

The Front-Lines of Energy Policy The Coal Mining Workplace and the Politics of Security in the American Century

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In April 1977, Jimmy Carter detailed to the nation in a televised address the energy crisis facing the nation. Although many Americans doubted a “real” energy crisis even existed, Carter insisted that the crisis was not only real, but a severe, long-range, even existential threat to the nation. To meet the challenge, he argued, would demand a response that was “the moral equivalent of war.”¹ Conjuring war only two years after the final withdrawal of American troops from Vietnam was a fraught proposition. If the recent past weighed heavily, the language of war nonetheless invoked a long history of entanglements between domestic energy use and war making, and a more contemporary but nonetheless ubiquitous political culture which imagined national security as deeply entwined with the everyday energetic lives of American citizens.² Carter’s invocation of war, however, signaled not military conflict, but energy transition. Just as wood had given way to coal, and coal to oil and natural gas, the time had come to transition again: to a coal regime characterized by both conservation and growth which would operate as a bridge into an alternative energy future.

Carter understood policy-directed energy transition would be a massive undertaking, not a matter of tinkering with regulations but of completely transforming a nation, its people, and its culture. Certainly, the energy crisis was bound up with efforts by Third World oil producers to assert their own sovereignty and international influence.³ But it was also a profoundly domestic problem, calling into question the politics of postwar liberalism which pursued national stability through economic growth, the more-measured extension of welfare systems, and the global projection of American power, culture, and political economy.⁴ He more likely intended to call forth World War II: the “good” war against which Vietnam was positioned in US politics. The war mobilization that last from the late 1930s until the middle of the next decade has taken on mythic qualities in American life. The imagined

¹ Jimmy Carter, address to the nation on energy, April 18, 1977. Online by Gerhard Peters and John T. Woolley, The American Presidency Project, <https://www.presidency.ucsb.edu/node/243395> (accessed July 22, 2019).

² Mary L. Dudziak, *War-Time: An Idea, Its History, Its Consequences* (New York: Oxford University Press, 2012); Peter Shulman, *Coal and Empire: The Birth of Energy Security in Industrial America* (Baltimore: Johns Hopkins University Press, 2015).

³ Christopher Dietrich, *Oil Revolution: Anticolonial Elites, Sovereign Rights, and the Economic Culture of Decolonization* (New York: Cambridge University Press, 2017).

⁴ Jennifer Klein, *For All These Rights: Business, Labor, and the Shaping of America’s Public-Private Welfare State* (Princeton: Princeton University Press, 2003); David Ekbladh, *The Great American Mission: Modernization and the Construction of an American World Order* (Princeton: Princeton University Press, 2011); Jefferson Cowie, *The Great Exception: The New Deal and the Limits of American Politics* (Princeton: Princeton University Press, 2017).

ability to provide the nation with a sense of unified moral purpose in confronting the domestic problems of war-making, particularly the rationing of resources, figured centrally in this story, even as it obscured the same labor and cultural conflicts that would re-emerge in the 1970s.⁵ This comparison also suggested the importance of domestic industrial workplaces in “winning” the energy war. If the energy crisis presented an existential crisis, it could not be fought on existential terrain.

Coal miners, their union, and coal industry leaders located both the nation’s energy problems and their solutions in a peculiar kind of conflict zone: the coal mining workplace. In particular, the United Mine Workers of America, the union which represented the vast majority of US coal miners in the mid-twentieth century, positioned coal mines as the front lines of energy policy. This position on the front lines elevated their workplace claims by suggesting they bore the burdens of nation’s energy policy disproportionately, and in a manner that supported national security—even as coal’s importance to traditional war-making declined. Miners and their representatives further buttressed these claims by portraying coal miners as white and masculine—even as women, Black, Chicano, and indigenous miners continued to play a significant role in coalfield politics.⁶ The form of energy security espoused by Carter in 1977 was intelligible, in part, as a result of the contestations over security which had taken place in the coal industry since the early 1950s, mostly in the coal mining workplaces east of the Mississippi River.

Coal mines are small spaces, whether you are looking at them mapped onto a page or you are crouched in a narrow seam, operating a roof bolter. In the United States, they are overwhelmingly located far from population centers, even if they provide energy to them. Most Americans will never see a coal mine, let alone labor in one. Yet in these small spaces, both energy regimes and carboniferous geologic strata are imbued with cultural meaning and political power through their mutual entanglement. Because of the centrality of coal to energy flows in the United States from the end of the Civil War to the dawn of the twenty-first century, these sites have had a disproportionately large impact on American political culture—including in the post-1945 period, which scholars have typically

⁵ James T. Sparrow, *Warfare State: World War II Americans and the Age of Big Government* (New York: Oxford, 2011); Nelson Lichtenstein, *Labor’s War at Home: The CIO in World War II* (Philadelphia: Temple University Press, 2008); Jefferson Cowie, *Stayin’ Alive: The 1970s and the Last Days of the Working Class* (New York: New Press, 2010).

⁶ The *United Mine Workers Journal* reported extensively on activism by Black, Chicano, and indigenous miners. On the increased role of women miners, see Jessie Wilkerson, *To Live Here, You Have to Fight: How Women Led Appalachian Movements for Social Justice* (Urbana: University of Illinois Press, 2019), especially 146-170; Trish Kahle, “A Woman’s Place is in the UMWA: Women Miners and the Struggle for a Democratic Union in Western Pennsylvania, 1973-1979,” *Labor* 13 no. 1 (2016), 41-63.

defined through other energy sources, particularly oil and nuclear power. This article brings coal back into the debate about the relationship between energy, geology, and politics in the post-1945 US.

In the two decades after the end of World War II, coal became both the primary fuel for producing electric power in the US *and* the electric utilities became, overwhelmingly, the primary consumers of coal. By 1966, electricity production burned more coal than all other uses combined, and American electricity consumption was predicted to grow substantially through at least 1980. Electricity, described by the Federal Power Commission as “the lifeblood of the modern nation,” became as much a centerpiece of American energetic life as the automobile in the same period as the politics of security underwent their own transformation.⁷ The politics of economic and social security which had defined the New Deal were refashioned into the militarized vision of national security which came to dominate US politics by the early 1950s and which were projected internationally amid the global Cold War.⁸ Although no longer central to war making, coal figured centrally in national security governance—tied to both the raised standard of living that defined mid-century American life and to the use of coal-fired illumination for domestic security efforts by state actors, industry leaders, and a wide range of ordinary people who did things like install floodlights outside their homes.⁹ Coal was the baseload fuel of domestic consumerism, powering the proliferating range of electric appliances that appeared in American homes. Utilities promised coal-fired illumination could offer security to all for low monthly rates.¹⁰ Taken in tandem, these changes meant that the coal mining workplace remained an important site in which the political geology of national security was contested, expanded, and redefined.

The coal mine was situated as a site of political geology—an intersection between regimes of governance and geologic strata not fully reducible to either—by the discursive practices of industry and labor leaders alike. The importance of the coal to national security governance first imbued efforts in the 1950s and early 1960s to limit residual oil, taken up by industry and union leaders alike at a moment when they believed business-labor cooperation necessary to pull the coal industry back from the brink of collapse. As utility orders strengthened coal’s position in fuel markets, however, economic deprivation in the coalfields persisted. In the early 1960s, the United Mine Workers combined national

⁷ Federal Power Commission, *The 1970 National Power Survey: Part I* (Washington, DC: US Government Printing Office, 1971), I-1-4.

⁸ Klein, *For All These Rights*; Dexter Fergie, “Geopolitics Turned Inwards: The Princeton Military Studies Group and the National Security Imagination,” *Diplomatic History* 43 no. 4 (2019), 644-670.

⁹ Robert Gordon, *The Rise and Fall of American Growth: The American Standard of Living since the Civil War* (Princeton: Princeton University Press, 2016) 323-328.

