

**Testimony of**

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**Before the**

**Committee on Commerce, Science and Transportation**

**Subcommittee on Oceans, Atmosphere, Fisheries and Coast Guard**

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Mr. Chairman, I am Pete Slaiby, Vice President of Shell Alaska. I am pleased to be here today to share with the Committee the lessons Shell has learned in moving forward to explore our leases in Alaska's Outer Continental Shelf (OCS).

Alaska's OCS contains untapped world-class resource volumes. On Sunday, September 9<sup>th</sup>, Shell took the first step to developing those resources, when crews aboard the Noble Discoverer began drilling at Shell's "Burger" prospect in the Chukchi Sea. It has taken years of effort to get to this point. It is a critical step in the journey to ensure that Alaska's vast resources are developed for the benefit of the nation.

In my testimony I will discuss:

- Alaska's vast offshore resource potential and the benefits of developing those resources.
- Shell's Alaska operations with a focus on 2012 operations and plans for 2013 and beyond.
- Key lessons we have learned in recent years and recommended changes that policymakers should make.

### **Alaska OCS - World Class Potential**

We, like the U.S. Geological Survey, believe the Arctic holds vast resources. More than 500 exploratory, production, and disposal wells have been drilled in the Arctic waters off Alaska, Canada, Norway and Russia. In Alaska's OCS, following federal OCS lease sales in the 1980s and 1990s, more than 35 wells were safely drilled in the Beaufort Sea and Chukchi Sea.

Alaska's offshore likely holds one of the most prolific, undeveloped conventional hydrocarbon basins in the world. Conservative government estimates are that Alaska's OCS holds 27 billion barrels of oil and over 120 trillion cubic feet of gas.

To illustrate the magnitude of this estimate, consider that Alaska's OCS is estimated to hold two-and-a-half times what has been produced in the Gulf of Mexico since 1990; and at least one-third more oil than has been produced to date in Prudhoe Bay over the past 30 years.

One independent assessment has concluded that an average of about 700,000 barrels of oil per day for 40 years could be produced if Alaska's Beaufort and Chukchi Sea were developed. The study found that Alaska OCS oil production would peak in 2030 at 1.45 million barrels per day and that natural gas production would peak in 2050 at 2.1 billion cubic feet of gas per day.

### **The Benefits of Developing the Alaska Offshore**

Developing Alaska's offshore oil and gas resources will have many benefits in Alaska and throughout the nation. Resource development is an economic engine with an enormous economic multiplier effect that can last for decades.

- Creates Jobs and Government Revenue: Developing Alaska's OCS and the associated infrastructure will be an enormous job creator. It is no exaggeration to say that development will be a genuine, long-term economic stimulus plan.

In 2010, Northern Economics and the Institute for Social and Economic Research (ISER) at the University of Alaska evaluated the economic benefits of developing Alaska's OCS resources, and found:

**New Jobs:**

- An average of 54,700 jobs per year sustained for 50 years. Peak employment during development of more than 91,000.

**Payroll Paid:**

- Total payroll will be \$145 Billion through 2057.
- Employees in Alaska will receive \$63 Billion.
- Employees in the rest of the US will receive \$82 Billion.

**Government Revenue Generated:**

- Total government revenue will be \$193 Billion through 2057.
- Federal revenue will be \$167 Billion.
- State of Alaska revenue will be \$15 Billion, with \$4 Billion to local governments.
- Other states would receive \$6.5 Billion.

- Extends the Operating Life of TAPS (Trans Alaska Pipeline System): Developing the oil in Alaska's OCS would ensure the long-term viability of TAPS, which is a critical energy supply line. TAPS brings about 600,000 barrels of oil per day to market, equivalent to 11 percent of the nation's domestic supply. But this is a fraction of the 2.1 million barrels per day that TAPS delivered at its peak.

TAPS throughput is declining, because production in Prudhoe Bay has fallen significantly in recent decades. Unless new Alaska oil resources are developed, oil throughput into TAPS will continue to decline, and eventually the pipeline will shut down. The implications of this are serious.

