



The Nuclear Renaissance ***Seizing the Historic moment***

Remarks by

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I would like to congratulate the ANS, our hosts, and organizers, for this very crucial and timely conference.

Crucial because after three decades of retreat, its time for the nation's nuclear experts to be ready to identify new paths, new approaches, and new technologies to recast our nuclear future.

Timely because, like a prodigal son returning after 30 years of exile, nuclear energy is coming home to America.

It is part of the mission of my organization, the American Council on Global Nuclear Competitiveness, to see that we have an American Nuclear Renaissance, an American-led nuclear revival here and overseas.

To our members, it is not enough to build nuclear reactors again in the U.S. using only foreign suppliers; we want American suppliers in the competition and we want U.S. utilities and other power providers to have choices.

We want to see jobs and real futures for nuclear engineers and skilled workers on American soil in a revitalized industrial sector for nuclear manufacture, supply, and service.

We want U.S. companies to thrive in the nuclear business in the U.S. because it's in our national interest for them to do so.

Why is it in our national interest? What's wrong with foreign government owned and subsidized companies dominating the nuclear industry? Ask yourselves whether it matters that most of the world's oil is coming from state owned oil companies.

Does it matter if American companies are no longer in the nuclear business?

In short, it matters greatly...because nations that are engaged in the nuclear energy business sit at the non-proliferation table, have the technology to address global climate change, have the keys to combating global poverty and failed states, and hold the catalyst to advances in science and technology.

Having American companies competing in the global nuclear energy market will deliver more revenue and better paying jobs to America, and will, thus, help improve American competitiveness.

It's no secret that nuclear power in the United States was almost knocked out by its opponents. No orders for new nuclear plants have been made for thirty years. U.S. companies that once dominated the design and manufacture of nuclear reactors have largely disappeared or been sold to foreign companies. Former administrations halted reprocessing and eventually cut nuclear R&D funding to zero. Increasingly, the U.S. has been out of the nuclear game and now it is largely in the hands of foreign, state owned or directed companies.

While the United States argued about its nuclear future (and that argument finally has turned markedly pro-nuclear recently), the rest of the world recognized nuclear energy's benefits and moved aggressively forward. We see this in France, Japan, Russia and China. Countries all across the globe are looking to expand their use of nuclear energy and this is, of course, an exciting development. But the United States can't flounder in indecision and inaction anymore. The world is going nuclear and we must too or fall sadly, irrevocably behind.

Our President has been a strong proponent of building new nuclear plants, and Congress has enacted a series of incentives that seem to have us on the verge of the first new reactor plant orders in decades.

This is a welcome improvement in the outlook for nuclear energy here in the U.S., but it is not enough for the U.S. to simply build new plants. It is not enough for the U.S. to simply become a producer of electricity with plants designed, constructed, fueled, and serviced by foreign suppliers.

Of course if foreign suppliers can provide the best, most cost-efficient, safest systems and most reliable services, they will be the suppliers of choice. But competition is a good thing.

American jobs in a reinvigorated, restored nuclear power sector will provide many benefits beyond keeping the lights on. If the U.S. were to retake the lead in nuclear energy technology, it would revitalize science and engineering in universities, boost advanced, smart manufacturing, and potentially create a trillion dollar global market.

The U.S. is poised to do three things that can revitalize nuclear power in the U.S. and transform the nuclear landscape by bringing safe, proliferation resistant nuclear energy to the developing world.

First, we are going to build new plants in the U.S. The incentives are in place under the Energy Policy Act, including production incentives, risk insurance, and Federal loan guarantees for new plants. New leadership at the NRC under Dale Klein is dedicated to streamlining and efficiency in processing applications.

Second, the U.S. will recycle again. It is moving forward to close the nuclear fuel cycle and to reduce the levels of waste that have and will accumulate from nuclear power plants. The U.S. has eliminated regulatory obstacles and created the incentives for new power plant construction. What holds us back is the stubborn waste problem.

To some, GNEP seems like a distraction from solving the waste problem and building new plants. But if we step back and think about all the challenges facing us today, we can see that GNEP is designed to provide a comprehensive solution that solves not just our domestic problems but our far more worrisome proliferation problems overseas. Recycling is the key. In the hands of nuclear producer states, it reduces proliferation risk. At home, it recycles fuels and dramatically reduces the final volumes of waste product, making long term storage quite feasible.

Third, the U.S. can transform the market for reactor design and manufacture through a technology leap. Because the U.S. has been on the sidelines and its lead in nuclear design, manufacturing, supply and service has been severely eroded, it is in the position to leap frog existing technologies and to develop new technologies. One promising example of a transformational technology is highly advanced, right sized, proliferation resistant, long lived, modular nuclear reactors. These are reactors that can be manufactured in the U.S. and exported to the developing world.