¹⁰ David E. Nye, *Consuming Power: A Social History of American Energies* (Cambridge: MIT Press, 2001), 187-215.

security discourse with older narratives of economic security to claim that the coalfield economy was intimately tied to the security of the nation as a whole. The UMW located the intersection between these two forms of security in the coal mine itself. By the time a rank-and-file group of democratic reformers, the Miners for Democracy, took over their union in 1972, the national security imagination was well-entrenched in union politics. The meaning of national security, however, was reshaped by miners' efforts to negotiate the tensions—and sometimes outright contradictions—between different forms of security amid the oil shocks of the 1970s. Efforts to reshape the national security imagination which emanated from the coal mining workplace underscored the mutually constituted relationships among the geological and sociotechnical forces which shaped work in the mines, the energy transformations which turned coal in one place into electricity in another, and the political culture which imbued these practices with meaning well beyond the mining workplace. When miners spoke of themselves on the front-lines, they articulated their workplaces as distinct spaces marked by their geological entanglements.¹¹ Decades of armed labor conflict in the coalfields perhaps had primed miners to see themselves as soldiers even in the absence of war mobilization. Nonetheless, by accepting security goal around which the politics of the coal mining workplace would be organized, coal men often contributed to the militarization and securitization of everyday life that defined the postwar years.¹²

If recently brought to the fore by Kathryn Yusoff, the relationships among politics, energy, and geology have received renewed attention since the publication of Timothy Mitchell's *Carbon Democracy*. Mitchell's juxtaposition of coal and oil energy regimes underemphasized the importance of coal in post-1945 US politics, in the process obscuring the continued dependency on coal-fired power in US energy production through at least the 1990s.¹³ Yusoff, however, offers an account which situates extraction more broadly as a conceptual category linked to modern forms of governance. She contends that the grammars of geology result in a "transmutation of matter...as property, that makes a delineation between agency and inertness." These grammars, she argues, made intelligible the dehumanization of and extraction from black and brown bodies in the crucible of modern liberalism across the Atlantic World.¹⁴ While this articulation of "geologic relations [as] always material relations

¹¹ This concept of entanglements is adapted from Anna Lowenhaupt Tsing, *The Mushroom at the End of the World: On the Possibility of Life in Capitalist Ruins* (Princeton: Princeton University Press, 2015).

¹² Mark Neocleous, *Critique of Security* (Edinburgh: Edinburgh University Press, 2008), 3-4.

¹³ Kathryn Yusoff, *A Billion Black Anthropocenes or None* (Minneapolis: University of Minnesota Press, 2018); Timothy Mitchell, *Carbon Democracy: Political Power in the Age of Oil* (New York: Verso, 2012).

¹⁴ Yusoff, 4.

of power,” expands our understanding of origins of racial capitalism in the early modern period, further historicization can help us see how Yusoff’s overarching narrative of power in the modern world was at various junctures reimagined, legitimated, contested, and adapted to fit new realities. By placing the coal mining workplace at the center of the changes in national security discourse, this history illuminates the reshaping of the relationship between national and energy security that took place between the end of World War II and the energy crisis of the 1970s. As the “front lines” of domestic energy policy, coal mines were both seen as a potential sources of political and social stability and a place of danger and uncertainty. Far from being a hinterland, the American coalfields were sites in which the tensions within the national security imagination were reworked at the mine face.

Geology, Energy, and Security

That Jimmy Carter might come to see the discourses of national and energy security as interwoven as he struggled to secure the nation’s energy future was in no way preordained. Carter’s vision of energy security looked very different than efforts to secure military coaling stations amid the Civil War and in the decades after. The energy security discourse of the 1970s instead suggested improved domestic standards of living, achieved through reliable access to energy and stable economic growth, as an essential component of national survival in an age of limits.¹⁵

Peter Shulman has shown this genealogy of energy security reaches back into the nineteenth century, when the growing use of coal by the military generated concern about the new kinds of dependency the use of steam power, especially in sailing.¹⁶ While the steam engine had the power to collapse time and space, it was more accurate to suggest that the use of steam power remade time and space, creating new energy cycles to understand human movement in it.¹⁷ The introduction of coal-fired energy also, necessarily, introduced the problem of resource exhaustion.¹⁸ The finite nature of fossil fuels also introduced particular forms of exhaustion anxiety into the forms of governance they enabled—first through military might and imperial expansion, later the social politics of energy. The US fossil-fueled energy regime oscillated between ravenous expansion and conservation that sought

¹⁵ Richard Vietor, *Energy Policy in America since 1945: A Study of Business Government Relations* (New York: Cambridge University Press, 1984), 193-312.

¹⁶ Shulman, *Coal and Empire*.

¹⁷ Many scholars have emphasized the transformation of space-time through steam power. Recently, see Walter Johnson, *River of Dark Dreams: Slavery and Empire in the Cotton Kingdom* (Cambridge: Harvard University Press, 2013) and Andreas Malm, *Fossil Capital: The Rise of Steam Power and the Roots of Global Warming* (New York: Verso, 2016).

¹⁸ Shulman, *Coal and Empire*; Fredrik Albritton Jonsson, “The Coal Question before Jevons,” *The Historical Journal* (2019). doi:10.1017/S0018246X19000153.

to maximize the exploitation of fuels in the national interest.¹⁹ These basic tensions of fossil-fueled governance exposed the growth economy an entropic system, in need of constant fuel inputs. Government and industry efforts to “secure” energy resources were deeply tied to the ongoing process of American settler colonialism.²⁰ While security had long been a frontier concern, the New Deal, placed the politics of security at the center of social and economic life.²¹ Programs like the Rural Electrification Administration and the Tennessee Valley Authority, in particular, explicitly linked expanded energy access to programs meant to foster economic security and development.²² It is in this context we should read the transformation of the American state in the mid-twentieth century, and the subsequent debate over what these two forms of security, national and energy, would mean and who would get to define them.

Both the older genealogy of the concept of energy security and national interest and the New Deal security imagination changed dramatically after 1945. Energetically, the unleashing of atomic infernos on the Japanese cities of Hiroshima and Nagasaki marked the advent of the atomic age, and Suez Crisis portended uncertainty about future flows of oil from the decolonizing world.²³ Regimes of defense gave way to regimes of security and constant preparedness, emphasizing the ties between militarized domestic politics and the global politics of the Cold War.²⁴ By the time NSC-68 was issued in 1950, national security in its modern form, was, according to Michael Hogan, “coherent enough to approximate a formal ideology.”²⁵ On the other hand, energy security—often conflated with the term energy independence—would not become an ideology in the same way until the entropic decade of the 1970s forced the nation to confront its often unacknowledged relationships of energy dependency,

¹⁹ Black, *The Global Interior*.

²⁰ Black, *The Global Interior*; James Robert Allison III, *Sovereignty for Survival: American Energy Development and Indian Self-Determination* (New Haven: Yale University Press, 2015); Andrew Needham, *Power Lines: Phoenix and the Making of the Modern Southwest* (Princeton: Princeton University Press, 2014).

²¹ Klein, *For All These Rights*, 3-7.

²² David E. Lilienthal, *TVA: Democracy on the March* (New York: Harper & Bros., 1944); Abby Spinak, “Infrastructure and Agency: Rural Electric Cooperatives and the Fight for Economic Democracy in the United States,” Ph.D. diss., Massachusetts Institute of Technology, 2014; Matthew L. Downs, *Transforming the South: Federal Development in the Tennessee Valley, 1915-1960* (Baton Rouge: Louisiana State University Press, 2014).

²³ Spencer R. Weart, *The Rise of Nuclear Fear* (Cambridge: Harvard University Press, 2012), 55-87; Dietrich, *Oil Revolution*, 55; Guy Laron, *Origins of the Suez Crisis: Postwar Development Diplomacy and the Struggle over Third World Industrialization, 1945-1956* (Baltimore: Johns Hopkins University Press, 2013).

