

New In Nuclear (Script 1)

(Intro Sound)

This week on New in Nuclear. Three years after the Fukushima disaster, Japan refocuses on nuclear power. Also this week, why green energy may not be such a viable alternative after all, and in our Eye on the Future segment we'll take a look at how the US government is paving the way to a nuclear future. Friday, March 14th 2014. Let's get started

(Opening Theme)

Welcome to New in Nuclear for Friday March 14, 2014. I'm Jim Doran, your host.

The nuclear debate is raging in Japan. This according to a February Wall Street Journal article by Mari Iwata in which she reports that 17 of Japan's 48 nuclear reactors are undergoing a screening for restart in the future. This article comes on the heels of the Japanese government's release of a draft energy policy in February in which they declare their intent to continue to rely on nuclear plants as a significant part of the nation's energy strategy.

The report states the government's desire to use nuclear power for electrical base loading supplementing that base load with coal and hydro-electric power. Japanese officials say that nuclear power is vital for limiting Japan's carbon dioxide emissions and the import of foreign fossil fuels.

Although the plan advocates the use of nuclear energy, it does not specify how much of the nation's energy needs will be fulfilled by nuclear power. According to Industry Minister Toshimitsu Motegi, "It was impossible to plan any energy mix, as it's been unclear how many reactors can come back online." Before the Fukushima disaster, Japan was receiving approximately one third of its energy from its nuclear infrastructure with plans in place to increase that proportion to approximately one half.

To be sure, not everyone is a fan of the new proposal. Public opinion polling shows that 53% of Japanese citizens oppose the restart of any of Japan's nuclear facilities. Miwa Chiwaki is quoted as saying, "I don't understand how they could make such a plan after seeing the damage to people's lives. They have no remorse."

The plan has yet to be approved by the Japanese cabinet, but one thing is clear. Without a viable energy policy that includes nuclear power in the mix, Japan's energy costs and greenhouse gas emissions will continue to increase until suitable alternatives are found.

(Bumper Music)

Green may be clean, but, in Germany, it comes at a cost. In a February article for Reuters, Madeline Chambers writes that although transitioning from nuclear and fossil fuels is a priority for Prime Minister Angela Merkel's government, the proposed changes to the German

Renewable Energy Law include a reduction in subsidies paid to the nation's green energy producers.

Currently, Germany receives about 25% of its energy from renewable sources with plans in place to increase the percentage to 40% by 2025. This green energy, while clean and renewable, is subsidized to a tune of 20 billion Euros. This subsidy comes in the form of higher electric rates for German consumers.

These rates have forced German industrial firms to pass the higher manufacturing costs along to their customers and have threatened their competitiveness in the global market. Because industry accounts for 25% of the German economy, the threat to move 900 thousand jobs out of the country made by the Federation of German Industry due to higher costs, carries a great deal of weight with lawmakers in Berlin.

Markus Kerber, managing director of the Federation of German industry is quoted as saying, "I support the conclusions of the Commission in terms of the need to reform the German Renewable Energy Law. All support for renewable technologies must be designed in a way to create incentives for companies to be competitive."

It is doubtful that changes in the law will have any effect on current policy, but if exports fall and jobs move to other countries with lower energy costs, the effects of green energy on Germany's overall economy could be disastrous.

(Eye On the Future Theme)

And now let's turn our eyes on the future. Nature magazine reports that the US Energy Department has approved 6.5 billion dollars in loan guarantees for Georgia Power's new reactors at its Waynesboro Georgia Vogtle site. Energy Secretary Ernest Moniz stated that these loan guarantees are part of the Obama administrations "all of the above" energy policy. "The President wants to make clear that he sees nuclear energy as part of his carbon-free portfolio," stated Moniz.

The US Energy Information Administration predicts that the US nuclear energy sector will grow by 5% over the next 28 years, while its market share is predicted to fall by 3percent. Senior fellow at the Center for Climate and Energy Solutions Doug Vine was quoted as saying that, "Utilities are behaving very conservatively right now," which has resulted in the tapering off of new US construction of nuclear power plants.

The US nuclear industry faces challenges from the natural gas market. These challenges have resulted in closures of nuclear plants in Vermont and Wisconsin. With new natural gas sources coming on line each day, the challenges will only grow greater for the nuclear industry. However, Scott Peterson, vice president at the Nuclear Energy Institute believes these loan guarantees send a strong message that nuclear reactors are still a strong player in today's energy market. Peterson says, "As we start to see the economy bounce back, and we see electricity demand start to increase, I believe we'll see more nuclear plants being built."

Only time will tell if Peterson is correct, but with growing concerns over climate change and greenhouse gasses, the option of new nuclear plants must be seriously considered as part of the nation's energy strategy.

That's it for this week on New in Nuclear. Join us next week as we address the industry's concerns over an aging work force and the training which will be required for the next generation of nuclear professionals. I'm Jim Doran. Goodbye for now.

(Exit Sound)