Natural Gas Supply & Demand: Joint Association Testimony

10 June 2003

Summary of Statement by Richard J. Sharples, Senior Vice President, Marketing & Minerals, Anadarko Petroleum Corporation Before the Energy & Commerce Committee, United States House of Representatives "Natural Gas Supply and Demand" June 10, 2003

The U.S. faces a serious challenge with the growing gap between natural gas supply and demand. This situation didn't develop overnight, and it can't be solved overnight. It is a long-term, structural issue that requires major changes in our current energy policy. If we maintain the status quo, we will continue to have high levels of volatility and upward pressure on price.

There are ways to address this challenge, but they require changes in the way Congress and the Administration manage federal lands and in the way they approach energy development in general. The government must:

- Allow greater access to certain resource-rich federal lands and waters that are currently closed to exploration, and
- Create a regulatory framework that allows and encourages exploration and development to take place in a more timely and cost efficient manner.

Traditional U.S. gas producing basins are extremely mature. Even if today's relatively high level of exploration and development activity continues, U.S. reserves and production will not increase, because this new gas will barely offset the effect of natural field declines.

In the Lower 48 alone, there's an estimated 213 trillion cubic feet of natural gas beneath federal lands or waters where moratoria or excessive regulation make exploration virtually impossible - in the West, on the East and West Coasts and in the Eastern Gulf of Mexico - a 10-year supply at today's demand rate.

Natural gas supply shortages will hurt U.S. consumers not only in the pocketbook, but they will also result in job losses, as manufacturers that are heavy users of gas for fuel or feedstocks move plants to countries were natural gas is cheaper.

Through technology that is advancing daily, industry can explore and develop America's gas resources without harming the environment. It's crucial that Congress and the administration begin to address the growing natural gas supply/demand gap today if they want this safe, environmentally friendly energy to be available to Americans at an affordable price. Plentiful supplies of natural gas are critical to a strong, growing U.S. economy, and they are key to America's energy supply security.

Statement by

Richard J. Sharples
Senior Vice President,
Marketing & Minerals
Anadarko Petroleum Corporation

Also Representing

The American Petroleum Institute
The Domestic Petroleum Council
The Independent Petroleum Association of America
The National Ocean Industries Association
The Natural Gas Supply Association
The US Oil and Gas Association

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before the
Energy & Commerce Committee
United States House of Representatives

Thank you, Mr. Chairman, and members of the committee. I'm Dick Sharples, senior vice president of marketing and minerals for Houston-based Anadarko Petroleum.

Anadarko is the seventh-largest producer of natural gas in the U.S., and last week we had more rigs drilling for gas in the U.S. than any other company. So, I appreciate the opportunity to talk with you about the current state of the natural gas market today, because gas is such a big part of Anadarko's future - and of the members of each of the associations I am also testifying on behalf of today.

