Summary of Procedures for Determining Bid Adequacy at Offshore Oil and Gas Lease Sales

Effective March 2016, with Central Gulf of Mexico Sale 241 and Eastern Gulf of Mexico Sale 226

In administering the offshore oil and gas leasing program, the Secretary of the Interior is required by the Outer Continental Shelf Lands Act (OCSLA) to ensure that the Federal Government receives a fair return for the lease rights granted and the minerals conveyed. To carry out this responsibility, the Bureau of Ocean Energy Management (BOEM) uses a two-phase post-sale bid evaluation process to assess the adequacy of bids received in federal offshore oil and gas lease sales. Since 1983, the Bureau has used this two-phase post-sale bid evaluation process to meet the fair market value requirement. Under its bid adequacy procedures, the Bureau reviews all high bids received and evaluates all blocks using either tract-specific bidding factors or detailed tract-specific analytical factors to ensure that fair market value is received for each OCS lease issued. The bid adequacy process relies on both evidence of market competition and in-house estimates of tract value. In addition to the lease fiscal terms and bid adequacy process, the Bureau establishes terms and conditions to encourage lessees to develop leases expeditiously and in a manner that protects the environment and is consistent with safe operating practices.

The following sections describe the details of the bid evaluation process.

Phase 1

In Phase 1 BOEM reviews the bids for legal sufficiency\(^1\) and anomalies\(^2\) to establish the set of qualified bids\(^3\) to be evaluated for each tract. Next, all tracts receiving legal bids are classified as either confirmed, wildcat, drainage, or development, and then treated as follows: (See Appendix A for definitions of these tract types)

i. All drainage and development tracts are passed to Phase 2.

ii. All confirmed and wildcat tracts are tested for geologic and economic viability.

a. Each confirmed and wildcat tract determined to be a viable\(^4\) tract is passed to Phase 2.

b. Each confirmed and wildcat tract determined to be a nonviable\(^5\) tract will have its highest qualified bid accepted.

At any time in the bid evaluation process prior to a tract’s high qualified bid being accepted, the Regional Director (RD) may identify an unusual bidding pattern\(^6\). The RD has discretionary authority, after consultation with the Solicitor, to pass any tracts identified in an unusual bidding pattern to Phase 2 for further analysis. The RD may also eliminate from consideration all but the highest of the unusual bids when applying any bid adequacy rule, may choose not to apply a bid adequacy rule, or may reject a tract’s highest qualified bid.

\(^1, 2, 3, 4, 5, 6\) See Appendix A for definitions
The Phase 1 procedures are generally completed within three weeks of the opening of all the bids in a given lease sale. Leases that will be awarded as a result of the Phase 1 analyses are announced at the end of this period.

Phase 2

The Phase 2 bid adequacy determinations are completed sequentially over a period normally ranging between 21 and 90 days after the sale. If necessary, the total evaluation period can be extended at the RD’s discretion (See 61 FR 34730, July 3, 1996).

In Phase 2, activities designed to resolve bid adequacy assessments are undertaken by conducting further mapping and analysis and are primarily focused on resolving any outstanding uncertainties about tract type and viability status. Upon completion of these activities, the RD may accept the highest qualified bid on any tracts judged as nonviable. The remaining tracts passed to Phase 2 are subject to a full scale resource and economic evaluation to determine if each tract’s highest qualified bid is representative of fair market value.

In conducting the resource and economic evaluation, BOEM may use its probabilistic cash flow simulation model to generate up to four measures of bid adequacy as described below. A tract’s highest qualified bid is then compared to the applicable measures of bid adequacy, and if that bid exceeds any of these measures, the RD may accept the highest qualified bid as representative of fair market value for the tract.

1) The first measure of bid adequacy that BOEM calculates is referred to as the tract’s Mean Range of Values (MROV). The MROV represents the maximum cash payment that a bidder can offer for acquiring the tract’s drilling and development property rights and still expect to make a normal rate of return on its investment, according to BOEM’s probabilistic cash flow model. If a tract’s highest qualified bid is at least as large as the tract’s MROV, the RD may accept that bid as representative of fair market value.

2) The second measure of bid adequacy is referred to as the Delayed Mean Range of Values (DMROV). The DMROV is intended to allow a determination of whether, in cases where the high bid is below the MROV, leasing revenues consisting of the cash bonus plus royalties or profit shares would be greater if the high bid were to be accepted, rather than rejected and the tract reoffered in the next available sale. That is, owing to the time interval between the current sale and the next available sale, there would not only be a delay in receipt of leasing revenues if the tract is not sold to the highest qualified bidder in the present sale, but the value of the tract could be eroded if drainage is expected to occur. Accordingly, the DMROV represents BOEM’s estimate of the tract’s MROV at the time of the next available sale discounted to the present time, plus the value of future royalties from selling the tract in the next sale discounted to the present time, less the value of royalties associated with accepting the highest qualified bid on the tract in the present sale. If the highest qualified bid is at least as large as the DMROV, the RD may accept that bid as representative of fair market value.

