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Attention: Nancy Johnson and Trudy Transtrum

The American Petroleum Institute (API) is pleased to offer comments in response to your request for input on natural gas supply and demand as you develop DOE's response to Section 1818 of the Energy Policy Act of 2005. We also very much appreciate the opportunity we had to participate in the December 19-20 natural gas meeting. That meeting underscored the urgency of addressing the causes of today's tight natural gas market and the need to take action to develop much-needed supplies for the future.

This is not a new issue. As the 2003 National Petroleum Council (NPC) natural gas report indicated, "Current higher gas prices are the result of a fundamental shift in the supply and demand balance." And, in October 2004, the Joint Economic Committee (JEC) evaluated the pressures on natural gas prices and concluded that "...a combination of policies and circumstances that simultaneously encourages demand while constraining supply is *a recipe for problems*." [Emphasis added]

The JEC also succinctly outlined the challenges our nation faces:

"Another factor limiting domestic production is that gaining access to public lands, where most of the promising natural gas fields lay, has

become increasingly difficult... However, just obtaining leases and complying with the law are often not sufficient to extract natural gas. Litigation has stifled access to natural gas sources as environmental groups have brought numerous lawsuits to prevent even preliminary, noninvasive exploration activities."

The NPC study estimated that: "Increased access to U.S. resources (excluding designated wildernesses and national parks) could save \$300 billion in natural gas costs over the next 20 years." Yet, that estimate assumed phasing lifting of Outer Continental Shelf (OCS) moratoria beginning in 2005 which obviously has not occurred. Nevertheless, the NPC study made numerous important policy recommendations – unfortunately few of them have been implemented by government. API's policy recommendations can generally be summarized in one phrase – <u>implement the NPC policy recommendations</u>. A detailed list of API's policy recommendations (incorporating NPC recommendations) is attached.

While an important first step, the Energy Policy Act of 2005 (EPACT) included few provisions that would directly enhance natural gas supplies. Thus, as was noted repeatedly at the December 19-20 meeting, while we need to use energy wisely, we must address the supply side by proving greater access to federal lands, removing procedural impediments to resource development and building the infrastructure needed to tap into global gas supplies. For too long, the supply side of the equation has been ignored.

Clean-burning natural gas fuels our economy – not only heating and cooling homes and businesses but also generating electricity. It is used by a wide array of industries -- fertilizer and agriculture; food packaging; pulp and paper; rubber; cement; glass; aluminum, iron and steel; chemicals and plastics, etc. And, it is an essential feedstock for many of the products used in our daily lives -- clothing, carpets, sports equipment, pharmaceuticals and medical equipment, computers, auto parts, etc.

Hurricanes Katrina and Rita have underscored the tight balance of natural gas supply and demand. Only 4-5 years ago, natural gas prices were in the \$2 to 3 per million Btu (MMBtu) range. Recently, prices have settled in the \$11-14 per MMBtu range, setting record levels in the fourth quarter of 2005. And, almost 19% of natural gas production in the Gulf of Mexico remains shut in. Cumulatively, since August 26, 574.5 billion cubic feet of natural gas was shut in – enough natural gas to heat/cool a million homes for eight and one-half years.

And, as you heard at the December meeting, higher natural gas prices have taken their toll – more than 2.8 million US manufacturing jobs have been lost since 2000. Chemical companies closed 70 facilities in the year 2004 alone and have tagged at least 40 more for shutdown. As Andrew Liveris of Dow Chemical indicated in a December interview with the New York Times, in 2002, Dow's energy and feedstock costs represented 29% of their costs. Today, they are 50%.

The problem is not the lack of natural gas supplies. Rather, the U.S. seems reluctant to take the necessary actions to develop its own abundant supplies and to build the liquefied natural gas (LNG) facilities needed to tap into global gas supplies.

Federal lands, which comprise about 31% of total U.S. land area as well as the OCS, are key to America's future supplies. Federal lands contain most of the undiscovered natural gas – 62% according to data from the U.S. Geological Survey and the Minerals Management Service. U.S. undiscovered technically recoverable natural gas resources are about 635 trillion cubic feet (sources: MMS, USGS, BLM, NPC) – enough natural gas to power the 60 million homes using natural gas for more than 120 years. Yet, much of this land is either officially "off limits" (e.g., OCS moratoria) or access and development is severely constrained by permit stipulations, conditions of approval or other post-leasing restrictions that place these areas off limits in a de facto, but very real, sense. Of particular significance is the use of legal challenges by antidevelopment groups to delay and/or prevent energy development. In 1999, about 4.5% of the leases offered were protested. By 2005, that had grown to 50%. For example, in 2004, every lease offered for sale in Utah was protested. As Acting Assistant Secretary Burton pointed out at the December meeting, these protests are concentrated in natural gas-rich areas in the Mountain states, such as Colorado, Wyoming, Montana, etc.

