## POTENTIAL TO INCREASE OIL PRODUCTION AND HYDROCARBON LIQUIDS USING CO2 IN US SHALES IN THE FOLLOWING GEOLOGICAL FORMATIONS: PERMIAN, UTICA, MARCELLUS, BAKKEN, AND EAGLEFORD

RFP #DE-FE-002415-19-01 RFP Closing Date: Oct 4, 2019

## Responses to Questions Received by September 13, 2019

## Q: When do you expect to award the work?

A: The work will be awarded following USEA's evaluation of the proposals received and the U.S. Department of Energy's authorization for USEA to enter into a sub-agreement with the firm providing the best offer.

Q: How long are you giving the proposal winner to do the work? After the analyzes, how long is given for writing the 175-page document?

A: Proposals must include a timeline for completion of the study. The work must be completed by no later than September 30, 2020, but USEA prefers it to be completed sooner.

Q: Some parts of the study may require additional lab testing? Will you pay for that lab testing?

A: Execution of this study will not require lab testing.

Q: Will major billion-dollar decisions be made based on the study?

A: This question is not clear.

Q: What is the estimated price you are willing to give for the comprehensive study?

A: USEA seeks the best quality proposal at the most affordable price. Price will account for 20% of the weighted evaluation criteria.

Q: Are you expecting multiple universities to work on the study together?

A: USEA has no opinion regarding the cooperation of multiple universities in the execution of this study.

Q: Do you consider this a consulting study or a Total Comprehensive USA Unconventional Study that will direct the US government (DOE) in their funding programs and efforts?

A: This is a consulting study.

Q: How refined is the Production (oil, water, gas) and carbon dioxide usage are to be reported? How definite are you wanting the responses? Do we report it by Lease, Well, Region or Total Basin Area?

A: Reporting by region will be sufficient.

Q: Are we expected to survey operators to develop the list of commercial and pilot projects that are current or proposed?

A: Your proposal should detail the procedure your firm will employ to develop the list of commercial and pilot project that are current or proposed.

Q: Are we expected to utilize survey of operators and others to provide the type of technologies that need to be developed for carbon dioxide – EOR? It is noted that we are to identify research and resources necessary to overcome technical challenges in developing the field. Are you requiring the Technology Challenge to be solved, only? Do we need to identify the technology method of solving the challenge?

A: This question is unclear.

Q: Please define "EWSA" on p. 3 of the RFP.

A: The reference to EWSA was made in error. Please disregard.

Q: Will this be a fixed price contract or a DOE grant type sub-agreement and federal rates.

A: This will be a fixed price sub-agreement for labor.

Q: Several of the required responses require that "industry accepted best practices for making these assumptions" are utilized. Could you please identify the specific SPE, or other document that outlines the best practices that you are referring to for each of the highlighted items?

A: Offerors are requested to use their best professional experience in developing assumptions.

Q: In reference to the reserves, are you referring to SPEE documents? We want to insure the proposal responses are to the required specifications

A: No.

Q: What is the role of the DOE in this study? Is the DOE contributing to funding?

A: DOE is the funding agency for this study and may have substantial involvement in its execution.

Q: What is the expectation of the USEA in terms of duration of the study i.e. how many months from the contract execution?

A: Proposals must include a timeline for completion of the study. The work must be completed by no later than September 30, 2020, but USEA prefers it to be completed sooner.

Q: Is there a commerciality aspect to this. In other words, are you just interested in whether or not this can be done, where it can be done, and how it can be done, or are you looking to include a commercial/economic aspect such as cost for CO2, quantities of CO2 needed per barrel or oil (including recycle rates), drilling of injection wells and their cost, pipeline construction and economics of producing CO2?

A: This study should focus on whether or not it can be done, where it can be done and how it can be done.

Q: Given the heterogeneity of the reservoirs within the plays (both laterally and vertically) and the sheer area they cover are you looking for a more localized approach or a much broader approach based on play generalities?

A: This study should use a broad approach.

Q: Besides CO2, you mentioned mixed gases. Would this include methane and ethane or are you thinking more about N2?

A: This would include methane, ethane and nitrogen.