We have already witnessed what life without TAPS would mean. In 2011, TAPS was temporarily shut down. This had an immediate impact on crude prices, jeopardized the continuity of the U.S. West Coast refinery infrastructure, and over a longer time frame could ultimately result in increased reliance on Russian crude supplies. Unless new oil resources in Alaska are developed, TAPS future is uncertain.

Note too that new pipelines will be needed to bring offshore oil to TAPS. These new pipelines will enable the development of satellite oil fields in Northern Alaska, including the National Petroleum Reserve-Alaska (NPR-A). Those fields are currently "stranded" due to lack of infrastructure and could become economic to develop.

### **History of Shell in Alaska**

Shell has a long history in Alaska's offshore. Beginning in 1964, Shell produced in state waters at Cook Inlet for more than 30 years. In the late 1970s and mid-1980s, Shell drilled exploration wells offshore in the Gulf of Alaska, St. George Basin and the Bering Sea.

In the late 1980s and early 1990s, Shell acquired federal leases in Alaska's OCS. We drilled exploration wells in the Beaufort Sea and four of the five exploration wells drilled at that time in the Chukchi Sea. We found oil and gas, but chose not to proceed to development. Instead, we plugged and abandoned those exploratory wells for economic reasons – including the fact that TAPS was already running near capacity.

Since 2005, the federal government has held several more OCS lease sales in Alaska. Shell participated in these sales and is now the majority leaseholder in the Alaska OCS. Shell paid nearly \$2.2 Billion for ten-year leases in the Beaufort and Chukchi Seas.

Over the years, Shell has invested an additional \$2.5 Billion and seven years preparing for and assembling the assets to execute an exploration drilling program with unparalleled mitigation and safety measures.

Shell's work includes multiple years of 3D seismic data collection, first-of-its-kind baseline science, shallow hazard surveys, geotechnical programs, numerous social investment initiatives, and hundreds of meetings with North Slope residents.

Shell firmly believes that scientific investigation of the impacts of oil and gas activities on environmental resources is required to establish a truly sustainable business model. Since our return to Alaska in 2005, Shell has championed the establishment of a new frontier of scientific study in the Arctic and invested millions of dollars. The potential for oil and gas exploration and development in this important region has been a catalyst for extensive Arctic studies and research programs. At a time when federally funded scientific research is under budget constraints, Shell has played a critical role in working with partners and stakeholders to advance the investment in Arctic research and to establish a new baseline understanding of the ecosystems of the Chukchi and Beaufort seas.

### **Shell Alaska: 2012 Exploration Program**

This year, Shell will drill as many 'top holes' as possible in the Chukchi and Beaufort Seas during the short open water season. This means that we will not drill into oil reservoirs. Instead, we will drill the top part of a well to around 1,500 feet and then cap the well. We will return in 2013 to drill and evaluate potential hydrocarbon zones. The time spent working on the wells this year will reduce the time necessary in 2013 to complete and fully evaluate the wells.

Shell is committed to employing world-class technology and experience to ensure a safe, environmentally responsible Arctic exploration program – one that has the smallest possible footprint and no significant negative impacts on North Slope stakeholders or traditional subsistence hunting activities. Aspects of the 2012 program have been under evaluation by federal agencies since 2006. At every step, Shell has worked with federal agencies, the State of Alaska, local governments and residents to develop a program that achieves the highest technical, operational and environmental standards.

It is this commitment to the highest standards that led us to focus on top holes in 2012. We made the decision not drill into oil zones this year based on our assessment in early September about

the readiness of our voluntary dedicated first-of-its-kind Arctic containment system and operating constraints.

The operating constraints are largely about ice and weather, both of which played a role in delaying our mobilization in 2012. Although 2012 had record low summer ice across the entire Arctic, our program was nonetheless impacted by ice. Multi-year sea-ice near our leases was slow to melt and remained in the Chukchi Sea in the vicinity of our Burger drilling location throughout summer. In addition, storm systems occurred during the time that our fleet was transiting to Alaska and during the time vessel anchoring was planned. This resulted in significant lost operating and drilling days in 2012. Our decision not to drill into oil zones this year demonstrates that we reacted to ice and weather in a safe and responsible manner.

