

# The New Captain of the NRC

A STILLBORN NUCLEAR RENAISSANCE?  
BY DARRELL DELAMAIDE

**IF YOU'RE WAITING FOR A NUCLEAR** renaissance, don't look for Gregory Jaczko to play Leonardo da Vinci, or even Lorenzo de' Medici.

"Our primary mission is the safety and security of nuclear energy," said the newly designated chairman of the Nuclear Regulatory Commission.

What role nuclear power will play in the nation's energy mix, how many plants will be built and what type – all this depends on private industry, their financiers and the government at large, he said.

Jaczko's contribution, as he sees it, is to keep existing plants safe and make sure any new plants also have sufficient safeguards to prevent any nuclear accidents and to inspire public confidence. His priorities are more rigorous inspections and a new headquarters building to accommodate the agency's expanding staff.

None of this seems likely to reduce the long and expensive process of getting approval for building a new nuclear power plant or to alleviate the regulatory risk premium in financing one.

If anything, the NRC under Jaczko seems most likely to play the role of Pope Sixtus IV, the Renaissance pontiff who spent as much time keeping art patrons like the Medicis in their place as supporting artists like da Vinci or Michelangelo.

Jaczko, a former staffer of Senate Majority Leader Harry Reid, D-Nev., comes to the helm of the NRC as doubts are growing that the much-hyped nuclear renaissance will ever become a reality. He has a doctorate in theoretical particle physics.

A recent report from MIT, updating a 2003 study, said that very little has actually been done to promote development of nuclear power in the United States, despite the professed enthusiasm for it as a source of carbon-free energy.

"The sober warning is that if more is not done, nuclear power will diminish as a practical and timely option ...," the study said.

The current crop of applications for new plants is not likely to result in new approvals for another couple of years, Jaczko said, depending on a variety of factors, including response times by the industry. And at that point, there would come a protracted period of

construction, which historically has included spiraling cost overruns and a high rate of cancellations.

Though applicants may now pursue design, licensing and environmental approvals simultaneously, the complex process, especially for design, is taking longer than originally expected.

"It is taking applicants longer than we anticipated to respond to requests from our staff," Jaczko said. The NRC set its interim milestones on the basis of a 30-day response period, but that has turned out to be a "very aggressive assumption," he acknowledged.

Jaczko, who has been a Democratic member of the commission since 2005, stressed that he wants the application process to be predictable and decisive.

"What I would like to focus on is good communication of what we are looking for so that applicants have clear expectations," he said.

Some industry observers have expressed the hope that mini, or modular, reactors might represent the future of nuclear power, instead of the ponderous and complex power plants that take so long for certification and construction.

"These small fission reactors seem to me like the microprocessors that took over from the huge, air-conditioned, glasshouse mainframe computers," venture capitalist Bob Metcalfe wrote in a *Wall Street Journal* op-ed extolling the virtues of these reactors.

Despite his enthusiasm, though, Metcalfe said his firm could not invest in the projects because of the daunting NRC certification requirements costing \$100 million and taking five years.

Jaczko said the NRC takes its lead from the utility companies making the applications and there has been little sign of interest in mini-reactors. He said the agency could consider a sliding scale of fees for certifying smaller reactors. But these aren't likely to be considered until the current pipeline of applications has cleared.

The 38-year-old Jaczko cut his political teeth with Reid, an adamant opponent of the proposed Yucca Mountain facility for storing nuclear waste. He is not worried at the prospect of Yucca Mountain's demise – no further funds are being budgeted for the project.

"From my perspective, we have been able to manage spent fuel safely with dry storage and can continue to do so for decades," he said.

Jaczko, the only Democrat on the commission at the time of his designation as chairman because two other seats of the five-member panel remained vacant, declined to comment on charges that he is anti-industry.

"I come to work every day to carry out the NRC's mission of safety and security," he said. "I leave it to others to comment on how I'm doing." ☒