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## BEFORE THE SENATE REPUBLICAN CONFERENCE OFFSHORE ENERGY PRODUCTION HEARING

#### Introduction

Good morning Senators. I would like to thank you for the opportunity to appear before your conference this morning. The purpose of my comments will be to provide you with an overview of the opportunities and potential challenges associated with opening restricted areas of the Outer Continental Shelf or "OCS."

#### **Overview**

Today, the offshore federal OCS produces about 490 million barrels ("MMBbls") of oil and three trillion cubic feet ("Tcf") of natural gas per year. This accounts for about 27 percent and 14 percent of all U.S. oil and natural gas production, respectively. Regionally, some 95 percent of this oil production comes from the Gulf of Mexico ("GOM") region, with another five percent from the Pacific and less than one percent from Alaska. For natural gas, the GOM accounts for 98 percent of federal OCS

equal to 1,000 feet. In 1992, there were six producing deepwater projects accounting for 37 MMBBIs of oil production and 87 billion cubic feet ("Bcf") of natural gas production. Today, there are more than 130 active projects operating in the deep water producing over 327 MMBbIs of crude oil and one Tcf of natural gas. This is an increase of about 800 percent for oil production and more than 1,000 percent for natural gas production. Some of these projects, such as the fields associated with Independence Hub are operating in water depths up to 9,000 feet – a depth generally considered inconceivable slightly over a decade ago.

As promising as these statistics and accomplishments may sound, the federal OCS is mature areas and without expanded access, will ultimately decline in terms of the contribution they make to overall U.S. energy supplies. It is estimated that the federal OCS accounts for four billion barrels ("BBBIs") of proved oil reserves and 15 Tcf of proved natural gas reserves. Technical reserves for the area are much larger and estimated to be as large as 41 BBBIs for crsnund, tiTD

### **Capital Investments and Uncertainty**

One of the best ways to describe the significant degree of capital investment required in a frontier area is to use a hypothetical example from the deepwater Gulf. Consider the following hypothetical in which you are offered a potential, but not entirely certain,

#### **Long Term Commitments**

None of the infrastructure investments I just noted will simply appear over night. Efforts must be made today to ensure the infrastructure supporting future production will be available at the time those resources come on-line.

Consider that the development process in a frontier area is a multi-year endeavor that can take up to a decade to get to full production, provided all goes according to plan. Permitting, lease bidding, contractual work, and preliminary geophysical work can take several years and has to be conducted in advance of the first drill-bit hitting the seafloor. For the first couple years, test wells are drilled. If successful, this is followed by the development of a series of delineation wells that define the overall geographic and geological scope of the potential play.

The exploratory wells drilled in the early days of the project are then developed and completed into producing wells. But before any of this can happen, there is significant engineering design and fabrication work that has to be completed in developing the production structure, its caissons, topside decks, umbilicals, crew quarters, gathering systems, to name a few of the numerous logistical challenges a developer, or usually set of developers, will face.

The recent experience with Chevron, Devon Energy and Statoil's Jack project provides a case in point. It has taken these partners close to three years, to make preliminary findings that gave these partners the confidence that deeper wells could be profitable. The perseverance and hard work of these partners may pay off given their recent announcement of as much as 15 BBBIs in potential reserves for this particular area of the GOM: triple the current estimated GOM proved reserves of four BBBIs.

The experience with Jack play highlights one of the big potential upsides of developing frontier areas. Many naysayers maintain that currently restricted areas would only contribute small levels of resources over relatively brief periods of time. A shortcoming in this argument is its failure to recognize the potential for big quantum leaps in technology, ingenuity and our experience that are usually omitted in the resource estimates of these particular areas. A decade ago, no one would have thought that

drilling in water depths of over 1,000 feet would be feasible, let alone commonplace. Nor would anyone have thought that we could double the crude oil reserves in the GOM with a single concerted effort in a difficult-to-understand geological structure. But both

In this business sharing arrangement, government, operating on the behalf of its citizens, are in the position of making offshore resource available to industry for development. Industry then pays the government fees, bonuses, and a percent of the profits (what we call royalties) for the opportunity to take advantage of these resources. The more successful the resource development efforts, the higher the profits for both government and industry. The added benefit, however, is lower cost energy resources for domestic consumption use.

The fundamental question and clear source of confusion that arises in the royalty debate is defining the purpose of the royalty regime: is it to maximize revenues that accrue to the government from oil and gas activities, or is it to maximize the production of lower cost energy resources for its citizens? Unfortunately, the degree to which both of these goals can be attained simultaneous is exceptionally limited.

#### **Conclusions**

In conclusion, I want to thank you for the opportunity to provide an overview of oil and gas development opportunities and challenges in the currently-restricted areas of the OCS. The oil and natural gas resources in these areas represent considerable opportunities for bolstering our domestic energy supplies for some period to come. The key to realizing these opportunities rests in understanding that they will not occur by just access alone, nor can they occur overnight once their need gets so desperate that almost all recognize that maintaining these offshore restrictions makes no sense. Actions and leadership needs to be taken today that establishes a reasonable, sensible, and policy-consistent framework for making long-run investments that will result in a steady stream of domestic low-cost energy resources to fuel our transportation systems, homes, business and industries.

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