²⁴ Cynthia Enloe, *Maneuvers: The International Politics of Militarizing Women's Lives* (Berkeley: University of California Press, 2000); Odd Arne Westad, *The Global Cold War: Third World Interventions and the Making of Our Times* (New York: Cambridge University Press, 2005); Kate A. Baldwin, “Cold War, Hot Kitchen,” in *The Racial Imaginary of the Cold War Kitchen: From Sokol'niki Park to Chicago's South Side* (Hanover, NH: Dartmouth College Press, 2005), 1-17.

²⁵ Dudziak, 63-94; Michael J. Hogan, *A Cross of Iron: Harry S. Truman and the Origins of the National Security State, 1945-1954* (New York: Cambridge University Press, 1998), 12.

foreign and domestic.²⁶ Still, the ideology of energy security that *would* emerge just decades after the advent of the national security state took on new life in the aftermath of the second World War even as it drew on deeper histories of coal-fired empire, war-making, and settler colonialism stretching back into the nineteenth century. The politics of energy security were rooted in miners' political culture as well as long-range policy concerns. The political geology of the coal mining workplace helped turn the national security of the 1950s and 1960s into the energy security of the 1970s, which sought to secure not only energy resources for defense use but an entire energetic way of life. It was against the new landscape of the national security state that coal men—union and industry leaders alike—argued that the political geology of coal was more compatible with American democracy and free enterprise than oil—especially oil arriving on US shores from the global south.

Coal Men and the Battle over Residual Oil Imports

Coal industry leaders, like industrial leaders across the country, saw an incredibly opportunity in postwar reconversion to reshape the relationship between workers, corporations, and the state.²⁷ Union leaders hoped reconversion would deliver increased purchasing power and new markets, but coal's future was uncertain as the economy shifted to favor liquid fuels and electric power.²⁸ Making matters worse, as production plummeted, the union-supported mechanization of underground mining decimated sector employment. UMW president John L. Lewis's gamble to support mechanization to make coal competitive with other fuels appeared, initially, to have failed.²⁹ Miners' place in the consumers' republic was suddenly contingent on the opening of new markets for coal, and only two appeared on the horizon: utilities and exports. Coal, however, burned dirty and was labor intensive to extract. It had fallen behind other fuels in research and development. Although coal lacked both the versatility of petroleum and the world-remaking potential of atomic power advanced by nuclear optimists, coal was plentiful and under domestic control amid Cold War uncertainty. The effort to secure coal's place in the postwar energy regime rested in part on the ability of coal men—the industry and union leaders who collaborated to an incredible extent between 1952 and 1966—to articulate

²⁶ Robert Lifset, *American Energy Policy in the 1970s* (Norman: University of Oklahoma Press, 2014).

²⁷ Elizabeth A. Fones-Wolf, *Selling Free Enterprise: The Business Assault on Labor and Liberalism* (Urbana: University of Illinois Press, 1994), 32-59.

²⁸ Lizabeth Cohen, *A Consumers' Republic: The Politics of Mass Consumption in Postwar America* (New York: Vintage, 2003), 114-165; Vietor, *American Energy Policy since 1945*, 4.

²⁹ Jerry Bruce Thomas, *An Appalachian Reawakening: West Virginia and the Perils of the New Machine Age, 1945-1972* (Morgantown: West Virginia University Press, 2010), 20-24; Keith Dix, *What's a Coal Miner to Do? The Mechanization of Coal Mining* (Pittsburgh: University of Pittsburgh Press, 1988).

coal's particular suitability for the energy goals of the national security state like fostering economic development, building stockpiles, and ensuring constant military preparedness.

Eagerly, coal men took part in debates over which energy source might best fuel the national security state both within the sector and in the state and federal governments across the 1950s. Notably, however, the tenor of the debate among domestic energy producers focused less on fueling the nation's growing military industrial complex or Korean war than on the political character of the fuels which might instead be used to generate electricity, heat homes, and fuel economic growth. When the specter of war *was* raised, it was to conjure a potential World War III, a potential Russian submarine attack, or an ill-defined national defense emergency.³⁰ To be sure, with the use of electricity growing at an astronomical rate—one hundred percent each decade, projected to continue at least through the 1980s—the fueling domestic energetic appetites was no simple question.³¹ Moreover, questions of war mobilization and electricity production were not as separate as they initially appeared—heavy industry also consumed large amounts of electricity, as did military installations. At the same time, basic questions of capacity reconfigured traditional ideas of war mobilization: growing domestic demand, in turn, meant more electricity might be converted to defense use at a moment's notice. The consumers' republic and the national security state went hand-in-hand energetically.

For leaders of the coal industry, the debate over how to power the growing American domestic appetite for electricity presented an opportunity to reassert the coal's importance in the story of American freedom—or depending on the angle from which one looked, the American way of empire.³² Suggesting the fortunes of the coal industry were linked to the project of state building through the growth of electric power generation served as the basis for arguments for special protection. Coal's boosters used the language of national security to suggest that the “free enterprise system of this American republic” and “the precious heritage of political liberty,” were at stake.³³ To present oil as a threat to coal-fired story of freedom, they bound an older legal tradition that went back to the early oil antitrust cases in the early part of the twentieth century to emerging concerns

³⁰ “Economic Credo for Americans,” prepared by the coal industry members of the Foreign Oil Policy Committee, c. 1953; Press Secretary James Hagerty, press release on energy supplies and resource policy, February 26, 1955; Collected comments of Senators and Congressmen transcribed in “Congress Speaks...about excessive oil imports,” produced by the National Coal Association, December 1953. United Mine Workers of America President's Office Records [hereafter UMWPO], Eberly Family Special Collections, Penn State University, 10/3.

³¹ Federal Power Commission, *National Power Survey: Guidelines for the Growth of the Electric Power Industry* (Washington, DC: Govt. Print. Off., 1964), 35-45, especially see Figure 17 on 36.

³² Nikhil Pal Singh, *Race and America's Long War* (Berkeley: University of California Press, 2018); Black, *The Global Interior*.

³³ John L. Lewis, remarks on retirement from the National Coal Policy Conference, April 3, 1963. UMWPO, 192/13. Michael F. Widman, Jr., presentation to a Department of Interior hearing on crude oil imports, May 11, 1961. UMWPO, 13/16.

about the viability of future reserves. At the same time, coal men portrayed oil as geologically scarce, naturally pre-disposed to monopoly, and also subject to undue foreign influence, especially from formerly colonized nations.³⁴ Energy presented a vexing problem at the very moment that the US looked to expand its role in international development. Even as American capital investment in global energy development increased drastically—reaching more than eighteen billion dollars in 1964—flows of capital faced political obstacles and uncertainties as they passed through contested spaces: tribal lands, decolonizing and postcolonial states, disputed sea routes.³⁵ Increasing global energy interdependence was supported by the growth of American economic and cultural dominance. But coal advocates, including the UMW, warned that same interdependence could endanger “the national security of the nation and the future of Americans as a people.”³⁶

Because the debate centered around the utility markets, the focus of these policy debates was not the crude destined for the gasoline, diesel, or jet fuel, but residual fuel oil, which was created as a byproduct in the refining process. “[D]umping” of residual fuel oil—mostly from Venezuela—on the eastern seaboard had led some utilities to convert their generating facilities to burn it.³⁷ Coal men joined domestic oil producers in advocating for import quotas in order to stabilize the fossil-fueled energy mix of the national security state. Together, they formed the Foreign Oil Policy Committee (FOPC) in 1953. The “flood of foreign fuel,” the FOPC argued, posed “a critical threat to...the military and domestic economy.” The national security state, they argued, required multifuel domestic development in order to keep the nation in “a state of constant readiness to counter attacks of aggression.”³⁸ What constituted aggression, of course, was a matter of perspective.

