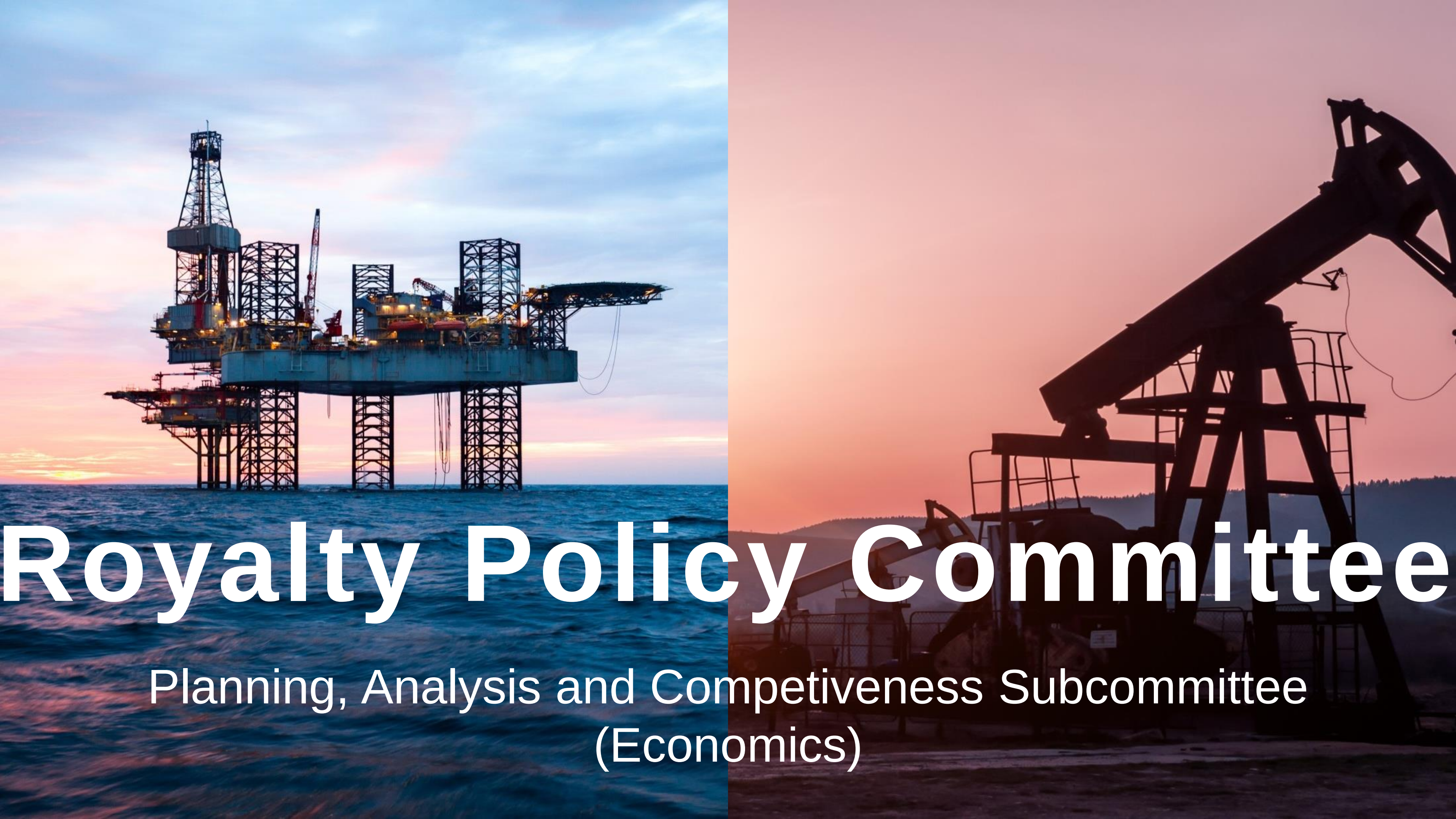
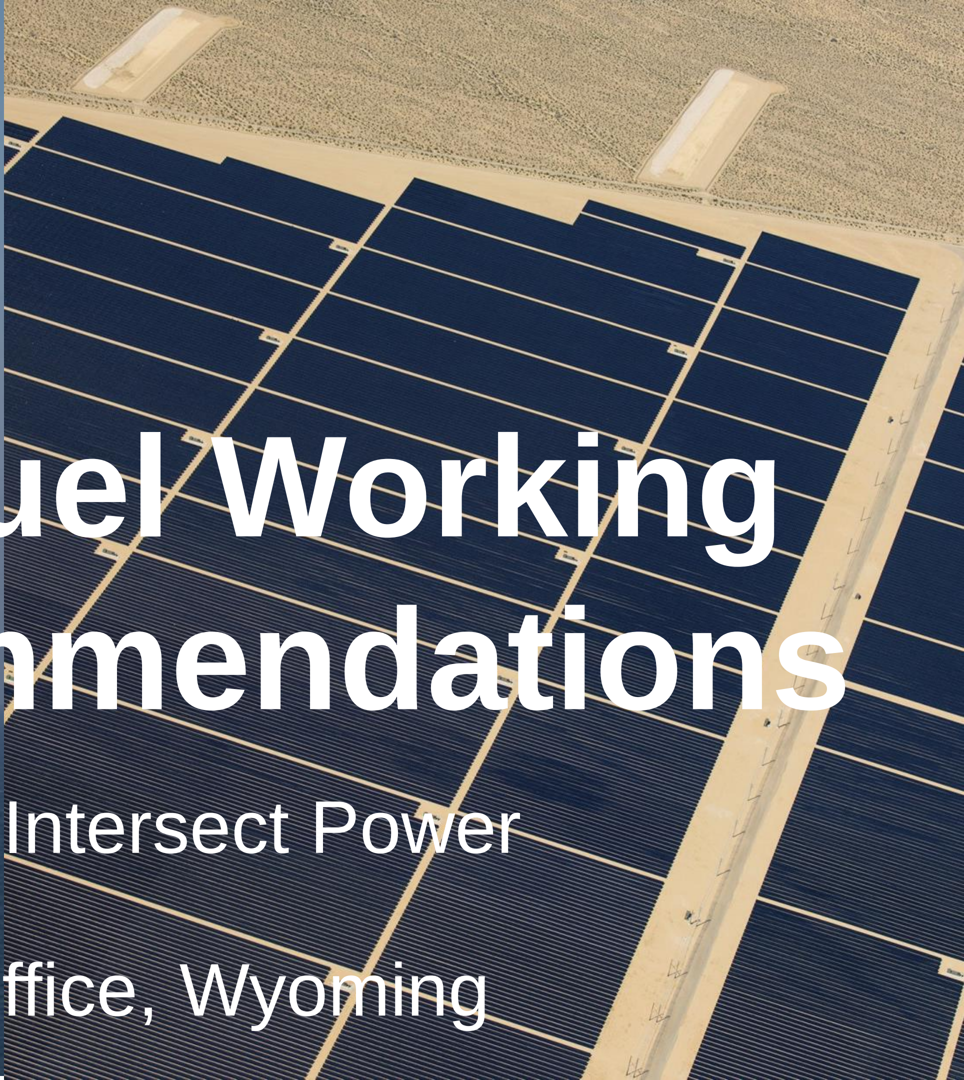


