

Statement of Peter A. Bradford At Utah Taxpayers Association News Conference
Warning of Likelihood of Extreme Electric Rate Increases Resulting from
Premature and Risk-riddled Commitments to Secretive and Unproven NuScale
Reactor Project.

Peter Bradford is a former member of the U.S. Nuclear Regulatory Commission who served as chair of both the New York Public Service Commission and the Maine Public Utilities Commission. He has been an expert witness in many cases involving nuclear power economics, and he has taught Nuclear Power and Public Policy at the Vermont Law School as well as Energy Policy and Environmental Protection at the Yale School of the Environment.

Fifty years dealing with nuclear cost overruns and mismanagement, have familiarized me with the basic characteristics of troubled projects, of which the nuclear industry has all too many. Let's start by reviewing the most recent example, the expensive dog on which UAMPS is the tail.

That would be the "nuclear construction renaissance", or "nuclear renaissance" launched twenty years ago on a tidal wave of press releases as well as state and federal subsidies – all that the industry asked for in fact. The promise of that time was that innovative new designs with modular features coupled with a streamlined federal licensing process would reduce costs and enable nuclear power to fulfill its oft deferred promise to become the nation's most economical nonpolluting electrical source, essentially the vision that Nuscale offers to UAMPS today.

Several southeastern states signed up enthusiastically, entering into arrangements that locked their customers into long term nuclear commitments and froze out opportunity to take advantage of other cheaper technologies that might become available. That renaissance is now an expensive ruin. Twenty-nine of the thirty-one applications that were pending or scheduled at the NRC in 2009 are cancelled or indefinitely deferred. The two units staggering toward a much-delayed completion are hitting exasperated Georgia customers with cost overruns exceeding \$10 billion. The greatest fiasco is in South Carolina, where the bankruptcy of nuclear industry mainstay Westinghouse left the state with a \$9 billion hole in the ground mostly to be paid for by the customers who will get no electricity on return.

Other cancelled projects also ran up billion-dollar tabs without adequate or clear-cut customer and taxpayer safeguards. We are 20 years into the nuclear renaissance now, and not one single molecule of carbon in the U.S. has been displaced by a new reactor. That's twenty lost years and more than 20 billion lost dollars in the fight against climate change. Had that money and time been allocated among renewable options, energy efficiency, load management and storage options according to competitive procurement and resource planning processes that we know how to run, the savings would have been large, the electricity cheap and the new jobs plentiful.

In an era of reexamined monuments nuclear history too has many lessons beyond the nuclear renaissance to offer – the Washington Public Power Supply System led an entity not unlike UAMPS to precipitate the largest municipal bond default in U.S. history; Shoreham in New York cost \$5 billion and never generated a single kilowatt hour; the “stranded costs” in nuclear plants paid off by customers in the 1990s exceeded \$50 billion dollars; among the prototypes dependent on federal subsidy, Fort St. Vrain in Colorado, Clinch River in Tennessee and West Valley in New York all collapsed when federal priorities changed and the support dried up.

Throughout my 50 years of regulating and teaching about the nuclear industry, another constant is that each period of abject failure is followed by an array of new design proposals said to be very different from the wreckage lying in plain sight around us. All 31 of the renaissance reactors were new designs, some of them modular. The new features were indeed improvements, but they caused problems of their own, both in construction and in licensing.

We have already seen some new designs – including Bill Gates's much ballyhooed original “Traveling Wave” and the Transatomic Power molten salt design embraced at MIT – drop out. There will be more. The development of untried new designs is no place for small utilities with no nuclear construction experience to risk their customers' money, especially with money for essential commodities as tight as it is right now and demand for electricity likely to fall well below past projections for at least several years.

To make matters worse, serious issues of candor and transparency are arising with the Nuscale project and throughout the nuclear industry. In Utah, UAMPS uses a freedom of information act exemption to prevent public scrutiny of its

ever-changing cost and schedule projections. Across the country, nuclear executives and their legislative and other governmental allies are doing embarrassing perp walks as a result of proceedings where nuclear licensees apparently sought approvals through secrecy and bribes that they could not obtain through open and honest processes.

The root cause, as long as we are not talking about safety, is always the same. Nuclear power is far more expensive than competitive technologies, even competitive low carbon technologies. If state and local governments accept that their power procurement decisions have vital, tax-like impacts on electricity prices, they will make their policy reviews – including the prices and impacts of alternatives - subject open and honest review. But experience shows that nuclear power doesn't prevail in open and honest competition, so it avoids it wherever possible, and by any means necessary.

Companies, officials, and nuclear consortia that won't accept open and honest review can't be trusted. Their record of blending incompetence, arrogance, corruption and economic ruin stretches back more than half a century. Their record is too clear and too consistent for Utah to walk down the same woeful and expensive path.

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