Similarly, some coastal states have objected to development 100 or more miles from their coast – despite the solid environmental record of offshore production. As Secretary of the Interior, Gale Norton, noted in recent testimony almost 3000 platforms were in the direct path of Hurricanes Katrina and Rita – some of which faced sustained winds of 170 miles per hour (mph) for 5-6 hours with gusts of over 200 mph. Secretary Norton emphasized that:

"There is good news regarding offshore operations. Katrina and Rita – both reaching Category 5 strength as they spun through the Gulf and the heart of offshore energy production – caused no loss of life among offshore industry personnel or significant spills from any offshore wells on the Outer Continental Shelf (OCS). *This bears repeating: We faced down two of the most devastating hurricanes ever to hit the Gulf of Mexico without one significant spill from any offshore well on the Outer Continental Shelf."* [Emphasis added] America's natural gas and oil companies have worked hard to protect the land and the environment by employing state of the art technology to minimize our presence while expanding the recovery of our energy resources. Using advanced technologies such as enhanced seismic imaging and extended reach drilling, exploration and production can be more precisely targeted to the resource reservoir and fewer wells needed. And, where feasible, multiple wells can be extended underground from a single site. An evaluation of advances in offshore technology, including subsea technology, indicates that about 1125 fewer platforms (pre-1995 design) would be in the federal OCS in the Gulf of Mexico today if today's advanced technology could have were applied when they were installed.

As you know, API does not conduct any forecasts of future supply and demand. As DOE moves forward with its analysis, we suggest you cast a wide net and examine many forecasts to consider the range of potential results. Individual companies issue such forecasts (e.g. ExxonMobil's recent "Outlook for Energy: A View to 2003) as well as government entities, both in the U.S. and elsewhere (e.g., IEA). And, academic institutions, energy research firms and think tanks may also offer fresh perspectives. In doing so, we do urge that assumptions be carefully scrutinized. As you know, EIA provides much useful information. However, the December meeting highlighted the importance of considering assumptions and questioning whether the forecast could, in fact, be met when EIA indicated that their outlook assumed current law but did not incorporate the lifting of OCS moratoria in 2012 when the current withdrawals expire. And, of course, the NPC study remains a touchstone with a wealth of solid information.

It is especially timely for your review of natural gas supply and demand and the policies needed to ensure reliable, affordable future supplies. As a nation, it is time to move forward and take concrete steps to develop those supplies. I look forward to working with you on these important issues and will be glad to answer questions or provide additional information. Please do not hesitate to contact me at 682-8116 or <u>anthonyb@api.org</u>.

Sincerely,

Betty Anthony

Natural Gas and Oil Policy Recommendations

Natural gas and oil fuel our economy – not only heating and cooling homes and businesses but also generating electricity. Natural gas, in particular, is used by a wide array of industries -- fertilizer and agriculture; food packaging; pulp and paper; rubber; cement; glass; aluminum, iron and steel; chemicals and plastics, etc. And, it is an essential feedstock for many of the products used in our daily lives -- clothing, carpets, sports equipment, pharmaceuticals and medical equipment, computers, auto parts, etc. Only 4-5 years ago, natural gas prices were in the \$2 to 3 per million Btu (MMBtu) range. Recently, prices have settled in the \$11-15 per MMBtu range, setting record levels in October. Higher natural gas prices have taken their toll – more than 2.8 million US manufacturing jobs have been lost since 2000 and chemical companies closed 70 facilities in the year 2004 alone and have tagged at least 40 more for shutdown.

The National Petroleum Council (NPC) study, "Balancing Natural Gas Policy: Fueling the Demands of A Growing Economy" (2003) highlighted the significant costs associated with current policies that do not support the development of America's abundant natural gas resources. The NPC estimated that continuing on our current policy path could result in \$300 billion more in consumer costs over 20 years.

Given the importance of natural gas and oil throughout the economy and the onset of the winter heating season, attention has begun to focus not only on ways to use natural gas and oil more wisely, but also on how to enhance supplies.

America's oil and natural gas industry supports the following actions:

Providing Low Income Energy Assistance

- <u>Full funding by Congress of the Low Income Home Energy</u> <u>Assistance Program (LIHEAP)</u>
- <u>Release LIHEAP funds early</u>. Providing funds to those in need early in the heating season can help prevent defaults on home heating bills and service curtailments.

