Record of Decision for Gulf of Mexico Outer Continental Shelf Oil and Gas Lease Sale 251 (July 2018)

1. INTRODUCTION

The purpose of the Federal action is to offer for lease certain Outer Continental Shelf (OCS) blocks located in the Gulf of Mexico (GOM) that may contain economically recoverable oil and gas resources. Under the 2017-2022 Outer Continental Shelf Oil and Gas Leasing: Proposed Final Program (2017-2022 Five-Year Program), two regionwide GOM lease sales are scheduled to be held annually. Five regionwide lease sales are tentatively scheduled in August of each year from 2017 through 2021, and five regionwide lease sales are tentatively scheduled in March of each year from 2018 through 2022. Lease Sale 251 is the third lease sale being held under the 2017-2022 Five-Year Program and will provide qualified bidders the opportunity to bid on unleased blocks in the Gulf of Mexico OCS, in order to explore, develop, and produce oil and natural gas.

The Outer Continental Shelf Oil and Gas Leasing Program: 2017-2022; Final Programmatic Environmental Impact Statement (2017-2022 Five-Year Program EIS) includes an analysis of the potential environmental impacts of the lease sale schedule put forward in the 2017-2022 Five-Year Program, including the 10 proposed regionwide GOM lease sales. The Gulf of Mexico *Outer Continental Shelf Lease Sale: Final Supplemental Environmental Impact Statement 2018* (Final 2018 GOM Supplemental EIS) evaluates the potential environmental effects of a proposed regionwide GOM oil and gas lease sale proposed under the 2017-2022 Five-Year Program. It updates, tiers from, and incorporates by reference information in the Gulf of Mexico OCS Oil and Gas Lease Sales: 2017-2022; Gulf of Mexico Lease Sales 249, 250, 251, 252, 253, 254, 256, 257, 259, and 261; Final Multisale Environmental Impact Statement (2017-2022 GOM Multisale EIS) and the 2017-2022 Five-Year Program EIS. The Final 2018 GOM Supplemental EIS informs the decision on whether and how to proceed with Lease Sale 251. The Record of Decision (ROD) for Lease Sale 251 is the second ROD that relies on the analysis in the 2018 GOM Supplemental EIS. The Bureau of Ocean Energy Management (BOEM) has verified that the 2018 GOM Supplemental EIS adequately assesses the environmental effects of the proposed lease sale. There are no new circumstances and no new information or changes in the action or its impacts that would require supplementation of the 2018 GOM Supplemental EIS.

2. DECISION

The Department of the Interior (DOI) has selected Alternative A, Regionwide OCS Lease Sale, which is to hold oil and gas Lease Sale 251 as a GOM regionwide lease sale. This alternative was identified as BOEM's preferred alternative in the 2018 GOM Supplemental EIS. This alternative would allow for a proposed GOM regionwide lease sale encompassing all three planning areas: the Western Planning Area (WPA); the Central Planning Area (CPA); and a small portion of the Eastern Planning Area (EPA) not under Congressional moratorium. For Lease Sale 251, DOI will offer for lease all available unleased blocks in the proposed regionwide lease sale area for oil and gas operations with the following exceptions:

- (1) whole and portions of blocks deferred by the Gulf of Mexico Energy Security Act of 2006;
- (2) blocks that are adjacent to or beyond the United States' Exclusive Economic Zone in the area known as the northern portion of the Eastern Gap;
- (3) whole and partial blocks within the current boundary of the Flower Garden Banks National Marine Sanctuary; and
- (4) the following blocks, whose lease status is currently under appeal: Keathley Canyon Blocks 246, 247, 290, 291, 292, 335 and 336; and Vermilion Area Block 179.

The unavailable blocks are listed in Section I of the Final Notice of Sale for Lease Sale 251. The regionwide lease area encompasses about 91.93 million acres (ac). As of June 2018, approximately 78.2 million ac of the proposed regionwide lease sale area are currently available for lease. As described in the Final 2018 GOM Supplemental EIS, the estimated oil and gas resource projected to be developed as a result of this regionwide lease sale is between 0.211 and 1.118 billion barrels of oil and 0.547 and 4.424 trillion cubic feet of natural gas.

