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Subsidizing Nuclear Risks: Davis-Besse Disaster Highlights Inadequacies of Price-Anderson Act

The more we learn about the near disaster at the Davis-Besse nuclear power plant, the more obvious it becomes that we urgently need to find a better and safer way to turn on the lights.

The hole in the reactor vessel head at FirstEnergy's reactor near Toledo was discovered March 7, 2002, and government regulators are still piecing together the details of what went wrong leading up to the closest brush with nuclear catastrophe since Three Mile Island. By the time Davis-Besse was finally shut down last spring, boric acid had corroded a six-inch hole in the reactor vessel head at Davis-Besse, leaving only a 1/8-inch metal cladding as protection against a reactor breach and a possibly devastating chain of events that might have culminated in a reactor meltdown. FirstEnergy's own assessment of this mishap concluded that the company had put production and profits ahead of safety.

That is an unfortunately common theme in U.S. nuclear power operations.

Consider the Price-Anderson Act, an obscure government subsidy that limits the liability of nuclear operators in the event of an accident or attack, letting the nuclear industry off the hook in these "what if?" scenarios. The Price-Anderson Act was enacted in 1957 as a temporary measure to jump-start the nascent nuclear power industry. Forty-six years later, the mature industry still balks at retaining insurance for its reactors' full potential liability. Under Price-Anderson, the nuclear industry's liability is capped at about \$9.5 billion.

To put that in perspective, a 1982 government study found that a severe accident at Davis-Besse, involving the sort of meltdown and breach of containment that was so narrowly avoided last year, would cause \$84 billion (in 1980 dollars) in damages. As a result, if there is an accident involving expensive damages, the public would be inadequately compensated and taxpayers likely would foot most of the bill for cleanup.

To make matters worse, even the \$9.5 billion afforded under the Price-Anderson Act is not secured. For example, you and I pay monthly premiums in exchange for insurance. If you don't pay, you can't claim. Not so for nuclear operators. Price-Anderson sets up an unusual system of retrospective premiums, banking on annual fees to be paid by reactor operators after an accident to finance the bulk of their coverage. Back in the day when all nuclear power plants were owned by regulated utilities with a guaranteed rate base, perhaps this made sense. But Price-Anderson insurance requirements have not kept pace with changes in the electricity market. Today many reactors have been sold to limited liability subsidiaries. These merchant operators in other parts of the country might be expected to declare bankruptcy rather than pony up payments to cover the costs of a

nuclear disaster in, say, Ohio. Widespread instability in electricity markets post-Enron make this all the more likely.

By artificially lowering insurance requirements, the Price-Anderson Act confers a windfall indirect subsidy to FirstEnergy and other nuclear operators because of annual premiums they don't have to pay. This unparalleled form of federal intervention distorts competition in wholesale electricity markets in favor of nuclear power while inadvisably masking its inherent risks.

If nuclear power is as economical and safe as the industry claims, the industry should be able to privately insure its reactors. But of course that is not the case on either account, and industry analysts have stated that no new nuclear power plants will be built unless the Price-Anderson insurance crutch is extended. Obliging, the Republican authors of energy legislation currently before the U.S. Senate included a provision that permanently reauthorizes the flawed Price-Anderson scheme to cover potential new reactors.

Fiscally, environmentally and in terms of safety, promoting the construction of new nuclear reactors without adequate insurance just doesn't make sense. Davis-Besse taught us that nuclear risks cannot be dismissed as abstract conjectures and will not go away if we bury our heads in the sand.