Royalty Policy Committee

Planning, Analysis and Competitiveness Subcommittee (Economics)

Planning, Analysis & Competitiveness Subcommittee Recommendations



Non-Fossil Fuel Working Group Recommendations

Presenter: Marisa Mitchell, Intersect Power

Colin McKee, Governors Office, Wyoming

Non-Fossil Fuel Working Group Recommendation #1

Recommendation: The Secretary shall plan a wind leasing program to bring at least twenty additional gigawatts from offshore wind to the United States over the decade beginning in 2024. This goal shall be achieved by leasing at least two gigawatts annually through at least four lease sales on the United States Outer Continental Shelf (OCS) of at least five hundred megawatts each.

Nature of change: Secretarial Order

Background

America’s energy future demands an aggressive “All of the Above” energy strategy in the OCS. This includes the responsible development of offshore wind power to support the energy needs of our coastal communities. This development will spur investments in local economies – creating job growth and avoiding the need to export hard-earned energy dollars outside the region.

The first handful of leases offered by BOEM has put in place leases for the first generation offshore wind, which is generally enough to meet the market demand (supported by state policies) through roughly 2030. However, that market demand is expected to grow, requiring the next generation of leasing and a commitment to a broader plan and the next generation of investment.

Experience from Europe has shown that an industrial commitment of two gigawatts of development is necessary to establish a significant and competitive supply chain for the offshore wind industry.

Analysis

This level of federal commitment, planning and investment of resources by the Federal Government, will spur follow on investment from States, industries, and researchers nationwide. Too often major energy projects, particularly in new areas, suffer from a “chicken and the egg” syndrome. For offshore wind this means no leasing, without power contracts, but no power contracts without leasing. By ensuring that the Federal Government is making an active effort to plan, prepare and initiate leasing of areas of the OCS, the Department of the Interior creates an important benefit of signaling that the Federal resources are open and available for investment and development.

