



Consul General Cynthia A. Griffin – Australian Institute of Energy

Remarks of Consul General Cynthia A. Griffin to Australian Institute of Energy: “Global Energy Challenges in the 21st Century: A U.S. Perspective”

(As prepared – August 21, 2013)

Good morning. I am delighted to be in Western Australia and to have the opportunity to speak with you today. Thank you Gary Jeffrey for inviting me... and thank you Murray for the introduction.

As an American diplomat who has focused the better part of my career on Commercial Diplomacy, I have had the rewarding experiences of helping American companies and their JV partners to advance their business objectives overseas; and protect everything from small and medium sized investments to multi-billion dollar investments.

With the weight of the USG on our side, I have pursued host governments in African countries to honor their contracts and abide by their commitments to pay U.S. companies fully and on time for services provided – in one instance to keep strategic rail lines operational where we had the operational concessions.

In another instance the Embassy worked closely with the Thai government when a moratorium was put in place to halt all construction in the Ma Tha Put Industrial complex due to environment concerns – as a result of hazardous gas leaks and subsequent protests by the surrounding communities.

In this particular case, a major U.S. multinational that was building a new plant in the industrial complex was unable to proceed with its construction. I know that you can imagine the costs associated with having to unexpectedly halt construction on a multi-billion dollar plant that is expected to feed into your global supply chain by a certain date.

My job was to help the Thai officials to put the necessary regulatory safeguards in place to satisfy the courts whereby they would lift the injunction on construction. We were also able to help the government prioritize the construction projects and move forward those that had abided by the environmental regulations already in place. And for those of you who have worked with American partners, you know that we have high standards and do our utmost to exceed expectations by importing the best technology, and maintaining strict work ethics. We make every effort to be the partner of choice and bring a gold standard of operation with us every step of the way.



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So today, I have been asked to talk with you about global energy challenges from the U.S. perspective. I will touch on the U.S. energy security policy, gas exports, and changing the energy mix to include more renewables and reduce the impact of climate change on the planet.

Two years ago, President Obama gave a speech outlining his plan for securing the United States' energy security. The President's plan is very ambitious and its implementation has been challenging. We are trying everything to turn the president's blueprint into reality.

As one of the world's largest producers and consumers of energy, we have a duty to put our own house in order. We are making an unprecedented investment in transforming our energy-economy at home.

Throughout the 70s, the U.S. received the bulk of its oil imports from the Middle East, and more broadly from OPEC. I remember the gas lines at the pumps and the high prices as a result of oil embargos. In fact, during a national speech competition in high school, I delivered a talk about our need to find alternative sources of energy to lessen our reliance on foreign countries that could hold the U.S. hostage to our dependence on oil imports.

Now, almost 40 years later, due to greater domestic production and improvements in energy efficiency, U.S. oil imports have fallen to their lowest level since 1987. Oil imports as a share of total U.S. consumption have dropped from 60 percent in 2005 to below 40 percent today.

The shift has been even more dramatic for natural gas. In 2005, before the gas boom, experts predicted that U.S. LNG imports would rise to 180 billion cubic meters by 2025. With the discovery of shale gas in the U.S., we now know that U.S. gas production will exceed consumption before 2020. And the United States now has the lowest natural gas prices in the world.

The U.S. shale gas revolution is still in its infancy, but making impressive strides.

So what does this mean?

The large-scale production of natural gas is helping to reinvigorate American manufacturing. Cheap energy allows some domestically made products to be more competitively priced. Reduced costs at home have also led a few companies to return from overseas and begin manufacturing in the U.S. again. Dow Chemical, for example, is spending \$ 4 billion on a new ethylene plant in Freeport Texas, due to open in 2017. The last time a plant like this was built in the U.S. was in 2001. In 2012, General Electric moved manufacturing of washing machines, refrigerators, and heaters back from China to a factory in Kentucky. Some foreign companies in energy intensive industries are



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building factories in the United States, like Siemens or Vallourec, a French manufacturer of steel pipes.

There is no question that the United States has benefited greatly from the development of our domestic unconventional oil and gas resources.

Just a few years ago, we were busy building terminals to receive LNG from the Middle East. We were even looking at building a platform off of the coast of California to receive LNG from Western Australia, as I am sure many of you recall. Now, companies are looking to turn many of these into export facilities so that we can ship our surplus supply overseas where demand is growing. We are already exporting natural gas to Canada and Mexico.

