Mr. Chairman, members of the committee, I am Barry Russell, President of the Independent Petroleum Association of America. Today, I am testifying on behalf of the IPAA, the National Stripper Well Association, and 32 cooperating associations of the IPAA that represent state and regional interests. These organizations represent independent petroleum and gas producers, the segment of the industry that is damaged the most by the lack of a domestic energy policy that recognizes the importance of our own national resources. NSWA represents the small business operators in the petroleum and natural gas industry, producers with "stripper" or marginal wells.

Today’s hearing addresses a fundamental issue – National Energy Policy: Ensuring Adequate Supply of Natural Gas and Crude Oil. This testimony will focus first on several key factors that influence this issue and second on actions that should be taken to improve the future domestic supply.

Factors In Developing A National Energy Policy

There are many factors that affect the development of a sound national energy policy. This testimony will focus on several key issues in crafting a sound policy to address adequate supply of essential natural gas and petroleum.

1. **Fossil energy – particularly natural gas and petroleum based energy – will continue to dominate energy supply in the United States.** According to the National Petroleum
Council’s *Natural Gas* study natural gas and petroleum account for 64.8 percent of national energy needs. Future projections show significant growth in the use of these fuels as domestic energy demand continues to increase. The U.S. economy is driven by the availability of adequate energy supplies whether consumed by manufacturing, by transportation to and from jobs, or by the expanding role of computer use and the Internet. It ignores this reality to suggest that an equally robust economy can be sustained without substantial energy growth. And, it ignores this reality to suggest that natural gas and petroleum will not be the dominant share of this growth.

2. *Regardless of changes in world politics, energy supply remains a national security issue.* A decade ago energy supply from foreign sources would be viewed as a national security risk in the context of the Cold War – supply routes at risk and energy sources subject to control by adversaries. Today’s national security issue is different, but it is nonetheless significant. Currently, we import over 55 percent of our nation’s petroleum. It comes from diverse sources, but diversity is not security. In 1973 the OPEC oil embargo crippled this country. Yet, we now import over twice as much petroleum on a percentage basis from the OPEC countries that embargoed us – and neither Iran or Iraq participated in that embargo. Whether we like to address it or not, our sources of petroleum come from countries with a history of instability. We are currently importing approximately 500,000 barrels per day from Iraq. Clearly, this is not a reliable source. Saudi Arabia is ruled by a monarchy in a world without ruling monarchs; it is constantly subject to subversion by radical religious elements. Even Venezuela is ruled by a government that has dramatically shifted that country’s priorities over the past two years and continues to be difficult to predict. We must recognize that shifts in any of these suppliers can dramatically and adversely affect our nation and our national economic security.

The past three years have demonstrated how susceptible the U.S. energy supply can be to foreign actions. The precipitous drop in petroleum prices in late 1997 through early 1999 posed a catastrophic threat to domestic petroleum production and a substantial threat to domestic natural gas production. As a result of the extended low petroleum prices in 1998-99, capital investment in petroleum production throughout the world declined. Existing production was lost. In the U.S., production dropped from 6.5 million B/D to less than 6.0 million B/D. Natural gas production suffered as well because the two commodities are linked. This year, the country has seen the inevitable consequences of lost capital in the exploration and production industry – as worldwide demand has increased, worldwide supply capacity has not kept up. This year, petroleum prices have reached levels not seen since the Persian Gulf war. Different segments of the economy have been threatened. In each case, the price and supply issues have largely been defined by the actions of foreign producer nations. Our policies must recognize this vulnerability.

3. *Future domestic natural gas and petroleum exploration and production will increasingly depend on independent producers.* Domestic exploration and production of natural gas and petroleum have changed dramatically since 1986 – the time of the last petroleum price crisis and major revisions to the federal tax code. Since that time the role of independent producers has increased. Generally, for example, domestic petroleum production is divided roughly 60 percent from the lower 48 states onshore, 20 percent
from the offshore, and 20 percent from Alaska. Since 1986, the share of onshore lower 48 states production by independents has increased from about 45 percent to over 60 percent. Independents are also increasingly active in the offshore. In the aggregate, independents drill over 85 percent of the wells in the U.S., produce 45 percent of the petroleum, and produce over 65 percent of the natural gas.