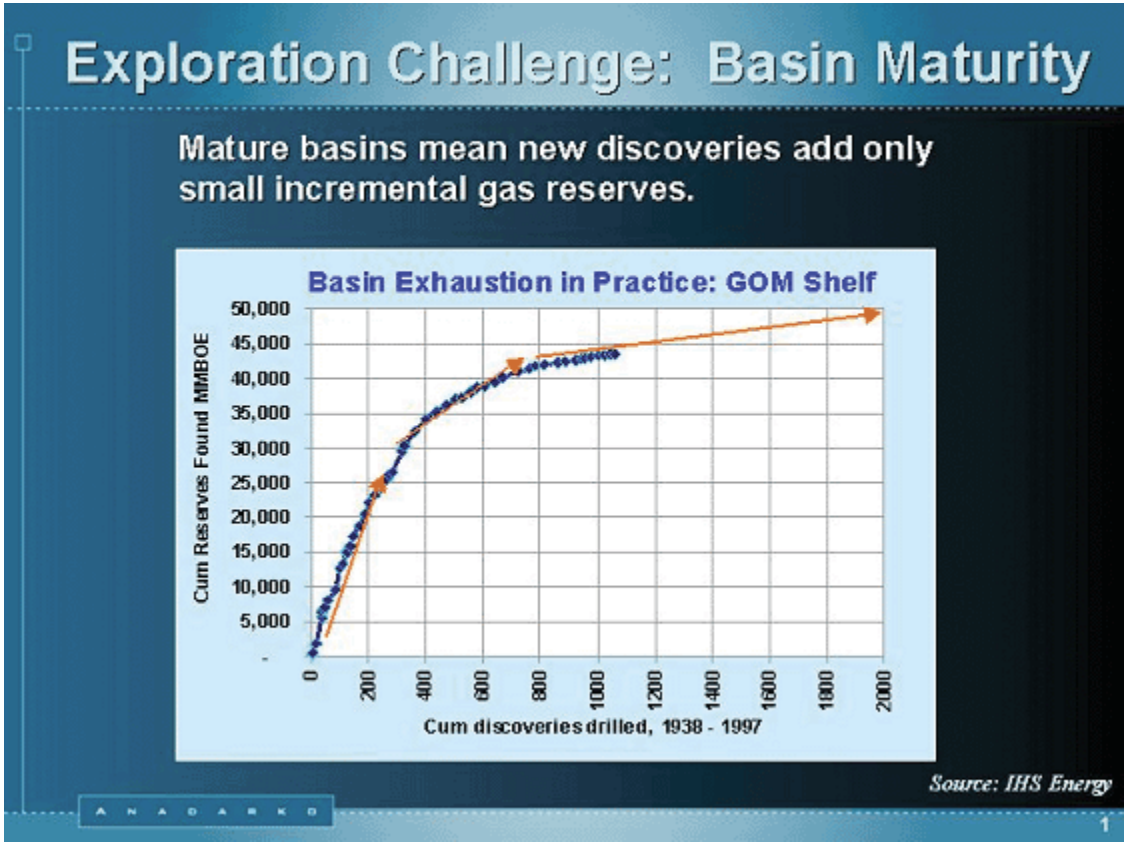
I think we all agree that we face a real challenge with the growing gap between natural gas supply and demand. I'm anxious to hear Chairman Greenspan's comments this afternoon, because he was right on target last month when he called our policy toward gas exploration, quote "contradictory."

Three points I'd like to make today:

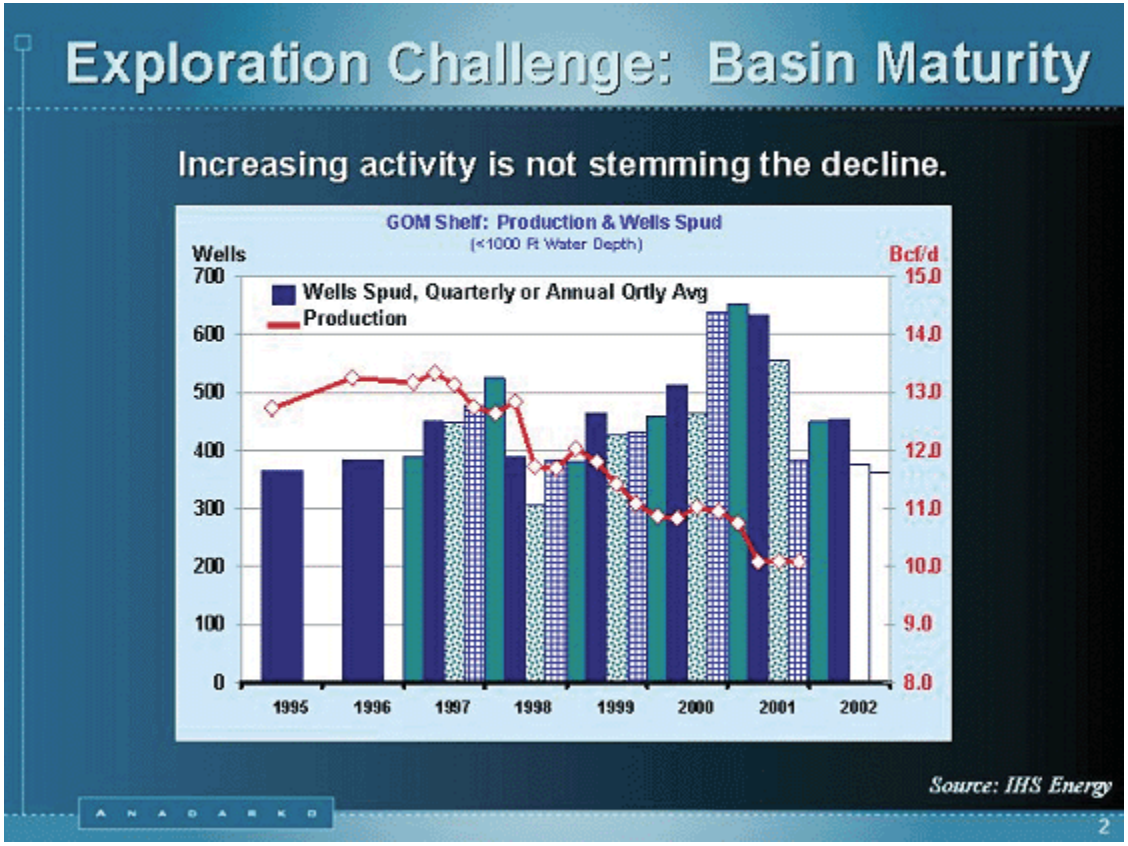
- First - the gas supply/demand gap didn't develop overnight, and we can't solve it overnight. This is a long-term, structural issue that requires major changes in our current energy policy.
- Second - if we maintain the status quo, we will continue to have high levels of volatility and upward pressure on price.
- And third - there are ways to solve this problem - but only if we have the political will to do so. There are vast energy resources beneath federal lands, but congressional actions and administrative practices have effectively locked up this energy. Congress needs to find a way to unlock it.

