

The Nuclear Renaissance Is Back, Industry Panel Says



The Exelon Byron Nuclear Generating Stations in Byron, Illinois. (Image credit: AFP/Getty Images via @daylife)

Jeff McMahon, Contributor Forbes

Encouraged by a new poll showing public support, industry leaders predicted Wednesday that nuclear power will resume the “renaissance” it was enjoying before the Fukushima accident roiled the industry 18 months ago.

“The future of nuclear is looking pretty good,” said Jack Grobe, the executive director of Exelon Nuclear Partners, striking a much more positive tone than former Exelon CEO John Rowe did just six months ago.

Grobe was among five industry leaders who lauded “The Future of Nuclear” Wednesday at the Great Lakes Symposium on Smart Grid and the New Energy Economy, held at the Illinois Institute of Technology in Chicago.

The panelists’ confidence stems in part from the nation’s fleet of aging coal plants, which are not expected to survive increasingly stringent environmental regulations.

“We will retire these old fossil fuel plants and have to replace them with something,” said Scott Bond of Ameren Missouri, the utility that operates the Callaway Nuclear Generating Station. “The question is, what do you replace them with?”

One obvious answer is a power plant that burns natural gas, which, thanks to fracking, is now so cheap and plentiful that Rowe said in March that it doesn't make sense for new nuclear plants to compete.

Wednesday's panel touted the stable price of nuclear fuel as insurance against the vagaries of most other fuel prices including, over the long term, natural gas.

"It's not just an economic question," said Exelon's Jack Grobe. "It's an energy diversity question."

"There's a lot of focus on gas right now," Bond said. But "fuel diversity is the only safe place to be for a utility."

Nuclear power may have stable fuel prices, but it faces an unstable regulatory environment subject to public doubts and political winds.

That's why the Nuclear Energy Institute is touting the results of a poll it released this week.

"We just did a survey, and we had a strong majority of Americans—81 percent—who believe that nuclear energy is important for the nation's future energy needs," said Alex Marion, NEI's vice president for nuclear operations.

"Eighty-two percent believe the U.S. should continue to develop nuclear energy to meet growing electricity demand, and about the same percentage support the idea of renewing operating plant licenses, as long as they meet NRC regulatory requirements.

"And 74 percent believe the nuclear power plants operating in the U.S. are safe and secure. So there is public support."

Support for nuclear power had dropped to 46 percent in the wake of the Fukushima accident, Marion said.

NEI conducts polls in part to encourage politicians to support nuclear power.

"Many of them are hesitant to go public because they're afraid their constituents may not like nuclear and they don't want to upset their

constituents. So we develop these kinds of opinion surveys and we provide them to Congressional staff and members of Congress.”

The panelists expect new nuclear plants to take the form of small modular reactors and, eventually, fast breeder reactors.

They were much more optimistic about the outlook for new reactor designs than a panel held at the University of Chicago in the wake of the Fukushima accident. At that event, Hussein Khalil, director of Argonne’s Nuclear Energy Division, said safer reactor designs are impeded by industry reluctance to invest in them.

Wednesday’s panelists said the NRC’s new “one-step licensing” procedure will overcome that obstacle. Instead of seeking NRC approval for each new reactor design, a costly and uncertain procedure, utilities will have the option of choosing from pre-approved designs.

“It’s a tremendous advantage having the design approved ahead of time and having this modular construction,” Grobe said. “Once those designs are certified, the ability to plunk those down anywhere in the country is quite easy.”

The first new reactors from what has been called America’s nuclear renaissance are expected to come online in the next seven years in Georgia and South Carolina.

“Now you’ve got two large plants that are just about through the licensing process,” Bond said. “I think that’s going to provide utilities with some certainty about all it takes to build a plant. How much it costs and so forth.”