This is a trend that will continue. The reasons are straightforward. Large, integrated petroleum companies are driven by their need to generate adequate shareholder returns. In the "Dot Com" world we are living in, this requires finding and developing large "elephant" fields. Mature fields that yield more limited quantities of natural gas and petroleum characterize most of the U.S. Many of the U.S. large field prospects such as the Arctic National Wildlife Refuge (ANWR) are not available for development. In the offshore, moratoriums limit many options; those that are left are largely in the "ultradeep" portions of the Gulf of Mexico. So, compelled to fill their refineries, major integrated companies focus their development funds to the deep Gulf of Mexico and overseas. This leaves the brunt of future domestic resource development to independent producers – large and small. Independents need different policies than integrated companies. Independents rely on revenues generated solely in the upstream and are more susceptible to price swings that strip away critical financial resources.

4. Natural gas is an increasingly important element of domestic energy supply. The National Petroleum Council Natural Gas study concluded that domestic natural gas demand will increase from the current 22 trillion cubic feet per year (Tcf/yr) to 29 Tcf/yr by 2010. Most of this increase will be needed to fuel expanding electricity generation. The study concluded that:

U.S. gas demand will be filled with U.S. production, along with increasing volumes from Canada and a small, but growing, contribution from liquefied natural gas (LNG) imports…. Two regions—deepwater Gulf of Mexico and the Rockies—will contribute most significantly to the new supply…. U.S. production is projected to increase from 19 TCF in 1998 to 25 TCF in 2010, and could approach 27 TCF in 2015. Deeper wells, deeper water, and nonconventional sources will be key to future supply.

Importantly, this study concludes that these future natural gas needs can be met through domestic resources supplemented by other North American resources. Equally important, it identified key issues that had to be addressed to meet these needs.

Actions That Must Be Taken to Meet Future Needs

The NPC Natural Gas study identified a series of needs that serve to characterize the key factors to meeting future demand. They also apply to addressing domestic petroleum development. They can be divided into the following four areas: access to capital, access to the natural resource base, access to technology, and access to human resources. Of these, access to capital and access to the natural resource base are highly dependent on federal policy.

Access To Capital
The federal government needs to take actions to improve capital flow into this critical industry. Generally, there are two areas for possible action – tax reforms and federally backed financial instruments. The most immediate focus should be on tax reforms.

Following his recent radio address, President Clinton released documents indicating that he intended to propose legislation to allow expensing of geological and geophysical (G&G) costs and of delay rental payments. These are sound first steps, but more must be done.

He also indicated that he was evaluating proposals dealing with marginal wells. Action regarding these wells is essential to preserve existing production and we believe there are four key elements that should be enacted immediately:

- Creating a countercyclical marginal well tax credit.
- Allowing a 5-year net operating loss carryback for independent producers;
- Eliminating the net income limitation on percentage depletion for marginal wells; and,
- Eliminating the 65 percent net taxable income limit on percentage depletion;

All of these have been introduced or passed in some form over the past two plus years. For example, Senator Kay Bailey Hutchison recently introduced S. 2265 incorporating the expensing proposals and the marginal well tax credit in one bill. Several senators introduced S.2557 last week that includes these provisions.

We are at a rare juncture. Both Congress and the Administration are moving in the same direction regarding tax reforms for domestic natural gas and petroleum exploration and production. Both are looking toward provisions that will encourage exploration. Both are looking at ways to extend the life of domestic marginal wells – our true strategic petroleum reserve. Now is the time to act.

Will these steps guarantee that domestic production will rebound? Nothing is certain, but it will guarantee that more capital will get into this industry when it is needed. And it will avoid the mistakes of 1986 when Congress enacted Alternative Minimum Tax provisions, just as the industry needed capital to rebound from low petroleum prices. This was one of many factors that have resulted in the loss of about 2 million barrels per day of domestic petroleum production from 1986 to 1997.

This is not all that we need to do. We should also look at other tax reforms that can help bring capital to this industry over the next decade and beyond. This industry must compete for capital against high technology and Internet companies that are generating far higher returns than are likely from this mature but risky industry. Investors need reasons to put their capital in domestic exploration and production companies. Other tax reforms that could be addressed include modification of the AMT, expanding the Enhanced Oil Recovery tax credit, considering what tax treatment should apply to the unconventional sources identified in the NPC study like the current Section 29 tax credit, considering a drilling tax credit, inactive well recovery, and reevaluating the elements of percentage depletion including the rate and the number of barrels of production that apply. Decisions on these reforms should be made based on the importance of this
domestically produced resource. We must begin treating domestic natural gas and petroleum as a critical element of national economic security.

And, we should look at federal financial instruments like the PADDIE MAC concept that would create a FANNIE MAE-like program to help lower the capital costs to the smaller producers so essential to maintaining the nation’s marginal wells.

