Nuclear power is vital to South Carolina's future

By Rep. Chip Limehouse

GUEST COLUMN



Rep. Chip Limehouse represents Berkeley and Charleston counties in the South Carolina House of Representatives.

Since the disastrous Japanese earthquake and tsunami hit the front pages of every newspaper, South Carolinians have prayed and offered their money, time, and support for the millions affected in Japan. Following our natural stages of grief and concern, the obvious question comes to mind as we wonder how this tragedy could have happened, and then ask ourselves, "Can it happen here in the Palmetto State?"

After listening to the armchair experts posturing to make their point, I felt it necessary to find the facts. Speaking to advocates and opponents of nuclear power, I have come to realize some basic truths about this energy source. I share these facts, so the public can draw its own conclusions in a practical and simple way. My intensive soul searching about the future of nuclear power and how it will affect my children and my state is something I needed to do as a policy maker to fully comprehend its safety and place in our energy portfolio. It is no secret that I have been an outspoken critic of coal-fired power, so I believe that I speak with some clarity on this issue.

As a vital element of America's electricity portfolio, nuclear energy produces power for one of every five homes and businesses. In South Carolina, about half the electricity produced within our state comes from nuclear power. This is a major factor in the low-cost power that South Carolina enjoys. Nuclear power has the lowest production costs of any form of large-scale electric power available today, so it should come as no surprise that the average overall retail price of electricity in our state is about 10 percent below the national average. Add to that benefit the fact that energy experts point to the safety record of American reactors and readily admit they are the most reliable power plants on the electricity grid.

The demand for nuclear power rests with its many benefits. Its main advantage over other methods is that it is among the cleanest means to produce energy. It does not result in the emission of greenhouse gases or other pollutants commonly associated with the burning of fossil fuels. So, as South Carolinians become more environmentally conscious, we find nuclear power to be the most viable option for clean electricity generation.

With the growth of businesses investing in South Carolina and the addition of new homes, our demand for electricity is expected to grow substantially. South Carolina is now in the process of expanding our nuclear power capacity with the building of the joint SCE&G/Santee Cooper V.C. Summer reactors in Fairfield County.

As is the case with all South Carolinians, I wanted to know that this expansion is safe for our citizens and that a Japanese-style disaster would not occur in our state. I am pleased to report that SCE&G and Santee Cooper have been forthcoming in providing details on those concerns.

First, V.C. Summer Unit 1 and the new units, as required by the Nuclear Regulatory Commission, are designed to withstand earthquake motions equal to the plants' maximum projected seismic event, which is based on the detailed studies of geology and seismology of the area.

Second, following Japan's earthquake, the plants there reportedly shut down automatically, as designed, and their backup diesel generators were powering emergency cooling equipment. However, the tsunami caused the loss of the diesel generators, which ultimately led to loss of core cooling. V.C. Summer Station is more than 400 feet above sea level, so a tsunami is not a credible event for that plant.

I was encouraged to learn that nuclear experts and power providers were well aware that natural disasters and unforeseen conditions can occur and they plan for them. I was impressed to see a detailed and aggressive emergency planning process and specific guidelines to address such incidents. In addition, the Nuclear Regulatory Commission is intensely focused on the safety and reliability of nuclear power at every step of the permitting, build-out and delivery stages.

What I learned from the Japanese crisis is that South Carolina's nuclear industry is running a safe and technologically advanced system that puts a premium on safety. It is a system that delivers clean power with a low-cost, long-term benefit. In a state where economic development and opportunity is what grows our economy, I have concluded that we must advance our state with safe and plentiful nuclear power. In that process we must also continue our undying commitment to safety to ensure a prosperous state that provides incomparable opportunity and quality of life.