These include tracts that are classified as drainage and development tracts or as confirmed and wildcat tracts that are viable.
3) The third measure of bid adequacy is called the Adjusted Delayed Value (ADV). In practice, BOEM calculates the tract’s MROV and DMROV and designates the lesser of these two measures as the ADV. The RD may accept a tract’s highest qualified bid if it is at least as large as the tract’s ADV.

Those tracts found to have a highest qualified bid of less than the ADV are separated into two sets:

The first set consists of confirmed and wildcat tracts receiving either a single qualified bid, or two or more qualified bids where the second highest qualified bid is less than 25 percent of the highest qualified bid. Also included in this set are drainage and development tracts where the highest qualified bid is less than one-sixth of the tract’s MROV or drainage and development tracts receiving three or more qualified bids where the third highest qualified bid is less than 25 percent of the highest qualified bid. The RD may reject any and all of the highest qualified bids on tracts in this set.

The second set consists of all remaining tracts, including confirmed and wildcat tracts receiving at least two qualified bids where the second highest qualified bid is at least equal to 25 percent of the highest qualified bid. Also included in this set are drainage and development tracts receiving at least three qualified bids where the third highest qualified bid is at least 25 percent of the highest qualified bid and where the highest qualified bid is at least equal to one-sixth of the tract’s MROV. All tracts in this set are subject to a final bid adequacy test before an acceptance or rejection decision is made, as discussed below under the next bid adequacy measure.

4) The fourth measure of bid adequacy is referred to as the Revised Arithmetic Measure (RAM). The RAM represents the average of the highest qualified bid, all other qualified bids that are at least 25 percent of the highest qualified bid, and the MROV. If the highest qualified bid on a tract included in the second set of tracts discussed above is at least as large as the RAM, the RD may accept the bid as representative of fair market value.

Before any final bid adequacy decisions are made in Phase 2, the RD may consider whether the results are consistent with ensuring receipt of fair market value as well as complying with other goals of the OCSLA. To the extent that the RD determines that the results are not fully consistent with a proper balancing of programmatic goals, the RD may propose an alternative fair market value protocol that would specify procedures and bid adequacy threshold measures for acceptance that cover selected categories of tracts. If this alternative is then approved by the Director, it could be applied either as an adjunct to or substitute for the bid adequacy procedure described herein for a given lease sale.

Upon acceptance of their bids, the high qualified bidders are required to pay the remaining balance of the bonus bid (80 percent) along with the first year’s annual rental within 15 days.

A flow chart illustrating these bid adequacy procedures is attached as an Appendix B to this document.
Appendices

Appendix A: Definitions used in the Bid Adequacy Procedures
Appendix B: Flow Chart for Postsale Evaluation Procedures in Areawide Sales
Adjusted Delayed Value (ADV) is the lesser of the MROV and DMROV. The ADV is used to simultaneously compare the MROV and DMROV to the tract’s high qualified bid.

Anomalous Bids include all but the highest bid submitted for a tract by the same company, parent or subsidiary (bidding alone or jointly).

Confirmed Tract is a previously leased tract having a well(s) that encountered hydrocarbons and may have produced. It contains some oil and/or gas resources, the volume of which may or may not be known.

Delay-adjusted Mean Range of Values (DMROV) is BOEM’s estimate of the theoretical amount of a tract’s high bonus bid needed in the current sale which, when added to the present value of anticipated royalties from leasing the tract in the current sale, equals the discounted sum of the tract’s expected high bonus bid and present value of anticipated royalties in the next sale if the actual highest qualified bid is rejected and the tract re-offered and sold in that next sale. Tract’s high bonus bid in the next sale is estimated by BOEM as the MROV for the tract at the time of the next sale under projected economic, engineering and geologic conditions, including potential drainage. If the actual highest qualified bonus bid in the current sale exceeds the DMROV, then the present value of leasing receipts from selling the tract in the current sale is expected to be greater than the present value of leasing receipts from rejecting the tract’s highest qualified bid in the current sale and selling the tract in the next sale.

Development Tract is a tract that has nearby productive (past or currently capable) wells with indicated hydrocarbons and that is not interpreted to have a productive reservoir extending under the tract. There should be evidence supporting the interpretation that at least part of the tract is on the same general structure as the proven productive well.

Drainage Tract is a tract that 1) is currently being drained by a producing well on a nearby leased tract, or 2) could be drained by a currently-non-producing well that is capable of producing oil or gas on a nearby leased tract if the well were placed on production. The reservoir from which the nearby well is currently producing or capable of producing is interpreted to extend with producible hydrocarbon resources to the tract that is subject to drainage.

Fair Market Value or Fair Return is discussed in The Outer Continental Shelf Lands Act (OCSLA) which grants the Secretary of the Interior the authority to issue leases on the OCS. Section 18(a)(4) of the OCSLA states that "Leasing activities shall be conducted to assure receipt of fair market value for the lands leased and the rights conveyed by the Federal Government." The Bureau sets the minimum bid levels, rental rates and royalty rates based in part its evaluation of unleased, undiscovered resources and of terms and conditions prevailing previously and in related offshore leasing markets as the sale approaches. The Bureau determines whether a particular qualified highest bid is acceptable by comparing that bid with an assessment of the price the property rights associated with the lease would sell for in a competitive market at the time of sale.

