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# *Introduction*

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SINCE THE END OF THE COLD WAR in 1989, Americans have begun to consider seriously the social costs exacted by the development of the atom. Recent disclosures have revealed radiation tests conducted on unknowing children. Similar studies have probed cancer rates in the intermontane West presumably caused by nuclear testing. Still others have examined the survival of cities such as Hanford, Washington, and Los Alamos, New Mexico, where the first bombs and reactors were manufactured.<sup>1</sup> But little scholarly attention has been directed to the supply side of the industry. Although some recent works have examined the environmental consequences of uranium mining and the cancer rates among its miners, there is little mention of the well-being of the communities impacted by the mining and milling of *yellowcake*, the industry's term for processed uranium ore.<sup>2</sup> This study analyzes the origins, development, and decline of four such yellowcake communities: Uravan, Colorado; Moab, Utah; Grants, New Mexico; and Jeffrey City, Wyoming.

Twice during the four decades of the Cold War, changing federal government policies caused “boom-and-bust” phases in the yellowcake communities. Although boom periods created severe problems with housing, schooling, and the like, the bust phases struck at the towns’ very existence. Some, such as Moab and Grants, survived high unemployment, sharp drops in property values, and losses in local revenue by shifting to tourism. But other municipalities, like Uravan and Jeffrey City, had no foundation other than the production of yellowcake. Jeffrey City is nearly a ghost town, whereas Uravan is a federally classified remediation site. The history of these towns illustrates the interaction of outside forces and local boosters and their impact on communities that both mined and milled energy resources in the twentieth-century American West.

Although the role of uranium mining communities is new, it is deeply rooted in the region’s history. Like all mining communities, the uranium towns were often located in remote places tied to larger trade networks. They were usually small, almost forgotten sites that became instant boomtowns when uranium was discovered. Like other such places, the communities were often deluged first by mostly male prospectors and later by families. This restless population overwhelmed the town’s infrastructure and altered the community’s character as it reshaped the landscape for mining and milling. The uranium industry also followed the traditional consolidation evolution from lone prospector to giant corporation.<sup>3</sup>

The study of company towns also sheds light on some uranium mining communities. Like their relatives in logging, coal, and copper mining, several uranium companies built new towns to support their workers in remote areas. In both Uravan and Jeffrey City, uranium mining companies provided inexpensive housing, recreation, schools, utilities, and shopping in addition to the usual jobs. Unlike the uranium boomtowns, these corporate communities were usually managed more effectively, with less economic and social upheaval. At the same time, Uravan and Jeffrey City, like all one-industry towns, were totally dependent on the uranium industry, and their residents were subject to colonial control—whether by the federal government, the market, or the company.<sup>4</sup>

Although the yellowcake towns were linked to other mining communities in these ways, the fact that they were supplying the raw material for the first atomic bombs and then for nuclear power plants places them in an entirely different context. As workers on the frontier of atomic science, uranium town residents often exhibited a unique “pronuclear” culture similar to citizens of the West’s other atomic towns. In Hanford, residents named their high school football team the Bombers and placed mushroom clouds



on their helmets. People in the yellowcake towns built “uranium cafés,” held “uranium days,” and even staged a “Miss Uranium” pageant where the lucky winner received a truckload of uranium ore.<sup>5</sup>

Understanding the forces at work in the international uranium market also provides a context for the history of the yellowcake towns. From the start of the Manhattan Project to the end of the federally subsidized market in 1970, the federal government completely controlled the market in the interest of national security. Uncle Sam subsidized prospecting, mining, and milling and was the only legal uranium buyer. This paternalism created the first big boom in the 1950s and a subsequent bust followed by a decade of stagnation. After 1970 the federal government’s total control ended, and international market forces came into play. Another boom and bust followed. By the early 1980s the domestic uranium industry was dead.<sup>6</sup>

The history of the yellowcake communities is also a study in the intricacies of economic colonialism. Unlike westerners’ traditional cry against control by eastern capital, the story of twentieth-century colonialism is a study of the integration of the western economy into the global economy. Like people in other hinterlands dependent on the extraction of natural resources, local boosters often pushed for uranium development in the yellowcake communities and later complained when they found themselves isolated and with very little influence in the global market.<sup>7</sup>

Such links are important to other fields of inquiry, but there must be limits. It is neither possible nor desirable in this study to pursue all related questions. For example, my examination of yellowcake communities is not intended to be an in-depth social history. These caveats aside, I reaffirm that the goal of this book is to analyze and compare the impact of changing federal policies on four uranium mining and milling communities. This approach reveals the typicality or uniqueness of the effects of outside forces and local boosters on a particular community. Further, the differing effects of corporate decisions on the various cities may also be detected. Because of this effort to compare similarities and differences among the four towns, the criteria for selection must be explained.