Now, let me describe briefly the components of our exploration program and the multi-year effort that led up to 2012. Then, I will describe our 2012 operations.

There are three main components to the exploration program and physical assets deployed:

- First, we have two drilling rigs and multiple support ships. Both drilling rigs have undergone several years of engineering upgrades, including extensive upgrades to meet extremely stringent air emissions regulations required by EPA.
- Second, we have assembled a 100% Shell-dedicated oil spill response capability that provides multiple barriers and responses to the very unlikely event of an oil spill or leak.
- Third, we have developed and implemented a sophisticated logistics plan that provides for re-supply and transportation of the vessels themselves, the equipment needed to drill wells, and the personnel required to operate the program.

As we were assembling these physical assets, we managed several other critical and essential elements to our program. For example:

- There was a multi-year process to obtain dozens of permits and approvals needed to operate. Numerous government regulatory agencies were involved; and many frustrating delays and set-backs occurred.
- There were many legal challenges to our permits, which created significant uncertainty around our program and, in some cases, actual delay.
- There was an intense outreach effort to stakeholders, particularly to the residents and communities on the North Slope of Alaska who have a keen interest in understanding the program and providing input.
- There were unlawful vessel boardings that posed a threat to people and the environment as well as to our assets. I would like to expand on this. We respect and welcome a dialogue and debate about Arctic development, both through the government's public process and through our own engagement efforts. However, once a decision has been

made to approve our program, interference that is unsafe and illegal should not occur and should not be tolerated. Unfortunately, we experienced such actions during our mobilization this year.

Our program in the Arctic is impressive and unparalleled. In addition to mobilizing two drill ships, more than twenty support vessels, an approved capping stack, and other redundant oil-spill response equipment we have:

- Fully trained approximately 1,800 personnel.
- Located a Search and Rescue helicopter on site in Barrow.
- Conducted coastal observation over-flights for marine mammals in both the Beaufort and Chukchi Seas.
- Hired and trained 160 Protected Species Observers, who are deployed on vessels and aircraft.
- Established and fully staffed 11 Communications Centers along the North Slope.
- Hired and trained 11 Subsistence Advisors and eight Community Liaisons Advisors, who are on site in coastal villages from St. Lawrence Island to Kaktovik.
- Hired, trained and deployed Oil Spill Response personnel.
- Put in service a dedicated 737 fixed-wing aircraft for crew changes.

It is important to note that an exploration program, unlike a development and production program, is a temporary, short-term operation. In the Alaska OCS, an exploration program includes drilling multiple wells. Each are anticipated to take approximately 30 days to complete and then the well will be permanently plugged and abandoned and the site cleared.

Shell's exploration program will meet or exceed all applicable regulatory requirements for the protection of health, safety and the environment.

We strive to be the best neighbors possible within the communities in which we work. For example, we have chartered a crew-change plane to avoid disrupting the existing flights in and out of Barrow. We have dedicated camps to quarter personnel to avoid flooding local markets and inflating the cost of living in communities that are already in tight supply. We have Communication Centers and Subsistence Advisors to assure that our activities are aligned with subsistence activities. Efforts such as these help ensure that our Alaska OCS development is sustainable.

Finally, our 2012 program also includes a significantly expanded data-gathering data program so that we can develop a comprehensive understanding of the coastal and onshore environments of the North Slope and identify viable development opportunities, including where future production infrastructure can be sited, such as pipelines, staging areas, and pumping stations. This program included:

- Surveying an area of more than 21,000 square miles (roughly the size of West Virginia) to understand the physical, biological, and social environment.
- Collecting various types of scientific information in more than 1,000 survey areas, transects, and study plots within the National Petroleum Reserve - Alaska.

- Conducting hydraulic assessments of 62 rivers and 20 lakes.
- Conducting vegetation / wildlife habitat assessments on 176 assessment plots and assessing coastal fish and bird populations.
- Working with the Bureau of Land Management to develop consistent data collection and assessment protocols and fill data needs.