Legal Bids are those bids that comply with the applicable regulations (30 CFR part 556) and the Notice of Sale, e.g., bids that, among other things, are at least equal to the specified minimum bid level. Any bids that fail to comply with the applicable regulations and Notice of Sale are returned to the bidder.
Mean Range of Values (MROV) is BOEM’s estimate of the dollar measure of a tract’s expected net present value, assuming that tract is leased in the current sale. It reflects the maximum amount a bidder could afford to pay as a cash bonus for the tract while expecting to earn a specified competitive after-tax rate of return. The calculation of the MROV considers exploration and economic risk, sales value, exploration, development and production costs, royalties, and corporate income taxes allowing for depreciation of certain capital investments and depletion of the cash bonus as estimated by the MROV.

Nonviable Tract is a tract considered by BOEM not to have the potential capability of being explored, developed and produced profitably. Nonviable Tracts are: 1) tracts that received bids but that are not associated with any discernible prospect or geophysical anomaly that might indicate hydrocarbon presence; or 2) tracts located over known prospects that are judged to offer sub-economic quantities of risked resources. The latter include tracts that are located on a prospect for which the most probable risked resource size is less than or equal to that of nearby proxies that were deemed uneconomic for the relevant cost regime and at similar anticipated future prices. Determination by BOEM of whether a tract is non-viable involves a rigorous assessment of whether or not the tract is likely to be profitable, but not a calculation of the tract’s precise monetary value.

Phase 1 is the first phase of the two-phased Bid Adequacy Procedures applied in each sale to ensure that the government receives the FMV for the offshore oil and gas lease rights that it sells. In Phase 1, a tract’s high bid may be accepted as representative of FMV if the tract is classified as Confirmed or Wildcat and judged to be nonviable by BOEM. If application of this set of criteria does not result in the tract’s acceptance in Phase 1, the tract is passed to Phase 2 for further evaluation.

Phase 2 is the second phase of the Bid Adequacy Procedures. In Phase 2, Viable Tracts and associated prospects are subjected to a complete geological review and economic evaluation for the purpose of establishing the FMV of received bids. BOEM conducts an individual economic evaluation of each tract that is passed to Phase 2, resulting in the generation of certain measures of tract value represented by the MROV, DMROV, ADV and RAM. The high bid typically is considered for acceptance if it exceeds any one of these measures.

Qualified Bids are “Legal Bids” that are not disqualified by BOEM for violating anti-competitive bidding practices.

Revised Arithmetic Measure (RAM) is BOEM’s representation of the average “bid” on certain tracts, and includes in its calculation all Qualified Bids on the tract that are equal to at least 25 percent of the tract’s high qualified bid, as well as the MROV for the tract as estimated by BOEM.

Unusual Bidding Pattern typically refers to a situation in which two or more companies bid on some tracts or subset of tracts far more often or less often than would normally be expected.

Viable Tract is a tract considered by BOEM to have the potential capability of being explored, developed and produced profitably. Viable Tracts are those located on a prospect for which the risk-weighted, most-probable resource size equals or exceeds that of nearby proxies that were deemed economic in the relevant cost regime and at similar anticipated future prices.

Water Depth Category is a classification of bathymetric depth, currently specified in the Gulf of Mexico for bid adequacy purposes as being either: (1) less than 400 meters; or (2) 400 meters or more. If different classifications subsequently are used for a Gulf of Mexico sale, they will be described in the Final Notice of Sale. Tracts offered in a sale held outside the Gulf of
Mexico will be considered to reside in the same, single water depth category encompassing the entire sale area, unless specified otherwise in the Final Notice of Sale.

**Wildcat Tract** is a tract that has neither nearby productive (past or currently capable) wells, nor is interpreted to have a productive reservoir extending under the tract. It has a high likelihood of not encountering hydrocarbons when drilled, and has sparse well control.
Appendix B

Flow Chart for Postsale Evaluation Procedures in Areawide Sales

**Bid Adequacy Procedures**

**Phase 1**

- Tracts Receive Bids
  - Adjust for illegal and anomalous bids

**Phase 2**

- Drainage & Development
  - Tract Classification
    - Confirmed & Wildcat
      - Viable Prospect
        - No: Accept Bid
        - Yes

- Additional Analysis and/or Mapping

- Discounted Cash Flow Analysis

**High Bid ≥ ADV**

- Yes: Accept Bid
- No: High Bid ≥ 1/6 MROV

- No: No. Qualified Bids ≥ 3 & Third Highest Bid ≥ 25% of High Bid

- Yes: Reject Bid

- Compute RAM

- Reject Bid

- High Bid ≥ RAM

- Yes: Accept Bid