The communities in this study were chosen for several reasons. First, all four towns were home to uranium mining and milling operations. Second, all four communities existed and operated during the four decades of government dominance of the uranium industry. Third, uranium production played such a large role in these communities that its impact is easily detected. Fourth, two of the towns in this study were company towns and two were not, so the influence of corporate paternalism can be compared to that of independent governments. Fifth, each town was influenced more



strongly by some policies than by others, allowing us to understand how national policies produced local variations. Finally, each community is located in a different state, so governmental differences—especially in the 1980s—can be detected. A brief look at each town provides an overview.

Uravan is located in west-central Colorado about 90 miles southwest of Grand Junction. A company town created by Union Carbide, the name *Uravan* is derived from the two main products processed there: *uranium* and *vanadium*. The town began, however, as a radium mining camp and only started to extract other minerals when market conditions proved favorable. During World War II, vanadium use in strengthening steel increased, and uranium became an unused part of the mill tailings. When the United States needed uranium to build the first nuclear bombs, the Manhattan Engineer District came to Uravan to process tailings for uranium. This mill remained in operation until 1945 when the town was closed.

Two years after the start of the new federal uranium program in 1946, Uravan reopened, and the population increased to over 800. But Union Carbide maintained its hold on the community, and Uravan never experienced true boomtown expansion. Indeed, the population never again matched its mid-1950s' peak. Operations at Uravan continued until the late 1970s when environmental regulations made them uneconomical. The mill closed in November 1984, and the town was shut down because of radiation problems in 1988.

Like Uravan, Moab played a role in the uranium industry before World War II. Situated on the Colorado Plateau in east-central Utah, the town's chief characteristic was its location in the canyon country near present-day Arches and Canyonlands National Parks. About 50 percent Mormon, Moab was rooted in agriculture and mining. After the war the town became a center for uranium prospecting and boomed after a major discovery in 1952. The population quadrupled in less than three years. In 1956 a mill was built, and city fathers proclaimed Moab the "Uranium Capital of the World."

During the 1960s, Moab's economic base diversified thanks to a new potash industry and increased tourism. Although impacted by the bust in the 1980s, Moab has prospered as a gateway town. In fact, few visitors to what is now billed the "Mountain Bike Capital of the World" even know about its past uranium identity.

Unlike Uravan or Moab, Jeffrey City, Wyoming, did not exist before the Cold War uranium procurement program in the 1950s. Created by Western Nuclear, Inc., to provide housing for its miners and mill workers at Wyoming's first uranium plant 90 miles northwest of Rawlins, during the first boom



period Jeffrey City grew from a small post office for a ranching district into a trailer town of 750 inhabitants. During the industry slowdown in the late 1960s, Western Nuclear sold out to mining conglomerate Phelps-Dodge. This consolidation brought more money into the community just as a second boom began. By the mid-1970s Jeffrey City's population had grown to almost 4,000. Phelps-Dodge built more housing, streets, and parks. Unfortunately, the bust in the 1980s forced local employers to lay off hundreds of workers. With no alternative employment opportunities, people moved away. Within a few years, Jeffrey City's population had dwindled to several hundred people.

Like Moab, Grants, New Mexico, once proclaimed itself the "Uranium Capital of the World" because it was the center of New Mexico's uranium industry. Located on Route 66, 90 miles west of Albuquerque, Grants was a small agriculture community that claimed to be the "Carrot Capital of the World" before uranium was discovered in the early 1950s. Before the end of the decade, new discoveries at nearby Ambrosia Lake brought five mills into operation in the region, and most of the workers lived in Grants. The town's population increased 500 percent between 1950 and 1960. Like Moab, the character of Grants changed as it grew into another uranium capital. Also as with its Utah counterpart, the uranium boom industrialized Grants, expanded the community's size, and popularized its image. In the bust of the 1980s, though, the dependency on the uranium industry wreaked havoc. As unemployment grew to over 30 percent, businesses closed, homes were sold at a fraction of their cost, and the population—once projected to grow to 100,000—dropped from 20,000 to 10,000.

The details of why and how these changes took place constitute the substance of this book. Chapter 1 traces the early history of the U.S. uranium industry and the first uranium towns amid the carnotite deposits of the Colorado Plateau. From here the U.S. radium and then vanadium industries developed before the rise of atomic physics and the Manhattan Project gave discarded rock a new use. The chapter also recounts the federal government's growing involvement in the industry.

Chapter 2 describes the postwar transition to the U.S. Atomic Energy Commission (AEC) and its domestic uranium procurement program. Using a variety of new government incentives and guaranteed prices, the AEC created the first uranium rush to fuel the burgeoning U.S. atomic arsenal. By the late 1950s the U.S. uranium industry was a huge success.