While it's true that the U.S. rig count is up about 25 percent over a year ago, don't expect gas production to increase. The reason is simple: traditional producing areas are playing out. New supplies we bring on will barely offset natural declines.

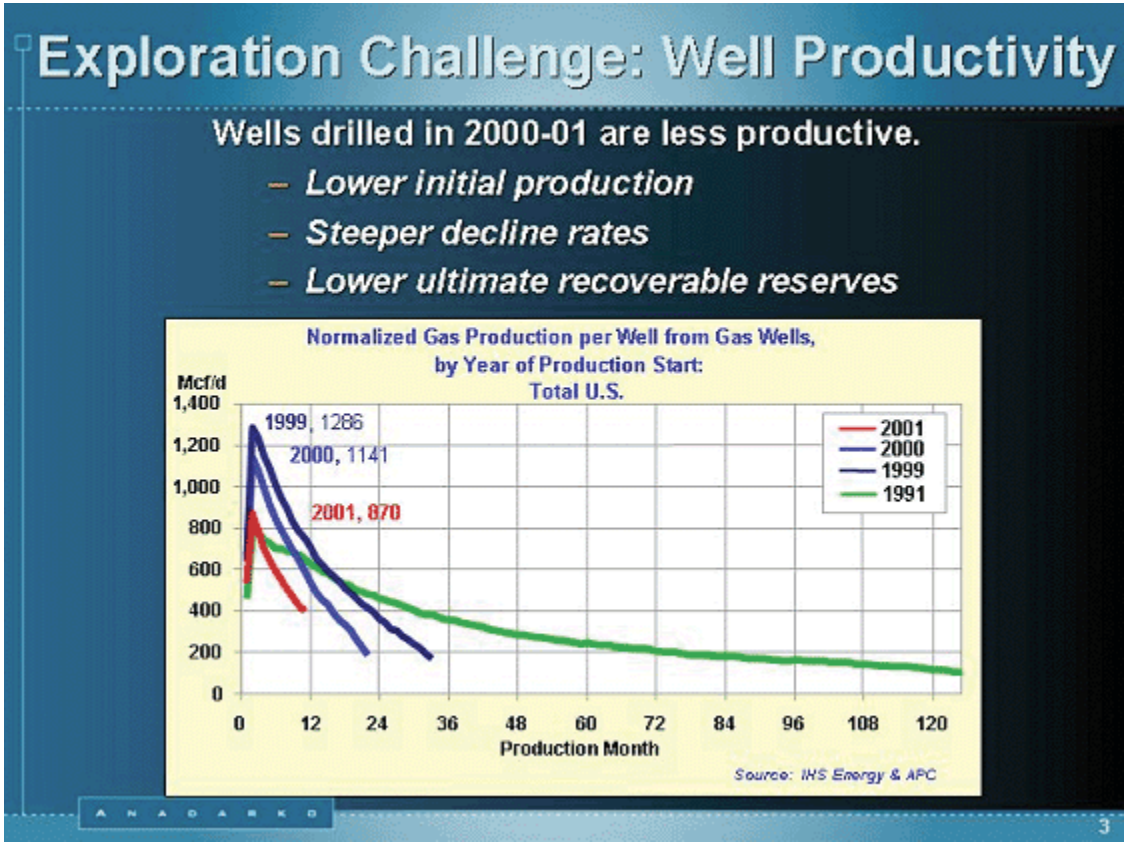
Three slides I'd like to show you illustrate my point. I've used the Gulf of Mexico as an example, because it provides about one-quarter of U.S. gas production, and the trends are pretty startling.



