



SNAKE RIVER
ALLIANCE
IDAHO'S NUCLEAR WATCHDOG

Proposed Nuclear Reactor by Bruneau, Idaho

December 18, 2006

What is proposed?

On December 5, 2006, Alternate Energy Holdings, Inc., announced it had signed a letter of intent to construct, own, and operate a 1,500-megawatt economic simplified boiling water reactor near Bruneau, Idaho. The company plans to sell most of the electricity to West Coast states, though some of the power would be sold to area irrigators.

What is Alternate Energy Holdings, Inc.?

AEHI is a “penny stock” company incorporated in Nevada, though its announcement was made by its president, Donald Gillispie, from Virginia. Penny stocks are subject to less regulation by the Securities and Exchange Commission. AEHI went public three months ago in a reverse merger with Nussentials, Inc., which sells natural food supplements. A reverse merger is when a private company goes public by simply buying another company that has already completed the process. Many members of AEHI’s board have nuclear experience.

What is an economic simplified boiling water reactor?

The ESBWR is a “Generation III+” reactor designed by General Electric. GE says the design was “officially docketed” with the NRC on December 1, 2005, and formal design certification may come in 2009. AEHI estimates it will take as much as \$2 billion to construct an ESBWR, which the company has yet to raise.

Why now?

No new nuclear reactor has been proposed, licensed, constructed, and operated in the US since the early 1970s. So, in an effort to revive the stagnant nuclear power industry, the federal government has streamlined reactor licensing by combining construction permits and conditional operating licenses. NRC issues generic design certificates like the one GE is seeking now. It is trying to change the review required by the National Environmental Policy Act from an environmental impact statement to an environmental assessment, which is more limited in scope and requires less public participation. Further, the government heavily underwrites nuclear power, and AEHI says the Energy Policy Act of 2005 creates an “ideal market atmosphere for the development of new plants.” Indeed. For the first six new reactors built, the 2005 act authorizes \$2 billion in “risk insurance” against delays caused by the NRC or litigation. For those same

reactors, there are unlimited taxpayer-backed loan guarantees for up to 80 per cent. These could cost taxpayers \$6 billion, assuming a construction cost of \$2.5 billion per reactor and a 50 per cent default rate as the US Congressional Budget Office estimates.

Why here?

AEHI asserts that the Raft River Co-op wants a nuclear plant near Bruneau. Bruneau currently gets its electricity from Idaho Power. AEHI has also announced it is also considering using heat from a reactor to produce ethanol from locally grown grain. The AEHI president said, "Small towns love these things."

Why NOT here?

When the Snake River Alliance first revealed the AEHI proposal to area residents, we heard fairly widespread consternation. Dick Reynolds, an Owyhee County commissioner, said, "I don't know this for a fact, but most people are not enthused about being in an area where there's a nuclear plant." In addition to skeptical potential neighbors and a \$2 billion budget gap, AEHI has neither the 1,000 acres of land in southwest Idaho nor the water rights it will need. A retired farmer and inventor in Salt Lake City is charged with finding those resources. Water, not surprisingly, is the larger hurdle. The Alliance is still researching the specifics of the ESBWR, but all nuclear reactors require significant water whether they are "once-through" or "recirculating" systems. "Once-through" systems use much more water but also return much more of it than "recirculating" systems. Either way, it is millions upon millions of gallons a day. In a region of water scarcity, it's worth noting that some of the water nuclear reactors need simply cannot be withheld, since cooling water keeps the reactor from meltdown.

What's next?

AEHI has boasted that it expects to begin "plant construction" in early 2008, but this surely doesn't include the reactor, since NRC might take until the end of 2010 to certify the generic design for an economic simplified boiling water reactor. The NRC acknowledges that "site-specific design information and environmental impacts associated with building and operating the plant at a particular location could be litigated" even after the standard design is certified. The NRC must issue a combined construction permit and conditional operating license and conduct at least an environmental assessment. On the state level, AEHI would have to apply to the Department of Environmental Quality for a wastewater application permit and a Resource Conservation and Recovery Act permit that would cover both producing and storing hazardous waste. The Department of Water Resources would have to approve the sale or transfer of water rights. Owyhee County would be responsible for issuing a conditional use permit.