These onshore studies are being integrated with preliminary engineering and design efforts to identify infrastructure construction requirements. While this program required extensive use of helicopters to deploy investigators across this large area, we worked extensively with local stakeholders and subsistence hunting communities to reduce the potential for impacts.

### **Shell Alaska: 2013 and Beyond**

For 2013, our approved Exploration Plan allows for a similar fleet and personnel deployment, so that we can drill wells and make hydrocarbon discoveries. We plan to complete several wells in the Chukchi Sea and one to two wells in the Beaufort Sea to prove Alaska's hydrocarbon potential, and then move to verify the size and scope of resource. The lessons learned from 2012's complex logistics fleet and personnel deployment are significant. Shell is already incorporating these lessons into our even more robust 2013 plans.

Well results in 2013 will dictate individual project success for further pursuit, or potentially, shift us to explore the remainder of our portfolio in both the Chukchi and Beaufort Seas. It is important to recognize we have 413 lease blocks in our Alaska offshore portfolio and paid a total of \$2.2 Billion between 2005 and 2008 for the right to explore and develop these leases. We are paying escalating annual lease rentals to the federal government. Total rentals paid in 2013 will be nearly \$8 million. While we are committed to continuing our exploration efforts, there is recognition of the untenable nature of exploring and confirming commercial energy resources within the 10-year lease term in the offshore Arctic. To have a sustainable program, these plans must be evaluated well in advance of lease expiry.

### **Lessons Learned and Recommendations**

We have learned many lessons over the last seven years in Alaska. Today I want to focus on the often frustrating experience with navigating the uncertain process governing exploration, and also provide a few recommendations concerning the regulatory and legal processes, and Arctic lease terms. Stated simply, the status quo is neither workable nor defensible, and it is putting the development of Alaska's offshore resources at risk.

### **Improve the Regulatory Process**

To put it bluntly, the regulatory process for drilling in Alaska is broken; it is not efficient, it results in unnecessary and costly delays, and it needs to be fixed. And we at Shell believe that it can be – and must be – fixed. We are willing to work with government agencies to accomplish this, based upon what we have learned and experienced over the last seven years. As we have said over a number of years, rigor is still required, but rigor can be delivered more efficiently. To put things in context, Shell paid the federal government \$2.2 billion for leases in the Chukchi and Beaufort Seas. Prior to offering these leases, the government spent years doing in-depth environmental analyses. While the federal government should not just hand Shell its permits and approvals without Shell making the required health, safety and environmental showings, we did

reasonably expect that following the government's comprehensive environmental studies and its decision to offer the leases, that the necessary government permits and approvals to explore and develop the leases would follow in an orderly manner. That has not been our experience, and it has deprived us of our ability to exercise our rights under leases that we paid significant amounts of money to secure.

I also want to make clear that fault does not always lie with the regulators themselves; it is the inefficient and broken regulatory process that is most often to blame. Over the years, we have worked with many individuals at state and federal regulatory agencies that are extraordinarily dedicated public servants and have worked intensely on our program. That is much appreciated.

But the fact remains that the regulatory system for offshore Alaska operations is flawed. The most fundamental flaw, which I will discuss in more detail, is that the regulatory process lacks certainty. Shell, like all other regulated businesses, needs to know the "rules of the game" up front, and these rules must be clear and cannot constantly change. Shell is more than willing to play by the rules; to have a robust and thorough permitting process; and to adhere to the highest environmental standards. But the way that regulatory agencies apply their standards, regulations and statutes should be clear and consistent, and the permitting process should be transparent, so that lease holders like Shell will know with certainty both what the requirements for drilling plans are, and that if these requirements are met, drilling can proceed.

A second problem is that there is a lack of coordination by the many agencies that regulate drilling activities within the Arctic, both between the various agencies, and, at times, even within the same agency. A mechanism must be put into place to require that regulatory agencies properly coordinate to avoid unnecessary, timely and costly delays. Congress has done this in many other circumstances, and should do so here as well.

