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**When Fracking Went Nuclear:
Projects Gasbuggy, Rulison, and Rio Blanco**

During the late 1960s and early 1970s, the U.S. Atomic Energy Commission (AEC) conducted a series of underground tests using nuclear explosives: Gasbuggy (New Mexico, 1967), Rulison (Colorado, 1969), and Rio Blanco (Colorado, 1973). These experiments were designed to fracture shale rock formations in order to stimulate the production of natural gas, a process similar to hydraulic fracturing but using much more powerful explosive devices. The AEC and its partners in the private sector hoped that the tests would enable the widespread commercial deployment of nuclear fracking. Their plans, if fully realized, would have resulted in thousands of detonations across the American West. Those plans were abandoned as a result of growing concerns about the economic and environmental costs of the process. Gasbuggy, Rulison, and Rio Blanco inspired resistance from local residents and helped catalyze the growth of the environmental movement, particularly in Colorado. The fact that environmental opposition could help bring nuclear fracking to a halt after 1973, just as the energy crisis of the 1970s was greatly intensifying demand for new fuel sources, underlined the movement's growing importance. The history of Gasbuggy, Rulison, and Rio Blanco is also an important prelude to the later growth of hydraulic fracturing. Nuclear gas stimulation targeted the same shale formations that are the focus of hydraulic fracturing today, and it involved similar public-private partnerships between government and industry, foreshadowing the fracking boom that has transformed the U.S. energy sector since the mid-2000s.