Considering that a single lease can take as long as 5 years to prepare and plan prior to an actual lease sale, initiating a plan now to begin in 2024 puts us right on schedule for kick starting an American energy future with offshore wind all over the US OCS.

Non-Fossil Fuel Working Group Recommendation #2

Recommendation: In order to ensure the benefits of offshore energy and mineral development to all Americans it is necessary to expand the reach of the Outer Continental Shelf Lands Act (OCSLA) to the United States Territories, Guam, American Samoa, U.S. Virgin Islands, Commonwealth of the Northern Marianas and Puerto Rico.

Nature of change: Secretary will submit to Congress a legislative amendment to OCSLA

Background

The effort to expand the OCSLA to the territories has passed one body or the other in Congress several times over the last decade, most recently in the SECURE Act (Scalise-LA), HR 4239. In addition, the Obama Administration issued a strong statement of support and the Trump Administration has continued that support. Including the U.S. territories and possessions under the leasing authority of OCSLA will result in:

- Potential Economic Activity
- Revenues
- Increased Scientific Research
- Improved Technology

Both the rebuilding of the electrical grid of Puerto Rico as part of the recovery from the hurricanes of 2017 and the significant investment of resources by the Department of Defense into Guam provide unique opportunities for energy investment in the OCS if the Department of Interior is given the opportunity to plan offshore energy development.

Analysis

According to the Congressional Budget Office enacting this provision could increase federal revenues by $20 million over the 2018-2027 period.

Specifically, CBO says in analysis of HR 4239 that “Renewable Energy Leases on the OCS. H.R. 4239 would direct DOI to study the potential for production of electricity generated by wind off the coasts of Puerto Rico, the U.S. Virgin Islands, Guam, American Samoa, and the Northern Marianas Islands. If those studies showed that developing offshore wind resources was feasible, the bill would direct DOI to conduct lease sales in those areas. CBO estimates that implementing those provisions would increase offsetting receipts by $20 million over the 2018-2027 period, net of payments to states and territories.

Non-Fossil Fuel Working Group Recommendation #3

Recommendation: The Committee recommends that the Secretary direct the National Office of the Bureau of Land Management to issue an Instruction Memorandum to update and clarify solar energy right-of-way (ROW) acreage rent schedules, megawatt (MW) capacity fees, lease and grant renewal processes, bond requirements, and application priority for projects in the six southwestern states subject to BLM's Western Solar Plan (Arizona, California, Colorado, Nevada, New Mexico, and Utah), including guidance on the implementation of the rule on Competitive Processes, Terms, and Conditions for Leasing Public Lands for Solar and Wind Energy Development and Technical Changes and Corrections, 81 Fed. Reg. 92,122 (Dec. 16, 2016) (the "Rule").

Nature of change: Instruction Memorandum

Background

America’s multiple use public lands in six southwestern states offer some of the best solar resources in the nation and have been identified by the BLM as highly suitable and potentially suitable for such use. However, despite a solar boom on America’s private lands, prevailing federal land solar policies discourage solar development on public lands. Clarifications to and guidance on current policy should be made to ensure that multiple-use federal lands are made competitive with private lands.

Analysis

1. **Acreage Rent** – current policy creates rent uncertainty for fixed revenue stream assets and escalates at well above market rate, contributing to public land being uncompetitive with private land
2. **MW Capacity Fee** – current policy includes a royalty-like payment that is well above market, contributing to public land being uneconomic with private land
3. **ROW Grant and Lease Renewal** – current policy limits solar grants and leases to 30 years, inclusive of construction period, while useful life of equipment is 35+ years, causing assets on public land to be undervalued relative to private land counterparts

Analysis

4. **Bond Rates for Solar Grants and Leases** – current policy sets minimum solar bond rates 10x above market, inconsistent with reclamation cost estimates, causing credit terms for public land sited facilities to be uneconomic compared to private land
5. **Variance Application Processing** – current policy puts a would-be project's site control at risk by giving BLM staff the discretion to open "Variance Process Lands" to competitive bidding, even if a proponent has expended significant funds to diligence and secure the site, causing public land to be too risky for proponents to expend development capital

Consequence: American Taxpayers are not Benefiting from Solar Development as the Rule Intended

Analysis

	Coal	Oil + Gas	Solar PV[2]	Wind[3]
Per acre lease rate[1]	$3	$1.50 - $2	$16.77 - $914.10	$1.68 - $91.31
Capacity fee	n/a	n/a	$2,863 / MW	$5,010 / MW
Royalty rate	12.5%	12.5%	n/a	n/a
Minimum bond rate	$10,000 / lease	$10,000 / lease	$10,000 / acre ($15,000,000 / lease)	$20,000 / turbine ($1,000,000 / lease)
Federal acres available	370,000,000	564,000,000	19,600,000	19,600,000
Production (2016)	728,000,000 tons	32,636,000,000 mcf	37,000,000 MWh	227,000,000 MWh
Treasury revenue (2017)	$558,000,000	$6,149,000,000	n/a	$55,000,000