To improve the regulatory process I have three recommendations:

1. *Federal permitting for Alaska energy development and infrastructure should be done by a single office.* To date, our project has required many permits from multiple federal agencies. The current process is cumbersome, inefficient, and leads to duplication of work and effort (on both the part of the agencies and Shell). There is a lack of communication among and between the many agencies. Under the current system, the process is neither clear nor certain, and the quality of decision-making could suffer.

The need for coordination was recognized by our Alaska senators in legislation and the Administration in July 2011, when the Federal Interagency Working Group on Coordination of Domestic Energy Development and Permitting in Alaska was created to ensure that Arctic energy decisions related to drilling projects were coordinated across some 11 federal departments and agencies. This was a welcome development led by Assistant Secretary David Hayes.

But I believe this is not enough to efficiently meet the growing demands of a project that will require years of sustained effort. Going forward, Shell and possibly other companies will collectively need hundreds of government reviews, approvals and permits annually. Under the current multi-agency regulatory process, this will not work.

Just as important, the government should be organized in a manner that ensures a cohesive approach to developing Alaska's energy resources. We have seen the National Oceanic and Atmospheric Administration issue an Arctic Environmental Impact Statement with little consultation or coordination with other agencies. We have a new National Petroleum Reserve Alaska (NPRA) management plan from Bureau of Land Management that will make pipeline construction through NPRA to TAPS a regulatory challenge, because it includes provisions that hinder stream and river crossings, complicating the construction of energy infrastructure.

The federal government made the decision to sell Alaska OCS leases with the intent of assessing and evaluating the resources potential to inform decisions about future development. The government accepted \$2.2 Billion from Shell in lease bids. It should have a coordinated, cohesive plan to make that a reality. Instead we have multiple agencies each with a separate piece of the regulatory puzzle that are not always working in a coordinated fashion toward a clear and common goal. We believe that in order to facilitate an orderly and efficient process, all regulatory approvals should be handled by a single office with clear coordination and consultation requirements and clear deadlines.

Canada is moving to "one project, one review" in order to streamline the regulatory process for *all major economic projects*. The reforms consolidate the number of regulatory bodies responsible for reviews and set binding timelines for regulatory decisions. In announcing the reforms, a top government official said, "It will help prevent the long delays in reviewing major economic projects that kill potential jobs and stall economic growth by putting valuable investment at risk." Many state public service commissions have a similar approach, where a single siting board issues all of the permits and approvals required for an energy generation project.

To bring certainty, efficiency, clarity and coordination to the process of permitting Alaska energy projects, I recommend a "one-stop" permitting office for Alaska's offshore projects. This could be done any number of ways. For example,

- All federal review, approval and permitting work for developing Alaska's energy resources and related infrastructure could be done in a single office based in Alaska. That office should include the range of experts needed for both the offshore exploration and development and the onshore infrastructure. Such an office was proposed in legislation that Senator Begich and Senator Murkowski introduced recently.

Or

- Even better, Congress should consider creating a dedicated, focused regulatory body for Alaska's offshore oil and gas projects. The compelling reasons to take this step include the size of the resource; the economic benefits of development for the nation; and the critical need for the resource to reach the TAPS pipeline and ultimately, the market in a timely manner.

2. *Federal agencies must be fully resourced, coordinated, and must deliver decisions in a timely manner.* We cannot forget that the federal government held a lease sale and Shell paid \$2.2 billion with the reasonable expectation that the federal government would have adequate, trained staff with appropriate expertise and direction to execute the program in a timely manner. Failure to provide such support undermines confidence in the offshore leasing program and denies lessees of the benefit of their bargain.

To the extent that there is not “one-stop” permitting, Congress should take action to assure that regulatory agencies are fully coordinated, have deadlines in place for reviewing and processing permit applications, and are held accountable when they fail to meet such milestones. In the new transportation authorization, MAP-21, agencies that miss permitting deadlines can lose part of their budget. When the private sector invests billions of dollars in projects that will create economic activity and jobs, enhance energy security, and improve the nation’s infrastructure, there is a real cost if regulatory agencies fail to coordinate and deliver (or reject) needed approvals and permits in a reasonable and timely manner.