Developing Offshore Natural Gas and Oil Supplies

 Promptly fund and conduct the OCS inventory required by the Energy Policy Act of 2005. This inventory will allow states and the nation as a whole to fully appreciate the sizable resources off our coasts that have been placed "off limits" to development. Current estimates are based on older data and are likely to be conservative. Advanced computer models coupled with updated seismic data will show policymakers and their constituents the true costs of OCS moratoria to all American consumers.

- Lift the existing moratoria on offshore natural gas and oil exploration and development. Restrictions on federal lands off the Atlantic and Pacific coasts, Alaska and most of the Eastern Gulf of Mexico have put 77 billion barrels of oil and 420 trillion cubic feet (Tcf) of natural gas off limits. That is enough natural gas to heat more than 100 million homes for over 60 years. And, it is three times the natural gas resources of Canada and Mexico combined.
 - Provide states with expanded rights to develop energy resources off their shores. States deserve the right to opt out of moratoria and develop resources off their coasts. This could help supply additional, critically needed natural gas and oil supplies to American consumers. Natural gas resources off the lower 48 states are estimated to be enough to maintain current natural gas production for almost 70 years and could supply current industrial and commercial needs for 29 years.
- Adopt the most expansive 5 year lease sale program for 2007-2012 possible. The Minerals Management Service (MMS) is preparing its next 5 year plan. The first step (the recent call for information) drew record support for OCS development. To maximize future supplies of natural gas, MMS should include all areas (not under moratoria) in their leasing program; expand OCS acreage offered for sale in Alaska (including the Beaufort and Chukchi seas and Bristol Bay); and schedule an early sale for the remaining Sale 181 acreage. The Sale 181 area in the Gulf of Mexico is particularly important as it has substantial resource potential and access to existing infrastructure that could speed delivery of its resources to energy users. And, an early sale would send a powerful signal to energy markets.
- <u>Streamline the Coastal Zone Management (CZM) consistency review</u> <u>process.</u> Uncertainties that can impede/deter resource development can be reduced if: a deadline of 120 days (from filing of an appeal) is set for decisions on state appeals of consistency findings; initial action is taken to reach federal and state agreement on information needed for the decisionmaking process; and a single consistency finding is allowed. The CZM review process has proved to be a major impediment, allowing states to challenge oil and gas projects more than a hundred miles off their shores and leaving some projects in limbo as approval decisions can take years. Although the recently enacted Energy Policy Act of 2005 (EPACT) set a deadline for decisionmaking of up to 365 days, this deadline is overly long and EPACT did not address the issue of a single consistency finding.

Developing Onshore Oil and Natural Gas Resources

Onshore lands in the Mountain West and Alaska hold great potential for additional domestic supplies if access is allowed and permitting and regulatory process impediments removed. Alaska has significant resource potential – estimates of 69 Tcf of natural gas and 18 billion barrels of oil. For example, the mean estimate of oil in the Arctic National Wildlife Refuge (ANWR) is 10 billion barrels (EIA) which is enough to replace current levels of imports from Saudi Arabia for 20 years. Actions needed include:

- **Opening a small portion of ANWR** in an area the size of South Carolina (19 million acres) exploration and production activity would likely only affect about 2000 acres.
- Expanding leasing in the National Petroleum Reserve-Alaska, and
- **Providing support for building the necessary infrastructure** to bring Alaska natural gas supplies to consumers in the lower 48 states by ensuring that the federal government has sufficient staff and budgetary resources to facilitate permitting and other activities such as those related to loan guarantees.

While Alaska's onshore resources will be critical to a healthy energy future, it will take time to develop them.

In the shorter term (2-5 years), the abundant natural gas resources in the Mountain West can provide much needed domestic supplies. However, vast areas of multiple use federal lands have been withdrawn from development either directly or indirectly through restrictions and constraints on operations. In assessing these non-park, non-wilderness federal lands, the NPC concluded that 125 Tcf of natural gas was effectively off limits to development and/or significantly affected by access-related regulatory requirements such as no surface occupancy and prohibitions on drilling at certain times of the year. The regulatory process is complicated and constitutes an impediment to energy production. Furthermore, legal challenges by antidevelopment groups are growing. In 1999, about 4.5% of the leases offered were protested. By 2005, that had grown to 50%. For example, in 2004, every lease sold in Utah was protested resulting in delays of up to 18 months per lease.