Cynics (that's realists you disagree with) will say that investing in nuclear power is still too risky even though gas prices soared off the chart; they do come down. And what about political risk? Will nuclear energy be tenable in the U.S. with Democrats in power in one or both houses of Congress?

I believe the answer to these questions is yes but to me what is compelling is that there is an historic opportunity before our eyes that should compel our nation to do so.

Let's take a minute to look at the world---at the Global Energy Ladder. In one slide it illuminates the energy future and, therefore the economic future, of the U.S. and the fast-developing world. It may also foretell unbearable human poverty and suffering for the slow or non-developing world.

What the Energy Ladder shows:

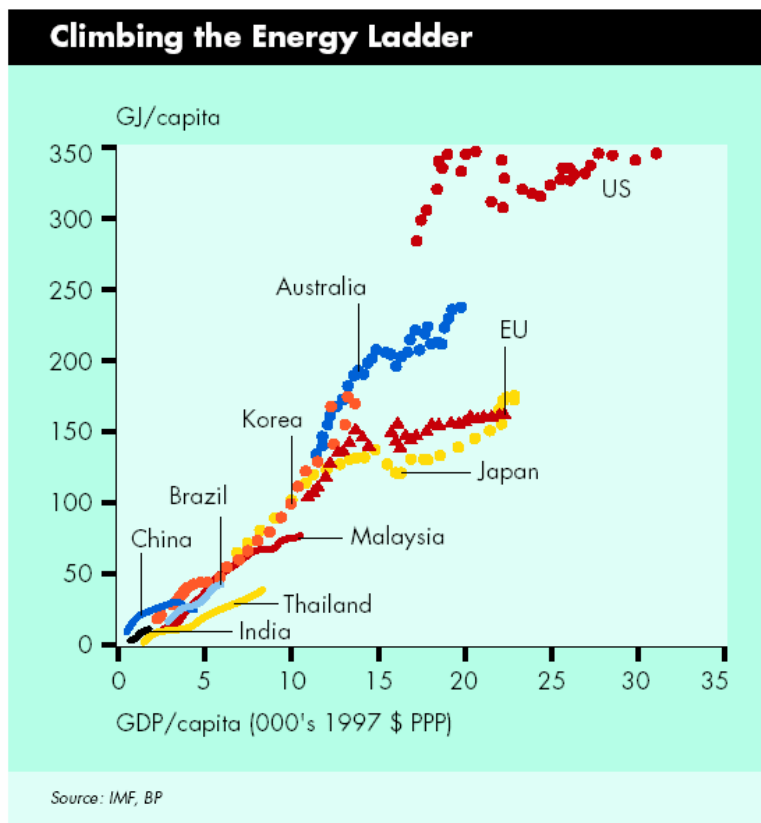
- The U.S. at the top consuming about 1/3 of the world's energy
- Australia, Japan and the EU positioned up the ladder
- Economic prosperity directly tied to energy consumption
- China and India beginning their rise and moving fast? to join the U.S. at the top of the ladder
- For the developing world to get where Malaysia is on the ladder will require 20 times today's energy output
- The growing potential for regional and global conflict over access to resources
- World will have to rely on every fuel source to meet demand
- Unless the world wants to overheat and pollute its air, nuclear energy will have to expand exponentially

What this means is that the gap between China, India, Mexico, and the developing world is enormous and presents huge geo-strategic and economic opportunity for a revitalized American nuclear energy industry.

The energy gap is a warning; but it is also a call to action...a call for American leadership.

In 1943, during the midst of World War II, U.S. Navy Intelligence heard rumors that vast quantities of petroleum were located in shallow reservoirs in Arabia. Perhaps so much oil, it could one day shift the international balance of power. Since the U.S. and its allies would consume about 11 billion barrels of oil defeating the Axis powers and substantially drain American reserves, the Navy was very interested in oil that could be tapped to fuel its ships.

They dispatched the eminent Dallas geologist, Emmet DeGolyer, on a secret mission to investigate. Within a few months, DeGolyer's classified report came to Franklin Roosevelt's desk. It began—"Mr. President, the center of gravity of world petroleum will shift from Texas to the sands of the Arabian Peninsula." Within three months, Roosevelt was on a U.S. battleship anchored in the Persian Gulf having tea with Ibn Saud. American oil hegemony in the Middle East began with that meeting and the U.S.



fueled the greatest period of economic growth in history in significant part because of abundant, cheap Middle East oil. FDR saw the future, seized the opportunity, and positioned the U.S. for world leadership and economic prosperity.

Today we face an energy challenge not unlike Roosevelt's. The world will choke and broil itself on hydrocarbons or it will turn to nuclear technology to fill the formidable gap on the energy ladder. Today this nation has an historic opportunity to address the gap but it will take the best minds, the new technologies and new approaches by innovative American companies to meet the day.