Although coal men had joined with domestic oil producers to campaign for oil import quotas, they strongly disputed the domestic producers’ claim that stateside oil reserves were substantial. Too much dependence on domestic oil, they argued, exposed a paradox. Where exhaustible fuels were concerned, the same expansion of industry to improve productive capacity in the name of war

³⁴ *Standard Oil Co. v. United States*, 221 US 1 (1911); W.A. Boyle, Statement to the Mines and Mining Subcommittee, House Committee on Interior and Insular Affairs, March 26, 1963. UMWPO 12/24.

³⁵ On overseas capital investment in energy, see Walter R. Hibbard, Director of Bureau of Mines, Remarks before the Mining and Metallurgical Society of America, New York, New York, September 20, 1966. UMWPO 15/29. On the difficulties of capital flows as a metaphor, James Ferguson, *Global Shadows: Africa in the Neoliberal World Order* (Durham, NC: Duke University Press, 2006), 36-40; on the question of materiality of energy flows, see Christopher F. Jones, “The Materiality of Energy,” *Canadian Journal of History* 53 no. 3 (2018), 378-394.

³⁶ Michael F. Widman, Jr., presentation to a Department of Interior hearing on crude oil imports, May 11, 1961. UMWPO, 13/16.

³⁷ Charles River Associates, *The Economic Impact of Public Policy on the Appalachian Coal Industry and the Regional Economy*, 8-9; Federal Power Commission, *National Power Survey* (1964), 57-58.

³⁸ FOPC, “An Economic Credo for Americans.”

preparedness also had the effect of drawing down the same domestic reserves which might become even more politically precious were a war to break out.³⁹ This depletion problem appeared to tilt the scales heavily in favor of coal, which occurred abundantly across the North American continent. The US Geological Survey in 1953, adjusted to reflect more conservative estimates than previous studies, found that of the 1.9 trillion tons of coal winding across the continent's many coal seams, more than 950 billion tons were recoverable with contemporary mining methods.⁴⁰ Coal men were quick to point out that at 1953 usage levels, those reserves would have lasted more than 2,000 years. No other fuel, they suggested, could offer such long-term stability.⁴¹

Coal industry and union leaders quickly pivoted the language of national security to frame industrial strategy. In a position paper titled "An Economic Credo for Americans, coal members of the FOPC argued that in the postwar period, their industry had been "relentlessly attacked by a competitor willing to sell its product at severe losses in order to establish markets at the expense of coal." Overlapping economic and defense imperatives, they articulated their own vision of postwar political geology where coal represented the ideal of free-enterprise competition. This representation obscured the coal industry's ties to the same colonial dispossession which had rendered oilfields prime targets for nationalization. Coal was a "solid base" on which "industries haven been built," while they deployed terms like "heavy" and "leftover"—both of which had technical meanings within the crude sector but drew negative connotations from a wider discursive context—to describe residual fuel oil. They never missed a chance to suggest that Venezuelans were sending tankers carrying unemployment. By 1954, Venezuelan deliveries to East Coast markets had reached 445,000 barrels daily. Coal's advocates within the FOPC argued this oil was keeping 22,000 of the nation's miners back to work. The problem, they suggested, was that coal competed fairly, making "every effort to keep itself competitive with other fuels, in the best tradition of the American economic system," while the Venezuelans flooded markets with residual oil, flagrantly disregarding the laws of supply and demand. "Although world markets are demanding increasingly more motor fuel, kerosene, and distillates, Venezuelan oil is being literally downgraded into coal to compete...in coal's rightful

³⁹ Douglas A. Irwin, *Clashing over Commerce: A History of Trade Politics in America* (Chicago: University of Chicago Press, 2017), 517.

⁴⁰ Paul Averitt, Louise R. Berryhill, and Dorothy A. Taylor, *Coal Resources of the United States*, US Geological Survey, Circular No. 293, October 1, 1953.

⁴¹ Sam H. Schurr and Bruce Netschert, *Energy in the American Economy: An Economic Study of Its History and Prospects* (Baltimore: Johns Hopkins University Press, 1960), 12. Statement of W.A. Boyle to the Mines and Mining Subcommittee of the House Committee on Interior and Insular Affairs, March 26, 1963. UMWPO 12/24; Carl E. Bagge, "Coal: An Overlooked Resource," Colby College, March 2, 1972. UMW Department of Organization Records, 3/88.

markets.” This misuse of oil resources had thus deprived coal of its “rightful future.”⁴² This argument assumed there was a proper order of geological life, in which each fuel had a proper role. The coal members of the FOPC sought to argue that coal, because it generated domestic employment and was less subject to foreign influence, was more compatible with American political culture and thus a better choice for generating electric power.

In light of such remarks, the alliance between coal men and domestic oil producers in the effort to secure oil import quotas seems paradoxical. It was, however, effective. Early efforts secured a 1954 resolution by the Governor’s Fuel Conference, composed of sixteen state governors, that declared support for import quotas to ensure “the nation’s defense, security, and welfare.”⁴³ The first wave of lobbying ended with the formation of a Cabinet Committee on Energy Supplies and Resources. In March 1959, following the failure of requests for voluntary restriction, President Eisenhower finally relented and established the Mandatory Oil Import Quota Program.⁴⁴ The administration further established the Federal Office of Coal Research the next year since coal research and development had fallen far behind schedule, according to the Office’s director George Fumich, Jr.⁴⁵ The quota program, during its six-year tenure, helped to curb residual oil imports, during which time coal orders for utilities increased dramatically. In working with domestic oil producers to secure a place for coal the national security state, coal’s advocates hedged that, in the long run, it could outperform domestic oil in key markets because coal resources in the mainland United States so vastly outstripped oil reserves. Coal men, in both union and industry, fought hard to maintain the quotas throughout the early 1960s, suggesting the perceived fragility of coal’s newfound market in utilities. UMW counsel Michael Widman warned the Department of the Interior in 1961 that domestic energy security was central to the national security state. Without domestic development promoted by protective quotas, he argued “the armed forces of this nation will be forced to fight to protect no American liberty, but international oil companies”—a term which appeared to deliberately obscure the fact that many of the largest international oil companies were in fact, American.⁴⁶ Meanwhile, the

⁴² FOPC, “An Economic Credo for Americans,” 1953.

⁴³ Resolution adopted by the Governor’s Fuel Conference, April 28, 1954. UMWPO 10/3.

⁴⁴ “Oil Protest Wins Shift in Coal Study Plan,” *National Petroleum News*, September 22, 1954, excerpted for UMW attention, UMWPO 10/3; Felix Belair, Jr., “All Oil Imports Under Hard Curb,” *New York Times*, March 11, 1959. Vietor, 114-115.

⁴⁵ George Fumich, Jr., remarks at the annual dinner of the Paonia Chamber of Commerce, Paonia, Colorado, February 2, 1966. UMWPO 15/29.

⁴⁶ Michael F. Widman, Jr., presentation to a Department of Interior hearing on crude oil imports, May 11, 1961. UMWPO, 13/16.

distinction between domestic and foreign oil became murkier as the nation's oil companies expanded and reimagined their international role and participated in oil statesmanship.⁴⁷

According to coal men, the threat oil posed to national security was also domestic. When the import quota system collapsed in 1965, coal men took the opportunity to emphasize coal as a reliable and secure fuel. They asserted the fundamental incompatibility of the national security governance rooted in foreign oil dependence. Their criticisms built on a long-standing portrayal of the oil industry in American popular discourse as antithetical to the practice of free enterprise and democratic governance.⁴⁸ Increased assertiveness of formerly colonized countries also raised the stakes of domestic energy production by making global energy flows appear less secure. National Coal Association president Carl E. Bagge warned that energy imports undercut national security as countries like Venezuela and Algeria used their energy leverage “to suit their own national aspirations.”⁴⁹ To secure coal as the fuel of American aspiration, the coal industry and the UMW looked to federal investment in research and development to secure the links between national security statecraft and coal-fired economic growth. Although energy security would come to be most powerfully associated with oil, the early years of the national security state, increasingly reliant on electricity as its “lifeblood,” found a willing partner in the coal industry.⁵⁰ Coal men presented themselves as willing to undertake new obligations and ethics of service. In their narrative, domestic coal powered the tremendous increase in per capita domestic energy consumption that cultivated citizen buy-in to the Cold War.⁵¹

In the energy discourse of the 1950s, coal and oil could at times appear to be agents themselves. Despite the involvement of the UMW, miners were mentioned only tangentially, their employment woes used to buttress support for import quotas on oil. But building on Andreas Malm's observation that “fossil fuels should...be understood as a social relation: no piece of coal or drop of oil has yet turned itself into fuel,”⁵² the political geologic arguments about the character of particular fuels and their suitability for powering American electricity, ironically obscured the fact that geology

⁴⁷ Anthony Sampson, *The Seven Sisters: The Great Oil Companies and the World They Shaped* (New York: Viking, 1975).

