WASHINGTON — Gregory B. Jaczko, the chairman of the Nuclear Regulatory Commission and the subject of a harsh new investigative report from his own agency, finds himself in the cross-fire of a 30-year political battle over disposal of radioactive waste from the nation’s nuclear power plants and weapons program.

The fight pits Republicans in Congress who support continued work on a nuclear waste dump at Yucca Mountain in Nevada against Senator Harry Reid of Nevada, the Democratic majority leader and an ardent opponent of the repository. Seeking the support of Mr. Reid and to win his pivotal state, President Obama promised during his 2008 election campaign to seek a different disposal site, and later eliminated most of the funding for Yucca Mountain.

Mr. Jaczko, 40, was named to the chairmanship of the nuclear regulatory panel by Mr. Obama in 2009 with the explicit expectation that he would oversee the phaseout of the commission’s work on Yucca Mountain. Mr. Jaczko, who holds a doctorate in particle physics, for a time served as a science adviser to Senator Reid.

The regulatory commission’s inspector general, Hubert T. Bell, charges in the new report that Mr. Jaczko used his powers as chairman to carry out the president’s wishes while running roughshod over his fellow commissioners. The report said that Mr. Jaczko failed to fully inform the other four members that he was issuing budget guidance that would essentially halt the commission’s work on the project, which was to decide whether the Energy Department should be allowed to build and operate the dump. (In line with administration policy, the Energy Department had already laid off all the contractors and reassigned its staff.)
Further, Mr. Bell asserts that Mr. Jaczko created a hostile workplace atmosphere with frequent outbursts of temper, favoritism in travel assignments and selective release of information to the other members of the commission.

However, the inspector general determined that Mr. Jaczko had not broken any law or violated any commission standard of conduct, and the report makes clear the complicated nature of multimember federal commissions like the regulatory agency. While all of the members vote on policy decisions, the chairman deals with most fiscal questions alone.

In deciding not to spend more agency money on Yucca, Mr. Jaczko was not acting in secret, the report makes clear. It says that of the other four commissioners, two were told of the decision but may not have understood what they were told. A third did not return phone calls from the chairman’s office but did raise questions to the commission’s lawyers in a way that made it clear she knew of the issue.

Mr. Jaczko admitted to the inspector general that he sometimes loses his temper but denied violating any procedures or misleading the other commissioners.

In a telephone interview on Friday, he said that Yucca Mountain was a contentious issue that had generated controversy for years. “All along, my goal has been to make sure we preserve the agency function and focus on safety,” he said. “If that means I have to take heat, that’s my job. I’m here to make the hard decisions and take responsibility for those decisions, and that’s what I’ve done.”

The report further inflamed the long-running battle over how and where to store about 70,000 metric tons of the radioactive waste produced by the nation’s 104 operating nuclear power stations and about a dozen more than have been retired. Proponents of Yucca Mountain, on which about $10 billion has already been spent, say that it provides the safest available disposal of waste that will remain radioactive for thousands of years.

Others, including Mr. Obama and Energy Secretary Steven Chu, say that the material can be safely stored for decades above ground in casks at the nuclear plants where it is produced.

Mr. Bell, the inspector general, is scheduled to appear before a House committee next week to be questioned about his report.

Representative John Shimkus, the Illinois Republican who heads the subcommittee of the Energy and Commerce Committee that will review the report, said that the inspector general’s findings confirmed his worst suspicions.
“The report reveals a calculating and political N.R.C. chairman who has abused his authority, who sought to suppress scientific reports and withhold information from fellow commissioners — strategically working to rig the system in a no-holds-barred effort to derail the Yucca Mountain repository,” Mr. Shimkus said in a statement on Friday.

“The I.G. provides a disturbing glimpse of Chairman Jaczko’s concerted effort to obliterate the work of the last 30 years,” he said, “exhibiting complete disregard for the scientific research, bipartisan collaboration, and billions of taxpayer and consumer dollars invested in this national effort to safely and permanently store nuclear waste.”

Mr. Jaczko was nominated to the commission in 2005 by President George W. Bush under strong pressure from Senator Reid, on whose staff Mr. Jaczko then served. He was opposed by the nuclear industry, which is unusual for an regulatory commission nominee. Not having run a nuclear-powered Navy submarine or worked in a nuclear power plant, he is still viewed with suspicion by the industry.

Senator Reid defended Mr. Jaczko, saying the inspector general’s report had largely exonerated him.

“The N.R.C. inspector general report affirmed that Chairman Jaczko has acted within the law, N.R.C. guidance and his authority in closing out Yucca Mountain project licensing,” Mr. Reid said on Friday. “It’s time for House Republicans to move on and help find real solutions for safely managing nuclear waste.

“Yucca Mountain is dead,” he said. “The project is terminated now that Republicans and Democrats alike voted to zero out its funding, and the administration’s policy is clear that Yucca is not coming back and the U.S. will pursue much safer, workable alternatives.”