1 No annual escalation for coal, oil, gas; solar, wind escalate at IPD-GDP + 4%
2 Lease rates as high as $56k/acre in areas largely unsuitable for solar
3 Lease rates as high as $5.6k/acre in areas largely unsuitable for wind
Equivalent standard across industries: Fair Market Value to taxpayers
Source: https://www.eia.gov/outlooks/aeo/pdf/electricity_generation.pdf; USEITI

Analysis

Recommendations, if adopted, would:

- Allow American Taxpayers to benefit from the ~50 GW of installed capacity anticipated by 2021
- Estimate solar treasury revenue of ~$350M/year by 2021
- Create tens of thousands of domestic jobs

Non-fossil Fuel Working Group Recommendation #4

Recommendation: The RPC recommends that the Secretary issue a Secretarial Order grandfathering projects that were under construction or development at the time the BLM issued its “Competitive Processes, Terms, and Conditions for Leasing Public Lands for Solar and Wind Energy Development and Technical Changes and Corrections (81 Fed. Reg. 92122 (December 19, 2016)”.

Nature of change: Secretarial Order

Background

In 2016, the BLM issued this rule. Prior to this rule, operators were only subject to a capacity fee. However, the new rule instituted an additional acreage fee and changed how the capacity fee is calculated.

While it does have aspects that are positive for newly proposed wind and solar projects, it carries significant financial burdens for projects that were under development at the time of issuance. This was a significant and common issue brought up by a number of commenters, including the American Wind Energy Association, the Solar Energy Industries Association and many others.

Analysis

Making this change, the U.S. Treasury can expect to see the same level of revenue from projects. It will not affect projects applying with Interior after the issuance date of the rule. At most, without this change the impacts of the new rule may put at risk projects that were under development at the time of its issuance. At the least, this change will allow projects under development at the time of rule issuance to play under the same regulatory system that was in effect when projects first started permitting with Interior.

Making this change continues Interior’s commitment to advancing renewable projects on federal lands and can provide some certainty to upcoming projects that the rules of the game will not change during the course of permitting.

Offshore Working Group Recommendations

Presenter: Patrick Noah, ConocoPhillips

Previous Recommendation

In February 2018, the U.S. Department of the Interior's Royalty Policy Committee voted to recommend the following language:

Revise, clarify and simplify process for granting varying royalty rate for declining or particularly costly fields.

Offshore Working Group Recommendation #1

Recommendation: This follows on the previous recommendation for Royalty relief for late life or challenging assets by adding specificity as committed in the last full RPC meeting. Offshore committee recommends appropriate DOI/agency personnel consider, in their review of potential avenues for improved achievability of existing statutory royalty relief options, such factors as enhanced oil recovery (EOR); high pressure/high temperature wells (HPHT); and reservoir depths. (NOTE: 20,000 feet TVDSS is a common marker for exceptionally challenging reservoir depth.)

Nature of change: Notice to Lessees

Background

It is the committee's understanding that royalty relief is technically available to certain challenging and/or late life projects, but official dialogue at the last full RPC meeting confirmed that there has been little to no successful application for such relief in many years.

The linked DOI data seems to substantiate the absence of such successful policy application in modern OCS operations.

Background


Wood Mackenzie
A Verisk Analytics Business
January 2018
Deepwater GoM: 5 things to look for in 2018

"However, the challenge is that the key to unlock the next phase of significant volumes in the GoM lies with ultra-high-pressure exploration and development. What is still especially relevant to move projects forward in deepwater GoM are potential policy incentives specific to these ultra-high pressure developments. Without some stimulus, these volumes will struggle to compete with more attractive reservoirs in Brazil and Mexico."