BOEM considered the oil and gas resource potential in the planning areas and the likelihood of industry to develop those oil and gas resources in the context of social, economic, and environmental values, impacts, and concerns. BOEM is adopting this regionwide approach, described in the 2018 GOM Supplemental EIS, to provide greater flexibility to industry, including more frequent opportunity to bid on rejected, relinquished, or expired OCS lease blocks in all three GOM planning areas. More frequent lease sales in the planning areas (through biannual regionwide leasing) may also expedite and increase the present value of leasing and tax revenues.

As Assistant Secretary for Land and Minerals Management, I have concluded that holding GOM regionwide oil and gas Lease Sale 251, as described in Alternative A of the 2018 GOM Supplemental EIS, meets the purpose of and need for the proposed action, balances regional and national policy considerations, and includes appropriate measures to minimize potential environmental and socioeconomic impacts. I have also concluded that Lease Sale 251, as described in this ROD and in the Final Notice of Sale, is subject to adequate environmental safeguards and is consistent with the maintenance of competition and other national needs.

As noted in the 2018 GOM Supplemental EIS, environmental resources could be negatively impacted to varying degrees by routine activities (e.g., anchor placement) and accidental events. Possible adverse impacts from expected OCS oil- and gas-related activities and reasonably foreseeable accidental events include degradation of wetlands, coastal resources, benthic habitat, and pelagic habitat; behavioral changes to fish, sea turtles, marine mammals, and birds; mortality of individual organisms; and changes in air and water quality. The impact conclusions related to routine activities and accidental events are described in the "Summary" of the Final 2018 GOM Supplemental EIS. BOEM previously considered all comments received on the draft of the Supplemental EIS (Draft 2018 GOM Supplemental EIS) and has responded to those comments

2

as appropriate in the Final 2018 GOM Supplemental EIS; in addition, BOEM considered substantive comments submitted on the Final 2018 GOM Supplemental EIS in the ROD for the previous lease sale, i.e., Lease Sale 250. In light of these comments and the information in the Final 2018 GOM Supplemental EIS, I have fully considered the potential environmental impacts that are reasonably foreseeable as a result of holding Lease Sale 251.

The Notice of Availability of the Final 2018 GOM Supplemental EIS was published in the *Federal Register* on December 15, 2017 (82 FR 59645). The United States Environmental Protection Agency (USEPA), Region 6 submitted a comment letter on the Final 2018 GOM Supplemental EIS. The USEPA referred BOEM to their letter dated April 10, 2017, for comments on air quality. BOEM addressed the individual comments from the April 10, 2017, letter in Appendix E, Responses to Public Comments on the Draft Supplemental EIS, in the Final 2018 GOM Supplemental EIS. BOEM is currently coordinating with the USEPA on air quality and will continue to coordinate with USEPA on revised air quality modeling for future analyses. The comments received did not present any new information that substantially affected the analyses presented in the 2018 GOM Supplemental EIS.

As noted in the Final 2018 GOM Supplemental EIS, to better understand potential impacts to air quality on a regional basis, BOEM conducted a comprehensive, photochemical modeling study assessing pollutant concentration in the atmosphere using chemical and physical processes. Initial results of the study were included in the Draft 2018 GOM Supplemental EIS, and BOEM accepted comments on the air quality modeling during the public comment period for the Supplemental EIS. BOEM is in the process of revising and updating the air quality modeling based on technical comments; the results of the final air quality modeling will be included in a future NEPA analysis that will be available for public review and comment. The revised air quality model run was not completed before the publication of the Final 2018 GOM Supplemental EIS as an estimate of potential emissions and impacts. No activities beyond certain ancillary activities are actually authorized by the lease; therefore, there are few environmental impacts, including on air quality, reasonably expected from the proposed lease sale itself.

To the extent that the updated air quality modeling may continue to indicate impacts, regulations governing post-lease plan reviews allow for conditions of approval to be imposed to address these impacts. During its review of any plan submitted post-lease, BOEM conducts an air quality review to determine if additional controls are necessary. At this post-lease stage, BOEM has the authority to disapprove a plan or require additional mitigation to reduce impacts from projected facility emissions. In addition, BOEM's regulations direct the Regional Supervisor to require a lessee of any facility otherwise exempt from emission controls to submit additional information to determine whether emission control measures are necessary if the Regional Supervisor determines that the facility will, either individually or in combination with other facilities in the area, significantly affect the air quality of an onshore area. It is anticipated that revised air quality modeling results will be available for consideration in plan reviews before any plan is submitted on a block leased as a result of Lease Sale 251.