This curve shows how difficult it is to increase reserves today: The first 1,000 discoveries on the Shelf in the Gulf of Mexico added 40 billion barrels of oil equivalent of reserves, but the next thousand will generate a maximum of 6 billion, because the basin is mature.



Here, you can see that while we've been drilling more wells every year - with the exception of last year when prices were in a slump - average daily production has been falling.



This graph shows that over the last few years, new wells are coming online at lower production rates, and their decline is much steeper.

Western Canada - which provides 18 percent of U.S. gas demand - is also declining. Canadian gas imports declined almost 3 percent in 2002, and they're expected to drop another 5 percent this year.

Going forward, most of the gas that we'll find in this country onshore will be "unconventional" - tight sands gas, shale, and coal bed methane - gas that is higher cost and lower margin. Offshore, we'll be drilling deeper wells in deeper water.

Today, we are literally squeezing the last molecules of energy out of the basins where we have access. But as someone's wise old grandma used to say, "we can't get blood out of a turnip." That's what we face today in the domestic industry.

Unless we are allowed to explore in less mature basins, using technology that has allowed us to find and produce oil and gas more cost effectively and with less and less impact on the environment, price volatility and upward price pressure are a certainty, as the market struggles to balance.

Another important point: The market is working, despite the tightening between supply and demand. More rigs are running ... gas is getting to customers who need and value it the most...and gas is going into storage.

But in the future, the market will have to balance at higher prices than we've seen in the past unless we can tap lower-cost resources.

As in any industry, capital chases the highest returns. It makes no sense for producers to invest in low-margin projects in worn-out U.S. basins when higher-potential opportunities lay across the ocean.

The economic effect of these higher prices will be two-fold:

The first is on the pocketbook, whether it's residents paying more to heat or cool their homes, or businesses paying more to fuel their factories.

The average American paid 20 percent higher prices for natural gas during the first quarter of this year, compared with the same period in 2002. (Source: Consumer Price Index Data)

It could also cost a lot of Americans their jobs. If we can't find more cost competitive sources, manufacturers that use large amounts of gas for fuel or feedstocks will move plants to countries where it is cheaper.

Take ammonia, for example, which is a major feedstock for fertilizer. A U.S.G.S. study shows that from 1999 to 2002 alone, ammonia production decreased 26 percent, employment by this industry decreased 23 percent, and U.S. reliance on imports increased from 20 percent to 34 percent. (Source: U.S.G.S. Geological Survey's Mineral Commodity Summaries)

These job losses could become permanent. In fact, industrial production capacity is already beginning to relocate overseas. For example, 41 percent of the ammonia production capacity in Trinidad has been built just since 1996, representing about $700 million of investment. Last year 56 percent of U.S. ammonia imports were sourced from Trinidad while 43 percent of U.S. capacity lay idle.