-IHS CERA BOEM

*"The wide ranges of **government takes between 53% for profitable projects to 86% for marginal projects in Deepwater GOM suggests a highly regressive fiscal system that penalizes marginal fields**." P.5*

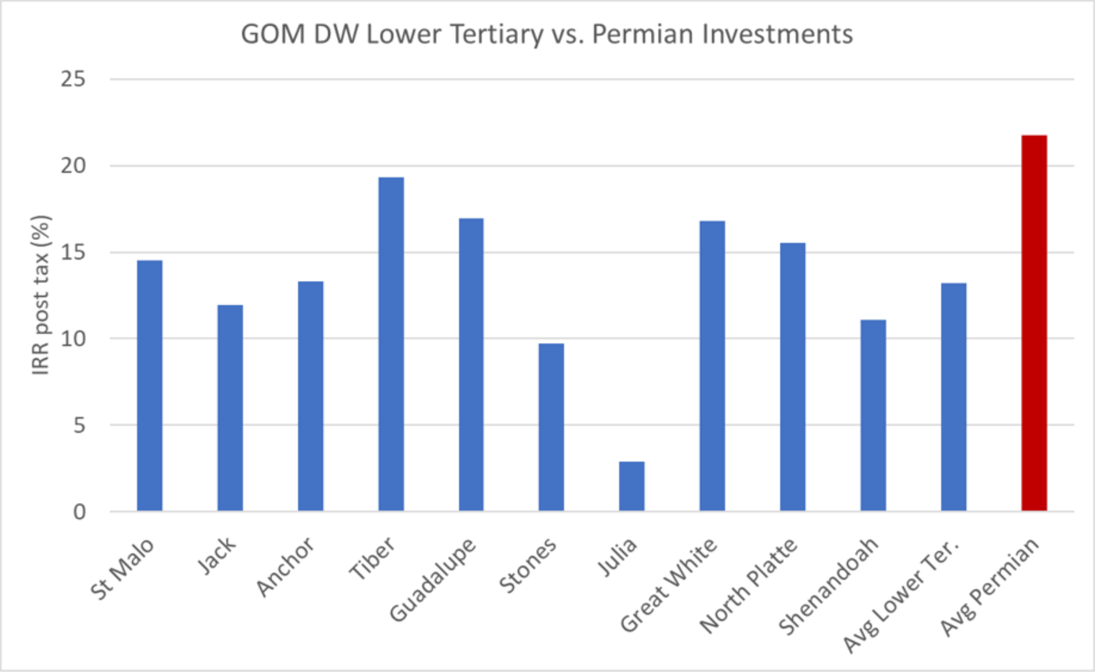
*"**The GOM is an attractive investment environment; however it is also among the most expensive** next to Alaska and other arctic environments. As exploration and production move beyond 5,000 feet, which seems to be the area with the greatest growth potential in the GOM according to EIA and DOI, achieving desirable rates of return is going to be quite challenging. P. 60*

*"...the **GOM nominal royalty rate is already higher than all offshore oil and gas jurisdictions** outside the United States." P. 133*

Background

Current IRR of DW Lower Tertiary vs. Permian

Data Source: Wood Mackenzie's "Upstream Asset Valuation" tool Nov 2017



Current IRR of DW Lower tertiary vs Permian

Source: Wood Mackenzie's "Upstream Asset Valuation" too, November 2017

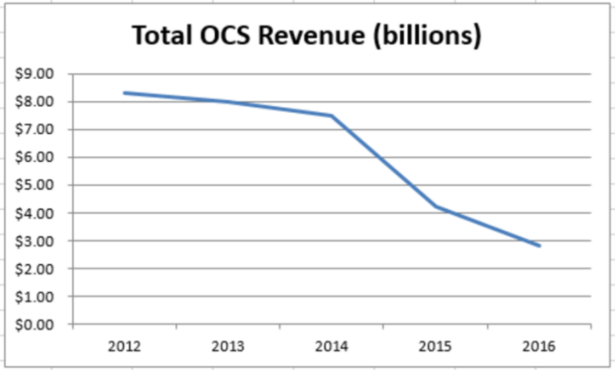
**IRR= Internal Rate of Return*

Background

10 Yr Sustained Decline in Revenue

Source: ONRR Data (CY 2017 not yet available)

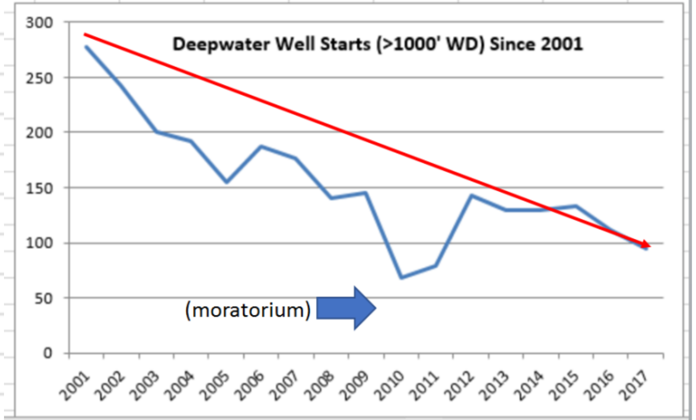
	Total OCS Revenue
2006	$8,214,724,747.76
2007	$7,299,243,627.21
2008	$17,174,236,772.66
2009	$4,523,979,142.05
2010	$6,536,890,231.64
2011	$6,656,578,120.94
2012	$8,325,530,575.18
2013	$7,958,969,927.54
2014	$7,489,351,623.25
2015	$4,189,584,797.18
2016	$2,813,832,536.24