3

The 2018 GOM Supplemental EIS acknowledges that a catastrophic spill has an extremely low probability of occurrence and is not reasonably expected to result from this lease sale. BOEM has prepared the *Catastrophic Spill Event Analysis* as a standalone technical report, which is summarized and incorporated by reference as appropriate in the 2018 GOM Supplemental EIS. The *Catastrophic Spill Event Analysis* provides a robust analysis of reasonably foreseeable impacts associated with low-probability catastrophic spills for oil- and gas-related activities on the OCS as per the recommendations provided in the August 16, 2010, Council on Environmental Quality report following the *Deepwater Horizon* explosion, oil spill, and response. Such a catastrophic spill event could have significant impacts on the environment; however, such an event is not reasonably expected to result from this lease sale.

To minimize the environmental impacts that could occur from OCS oil- and gas-related activities following a lease sale, BOEM imposes mitigating measures that have proven to be effective in the past in avoiding or reducing impacts. The mitigating measures I am adopting in the form of lease stipulations for this lease sale are described below in Section 5. While offshore exploration and development cannot be made risk free, OCS oil- and gas-related activities can be conducted safely and responsibly with strong regulatory oversight and appropriate measures to protect human safety and the environment. Since the *Deepwater Horizon* explosion, oil spill, and response, BOEM and the Bureau of Safety and Environmental Enforcement (BSEE) have raised standards for offshore drilling safety and environmental protection to prevent and reduce the risk of oil spills and have improved the Federal Government's and industry's ability to respond in the unlikely event of another large oil spill.

BOEM has reanalyzed the forecasted oil and gas exploration, discovery, development, and production activity expected from a proposed lease sale following the reduction in royalty rates from 18.75% to 12.5% for leases in water 200 meters or less. BOEM modeled the range of anticipated oil and natural gas production volumes and associated levels of exploration, development, and decommissioning activity on a per lease sale basis; segregated anticipated production volumes into water depth categories; and compared the high case forecasted for wells drilled to leases sold in 2018 under the reduced royalty rate for shallow water leases. Through this analysis, BOEM has verified the activity level in any forecasted year resides well within the margin of error taken into account for the scenario. Therefore, BOEM has determined that the impact analysis conducted in the 2018 GOM Supplemental EIS, and documents from which it tiered, remains valid. The forecasted scenario, based originally on 18.75% royalty rates, remains valid; even assuming some leases are issued with a 12.5% shallow water royalty rate. Any additional activity that could occur as a result of the change in royalty rate in shallow water is still expected to be within the range of the reasonably foreseeable activity scenario under which the analysis was performed. Further, during its review of any plan submitted post-lease, BOEM conducts a review to determine if a site-specific EA or EIS is required and whether additional controls are necessary. This review informs BOEM's decision to require additional mitigation measures to reduce impacts from projected activities or to deny the plan if impacts cannot be adequately reduced.

BOEM has also verified its analyses in the 2017-2022 Five-Year Program, 2017-2022 GOM Multisale EIS, and 2018 GOM Supplemental EIS with consideration given to revisions proposed for the 2016 Oil and Gas Production Safety Systems Rule and the 2016 Well Control and

Blowout Preventer Rule. BOEM conducted its environmental analyses with the 2016 Oil and Gas Production Safety Systems Rule and the 2016 Well Control and Blowout Preventer Rule in place. The revised rules would carefully remove unnecessary burdens, while leaving critical safety provisions intact. However, neither revised Rule has been finalized. BOEM has reviewed BSEE's Draft Environmental Assessments (EAs) for both 2016 rule revisions. BOEM agrees with BSEE's conclusions that the proposed rule changes would not change or increase environmental risks from what they were under the 2016 rules. BOEM has determined that the proposed changes to the 2016 Oil and Gas Production Safety Systems Rule and the 2016 Well Control and Blowout Preventer Rule do not change the conclusions of the 2018 GOM Supplemental EIS because the changes to the rules leave critical safety provisions intact.