⁴⁸ Roger M. Olien and Diana Davids Olien, *Oil and Ideology: The Cultural Creation of the American Petroleum Industry* (Chapel Hill: University of North Carolina Press, 2000).

⁴⁹ Carl E. Bagge, “Coal: An Overlooked Resource,” Colby College, March 2, 1972. UMWA Department of Organization Records, 3/88.

⁵⁰ FPC, *1970 National Power Survey*, I-1-4.

⁵¹ On the cultivation of citizen buy-in, see Heidi Tinsman, *Buying into the Regime: Grapes and Consumption in Cold War Chile and the United States* (Durham, NC: Duke University Press, 2014).

⁵² Andreas Malm, “The Origins of Fossil Capital: From Water to Steam in the British Cotton Industry,” *Historical Materialism* 21 no. 1 (2013), 17.

and politics together gathered meaning from the spatially concentrated labor of extraction. Coal-fired energy security for the nation required coal to be mined from deep within the earth, under extraordinarily dangerous conditions. The nation's coal miners labored the seam that gave geology a political life. The geologic volatility borne disproportionately by miners resulted in what Bob Johnson has described as one of the key sites of modern carbon-based stratification.⁵³ The coal mine, like other energy worksites intimately tied to carboniferous strata, were key sites in which political geology was produced, legitimated, and contested. Here, the United Mine Workers diverged from its close mid-century ties to industry leaders as the union navigated competing visions of security.

The Culture of National Security in the Eastern Coalfields

As coal faced an uncertain future in the early years of the national security state, the residents of the nation's coalfields were suffering. Although growing utility markets had pulled coal back from the brink of disaster, the employment situation in the coalfields remained dire. The number of miners had declined from 507,333 in 1948 to 189,679 by 1960—sixty-three percent in just ten years.⁵⁴ As increasing numbers of families—particularly white suburban families—embraced a high-energy lifestyle, mining communities remained poor, whether measured by energy or economic consumption. According to W.A. “Tony” Boyle, president of the UMW from 1963 to 1972, the great degree of “human suffering and misery” in coal communities made “a mockery of the overly advertised well-being and wealth of our society.” Subtly referencing new high-energy forms of leisure, the growth of indoor climate control, and the increasing number of electric appliances becoming synonymous with the American standard of living, Boyle continued, “Claims of comfort and abundance sound mighty hollow.”⁵⁵ In the coalfields, the politics of security were far more rooted in working-class concerns, especially employment and workplace safety.

This coalfield vision of security, which at first glance had more in common with the New Deal articulations of security, was reshaped for the national security imagination by the widely-read *United Mine Workers Journal*, which combined coverage of national energy politics, union organizing efforts,

⁵³ Bob Johnson, *Carbon Nation: Fossil Fuels in the Making of American Culture* (Lawrence: University Press of Kansas, 2014), 63.

⁵⁴ “Engineers’ Magazine Examines Our Industry: The Return of Old King Coal.” *United Mine Workers Journal*, January 15, 1964. For government statistics on number of working miners, which can vary by source, I have used Mine Safety and Health Administration, “Coal Fatalities for 1900 through 2018,” <https://arlweb.msha.gov/stats/centurystats/coalstats.asp> (accessed August 2, 2019). Variation between data sets are small and do not contest the basic trend.

⁵⁵ Statement of W.A. Boyle to the Mines and Mining Subcommittee of the House Committee on Interior and Insular Affairs, March 26, 1963. UMWPO 12/24.

safety reports, and consumer advice. Cartoonist Ray Zell, the *Journal's* cartoonist throughout the 1960s, encouraged miners to see energy policy as lived experience intrinsically linked to their workplace identities, and see these experiences as linked to the fate of the nation. Moreover, Zell's cartoons portrayed energy policy as a key component of national security by mixing images of energy workplaces, infrastructure, and landscapes with the visual culture of empire and militarism. Cartoons like "The Road Back" from 1962 drew on the settler colonial tropes of westward expansion to suggest a new kind of twentieth century coal-fired manifest destiny. In a play on the ubiquitous visual culture of nineteenth century settler colonialism, a miner stands next to a pipeline meant to carry coal to new markets, crying "Eastward Ho!"⁵⁶ (Figure 1.) Others, like drew on more contemporary images of military conflict. In "This is War," Zell represented Venezuelan "dumping" of residual fuel oil in coastal utility markets as oil-barrel bombs being dropped on the coalfields, sending the aspirations for postwar economic stability in the region, quite literally, up in smoke.⁵⁷ (Figure 2.) The bonds between work, soldiering, and citizenship had been firmly established during World War II. Still, Zell's imagery blurred the lines between the economic security to which miners were entitled *because* of their contributions to national security—the argument which many workers had made throughout WWII mobilization—and the idea that national security and coalfield economic security were, in fact, literal synonyms.⁵⁸ The bonds between work, soldiering, and citizenship had been firmly established during World War II. Still, Zell's imagery blurred the lines between the economic security to which miners were entitled *because* of their contributions to national security—the argument which many workers had made throughout WWII mobilization—and the idea that national security and coalfield economic security were, in fact, literal synonyms.⁵⁹

In these cartoons, miners' place in the national security imagination was not only tied to the landscapes and regions defined by their role in coal extraction, it was also embodied. Zell's cartoons encouraged miners to see themselves as soldiers on the front lines of energy politics. In a 1962 cartoon, Uncle Sam deemed a union miner, standing at soldier's attention with his shovel held at his side evocative of a gun, to be "Passing Inspection"—meeting his obligation to the nation's energy needs.⁶⁰ (Figure 3.) The specific perils of the mining workplace also featured prominently in these cartoons,

⁵⁶ Ray Zell, "The Road Back," original print for the *United Mine Workers Journal*, February 15, 1962. UMW Journal Office Records [UMWJR], Eberly Family Special Collections, Penn State University, 60/6.

⁵⁷ Ray Zell, "This Is War," original print for use in the *United Mine Workers Journal*, February 15, 1962. UMWJR Records 60/6.

⁵⁸ Sparrow, *Warfare State*, 160-200.

⁵⁹ Sparrow, *Warfare State*, 160-200.