Building on federal policy during the boom years 1946–1958, the next three chapters examine how the four communities responded to the boom. Chapter 3 shows how the new program affected employment, school



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enrollment, population, business growth, and physical expansion in the two company-controlled communities, Uravan and Jeffrey City.

Chapters 4 and 5 explore the rise of the two uranium capitals Moab and Grants during the 1950s uranium rush. Chapter 4 discusses Moab's growth and problems, and Chapter 5 examines the same issues in Grants. Rapid growth in population, school enrollment, business, and physical size are again investigated. Further, the place of uranium mining in each town's self-image is explored to show the transition to a uranium-dependent yellowcake community.

As uranium expansion increased beyond imagination in the 1950s, Congress decided it could no longer afford to purchase all the uranium ore being produced. As hopes for peaceful uses for atomic energy in power plants developed more slowly than expected, the uranium industry seemed headed for a state of overproduction. To ease this transition, the federal government instituted a new allocation program, a ban on imported uranium, and an extension, or "stretch-out," policy to keep domestic producers afloat until demand for nuclear power increased. Chapter 6 traces the development of these new policies during the period 1958–1970.

In the late 1950s and 1960s these four communities realized that their dependence on federal policy and industrial whim was likely stronger than imagined. As slowdowns and layoffs occurred, companies were forced to make decisions about their uranium futures. These decisions often led to consolidations, layoffs, and slowdowns that seemed to question the future of both the industry and the communities. The towns, meanwhile, sought to diversify their economies. Chapter 7 describes how these places survived the allocation and stretch-out periods.

By the early 1970s the government procurement program had ended, and a new commercial period began. Rising energy costs, created in part by the oil crisis, generated a second uranium boom. Although no longer the sole buyer of uranium, the government continued to influence the industry through international trade. Power companies planned dozens of new nuclear power plants, and demand increased. As uranium prices soared, Congress lifted the embargo, and imports began seeping into the seemingly endless U.S. market. By 1977 it seemed the boom would never end. Then the uranium market collapsed.

The reasons for the collapse were complex. Although many Americans blamed the March 1979 Three Mile Island incident for the falling price of uranium, that event was only a symptom of the problems created by growing environmental concerns, overproduction, delays in nuclear power plant construction, increased import dependency, and overzealous industrial



speculation. As plans for new nuclear power plants were delayed and then scrapped, U.S. uranium producers petitioned the Reagan administration for help against low-cost imports. Arguing that the government had a legal duty to maintain a “viable domestic industry,” the industry fought the government all the way to the Supreme Court. In 1988 the court ruled in favor of the government, which killed the U.S. industry. The factors that shaped the second great uranium boom and bust—the commercial period—are examined in Chapter 8.

Chapter 9 describes how the four yellowcake communities were affected by the commercial boom-and-bust period of the 1970s and 1980s. Like the earlier government program, the free market brought another expansion that transformed all four cities, especially Jeffrey City and Grants. New schools, businesses, and churches were opened as forecasters insisted that atomic power had a bright and prosperous future. For Moab and Uravan, the second boom had less of an effect than the first, but both towns bit into the expansion. For many, the future had never looked brighter. Then a bust hit again.

The drop in the price of yellowcake brought mill closings and job layoffs, followed by exodus. As people began to move, the local businesses that fed off the mining industry collapsed. Unemployment rates exceeded 30 percent in some towns, and property values plummeted. Newly built schools and water works were closed. In many communities the only remaining uranium jobs were in the reclamation projects that tried to control the millions of tons of waste. As the bust continued, town leaders considered nuclear waste storage as a possible solution to the job problem before looking to other ventures like tourism to keep their cities alive.

Chapter 10 examines the history of the uranium industry and the yellowcake communities since 1988. As during the stretch-out period, the continued commercial slump brought another round of consolidations in the domestic industry. But without government protection most U.S. producers saw little chance of success, especially after Russian uranium infiltrated the U.S. market in the early 1990s.

By the summer of 2001, the yellowcake towns had virtually disappeared. Uravan is in the process of remediation, and the remaining homes in Jeffrey City were recently sold and carted off. Moab’s tourist industry has boomed to the point that few know of its past tie to the atomic age. Charlie Steen’s home above the town is now a restaurant catering to tourists. Only Grants profits from its uranium history through heritage tourism. Visitors to the New Mexico mining museum can go “underground” and tour a reconstructed uranium mine before visiting the Uranium Cafe. Built in 1956,





the café still serves “yellowcakes” for breakfast and “uranium burgers” for lunch. It seems a small reminder of the half-century history of uranium mining towns in the American West.

### Notes

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