The decision to hold Lease Sale 251 recognizes the important role the GOM oil and gas resources play in addressing the Nation's demand for domestic energy sources and fosters economic benefits realized through continued exploration and development in the GOM region. This decision promotes domestic energy production, which can reduce oil imports. Additional benefits flowing from OCS leasing include continued employment, labor income, tax revenues, and other economic impacts; these benefits, though highest in the Gulf coastal states, are widely distributed across the United States. Continued oil and gas leasing on the OCS may also reduce the risk of spills from the transportation of imported energy resources (e.g., the reduced need for tankers to transport oil). Moreover, revenue sharing with applicable coastal states and political subdivisions can help mitigate risks and costs assumed by the states and communities of the GOM region.

After considering the benefits and potential impacts evaluated in the 2018 GOM Supplemental EIS, and determining that no new information or circumstances substantially affect the conclusions of that analysis, I have concluded that it is in the Nation's best interest to hold Lease Sale 251 in the manner described herein.

3. OTHER ALTERNATIVES ANALYZED IN THE 2018 GOM SUPPLEMENTAL EIS

Alternative B would have offered for lease all available unleased blocks within the CPA and EPA portions of the proposed lease sale area for oil and gas operations, with the following exceptions: whole and portions of blocks deferred by the Gulf of Mexico Energy Security Act of 2006; and blocks that are adjacent to or beyond the United States' Exclusive Economic Zone in the area known as the northern portion of the Eastern Gap. Available blocks within the WPA would *not* be offered for lease under this alternative. BOEM considered the oil and gas resource potential in the CPA and EPA and the likelihood of industry to develop those oil and gas resources in the context of social, economic, and environmental values, impacts, and concerns. Alternative B could potentially result in a slightly smaller amount of activity than proposed for Alternative A (1.0-3.6% of the forecasted cumulative OCS oil and gas activity in the GOM). As of February 2018, approximately 51.2 million ac (56%) of the proposed lease sale area would be available for lease. This alternative was not selected because it does not provide as prompt an opportunity for bidding on rejected, relinquished, or expired OCS lease blocks from the WPA as is provided in the chosen alternative, i.e., holding a regionwide lease sale. The incremental contribution of the possible negative impacts of the selected alternative is expected to be only slightly greater than those of Alternative B. For these reasons, I did not choose Alternative B.

Alternative C would have offered for lease all available unleased blocks within the WPA portion of the proposed lease sale area for oil and gas operations, except for whole and partial blocks within the current boundary of the Flower Garden Banks National Marine Sanctuary. Available blocks within the CPA and EPA would *not* be offered for lease under this alternative. BOEM considered the oil and gas resource potential in the WPA and the likelihood of industry to develop those oil and gas resources in the context of social, economic, and environmental values, impacts, and concerns. Alternative C could potentially result in only 0.2-0.6 percent of the forecasted cumulative OCS oil and gas activity in the GOM, which is much smaller than either Alternative A or B. As of February 2018, approximately 26.2 million ac (28%) of the proposed lease sale area would be available for lease. This alternative was not selected because it does not provide as prompt an opportunity for bidding on rejected, relinquished, or expired OCS lease blocks from the CPA and EPA as is provided in the chosen alternative, i.e., holding a regionwide lease sale. While Alternative C would reduce potential impacts, it would also reduce the likely oil and gas resources to be produced, reduce domestic production, and potentially increase reliance on foreign resources. For these reasons, I did not choose Alternative C.

Alternative D would have offered for lease all available unleased blocks under either Alternative A, B, or C (the chosen regionwide Lease Sale 251), but would have excluded from the lease sale all blocks subject to either the Topographic Features, Live Bottom (Pinnacle Trend). and/or Blocks South of Baldwin County, Alabama, Stipulations, precluding economic benefits of oil and gas that could be developed in these blocks. Other than these block exclusions, all other aspects of Alternative D, including potential mitigating measures and estimates of resource production, are the same as for the chosen Lease Sale 251 decision. Alternative D was not selected because the impacts are expected to be nearly the same as those for the selected alternative. The incremental contribution of the possible negative impacts of the selected alternative is expected to be slight, and these negative impacts compared with those of Alternative D should be largely mitigated by the adoption of the Topographic Features Stipulation (refer to Section 5) and site-specific mitigating measures that may be imposed at the plan or permit stages, the depths of the topographic features, and water currents in the topographic feature areas. Therefore, the minimal decrease in impacts that may be avoided did not outweigh the need for oil and gas resources that could be produced by holding a regionwide lease sale that did not exclude these blocks. For these reasons, I did not choose Alternative D.