**Access To The Natural Resource Base**

Addressing the issues of access to the nation’s resources under government controlled lands is complicated. Recent successful laws that have addressed access are the Deepwater Royalty Relief Act, The Royalty Fairness and Simplification Act, and moratoriums on rules for illegally assessing new petroleum royalties. We are pleased to announce that in a recent decision, *IPAA v. Armstrong*, the District Court ruled that in fact the government doesn’t have the legal right to require producers to market at no cost to the lessor, a matter at the heart of the petroleum royalty rulemaking. These actions have enhanced the development of federally controlled resources.

The legislative requirements of the Deepwater Royalty Relief Act are expiring. The authority to continue royalty relief will rest in the hands of the Minerals Management Service. IPAA believes it is critical to continue to provide a royalty structure that encourages offshore development. The Deepwater Royalty Relief Act has proven that its approach works. However, while its benefits have largely flowed to the major integrated petroleum companies, independents are now moving more aggressively into the offshore generally and the deepwater more specifically. Major integrated companies are moving toward the ultra-deep water where their cutting edge technologies are allowing them to go. IPAA and other associations, and companies involved in the offshore have begun working with MMS and the DOE to look at how royalty policies can enhance domestic offshore production. Hopefully, these efforts will lead to administrative actions to create a royalty structure throughout the offshore that will enhance domestic production. However, if this result does not occur, Congress will need to address offshore royalty policies.

At the same time it is equally important to recognize that a larger aspect of access to natural resources involves opening access to that which is not now available and halting the trend of further embargoes of western lands. Unfortunately, the Administration avoids dealing with the clear need to open government lands to exploration and production. It hides behind an environmental sensitivity argument that is proven wrong by its own DOE report. It focuses on arguments against opening ANWR and avoids dealing with access issues offshore and in the Rockies where its own National Petroleum Council *Natural Gas* study concludes that over 200 trillion cubic feet of natural gas is either off limits or difficult to permit.

It is important to understand that access issues differ between these areas. ANWR and offshore activity off of California, the Eastern Gulf of Mexico, and the Atlantic are constrained by policy decisions, both executive and legislative, through prohibitions and moratoriums. These are based on outdated reactions to spills occurring in the past. The Administration’s own study, *Our Ocean Future*, concluded unequivocally that offshore natural gas and petroleum production is a success story. We need to move into the 21st century and make enlightened decisions to use these critical national resources.
Access in the Rockies won’t be resolved by a single act. Here, we are dealing with a mosaic of limitations. Some involve land that is completely excluded from natural gas and petroleum exploration and production.

- The Antiquities Act of 1906 has been used to declare areas as national monuments placing land completely off limits.
- In other areas, the Department of Agriculture is proposing to expand roadless areas in national forests that will preclude natural gas and petroleum development.
- Some national forests, like the Lewis and Clark National Forest, projected to be a world class natural gas source, have been administratively closed to natural gas and petroleum development.
- Wilderness areas have been created without an understanding of the resources that might be lost.

We must also deal with permitting limitations and other indirect actions of federal agencies.

- Because these are government lands, it is necessary that federal agencies issue permits for the exploration and production activities. These agencies are charged with the task of developing environmental management plans for areas under the National Environmental Policy Act (NEPA). NEPA can be used to create effective, environmentally sound management plans, or it can be used to delay and deny access. Frequently, the results reflect the attitude of the agency and its leaders. For example, in the Powder River basin the development of coal bed methane has first been delayed by the inability of the BLM to process permits. But, as the magnitude of effort was more clearcut, BLM fell back to the excuse that the EIS for the area was outdated and required a new plan under NEPA. This has led to further delay. BLM then argues it needs additional funds, requiring Congress to act and resulting in further delay. In the San Juan basin, BLM has tried to argue that its management plan needs updating and permitting needs to be delayed until another plan can be developed despite repeated assessments of the plan that demonstrate its adequacy.

- NEPA is only one of many laws that are involved in the planning or permitting processes and BLM is only one of the agencies that must be dealt with. Others include the Endangered Species Act and the Fish and Wildlife Service, the Clean Water Act that can involve both the Environmental Protection Agency and the Corps of Engineers when wetlands are concerned, and even the Clean Air Act.

- For example, many areas in the Rockies are limited during certain times of the year because of management plans designed to protect various species. While each plan individually provides opportunities for resource development, collectively, they interact to effectively prohibit natural gas and petroleum extraction.
If we are to provide the country with the domestic energy it deserves, we need to create national policies that allow environmentally sound development of these resources. No one can expect that this mosaic of limitations can be instantly revised, but we need to start the process.