⁶⁰ Ray Zell, "Passing Inspection," original print for use in the *United Mine Workers Journal*, February 1, 1962. UMWJR, 60/6.

conveying the importance of the coal mine as a central site in energy governance more broadly. Zell linked the economic health of coal miners, and the dangers of the miners of the mining workplace, to the security of the nation as a whole. Zell suggested the deadly outcomes of common underground accidents, like roof collapses, were felt above ground as well. One roof fall cartoon placed a figure representing Congress in the coal seam, unaware of the roof about to fall on his head if mine safety laws were not strengthened. The implication was that danger and instability below ground threatened Congress's ability to govern from Washington. (Figure 4.) In a more complex 1962 metaphor, as concern over the future of the mandatory oil import program mounted, Zell drew one cartoon titled "Roof fall! Hurts the Nation Too!" Conjuring a common and deadly accident that crushed workers under hundreds, even thousands of pounds of rock, Zell depicted a miner being crushed beneath an oil barrel. The miner lay in mortal peril, and the nation is lamed as the barrel then lands on Uncle Sam's right foot.⁶¹ (Figure 5.) To miners, the implication of these visual stories would have been clear: the costs of national security were borne unequally. The ability of miners to present themselves as sacrificing patriots, shouldering an unequal burden of the cost of national security rested on cultural renderings of the coal miner as a citizen-soldier, dying to provide a stable source of electricity in an increasingly volatile world. This figure of the coal miner should be understood as distinct from who miners actually were, and it drew power from placing the white, masculine body within an underground landscape so long defined by its ability to dehumanize, tying the mineral frontier to the frontier myths of US society.⁶² A decade after these cartoons appeared in the *Journal*, this argument would filter into the mainstream of American politics: the coal mines were the place where people were "burned up to make electricity," the site "where nature takes its revenge, where man pays for what he steals from the earth in life and blood."⁶³ More immediately, however, the metaphors of workplace danger to situate miners in the national security imagination revealed the ambiguities of the politics of security in the mining workplace. Competing definitions of bodily, economic, and national security overlapped and often contradicted each other in these visual narratives.

⁶¹ Ray Zell, "Roof Fall! Hurts the Nation Too!" original print for use in the *United Mine Workers Journal*, February 1, 1962. UMWJR 60/6.

⁶² Yusoff, 2-6; Greg Grandin, *The End of the Myth: From the Frontier to the Border Wall in the Mind of America* (New York: Metropolitan, 2019).

⁶³ Fred Harris, "Burning People Up to Make Electricity," *The Atlantic*, July 1974, <https://www.theatlantic.com/magazine/archive/1974/07/burning-up-people-to-make-electricity/304563/> (accessed August 7, 2019); Transcript, "The Cherokee Shaft: The Story of Mines and Men." ABC Broadcast, May 22, 1971. 8:30-9:30 PM EDT. Miners for Democracy Records 63/1.

The visual arguments made by Zell's cartoons in the *Journal* both shaped and reflected other statements by UMW leaders in public forums. A typical example came from the anthracite coalfields of eastern Pennsylvania. August Lippi, the President of UMW District 1, wrote to Congressman Daniel Flood (D-PA), that the dire economic conditions in the region endangered national security. The anthracite miners had suffered the near-complete loss of their crucial market in home heating to oil and gas imports, and Lippi painted a dire picture of industrial collapse in the two counties most affected—Luzerne and Lackawanna. An eighty-nine percent decline in the mining workforce in just a decade had forced ten percent of the population—68,134 people—to leave Luzerne and Lackawanna altogether. The resulting loss of royalty payments into the anthracite health and welfare fund threatened the pensions of 9,500 retired miners, and an annual flow of \$3,420,000 into the local economy. Lippi blamed oil imports. The wide-ranging impacts of lost mining jobs, he wrote, “could lead to the sapping of our Nation’s strength in case of war.” The “peril to our Nation’s security,” he suggested, compelled public interest in the coalfields. National defense and economic growth were two sides of the same coin, and the development of the coalfields may “tip the scales in our favor,” were a national security emergency to arise.⁶⁴ The letter was all the more remarkable since anthracite coal had not been central to industrial applications for decades. It was a home heating fuel. Lippi’s letter signaled a new set of energy relationships which miners saw as implicated in national security.

This national security imaginary reached far beyond the anthracite regions decimated by shifting energy use patterns. UMW members in the bituminous coalfields, which supplied the overwhelming majority of coal for utility and industrial applications, also presented themselves as energy soldiers, and reliable partners in the national security state. T.H. Price, a regional union officer in Virginia, wrote to President Kennedy that miners “have never failed our government when they have called upon them in time of crisis to produce the fuel that was so vitally needed to carry on our economy and our wars.”⁶⁵ The officers of Local 5741 warned in their letter to the President that increased oil imports would “cause the Mine Workers of this Nation to lose their jobs...Not only this, but should this nation be attacked, the coal mines would be insufficient to furnish the necessary fuel for the safety of this Nation.”⁶⁶ While the communications were the product of a letter writing campaign organized from the national office, the internal instructions for this campaign asked letter

⁶⁴ August J. Lippi to Daniel J. Flood, March 9, 1962. Included as part of Representative Flood, speaking on Impact of Residual Oil Imports on Coal Mining Industry, 87th Cong., 2nd sess., *Congressional Record* 108 no. 36 (March 13, 1962). UMWPO 21/22.

⁶⁵ T.H. Price to John F. Kennedy, March 9, 1962. UMWPO 21/22.

⁶⁶ Ezra Johnson, Harold Bellamy, and Robert Carter to John F. Kennedy, March 23, 1962. UMWPO 21/22.

writers to focus on unemployment and economic devastation, without mentioning national security.⁶⁷ Writers appear to have added these observations on their own, having imbibed both the Zell's imagery spread across the pages of the *Journal* and the public statements of union officials and coal industry leaders. By arguing that coal's place in the national security state was intimately tied to the economic fortunes of the workers who extracted it, the UMW presented their own vision of national security through economic development. As went the coalfields, the argument went, so did the nation.

Energy Security and Coalfield Politics in the 1970s

The United Mine Workers convened for their constitutional convention in December 1973 under incredible circumstances. The nation was in political turmoil, entering the second month of an oil embargo by the OPEC meant to censure the US for its military support of Israel and raise global oil prices. At the same time Nixon's administration under increasing pressure from the Watergate scandal. Within the union, a group of insurgent reformers—the Miners for Democracy—had recently become the first such group to take over their union at the international level.⁶⁸ The convention delegates who attended to rewrite the union's constitution were of a mind to redefine themselves, their place in the labor movement and the nation.

Arnold Miller, the Miners for Democracy leader and newly elected union president, was no exception. Miller was a proud combat veteran who had been injured in the WWII invasion of Normandy. He often compared coal mining with his own military service. He used his first "State of the Union" address to offer a version of the nation's history with the miner-soldier at its center, "the front-line troops" of the nation's industrial growth, who worked "in the bowels of the earth to fuels the nation's progress." He also placed coal miners in a settler colonial genealogy of men who "helped tame the western frontier." Then, somewhat paradoxically he noted that around the convention hall, one could meet miners who were the grandchildren of people who had been enslaved and expect to encounter a wide array of national accents. To address the seeming contradiction, he contended that the union was an institution that turned workers into citizens that served the nation first. As evidence, he held up the UMW's fierce pride in its interracial origins and its insistence on integrated locals at the

⁶⁷ For examples of these directives, issued by district presidents, see directive from C.E. Bean, District 30 President, March 12, 1962; directive from Hugh White, District 12 President, March 7, 1962, UMWPO 21/22.

⁶⁸ Paul F. Clark, *The Miners' Fight for Democracy: Arnold Miller and the Reform of the United Mine Workers* (Ithaca, NY: ILR Press, 1981).

height of Jim Crow. He made clear that the UMW was “the finest group of working men in the world” ready to “come to the nation’s aid”—in return for their own vision of security.⁶⁹

But the fact that miners served the nation first, he argued, now needed qualification. Modern coal miners were also modern citizens, unwilling to sacrifice their lives, bodies, and land with nothing to show for it. The vision of security espoused by the rank-and-file miners who seized control of their union had expanded beyond employment security to reflect their own democratic aspirations for a greater political voice in the nation. This broader vision of security did not abandon job security entirely, but rather yoked it to demands for greater workplace protections, environmental regulations, and state-sponsored occupational health programs and compensation schemes. This form of labor politics was not unique to the United Mine Workers, but the basis on which miners claimed legitimacy was—their role in energy production.⁷⁰ The tenor of the convention debates on the energy crisis was not *whether* miners would return to the “front lines” but under what terms they would do so. Their importance to national energy security, they believed, entitled them to more political power, but came with an obligation meet the energy demands of the nation. Although the attendees to the 1973 UMW convention marshalled the language of war to discuss energy security, the energy at the center of policy debates in the 1970s was not energy for making war, but for stabilizing a society whose bonds appeared increasingly frayed.⁷¹ This energy, consumed industrially and domestically, was increasingly understood to be basic to social functioning and governability.⁷²

By the early 1970s, the national security imagination developed in the 1940s was deeply woven into the political culture of the UMW, but it also had adapted to the decade’s energy uncertainty. Using language that adapted earlier conservation discourse for the age of limits.⁷³ The miners imagined themselves as “stewards of this black gold,” with “our hands laid upon coal, black, crystalline energy,” who in a time of looming energy crisis had “a new kind of opportunity, a new potential, a new power,

⁶⁹ Arnold Miller, transcribed in in *Proceedings: of the Forty-Sixth Consecutive Constitutional Convention of the United Mine Workers of America* (Washington, DC: United Mine Workers of America, 1973), 8-9.”