Measures can, and should, be taken to protect the environment, wildlife and historical and cultural properties, but the regulatory process can be improved by:

- Removing process impediments by:
 - <u>Allowing joint filing of Right of Way and drilling permits</u> for federal lands to expedite the permitting process.
 - Expanding the use of categorical exclusions or sundry notices for minimal disturbance activities, including categorical exclusions for wells and rights of way with minimal surface disturbance in existing fields and sundry notices instead of Applications for Permit to Drill

(APDs) for successive wells on multi-well drill pads. Although EPACT allows for certain categorical exclusions to be applied to disturbances of 5 acres or less, application to areas of up to 10 acres would be helpful.

- Implementing Bureau of Land Management's (BLM's) 2003 Process Improvement Memoranda
- <u>Conducting an independent review of agency practices and</u> <u>interpretation of criteria for determining site significance</u>, including establishment of standards for cultural resource reports and eliminating duplicate survey requirements.
- Monitoring by BLM of lease stipulations and conditions of approval to determine their effectiveness and removing them as appropriate. EPACT establishes a pilot project for certain Western field offices to streamline permitting. This pilot approach should be expanded to focus on monitoring, too.
- Providing adequate agency funding to:
 - <u>Update resource management plans</u> (RMPs). All activity on BLM lands is managed through RMPs. New lease sales cannot be held without updated RMPs. Further, activities not anticipated in an earlier RMP cannot occur until the plan is updated or amended.
 - Improve data sharing by federal and state land management agencies. Under EPACT, the pilot project must provide recommendations to Congress on process improvements in this area.
 - **Ensure regulatory compliance** through vigorous inspection and enforcement programs.
 - Administer the National Environmental Protection Act effectively; and
 - Provide timely resolution of appeals and protests.

Additional measures that could be taken by BLM to expedite onshore production now, including:

- Exercising existing authority to allow year-round drilling and completions to proceed;
- Issuing permits immediately for all applications in areas where existing NEPA requirements have been met;
- Proposing new fast track, emergency response rules when there is a national energy emergency in order to significantly reduce permit review and approval times.

Additionally, the Endangered Species Act (ESA) and National Environmental Policy Act (NEPA) impose an array of regulatory requirements and have provided opportunities for antidevelopment groups to litigate with the intention of delaying or preventing energy projects.

- Updating the Endangered Species Act (ESA) to enhance species recovery while streamlining review processes. Industry supports an ESA process that:
 - Improves science requirements to include use of peer-reviewed data;
 - Evaluates the economic and social impacts of species designation;
 - Encourages the use of voluntary agreements; and
 - **Recognizes different levels of protection** can be appropriate for different species.
- Improving NEPA by:
 - Eliminating duplicative environmental documentation in the NEPA process;
 - **Strengthening the Environmental Assessment process** to help reduce the need for Environmental Impact Statements;
 - Improving interagency consultation and cooperation;
 - Making the NEPA process more objective and timely through the use of best available scientific evidence and clear definition of information needed for decision-making; and
 - Enhancing agency monitoring, inspection and enforcement.

Tapping into Global Supplies through Liquefied Natural Gas (LNG)

Despite the growth of alternative fuels, oil and natural gas are expected to provide nearly two-thirds of the energy America consumes in 2025. And, natural gas demand is forecast to grow 34% by 2025 (EIA). While additional domestic supplies can and should be developed, the US also needs to tap into global supplies of natural gas through LNG shipments. There are only five US LNG receiving terminals currently in operation. The following should be implemented to support growth in LNG supplies:

- <u>Timely processing of LNG project permit applications</u>. Achieving this goal will require:
 - Coordinating and streamlining permitting LNG project sponsors face multiple, often-competing state and local reviews, as well as federal review, that result in permit delays. Setting clear review deadlines and conducting concurrent reviews will help streamline the process.
 - Providing adequate regulatory agency funding and trained staff – Adequate funding and staff will be needed to promptly process increased applications for LNG terminals and to administer regulatory programs for these terminals once they are operational.

- Conduct public education programs on the need for, and benefits of, <u>LNG as well as the safety and security of LNG operations</u>. EPACT provisions addressing this need should be implemented promptly.
- <u>Resolve uncertainty regarding natural gas quality and</u> <u>interchangeability requirements by pipelines.</u> FERC action is needed to resolve uncertainties in order to encourage development of new LNG infrastructure and maximize LNG supply.

If implemented, this array of policy recommendations cal help result in additional future natural gas and oil supplies that are essential to US energy security and economic growth.

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