In short, unconventional oil and gas have been an economic and energy game changer for the United States.

In April of this year, for the first time, natural gas powered as much electricity in the United States as did coal. And the share of coal in U.S. electricity is expected to fall even further by the end of the year – to below 40 percent– its lowest level since World War II. And by the end of this decade, it is likely to drop to near 30 percent.

While coal has been a great source of energy for centuries, it is no longer our best option. It has too many externalities – carbon pollution, emissions, and major environmental damage.

Likewise, we are changing our energy mix not only for reasons of energy security, but also for the long-term health of the planet. The impact of carbon intensive fuels to climate change is now indisputable. Our reliance on coal and other carbon intensive fuels has been bad for our health and bad for our planet. While we may disagree over how best to tackle the problem, the one thing on which we can all agree is that we must do something.

Our greatest challenge is to develop a sustainable energy future, and we are working to do just that. Natural gas helps us avoid some of the problems associated with relying on coal—that I mentioned earlier, and helps us to decrease our carbon footprint as well.

Companies and communities working in the off-shore oil and gas industry - in the U.S. Gulf states, here in Australia, and around the world - are all too aware of the high stakes that can be involved in finding, and safely exploiting, new sources of energy. Three years after the Deep Water Horizon disaster, both government and industry have responded with improved regulations and practices.



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The U.S. federal government restructured the key regulatory authority responsible for the industry, added more inspectors, requested additional funding, and in October of last year, implemented new safety rules to improve well-design and integrity. Industry likewise has created new equipment to help contain a high pressure blowout in deep water. There is no doubt that there is much more work to be done in this area.

Having said all of this, there are still real challenges. According to members of the [National Commission on the BP Deepwater Horizon Oil Spill and Offshore Drilling](#), the Bureau of Ocean Energy Management, Regulation and Enforcement (BOEMRE) still needs to put together tougher rules for blowout prevention designs; industry has yet to establish an independent safety training center to create a culture of safety-- and instead supports one under the auspices of the American Petroleum Institute, and Congress has yet to pass legislation to raise liability caps, or make inspection self-funded, rather than tax-payer funded, among other measures designed to “make the industry safer.”

For shale gas and other unconventional oil and gas industries,

the U.S. Department of Energy and the State Environmental Protection Agencies are working together with teams from U.S. corporations, academia, and environmental NGOs to advance oil and gas exploration and production technologies in the most effective and environmentally responsible manner. They are working jointly to provide unbiased scientific information for the basis of regulation.

As you all know, there are concerns about chemicals used and the possible contamination of ground water. We are seeing protests in populated communities in countries around the world where hydraulic fracturing is taking place.

Only by coming together, doing the research, quantifying the risk, developing the tools to meet the environmental challenges in managing water and treatment, disposal and re-use, will people feel a greater sense of understanding and perhaps a greater ease with fracking-- and eventually maybe even minimize concern. But again, companies must be out front and up front and transparent in chemicals used in extraction. I have heard companies say that chemicals used are company proprietary and cannot be revealed. But is this a legitimate argument? I contend that governments have a lead role to play in drafting implementing regulations to guide this shale revolution-- to ensure safety and environmental sustainability.

In the U.S., we are also betting heavily on renewables.



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The U.S. has invested over \$90 billion in incentives to produce clean sustainable energy supplies.

Here's one example: four years ago, the U.S. produced 2 percent of batteries for electric vehicles. By 2015 we will produce 40% of them.

In 2012, we doubled our solar energy production, and two years from now we will double it again. Wind power is also booming in the United States. In 2012, the largest new source of electricity generation was wind – surpassing natural gas. Wind can now power the equivalent of 15 million homes, and in states like South Dakota, Kansas and Iowa, wind contributes 20% of annual energy consumption. We're also looking at geothermal energy as a promising future source of renewable energy. According to the U.S. Department of Energy, geothermal sources located in the western U.S. could potentially power 20% of the nation's needs.

President Obama laid out a goal of generating 80 percent of America's electricity from renewable, nuclear, and clean gas and coals by 2035. This will be a tough effort - special interests and lobbies fight hard against these innovations – but our future depends upon us not losing our ground.

