Of 26 new nuclear reactor license applications submitted to the Nuclear Regulatory Commission since 2007, nine have been canceled or suspended indefinitely in the last 10 months. Ten more have been delayed by one to five years. The Tennessee Valley Authority has canceled plans to revive a partially built unit.

Much of this chaos is because cost estimates for new reactors tripled while natural gas prices declined precipitously. The recession and energy efficiency programs postponed estimated need for the power -- often exaggerated in any case -- by at least five years.

In short, year seven of the ostensible U.S. nuclear renaissance looks a lot like the 1980s, a decade of no new orders, multiple delays and cancellations, and emerging cheaper alternatives.

What is the response of the industry that took the country through what Forbes Magazine in 1985 called "the largest managerial disaster in business history"? These companies and their congressional allies are praying toward the Mecca of failed industries: the federal treasury. As the economic risks of new reactors become ever clearer, the industry's desire to offload them on the taxpayer grows apace. Though no applicant has yet been found suitable for the $18.5 billion in loan guarantees that Congress offered new reactors in 2007, Senate Republicans want climate law commitments for 100 plants by 2030, an absurd goal that would require loan guarantees from taxpayers approaching a trillion dollars for designs that have yet to break ground.
The nuclear industry has said that new nuclear reactors can be built only if taxpayers and customers take the risks normally assumed by investors. Since new nuclear plants are estimated to cost at least $6-7 billion apiece and to produce power far more expensive per kilowatt hour than other sources (renewables, efficiency and fossil fuels), the excess expense to consumers and the government from having Congress subsidize reactors on the scale necessary to make any difference to climate change will be very large indeed.

The most authoritative recent estimate of the excess cost (a June 2009 study by Mark Cooper) puts the figure between $1.9 trillion and $4.4 trillion over the lifetime of 100 new reactors. Such an approach would worsen climate change, because the money spent on nuclear reactors would not be available for solutions that fight it faster and at lower cost. Nuclear loan guarantee proponents could as sensibly urge damming a river to create a lake to fight a raging forest fire.

As a result of the massive cost overruns and rate shocks associated with the last round of nuclear construction (in which Wisconsin paid heavily for canceled plants), the U.S. moved away from power supply planning entrusted to politicians and monopoly utilities toward power procurement based on competitive bidding among different sources. In this system capital cannot be raised for nuclear power plants because they are too expensive to compete. Indeed, a new nuclear plant has yet to make a competitive bid to provide power. Hence the need for loan guarantees to assign to taxpayers the risks that Wall Street refuses to bear.

The U.S. has far more nuclear power than any other country. The idea that Congress and state legislatures must override the 30-year market verdict against additional power reactors by providing vast infusions of taxpayer and customer money for dozens of new reactors is beyond sober analysis. Instead, government should set a framework to deal with climate change, support research into innovative technologies (including aspects of nuclear) to help to meet those standards, and ignore the exhortations of interest groups to shovel vast sums at technologies that should long since have been able to make it on their own.

Wisconsin is fortunate in having Congressman David Obey chairing the House Appropriations Committee. His leadership helped derail Senate efforts to lard nuclear loan guarantees into the stimulus legislation last winter. He'll need to do so again.

Peter A. Bradford is an adjunct professor at the Vermont Law School and a former member of the U.S. Nuclear Regulatory Commission. He will be in Madison on Friday to speak at a legislative briefing and the Future Cities Conference.

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