	Total OCS Revenue (billions)
2012	$8.30
2013	$8.00
2014	$7.50
2015	$4.20
2016	$2.80

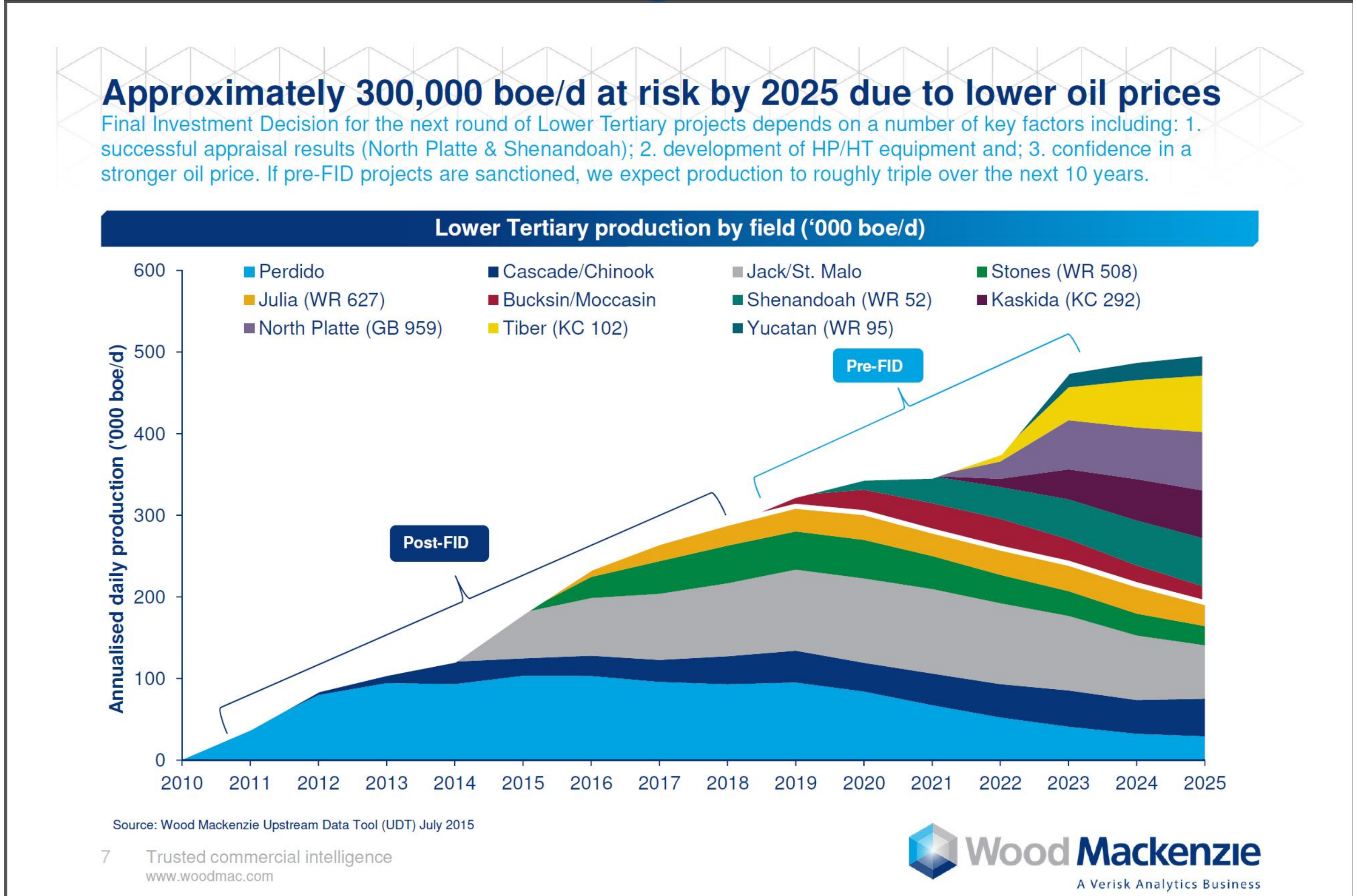
15 Yr Sustained Decline in Deepwater Well Starts

	Deepwater Wells (>1000') Since 2001
2001	277
2002	243
2003	200
2004	192
2005	155
2006	187
2007	176
2008	140
2009	145
2010	68
2011	79
2012	143
2013	129
2014	129
2015	133
2016	111
2017	95



GOM faces rapid increases in depletion rates as reported by Schlumberger (March 2017). According to Schlumberger, deepwater GOM depletion rate is approaching 25%. These rates will accelerate further absent increases in drilling and reserve additions. The OCS program's survival is hinges on increased exploration activity.