⁷⁰ Recent scholarship has greatly expanded our understanding of labor environmentalism in the environmental decade. For an overview, see Chad Montrie, *The Myth of Silent Spring: Rethinking the Origins of American Environmentalism* (Berkeley: University of California Press, 2018).

⁷¹ Natasha Zaretsky, *No Direction Home: The American Family and the Fear of National Decline, 1968-1980* (Chapel Hill: University of North Carolina Press, 2007).

⁷² Eunice S. Grier, *Colder...Darker: The Energy Crisis and Low-Income Americans—an Analysis of Impact and Options* pursuant to Contract No. B6B-5522 (Washington, DC: Community Services Administration, 1977); Barry Commoner, *The Poverty of Power: Energy and the Economic Crisis* (New York: Bantam Books, 1977); Richard Newbold Adams, *Energy and Structure: A Theory of Social Power* (Austin: University of Texas Press, 1975).

⁷³ Fergie, “Geopolitics Turned Inward”; Sarah T. Phillips, *This Land, This Nation: Conservation, Rural America, and the New Deal* (New York: Cambridge University Press, 2007); Jedediah Purdy, *After Nature: A Politics for the Anthropocene* (Cambridge: Harvard University Press, 2015).

perhaps even greater than that which this union has had in the time of war.”⁷⁴ The Environmental Protection Agency agreed. EPA administrator Russell Train, tied the nation’s energy rhythms to the life cycles of the men who mined it: “During your lifetime, and for at least the next generation of miners, most of America’s energy must come from coal.” Because the majority of the “load” of energy security would be borne “on your [miners’] shoulders and on those of the new miners you must train,” he insisted that the nation “must do whatever is necessary to insure the health and safety of the miners and their families, and the integrity of the environment in which they live.” The work of the coal industry would be reframed as a new form of energetic “husbandry.” Through the use of coal, energetic growth could be managed for political, social, and environmental stability, and that stability would be secured, in the UMW’s perspective, from shared governance of the coal mining workplace.⁷⁵

Conclusion

Jimmy Carter’s imagined future of security through alternative energy never arrived, but his complicated relationship with coal reshaped the domestic politics of energy security. Miners’ efforts to frame their democratic aspirations within the confines of the national security state failed too. When the UMW went on a four-month strike beginning in December 1977, they lost control of the story they had tried to present of themselves as the dutiful energy soldiers of the nation. Companies across the rustbelt, the area most affected by coal shortages, pre-emptively engaged in voluntary blackouts—an effort to signal that the miners were putting themselves ahead of country.⁷⁶ When politicians invoked national emergency legislation like Taft-Hartley, miners insisted such measures were unacceptable because it wasn’t wartime, undermining their claims to have been fighting an energy war for more than thirty years in the name of national security.⁷⁷ The strike ended in 1978, but the nation’s energy problems only continued. Less than a year later, the Iranian revolution sent oil markets into a panic for the second time in less than a decade. Gas lines returned. Then, in March 1979, a nuclear accident at the Three Mile Island generating station halted plans to expand nuclear power. Once again, miners positioned themselves in the coal seam, the front line of defense between the nation and the threats posed by energy shortages. The UMW adopted the slogan, “America can solve its energy

⁷⁴ Rev. James Somerville, coalfield “fighting preacher,” invocation on Day 2 of the UMW Convention, December 4, 1973. Transcribed in in *Proceedings*, 34.

⁷⁵ Russell Train, transcribed in in *Proceedings*, 254-256.

⁷⁶ Reginald Stuart, “Cities Turn Off Lights as They Run Out of Coal,” *New York Times*, February 16, 1978; Walter S. Mossberg, “A Doubtful Ace in the Hole,” *Wall Street Journal*, March 16, 1978.

⁷⁷ See miners quoted in “Entering the Doomsday Era: Shutdowns and Blackouts Loom as the Coal Strike Rumbles On,” *Time* 111 no. 9, February 27, 1978, 12.

problems...Let us do it!” The slogan was printed beside a helmeted, white, masculine miner.⁷⁸ Despite the political setback of the 1977-78 strike, miners once again advocated for coal to “save America.”⁷⁹

Speaking in Kentucky, President Carter agreed the stakes of energy security were nothing less than national survival. “The energy problem,” he told the crowd, “threatens the very security of our nation. It threatens our economic independence...We are actually in a battle to win our energy independence.”⁸⁰ If the coal mines were the front-line of this war, who—or what—was the enemy? The growing energetic tensions between the heavily industrialized north and the Third World, rooted in imperial inequalities, could not alone explain the problem. The energy war was not only a diplomatic war, but a geologic one as anxieties about resource exhaustion pushed energy work deeper into the coal seam. The discourse of energy security highlighted the unsustainability of fossil fuel consumption as it appeared to count down the lifetime of a national security imaginary whose promises of prosperity were founded on profound energetic inequalities.

Between the end of World War II and the election of Ronald Reagan, coal miners were able to mobilize competing visions of security, using the language, images, and assumptions of the consolidating national security state for different ends that emphasized egalitarian ends: the evening of regional disparities in employment and development, securing new forms of entitlements from the liberal state on the basis of their work in energy production. The political geology of the national security state was based on displacing the risks, damages, and costs of a fossil fuel energy regime in a way that supported American aspirations for global hegemony. But while the political geology of this new form of governance, intimately bound to the coal mining workplace, had given miners a new axis of power along which to make claims on the nation, appears to have set limits on the political leverage it provided. Still, the efforts by miners to redefine security from their workplace challenges us to rethink the importance of coal and coal miners in the age of oil. The centrality of coal-fired electricity in the post-1945 United States meant that coal mines were sites of political geology which carried meaning far beyond their physical limits. This meaning was shaped by miners who labored within them, as their political struggles flowed across the nation, illuminating the persistent presence of the coal miner as a figure in American political life into our present.

⁷⁸ Photographs from a meeting with the Department of Energy, 1979. UMWJR 55/9.

⁷⁹ Blake Clayton, *Market Madness: A Century of Oil Panics, Crashes, and Crises* (New York: Oxford University Press, 2015); J. Samuel Walker, *Three Mile Island: A Nuclear Crisis in Historical Perspective* (Berkeley: University of California Press, 2006); “Save America, Burn Coal” pickets at the Democratic National Convention, 1980, UMWPO 219/1.

⁸⁰ Jimmy Carter, Bardstown, Kentucky Remarks and a Question-and-Answer Session at a Town Meeting, July 31, 1979. American Presidency Project: <https://www.presidency.ucsb.edu/node/249975> (accessed August 2, 2019).