First, we can determine where the most likely resources lie. Congress should compel the development of such an inventory. When actions like this have occurred in the past, they allow the disputes to be better focused. They allow the issues to be discussed in a real rather than hypothetical context. And, this can lead to real solutions for specific areas.

Second, we need a clear understanding of the impediments that we are encountering. We need to know how many laws, regulations, conflicting management plans, and whatever else are in play. This perspective is essential to provide a real sense of how these actions can result in effectively foreclosing any development. A recent assessment of one area of the Rockies showed how a mixture of management plans for various species effectively foreclosed any petroleum or natural gas development, but no single plan would result in such denial (a graphical presentation is attached to this testimony).

Third, we cannot expect to meet our nation’s needs for clean burning natural gas without reasonable access to the resource. The NPC Natural Gas study and all other analyses conclude that the Rockies contain significant extractable reserves of natural gas. Yet, in the Rockies access is being limited. It is either the unanticipated outcome of laws, regulations, and plans that unintentionally deny access or the manipulation of these laws to produce that outcome. In either case, access limitations are not the result of a clear policy decision. Consequently, we need a commitment from Congress and the Administration that these types of constraints will be eliminated or restrained and proper funding will be provided on a continued basis to allow environmental documents, leases, and drilling permits to be issued in a timely fashion.

Clearly, there are environmental extremists who will not support this essential development. But, as the DOE has demonstrated in its report, it can be done and in an environmentally sound manner. It will take effort, and it will also take courage.

Other Issues

While these issues dominate the factors that influence future natural gas and petroleum exploration and production, there are many others that must be addressed – some that are dominated by factors largely outside the scope of the federal government, others where the federal government is a key factor.

For example, the other factors identified in the NPC Natural Gas study relate to access to technology and to human resources must not be overlooked. Domestic natural gas and petroleum development have changed dramatically during the past two decades through the application of new technologies such as 3D and 4D seismic analysis, horizontal drilling, and the use of advance offshore technologies. The widespread availability of these and other technologies will be critical to meeting future challenges as well. Similarly, the industry has suffered further declines in employment. During the 1998-99 low petroleum price crisis, the natural gas and petroleum extraction industry lost 65,000 jobs of which only about 7,000 have returned. Employment has dropped below 300,000 from levels that exceeded 600,000 in 1984. These are highly skilled jobs
at both the rig operator and engineering level. Many of the domestic industry workers are Hispanics. But, once people leave the industry it is hard to attract them back. Attracting new workers is equally difficult. For example, enrollment in petroleum engineering has consistently fallen over the past several years. While these are not issues that are dominated by federal policy decisions, they are nonetheless essential to meeting future natural gas and petroleum demand.

At the federal level, we must continue to work with foreign producer nations to move toward petroleum policies that produce the stability needed to maintain and enhance our domestic production. And, as we do, we cannot assume that other countries are willing to sacrifice their national incomes to meet our expectations that product prices should be low in the U.S.

The federal government must strive toward sound environmental regulatory programs that do not burden the industry with regulations and paperwork that provide little if any environmental benefits. For example, the Environmental Protection Agency (EPA) is now being sued again to compel regulation of hydraulic fracturing under the Underground Injection Program (UIC) of the Safe Drinking Water Act (SDWA). Study after study has shown that hydraulic fracturing is an environmentally sound process involving the brief injection and subsequent removal of fluids to place proppants necessary to open natural gas and petroleum formations for development. Some analysts believe that over 60 percent of the natural gas wells that will be needed to meet the projected 2010 demand will require hydraulic fracturing. It is exactly this type of poorly targeted regulation that must be avoided. Similarly, EPA is proposing new reporting requirements under the federal Superfund and Right-to-Know laws that will add nothing to the scope of information on emergency releases but burden natural gas and petroleum producers and other industries with needless paperwork. In an era when future natural gas and petroleum production will depend on the amount of capital that must be invested, stripping this capital away through unneeded regulations is counterproductive and unwarranted.

Conclusion

On balance, future supply of domestic natural gas and petroleum will depend on a clear recognition – first by the federal government and more broadly by the nation as a whole – that these commodities provide a value as a domestic resource. It will require a clear recognition that the domestic industry has changed dramatically since the 1980s and will continue to change toward greater reliance on independent producers. And, it will require a clear commitment from the federal government that it is prepared to implement policies to allow domestic exploration.