And, of course, at the same time, we are also working to decrease demand. We've raised our fuel efficiency standards on cars and appliances. We are promoting technologies that help reduce waste and overconsumption. We have also made huge investments in promoting home energy efficiency.

The world today faces unparalleled energy challenges. America and Australia are two of the most energy-intensive economies on earth. Our nations built our economies to run on inexpensive fuel supplies that still seem limitless because of the technological advances in this industry. However, this appearance is misleading and supplies will eventually run out. So we need to continue to develop alternatives – both bridge technologies and long-term future technologies.

Compared to many other nations, the U.S. and Australia are in a privileged position. As nations that are wealthy, and well-endowed with resources, we have had more time and more options to think about how to transition away from carbon intense fuels. We have the ability to use bridge technologies and to improve legacy fuels (like coal and oil) while we make the transition. We can anticipate and model the costs of shifting to new energy systems. In fact, academics are doing this, businesses are doing this, and even legislators are doing this.

Energy policy is also about competitiveness. In the next century, Australia and America are never going to have the world's lowest cost workers or cheapest resources to exploit.



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And, frankly, we don't want to "win the race to the bottom." If we want to remain competitive, we must use energy more efficiently, eliminate its external costs and risks as much as possible, and create new jobs and sectors in energy technology.

You, as business leaders and industry insiders know all of this. You know it better than anyone. And you also know that the future of the industry is driven by technological advances that make oil/gas more economical for consumers and reduce the carbon footprint.

American companies are part of that effort, not only in the United States, but also here in Australia. The United States firmly believes in Australia's future as a key global energy supplier – a role that will be beneficial for both Australia and the Asia-Pacific region.

Much of this is happening right here in WA. The WA LNG industry is the fastest growing in the world. Many American companies' largest investments here are focused on LNG projects. Chevron and ExxonMobil, for example, are both betting heavily on natural gas. Along with Shell, their Gorgon Project off the North Coast – which will generate approximately \$40 billion in revenues to state and federal governments – costs more than Chevron spent to acquire Texaco. Apache is producing natural gas for use in WA at its new Devil's Creek plant and is a partner in the Wheatstone LNG project. General Electric recently reported an AUD\$1.3 billion equipment contract for the Inpex/Total LNG project in Darwin.

Now, with all of this development going on here in Australia, there is some concern that we could see unhealthy competition that could sour the U.S.-Australia relationship. Frankly, we don't see this happening. Markets are very adaptable and there is huge and growing demand for clean energy in the region, and globally. There are plenty of opportunities to work together. There are plenty of opportunities for increased prosperity for both of our nations.

Finally, it is important to underscore that, even as energy imports shift from the Americas to Asia, and Asia to the Americas, the United States will continue to be engaged globally and in this region. The energy security of friends and allies who are consuming countries will remain a key focus. And the United States will still have a strong interest in secure energy supplies at reasonable prices to support economic growth, irrespective of where we procure our energy. We will sustain an interest in the free flow of energy to our friends and allies throughout the world.

The United States will continue to work hand in hand with partners like Australia to help countries around the world to manage the growing global thirst for energy, ensure secure and efficient means of energy transport and transmission, and mitigate environmental damage and climate change.



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Before I end, I'd like to add a caveat. We believe that one of our greatest challenges is developing sustainable energy. The United States is working to develop energy sources that are more sustainable. However, given the very low cost of natural gas right now, there's a real danger that we will take our eye off the ball.

We owe it to future generations to remember that shale gas is a bridge technology and not our ultimate destination. Natural gas is undoubtedly an improvement over coal and oil. However, there are other technologies in development that have far fewer externalities, no limits on supply, and that – with judicious investment – can be priced competitively with current fuel sources. As we reap the benefits of a cheap gas supply, we must continue to reinvest in new technology.

Australia and the U.S. have one of the strongest partnerships in the world. We share the same commitment to free trade, open markets, and rule of law, and we work to help solve one another's challenges. Our governments are engaged together in ensuring the security of the region, in pushing the limits of technology, and in looking after the world's oceans.

We can do this because the United States and Australia have a relationship whose breadth and depth is exceptional among America's allies. Today we are talking about energy, but we could also talk about scientific cooperation, or defense, or education, or even sports. All of these areas, and many others, reflect the strength and vitality of the multifaceted ties between our two countries. I am very pleased to be here in Perth and I look forward to working with all of you as we continue to build on this great friendship.

Thank you