Background


Approximately 300,000 boe/d at risk by 2025 due to lower oil prices
Final Investment Decision for the next round of Lower Tertiary projects depends on a number of key factors including: 1. successful appraisal results (North Platte & Shenandoah); 2. development of HP/HT equipment and; 3. confidence in a stronger oil price. If pre-FID projects are sanctioned, we expect production to roughly triple over the next 10 years.
Lower Tertiary production by field ('000 boe/d)
Perdido
Cascade/Chinook
Jack/St. Malo
Stones (WR 508)
Julia (WR 627)
Bucksin/Moccasin
Shenandoah (WR 52)
Kaskida (KC 292)
North Platte (GB 959)
Tiber (KC 102)
Yucatan (WR 95)
Pre-FID
Post-FID
Annualised daily production ('000 boe/d)
600
500
400
300
200
100
0
2010
2011
2012
2013
2014
2015
2016
2017
2018
2019
2020
2021
2022
2023
2024
2025
Source: Wood Mackenzie Upstream Data Tool (UDT) July 2015
7
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Background

Relief is rarely sought and even more rarely approved (10 total applications; 7 approvals minus 2 withdrawn by government.)

Most recent approval was 17 years ago.

The multiple indicators of declining GOM competitiveness strongly suggest that the lack of applications in recent decades are not for lack of need, but for lack of achievability.

Listing of Deepwater Royalty Relief Applications

data last updated: 05-20-2018 03:00 AM(CST)

The following is a listing of deepwater royalty relief applications received for pre-Act Fields. Please contact the GOMR with questions regarding the royalty relief status of individual leases within these Fields.

Data Grid

Customization: Reset Grid Layout

Export Current Grid: PDF XLS XLSX RTF CSV

Drag a column header here to group by that column

Field Name	Type	Action	Action Date	Suspension Volume	Withdrawn	Withdrawn Date
DC133	IDWNP	Approved	7/16/1998	87.5		
EW958	IDWNP	Approved	6/5/1997	52.5	MMS Withdrawn	12/1/1999
GB161	IDWSE	Denied	11/4/1999			
GB409	IDWNP	Approved	11/9/2001	52.5		
GB783	IDWNP	Denied	3/30/2005	0		
GC236	IDWNP	Approved	12/4/2000	87.5		
GC472	IDWNP	Approved	6/1/2001	87.5		
MC084	IDWNP	Approved	4/30/1998	87.5	MMS Withdrawn	5/23/2000
MC718	IDWNP				Operator Withdrawn	3/25/1999
MC718	IDWNP	Approved	7/23/1999	87.5		

Download the Royalty Relief Applications Raw Data

View the Field Definitions for Royalty Relief Applications

Analysis

Where there are risks that certain projects either would not materialize, would materialize sub-optimally (i.e. likely to produce substantially lower EURs), or would face earlier than optimal end of asset life/abandonment but for certain royalty relief, there is a public interest in seeking the “win/win” wherein greater production volumes and associated revenues and associated benefits continue to flow to the taxpayer, government, and employment markets. Creating improved certainty and accessibility for those situations would remedy the identified risks.

Onshore Working Group Recommendations

Presenter: Kathleen Sgamma, Western Energy Alliance

Onshore Working Group Recommendation #1

Recommendation: BLM should issue an Instruction Memorandum (IM) directing all field offices to issue Categorical Exclusions (CX) when any of the Energy Policy Act of 2005 (EPAct 2005) Section 390 criteria are met.

Nature of change: Instruction Memorandum

Background

Lengthy Application for Permit to Drill (APD) timeframes often occur because BLM is conducting redundant NEPA analysis rather than granting CXs when companies meet the criteria under Section 390 of the EPAct.

BLM data show APDs take 260 days on average.

BLM should issue guidance that CXs must be used when a company meets any of the statutory Section 390 criteria.

The Section 390 CXs are mandated by EPAct 2005 and should not be discretionary.

Use of CXs would reduce APD processing time, avoiding redundant NEPA analysis and allow analysis on non-CX activities.

Onshore Working Group Recommendation #2

Recommendation: In an effort to reduce NEPA processing timelines and increase regulatory certainty on public lands, project-specific NEPA documents should be scoped to the actual impact of projects and limited to best-available information, tiering to existing environmental analyses already analyzed in prior NEPA documents. Project proponents should not be required to fund new research to produce data that go beyond the scope of the project.

