

Atoms for Peace Plus 60 Years

by Danny Roderick

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Sixty years ago this month, president Dwight Eisenhower delivered his historic “atoms for peace” speech before the general assembly of the United Nations. In it, he introduced the nation and the world to his vision of the commercial use of atomic energy to produce electricity and lead America to greater prosperity.

Then on another December day in 1957, the first commercial nuclear power plant came on line in Shippingport, Beaver County. This plant was designed and built by Westinghouse and became the cornerstone of a new era and a new industry—one that will forever be rooted in western Pennsylvania.

Today, there are 100 nuclear power plants in United States that together supply one-fifth of America’s electricity.

And with so much interest and attention currently focused on natural gas from Marcellus Shale in western Pennsylvania, it’s important to remember on this occasion the profound impact that nuclear power has played—and will continue to play—in the quality of life of this region.

Not only was the first commercial nuclear reactor built here, but the first industrial “atom smasher” was also invented and built here by Westinghouse in 1937, a milestone that led to the company becoming the world leader in commercial nuclear energy technology and fulfilling President Eisenhower’s vision of its potential for civilian use.

In the decades since the atom smasher and Shippingport, tens of thousands of jobs have been created right here in western Pennsylvania as a direct result of nuclear power. Today, Westinghouse alone employs about 6000 people in this region, with thousands more in other parts of the U.S. and around the world. The jobs of today’s nuclear power industry pay annual salaries of \$68,000 for technicians to \$75,000 or more for plant operators, well above the national average of \$45,000 and the per capita income for this region of \$31,000.

That doesn’t even include the thousands of jobs created in construction of a nuclear power plant, or in the untold supplier and ancillary jobs created in the supply chain for such things as concrete, steel, electrical components, and other materials.

And it’s important to add that there were 138 fatalities in oil and natural gas drilling and 35 coal mining deaths in 2012, the lowest in history. Yet there has never been a single fatality in the U.S. as a result of

commercial nuclear power production. Not one. Even the tragic accident at the tsunami-crippled reactor in Fukushima, Japan, did not result in a single radiation-related fatality. I challenge any industry to match that safety record.

What's more, the new nuclear plants being built today by Westinghouse feature advanced technology and design that take safety to even higher levels and are being built at costs below levels from the 1970's and 1980's when most of the U.S. plants in operation today were built.

Furthermore, nuclear energy produces no greenhouse gases or other carbon-based environmental pollutants of any kind. In fact, many highly-respected environmentalists are now convinced that embracing nuclear power is the surest path to meeting the world's growing energy needs without contributing to the problem of global climate change.

So by just about any measure, President Eisenhower's bold vision of 1953 has become a reality.

The problem is that the U.S. has been slow to make the necessary policy decisions that will keep us from facing a critical shortfall in electricity supply in the coming years.

The Shippingport plant was decommissioned in 1985 and the fleet of nuclear plants that were built in that generation will soon reach the end of their design life cycle. Additionally, many coal-fired power plants are also nearing retirement and face numerous challenges with environmental compliance. Combined, these two sources represent over 60% of this nation's electricity supply. What's more, the U.S. Department of Energy forecasts that somewhere between 35 and 60 gigawatts of coal-fired power plants will be shut down by 2018 because of low gas prices and rigorous enforcement of clean air standards. That means up to one-fifth of the largest source of domestic energy production will soon be gone and need to be replaced.

So sixty years after Eisenhower called for the peaceful use of atomic energy, one thing is now certain – we need the power that the new generation of nuclear power plants can provide to meet the expected energy shortfall that will occur in the years ahead. And nuclear power is the only energy source that can safely and achieve this goal. The private sector and government policy-makers alike recognize that nuclear energy must be an essential cornerstone of any national energy policy and is the most certain solution for meeting our electricity needs now and well into the future.

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