

Leaky Nuclear Plants vs. States Rights

by Carl Etnier

Dear Editor,

New from Blue Ridge Press: President Obama gave a recent boost to the nuclear industry. But in Vermont, West Virginia and Arizona state legislators are rebelling against nuclear power. Last month, Vermont blocked relicensing of Vermont Yankee, its only nuclear plant, largely due to radioactive leaks into groundwater – a problem plaguing 27 other U.S. plants. Carl Etnier thinks all states should have a say in relicensing old nuclear plants and approving new ones. Etnier is director of Peak Oil Awareness in Montpelier, VT. He has extensively covered the Vermont Yankee story on his radio shows and blog.

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Questions? Contact editor Glenn Scherer (scherer@blueridgepress.com; 802-223-7997) or editor David Lillard (lillard@blueridgepress.com; 304-876-2860).

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The people of Georgia may soon be neighbors to the first two new U.S. nuclear plants approved in decades, thanks to billions in loan guarantees just proposed by the Obama administration. But discontent in state legislatures is signaling that those new nuclear plants may not be warmly welcomed in every neighborhood.

Around the country, a problem-plagued nuclear industry is being met by public mistrust. Just last month, the Vermont senate voted 26-4 to block a license extension for Vermont Yankee, the state's only nuclear power plant, when it reaches the end of its original 40-year license in 2012. Also in February, West Virginia defeated a bill to repeal that state's ban on new nuclear construction. And in Arizona, a bill to classify nuclear power as renewable energy was withdrawn.

The source of distrust is a fleet of 104 nuclear plants that isn't aging well. Vermont Yankee and its owner Entergy Corporation, for example, seemed a shoe-in for a 20-year license renewal in 2012, until one of the plant's cooling towers collapsed. Then radioactive tritium was discovered leaking into local groundwater from buried, uninspectable pipes (after Entergy claimed under oath that no such pipes existed).

Tritium is a radioactive isotope of hydrogen, created in the cooling water used in a reactor's core. It is impossible to chemically separate tritium from contaminated water. Remarkably, the Nuclear Regulatory Commission (NRC) has acknowledged similar tritium leaks at 27 U.S. nuclear plants, potentially threatening the nation's drinking water.

There may be more tritium leaks that have yet to be reported. Vermont Yankee had a previous leak in 2005, made public only last month. In Illinois, the Braidwood Nuclear Plant leaked millions of gallons of tritium-laced water, starting in 1996, but plant management didn't reveal the problem to state officials until 2005. While NRC documents confirm a 2009 leak at New York's Indian Point 2 reactor on the Hudson River of at least a hundred thousand gallons over four days, an energy consultant with 45 years in the nuclear industry believes the evidence shows the plant leaked millions of gallons.

The consultant, Paul Blanch, says that a contributing factor to leaky nuclear plants is a troubling lack of NRC inspection requirements. Entergy doesn't inspect or maintain its underground pipes at Vermont Yankee, says Blanch. "Their maintenance philosophy is 'run to failure.' It's like I'm driving along with my car, and the only time I take a look at my tires is after they blow out."

Vermont Radiological Health Chief Bill Irwin blasted Vermont Yankee's NRC-approved design, saying it was "inappropriate" for pipes carrying radioactivity to be buried 15 feet below ground, where inspection is impossible. But that's standard design for the nation's nuclear fleet.

NRC chair Gregory Jaczko insists that "the program we now have in place [to prevent tritium leaks] is sound," but his agency has recently beefed up its "guidance" to nuclear plants for handling underground pipes. Faced with underground radioactive leaks at a quarter of the nation's plants, one would expect the NRC to take stronger action, like issuing regulations that mandate pipe inspection. That hasn't happened.

The best-laid plans of the nuclear industry are to keep radionuclides exactly where they want them – for tens of thousands of years. Water threatens these plans in more ways than tritium leaks from pipes less than 40 years old. For example, spent fuel from Vermont Yankee sits near the banks of the Connecticut River, potentially vulnerable to flooding. It stays there because the U.S. government's preferred repository at Yucca Mountain has been all but scrapped due to its risk of contaminating groundwater – in the Nevada desert!

If nuclear plants are going to be a part of our energy future, then the industry and the NRC need to assure Americans that existing and new plants will make good neighbors – which means inspecting plants thoroughly enough to uncover potential problems, as well as developing a safe, permanent disposal plan for radioactive waste.

The industry and the NRC are unable to achieve even these basic levels of quality assurance. Therefore, state legislatures need to exert authority over the relicensing of old plants (which thus far only Vermont has done) and to set standards for the construction and operation of new ones in order to protect citizens and our drinking water.

With 27 U.S. plants currently applying for license extensions, Vermont Senate President Pro Tem Peter Shumlin has offered his services to other state governors and legislators who want to control the destiny of their aging nuclear power plants.

This expression of states' rights can only be welcomed by those who don't fully trust the federal government to make a nuclear plant safe and reliable in their backyard.

Carl Etnier is director of Peak Oil Awareness in Montpelier, Vermont. He has extensively covered the Vermont Yankee story on his radio shows and blog.

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