So our inability to grow supply due to misguided energy policies is a consumer issue, not just an industry issue. In fact, elected representatives of the consuming states ought to be hollering loudest for policy change.

The U.S. isn't running out of gas. The U.S.G.S. and the Minerals Management Service estimate there are about 1,400 trillion cubic feet of technically recoverable gas resources in the U.S. - including the Lower 48, offshore and Alaska.

But we are running out of places where we're allowed to explore for those gas resources that can be developed most cost effectively. Yes, there is a lot of natural gas left in the basins we've been producing for the last 60 years, and U.S. producers are actively exploring for and producing it. But as I explained a moment ago, because of basin exhaustion, this is mostly high-cost gas. Some of the most cost-effective gas resources we have left are found on federal lands.

In the Lower 48 alone, there is an estimated 213 trillion cubic feet of natural gas beneath federal lands or waters where moratoria or regulation make exploration virtually impossible.in the West, where much of the land is owned by the federal government.on the East and West Coasts, and in the Eastern Gulf of Mexico. That's a 10-year supply at today's demand rate. And if history is a reliable guide, as more exploration takes place, these estimates could turn out to be very conservative.

In the West, there is more than 290 Tcf of technically recoverable gas located on federal lands, but nearly half is either closed to exploration or so highly restricted it's not economic to explore. (Source: National Petroleum Council Natural Gas Study, December 1999)

To increase supply, we have to attack the problem on several fronts:

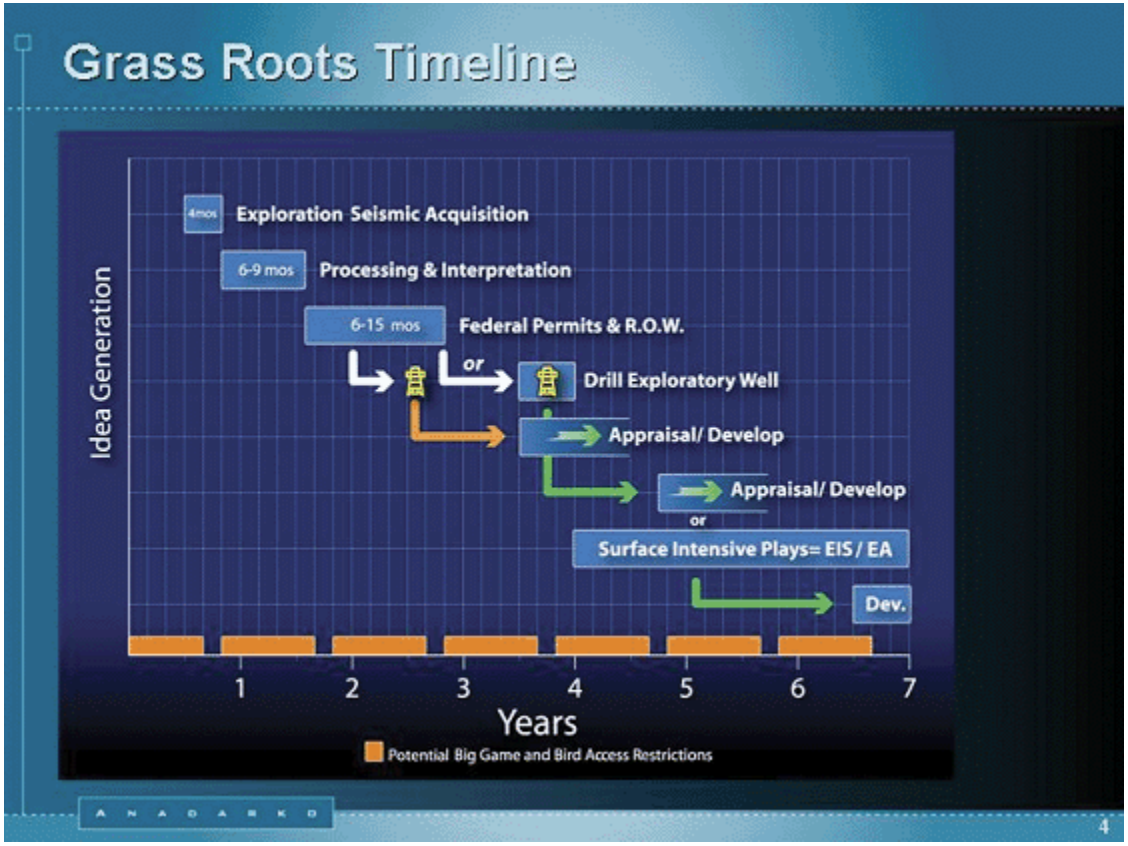
First, Congress needs to come up with a solution that will lift the moratoria on certain federal acreage where the resource base is the greatest.