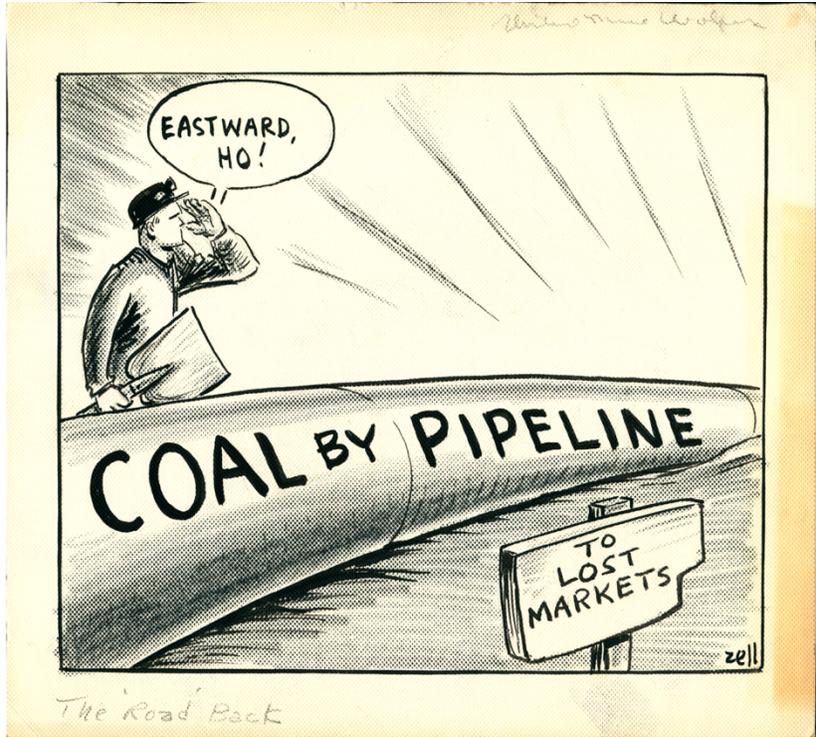


Figure 1: Ray Zell, "The Road Back," original print for the *United Mine Workers Journal*, February 15, 1962, UMWJR 60/6.

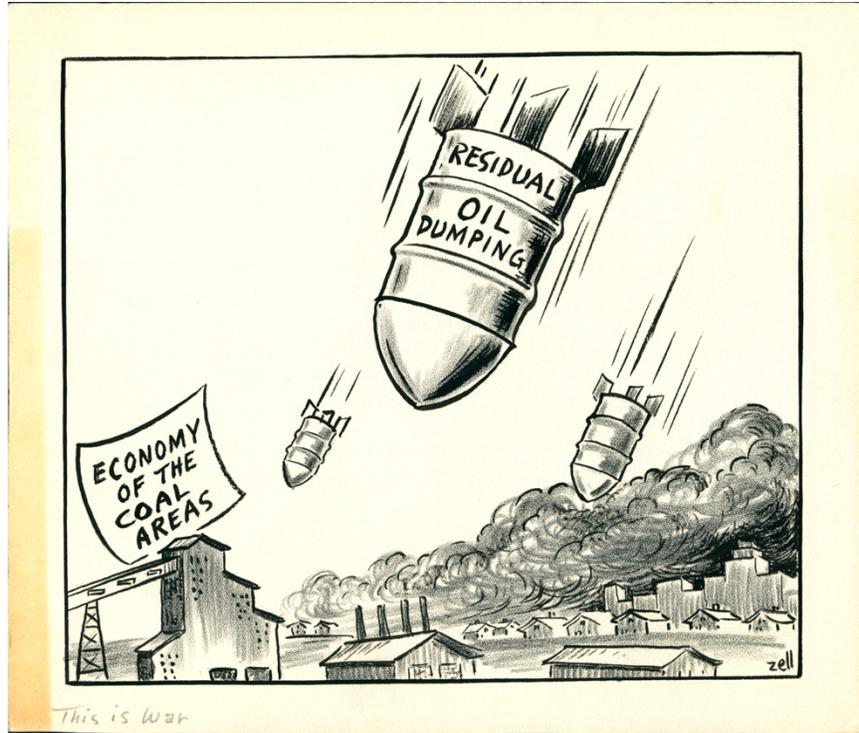


Figure 2: Ray Zell, "This Is War," original print for the *United Mine Workers Journal*, February 15, 1962, UMWJR 60/6.



Figure 3: Ray Zell, "Passing Inspection," original print for the *United Mine Workers Journal*, February 1, 1962, UMWJR 60/6.



Figure 4: Ray Zell, "Watch the Roof," original print for the *United Mine Workers Journal*, February 15, 1962, UMWJR 60/6.

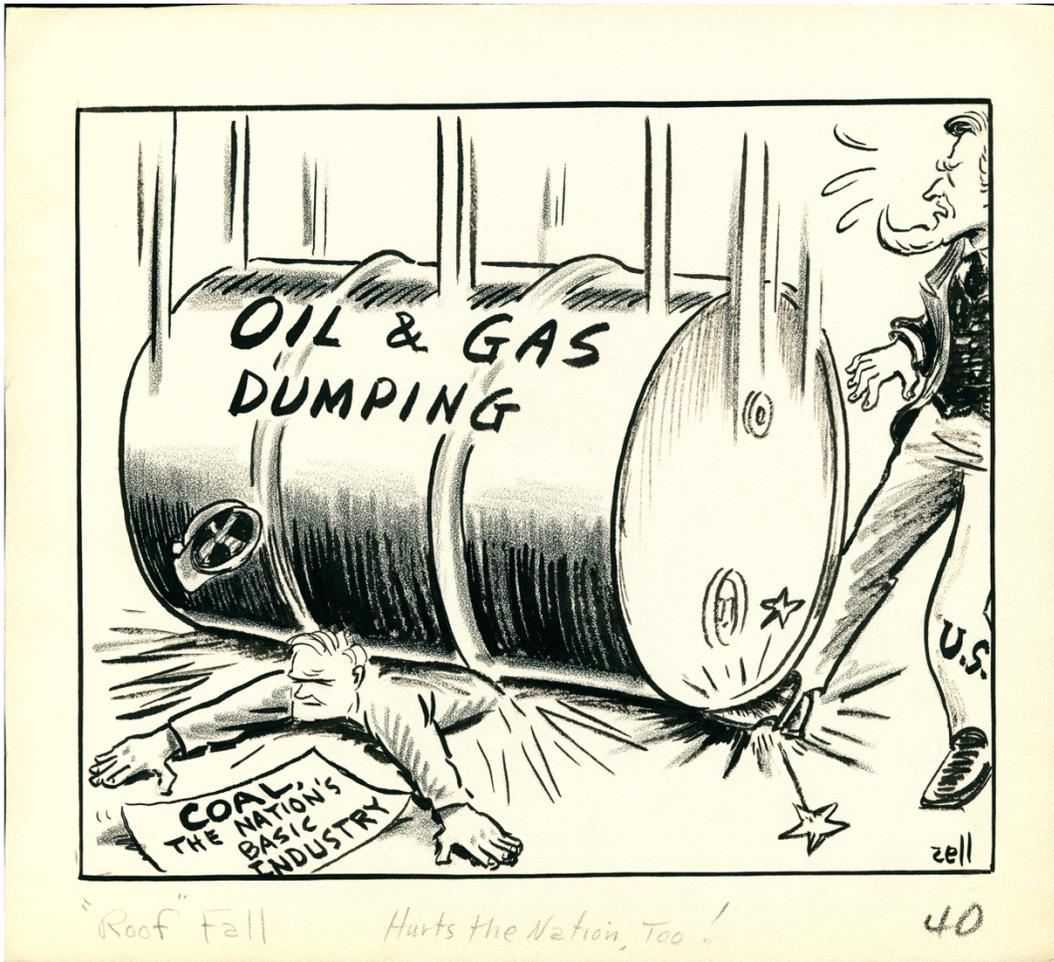


Figure 5: Ray Zell, "Roof Fall Hurts the Nation Too," original print for the *United Mine Workers Journal*, February 1, 1962, UMWJR 60/6.