Europe’s Anti-Nuclear Power Outburst

An energy policy test.

Henry Sokolski

June 30, 2011 10:39 AM

In Western Europe, Fukushima’s power reactor disaster has produced a loud round of anti-nuclear power reactions. Germany says it will phase out atomic power by 2022, and the Swiss insist they will shutter their reactor fleet by 2034. Earlier this month, the Italian public rebuked Prime Minister Silvio Berlusconi’s nuclear plans with an overwhelming approval of a binding, national anti-nuclear referendum and Finland’s new coalition government just signalled the end of any further nuclear construction by appointing a Green to be environment minister. Even in France, the Socialists—a major political force—are now courting the French Green Party, which is demanding a French power reactor close out by 2040. Add to this previously planned reactor decommissionings and the prospects for any net European nuclear-power expansion in the next two decades does not look good.

The question now is, what implications, if any, will these actions have for energy policy in Europe and beyond? The trick will be not to prejudge what they might be.

Atomic power’s supporters, of course, insist that if nuclear power is not allowed to expand further, electricity prices will soar. Europe, they warn, will only become more dependent on Russian gas and rely more on French and Eastern European nuclear power, and green house gas emissions will increase. Europe will be deprived of critical base-load electricity, they insist. Industrial production will decline.

Some of this sounds reasonable but to what extent each prediction is true (if at all) is pretty unclear. Indeed, the more nuclear power’s supporters denigrate their European opponents, the more the dare to unplug nuclear in 10 to 20 years gains in value as an experiment to see just who is right.

There is certainly plenty to learn.

Will Western Europe become dangerously dependent upon Russian natural gas? Natural gas burns relatively cleanly (emitting half the carbon of most types of coal), is vastly more efficient for heating, and is far more affordable than petroleum for anything but cars and trucks. Not surprisingly, France, Italy, and Spain all have long-term gas contracts with Algeria. However, these contracts were cut when gas prices were tied to the high price of oil. Natural gas is so abundant now, though, gas spot market prices are far lower than oil, so indexing the price to oil, as these long-term contracts do, no longer makes sense. Will they be renegotiated? If so, when?

As for unconventional gas, Poland has discovered plenty. The Russians, eager for political control, want to develop it. Will Poland let them or might others take the lead?

France, with a vast surplus of nuclear electrical capacity, encourages its citizens to mop up this excess by heating their homes inefficiently with electricity. Meanwhile, France imports expensive natural gas to take care of spikes in electrical demand that nuclear can’t supply. Compounding this energy weirdness, the French have banned domestic unconventional gas exploration for “environmental” reasons. Is this the model Europe will follow or will domestic fracking be allowed?

Very close to Europe, massive amounts of unconventional gas have been discovered off Israel’s shores that the U.S. Geological Survey describes as being “bigger than anything we have assessed in the US.” Natural gas’s low price currently has stymied development of these reserves. When might rising European demand change that?

Then there is the matter of integrating and modernizing Europe’s electrical distribution system. Germany is pushing this to reduce the number of generating stations needed to keep the current grid from collapsing and to accommodate more intermittent renewables like wind and solar. How feasible is this?

Finally, there are the renewable technologies themselves. Will their declining costs (currently tracking a kind of Moore’s Law) make them deployable without subsidies? If so, when?

The short answer is that we don’t know but are sure to find out well before the last power reactor is switched off in one to two decades. During the interim, nuclear power’s supporters have plenty to keep themselves busy, starting with safety.

Fukushima, it turns out, was not just a natural disaster. Emergency preparedness and management collapsed. Safety backup and electrical supply systems failed and the earthquake – not just the Tsunami – triggered much of this. Certainly, if the world’s leading nuclear regulators in the U.S., Europe, and Japan pull their punch or coddle the industry, they risk clearing the way for another Fukushima.

Yet another way to fumble nuclear power’s future would be to allow another “peaceful” nuclear Iran to emerge. Certainly, as U.S., Japanese, and European nuclear sales opportunities shrink, pressures to corner the remaining markets risks making non-proliferation and nuclear security secondary concerns. Someone should tighten the rules.

Late in 2009, the U.S. and the United Arab Emirates (UAE) established the “gold standard” for civilian nuclear cooperation. The UAE foreshowed making nuclear fuel – a process that can bring states within weeks of acquiring a nuclear bomb – and promised to ratify a new, tougher international nuclear inspection protocol. The U.S. Congress endorsed this deal and is now urging the White House to get other nuclear suppliers to adopt similar export conditions. A recent bill reported out of committee asks the White House to weigh the merits of continuing to make nuclear loan guarantees to nuclear firms eager to penetrate the U.S. market, such as AREVA, Rosatom, and EdF, unless they are willing to impose similar conditions on their nuclear exports.

The suggestion in all this is that Europe’s current nuclear intermission is less a political show than an energy policy test. At a minimum, it should be viewed as an experiment to determine what the safest, cleanest, cheapest energy future is. In this, the only serious mistake is to prejudge the results.
Henry Sokolski is the executive director of the Nonproliferation Policy Education Center in Arlington, Virginia and is editor of Nuclear Power’s Global Expansion: Weighing its Costs and Risks (2010).

Subscribe now to The Weekly Standard!

Get more from The Weekly Standard: Follow WeeklyStandard.com on RSS and sign-up for our free Newsletter.

Copyright 2010 Weekly Standard LLC.

Source URL: http://www.weeklystandard.com/blogs/europe-s-anti-nuclear-power-outburst_575938.html