

Addendum to BOEM’s “Modifications to the Bid Adequacy Procedures for Offshore Oil and Gas Lease Sales” Federal Register Notice (Docket No. BOEM-2023-0008)

On January 19, 2023, the Bureau of Ocean Energy Management (BOEM) published a notice in the *Federal Register* entitled “[Modifications to the Bid Adequacy Procedures for Offshore Oil and Gas Lease Sales](#).” In this notice, BOEM announced its intention to change the BOEM bid adequacy procedures (BAPs), which outline the process BOEM follows to ensure that the United States receives fair market value (FMV) from Outer Continental Shelf (OCS) oil and gas lease sales. BOEM proposes to discontinue the use of both tract classification and delayed valuation methodology. Instead, BOEM proposes to use a statistical lower bound confidence interval (LBCI), at the 90 percent confidence level (CL), as a measure of bid adequacy. BOEM is also proposing other, minor adjustments to its BAPs to clarify and streamline its processes.

This addendum provides the public with the equation BOEM is proposing to use for the calculation of LBCI at a 90 percent CL. The LBCI is a statistical concept that captures the lower bound of a range of values encompassing the true unknown mean of the risked present worth (RPW)¹ of the resources at the time of the lease sale. The LBCI incorporates the uncertainty of parameters unique to the valuation of each OCS oil and gas lease sale tract.

The LBCI at a 90% CL would be calculated using the following equation:

$$LBCI \text{ at } 90\% \text{ CL} = MROV - 1.645 \frac{SD \text{ of Tract's RPWs}}{\sqrt{\text{Number of Monte Carlo Iterations}}}$$

Where:

MROV (Mean Range of Values) is the **mean** of the RPWs of an OCS tract derived from a given number of Monte Carlo iterations.

SD of Tract’s RPWs is the **standard deviation** of the RPWs of an OCS tract derived from a given number of Monte Carlo iterations.

Number of Monte Carlo Iterations is the number of Monte Carlo simulations used for generating the RPWs of an OCS tract.

1.645 is a constant multiplier (also called **Z-score** in statistics) for 90% Confidence Level.

¹ Risked present worth (RPW) is a net present value of the potential oil and gas resources contained in a tract adjusted for the geological risks of not finding hydrocarbons and the uncertainties associated with the development and economic parameters of that tract at the time of the lease sale.