And lack of resources at the agencies cannot be an acceptable excuse for delayed permitting and approvals. In this time of tight budgets, policymakers should authorize and direct agencies to retain outside experts with funds provided by applicants. This is not new for many agencies, and can be accomplished through arms-length funding and with pre-approved independent third-party contractors.

3. *Regulatory requirements must be based on facts and science; and absent some compelling reason, those requirements should not change “in the middle of the game.”* Our Alaska project is subject to intense scrutiny by regulators and by the public, as it should be. Some who oppose the project, however, deal with information not based on fact or science. While such opposition – whether in the media or behind closed doors – will always exist, regulatory agencies cannot allow incorrect facts or faulty science to influence their decision-making.

Shell is committed to advancing the scientific understanding of the Arctic and the technology used in the Arctic. Some argue that there is insufficient scientific data regarding the Arctic and, therefore, exploration in the Chukchi and Beaufort Seas should not go forward. In reality, the available scientific data is more than adequate to identify and evaluate the impacts of an exploration program that is, by definition, a short-term, temporary operation.

Regulatory decisions that assess the capabilities of our equipment and assets must be based on accurate facts. For example, we have gone to considerable expense to assemble a suite of vessels and other assets that are capable of operating in Arctic conditions well into the fall. What is the point of having such equipment if we are not given the chance to use it in our operations?

### **Improve the Litigation System**

The system allows multiple lawsuits on a single project, which can keep a project in litigation for more than a decade. When a single, major project needs dozens, maybe hundreds of government

approvals and permits, each approval and each permit is an opportunity for a potential lawsuit by those seeking to stop the project. Project opponents often use the environmental laws under which permits are issued to challenge projects for reasons wholly unrelated to protecting the environment. These lawsuits have the potential to deter investment and economic growth.

This problem is not unique to Shell, and should concern all of us. There is a better way. For example, Congress passed legislation aimed at reducing the uncertainty that litigation can bring to federal transportation projects. Congress reduced the time in which an opponent must file suit from six years to five months. Under this simple reform, no one loses the opportunity to have his day in court, but potential plaintiffs can no longer “lie in wait” for years before bringing legal action. Policymakers should make such reforms apply more broadly, so that the right to go to court is preserved while at the same time ensuring that the legal process does not stymie economic growth and investment.

For example, Congress could:

- Change the statute of limitations period for legal challenges from six years to sixty days;
- Set a deadline for adjudication of challenges or require that courts give energy projects priority on dockets;
- Require that all project challenges be brought directly in the District Court closest to the project location.

### **Revenue Sharing**

Current law provides that revenue from Gulf of Mexico leases is shared with the Gulf States of Alabama, Louisiana, Mississippi and Texas. Alaska should also share revenue sharing rights. It is only fair. Congress should approve legislation that gives Alaska a portion of the federal revenue generated by production on current and future leases.

### **Extend Arctic Lease Terms**

Our Arctic offshore leases have a ten-year term. This is too short. Shell has worked diligently to prosecute its leases, but has experienced substantial and unanticipated delays due to a broken permitting process and to litigation. Further, the exploration window in the Arctic is short. While exploration in the Gulf of Mexico can be done 12 months a year, the exploration drilling season in the Arctic is typically about three or four months. We urge policymakers to provide longer lease terms for future Arctic leases. But we also need a remedy for existing leases that we have earnestly pursued; many of these are well into their term without even initial well results. Unless addressed, a number of Arctic leases will expire before they have had a fair chance to be explored.

### **Summary of Recommendations**

In summary, the statutes and regulations applicable to developing Alaska’s offshore resources and to bring those resources to market should be administered by a single, dedicated body based in Alaska. The regulatory framework should be clear and consistent. The regulatory process should be properly funded, efficient and robust. The process should lead to timely decisions.

Permitting for oil and gas activity must be done thoroughly and to the letter of the law, and the litigation process should be controlled. Regardless of one's views on oil and gas development, anything less than this should not be tolerated.

I am happy to answer any questions.