We're not asking that Congress open up every acre of federal land. But there are areas where we can explore and develop a lot of oil and gas without harming the environment. We've proved that's possible by using advanced technology that's getting better every day.

A great example is the Alpine field Anadarko is a partner in on the North Slope of Alaska - a little over 100 miles west of the coastal plain of ANWR. We've developed this 430 million barrel field from gravel pads totalling less than 100 acres using multi-lateral well completions. Today, Alpine is producing over 100,000 barrels a day.

In Alaska, tools such as ice pads and roads, multilateral well completions and re-injection of drilling wastes allow us to minimize the impact on the tundra. We use a variety of different tools to tackle other complex exploration and development challenges all over the world - safely and responsibly.

Second, federal land management agencies need to detangle the administrative bureaucracy and eliminate unnecessary leasing and permitting delays that discourage exploration. In high-cost areas, delay is denial, whether it's due to regulatory inefficiency or to lawsuits that can stall projects for months or even years. If we could speed up permitting and reduce the threat of litigation, we'd see an immediate increase in exploration.



As this slide illustrates, when you consider the fact that wildlife restrictions and other stipulations prevent us from operating more than half the year in some areas of the West, and you factor in all the steps it takes to permit a well, it can take six to seven years just to reach the development drilling stage. And that makes no sense.

The administration took a good first step by ordering fast-track updates of resource management plans in the West. But we need more staff at the BLM to review backlogged applications, and we need a consistent play book to tell us upfront what we must do to get our projects permitted.

The administration also needs to remove unnecessary regulatory barriers to pipeline permitting, so we can unlock stranded gas from the West..and one day bring Arctic gas to the Lower 48.

In the future, we will have to rely on LNG to help close the supply gap, so the third thing we need is to be able to permit and build regassification terminals - quickly.

Let me make an important point about LNG: We cannot import our way out of this supply crunch, either with Canadian gas or LNG, as we have done with imported oil. Even if we start permitting new import facilities today, it will take 5 to 10 years to meaningfully increase our supply of LNG. So this is a long-term solution, albeit an important one.

Next, let's look at exploration incentives: A number of incentives were included in legislation passed by the House, and they're being considered by the Senate. These would enhance existing royalty reductions for deep water and deep gas projects offshore..allow accelerated amortization of G&G costs and delay rental payments. provide seven-year depreciation for gas gathering lines..and renew Section 29 production tax credits for unconventional gas.

As I said a moment ago, most of the remaining resource is unconventional or in deep water, so these incentives will be important to helping producers develop more of our domestic resources.

We know these incentives work. Passage of Section 29, for example, led to a tripling in the production of non-conventional gas, and it resulted in innovation in drilling and completion technology. (Source: Gas Technology Institute)

We do have the ability to increase domestic supplies - and in doing so increase U.S. energy security - but only if we have the political will to do so.

Ladies and gentlemen, as a nation, we face a serious energy challenge. Industry is working as hard as it can to produce new supplies. New technology and good management practices allow us to do so in environmentally acceptable ways, with less and less temporary surface disturbance. But the vast energy resource potential that could address this challenge is under the control of the federal government, and only the government can unlock it.

We must begin to make changes today - changes in federal land use policy and in how we balance environmental concerns with economic considerations - if we want this safe, environmentally friendly fuel to be available to Americans at prices they can afford.

Thank you for the opportunity to address you today. Our industry looks forward to working with you to provide our country with the affordable, reliable energy supplies that are critical to a strong, growing economy.