Nature of change: Instruction Memorandum or Guidance to NEPA staff

Background

NEPA analysis can take up to ten years for larger projects, and even small project NEPA documents can take three to five years.

The Royalty Policy Committee has evaluated reducing NEPA and other approval timelines to encourage more development and hence, increase royalty revenue.

To implement Secretarial Order 3355 (one year time frame and 150 pages NEPA documents should focus on actual, not speculative, beyond the scope of the proposed project.

Tiering to existing environmental analyses should be used wherever possible.

NEPA documents should also be scoped to best available information. Processing of NEPA documents should not be put on hold while waiting for new research to be completed.

Onshore Working Group Recommendation #3

Recommendation: BLM should use the opportunity as it updates IM 2009-78 Processing Oil and Gas Applications for Permit to Drill for Directional Drilling into Federal Mineral Estate from Multiple-Well Pads on Non-Federal Surface and Mineral Estate Locations (otherwise known as the fee-fee-fed IM) to avoid unnecessary NEPA analysis of impacts to nonfederal surface when multi-well pads develop both federal and nonfederal minerals from off-lease, nonfederal surface locations. Similar, this guidance should avoid unnecessary analysis of horizontal wells that develop a minority of federal minerals.

Nature of change: Guidance to NEPA planning staff

Background

NEPA analysis need not consider impacts from nonfederal actions that would occur independently of a federal authorization such as when a multi-well pad is sited on off-lease, nonfederal surface to access nonfederal minerals.

BLM should provide clear concrete guidance for distinguishing between situations in which multi-well pads are and are not determined by access to the federal mineral estate. There should be a presumption that a multi-well pad developing both federal and nonfederal minerals is sited to access the nonfederal minerals, unless specific facts demonstrate otherwise.

NEPA analysis need not consider all impacts of drilling a well that develops a minority of federal minerals. BLM should establish clear guidance for analyzing impacts of horizontal wells that develop a minority mineral interest.

BLM should not conduct unnecessary analysis of impacts from nonfederal actions that would occur regardless of whether BLM approves an APD.

Onshore Working Group Recommendation #4

Recommendation: The Department of the Interior should rewrite Onshore Orders 43 CFR 3173 , 3174, and 3175 by adopting API standards and GPA standards in their entirety.

Nature of change: Full rulemaking process

Background

The rulemaking should fix the retroactive aspects of the existing rule that threaten existing unitization and commingling agreements.

- The simplest and most equitable means of modifying the regulations would be to adopt the American Petroleum Institute (API) and GPA Midstream (GPA) standards in their entirety.
- Continue to honor all variances, commingling agreements, and off-site measurement agreements approved prior to the effective dates of the new rules.
- Existing Commingling and Allocation Approval: BLM should consider a provision in the rule to define "economically marginal" that would establish when commingling of production is allowed from a property.

Alaska Working Group

Presenter: John Crowther, State of Alaska

Update

The Alaska Workgroup is not bringing forward any formal recommendations at this time, but has a number of topics under discussion related to our prior recommendation and potential upcoming recommendations:

- DOI has begun the NEPA scoping process for leasing in the 1002 Area, and we expect robust involvement from the State government and local stakeholders.
- The National Petroleum Reserve-Alaska continues to be an important new exploration opportunity for federal production, and DOI needs to ensure appropriate acreage is available and permitting is coordinated and efficient.
- The OCS 5 year planning process continues in Alaska, including planning for a 2019 lease sale in the Beaufort sea area. These are significant long-term national opportunities.
- Federal royalty valuation for OCS transportation costs and other factors should take into consideration the Alaska-context to promote production.

Coal Working Group

Presenter: Matthew Adams, Cloud Peak Energy

Update

The Coal Workgroup is not bringing forward any formal recommendations at this time, but has a number of topics under discussion:

- The Coal Workgroup has reviewed the Lease By Application process and discussed potential changes. We have reviewed a number of concepts, but do not have a recommendation at this time.

- The Coal Workgroup has discussed and attended presentations covering the current permitting and review processes necessary for new coal projects. We will continue to focus on this area.

Studies Working Group

Presenter: Emily Kennedy Hague
American Petroleum Institute

Update

The PAC Studies Workgroup, working with BOEM and BLM subject matter experts, has kicked off an effort to analyze modeling conducted within the Department. The team plans to review existing model assumptions and how the bureaus review and update those assumptions periodically to stay in line with current economic conditions. The group will also explore how the models are used within the Department to inform policy decisions and also look to see if there are gaps or additional factors that should be included within the models.

Thank You

Planning, Analysis and Competiveness Subcommittee