Lease Sale 251 would not be held under Alternative E, which is the No Action Alternative analyzed in the 2018 GOM Supplemental EIS. Alternative E was not selected because the needed domestic energy sources and the subsequent positive economic impacts from exploration and production, including employment, would not be realized. Furthermore, revenue would not be collected by the Federal Government nor subsequently disbursed to the states. Alternative E does not address the need for domestic energy sources, and the economic benefits resulting from the proposed action outweigh the potential environmental impacts of the proposed action. Although other sources of energy may substitute for lost production, these sources may have different negative environmental impacts, such as the risk of spills from the transportation of alternate oil supplies over long distances. Additionally, if the proposed GOM regionwide lease sale were not held, the overall near-term level of OCS oil- and gas-related activity in the region would be reduced by only a small percentage. Not holding a single lease sale would not

significantly change the overall activity levels in the GOM (i.e., on blocks sold in previous lease sales) and the associated environmental impacts in the near term; however, the incremental contribution of the proposed regionwide lease sale to the cumulative effects would be avoided.

4. ENVIRONMENTALLY PREFERABLE ALTERNATIVE

Alternative E, defined as the No Action Alternative, was identified as environmentally preferable in the 2018 GOM Supplemental EIS. The No Action Alternative is considered environmentally preferable because not holding the lease sale would preclude OCS oil- and gas-related activities related to new leases from occurring, along with the resulting environmental effects in the Gulf of Mexico. However, significant OCS oil- and gas-related activity would be expected to continue under existing leases, and the decision to not hold a single lease sale would result in only slightly less cumulative OCS oil and gas activity. In the short term, assuming OCS oil- and gas-related activities remain confined to acreage currently leased, OCS operators would likely reevaluate their exploration, delineation, and development strategies across their existing portfolio and reallocate resources accordingly.

As discussed previously, Alternative E would not promote the purposes of the Outer Continental Shelf Lands Act to advance expeditious and orderly development of OCS mineral resources, subject to environmental safeguards, in a manner that is consistent with the maintenance of competition and other national needs; therefore, Alternative E was not selected.

Consideration of these factors weighs in favor of the selected alternative for holding proposed. Lease Sale 251. This decision is reinforced by potential negative environmental impacts of substitute energy sources (e.g., risks from tankers transporting imported oil) and the Secretary of the Interior's ability to impose measures to mitigate impacts of proposed Lease Sale 251 at both the sale and operational stages.

5. MITIGATING MEASURES

As part of the decision to hold proposed Lease Sale 251, all practicable means to avoid or minimize environmental harm from the selected alternative at the lease sale stage are being adopted. In addition, post-lease activities (e.g., exploration and development plans), which may be expected as a result of proposed Lease Sale 251, will undergo additional environmental review and may include additional project-specific mitigation applied as conditions of individual plan approvals. The various mitigations adopted for the lease sale, and those that may be applied during post-lease reviews, are summarized below.

Lease Stipulations – I have decided that the leases will be offered subject to the lease stipulations described in the 2018 GOM Supplemental EIS. In the ROD for the 2017-2022 Five-Year Program, the Secretary of the Interior required the protection of biologically sensitive underwater features in all GOM oil and gas lease sales as programmatic mitigation. Therefore, the Topographic Features Stipulation and Live Bottom (Pinnacle Trend) Stipulation are adopted for application to designated lease blocks in Lease Sale 251. The additional eight lease stipulations I am adopting for Lease Sale 251 are as follows: the Military Areas Stipulation; the Evacuation Stipulation; the Coordination Stipulation; the Blocks South of Baldwin County, Alabama,

Stipulation; the Protected Species Stipulation; the United Nations Convention on the Law of the Sea Royalty Payment Stipulation; the Below Seabed Operations Stipulation; and the Stipulation on the Agreement between the United States of America and the United Mexican States Concerning Transboundary Hydrocarbon Reservoirs in the Gulf of Mexico. These 10 stipulations will be added as lease terms where applicable and will therefore be enforceable as part of the lease. The 10 stipulations being applied to Lease Sale 251 are provided in full in the Final Notice of Sale package. The blocks to which each stipulation applies are identified on the map entitled, "Final, Gulf of Mexico, Oil and Gas Regionwide Lease Sale 251, August 2018, Stipulations and Deferred Blocks," which is included in the Final Notice of Sale package.

Site-Specific Conditions of Approval – There are other post-lease conditions of approval that have been developed through previous experience and post-lease environmental analyses. Many of these mitigating measures have already been adopted and incorporated into OCS plans and permits for blocks leased in previous lease sales, in accordance with processes established in regulations to adopt measures identified in NEPA analyses or Endangered Species Act consultations relevant to OCS exploration, development, and production activities. For example, additional mitigating measures may require surveys to detect and avoid archaeological sites and biologically sensitive areas, such as topographic features and deepwater benthic communities. BOEM and BSEE incorporate the applicable conditions for site-specific, OCS oil- and gas-related activities (e.g., exploration and development plans, pipeline applications, and structure-removal applications) also go through additional BOEM and/or BSEE review and approval to ensure compliance with established laws and regulations.

BOEM and BSEE have developed a list of over 120 "standard" Conditions of Approval that are often applied to plan or permit approvals. Appendix B of the 2017-2022 GOM Multisale EIS, which is incorporated by reference into the 2018 GOM Supplemental EIS, provides a list and description of many of these post-lease conditions of approval that may be required by BOEM or BSEE as a result of plan and permit review processes in the Gulf of Mexico OCS Region. These conditions of approval include hazard survey reviews, inspection requirements, notifications, post-approval submittals, and safety precautions. Many of these conditions of approval clarify existing mitigation requirements included in regulations, lease instruments, or as a result of site-specific reviews. The conditions cover such areas as air quality, archaeological resources, artificial reef material, deepwater benthic communities, the Flower Garden Banks, topographic features, hard bottoms, military warning areas, hydrogen sulfide, drilling hazards, remotely operated vehicle surveys, geophysical survey reviews, and general safety concerns. Also, BOEM and/or BSEE may also apply conditions of approval that are developed on a case-by-case basis during the plan or permit approval process.

Mitigation Monitoring and Adaptation – BOEM and BSEE continually assess compliance and effectiveness of mitigating measures, where appropriate, to allow the Gulf of Mexico OCS Region to adjust mitigation as needed. This effort relies on requiring post-approval submittal of information within a specified timeframe or after a triggering event that is tracked by BOEM and/or BSEE (e.g., end of operations reports for plans, construction reports for pipelines, and removal reports for structure removals).

Enforcement – BSEE has the authority to inspect operations and enforce the conditions of any lease terms, including stipulations, as well as the conditions of any plan or permit approval under 30 C.F.R. part 250 subpart N. BOEM may also refer potential violations to BSEE for investigation and potential enforcement. BSEE may impose penalties on or require corrective actions from any lessee or any operator that fails to comply with the terms of a lease, including stipulations and other mitigating measures, and conditions of any post-lease plan approvals or permits.

6. CONCLUSION

For the reasons provided above, I have decided that Lease Sale 251 will be held as a GOM regionwide lease sale on August 15, 2018, and will offer for lease all available unleased blocks in the proposed regionwide lease sale area, with the following exceptions: whole and portions of blocks deferred by the Gulf of Mexico Energy Security Act of 2006; blocks that are adjacent to or beyond the United States' Exclusive Economic Zone in the area known as the northern portion of the Eastern Gap; and whole and partial blocks within the current boundary of the Flower Garden Banks National Marine Sanctuary (Alternative A in the 2018 GOM Supplemental EIS). Blocks where the lease status is currently under appeal will also not be offered in Lease Sale 251. The leases will be issued with the stipulations referenced above and include other terms I have approved for the Final Notice of Sale.

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6/28/18