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“Diablo Canyon, California: An Environmental History”

John Wills

A dissertation submitted to the University of Bristol in accordance with the requirements of the degree of Doctor of Philosophy in the Faculty of Arts, Department of Historical Studies, August 2000.

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Abstract

“Diablo Canyon, California: An Environmental History” explores the ever-shifting relationship between Californians and a small headland in San Luis Obispo County. Diablo Canyon, part of the southern Pecho Coast, has been used by Native Americans as a burial site, by nineteenth-century pioneers as ranching territory, and, more recently, by the American nuclear industry as a site for an atomic power plant. Few Californians had heard of Diablo Canyon when Pacific Gas and Electric Company (PG&E), a major US utility, chose the coastal setting for a twin reactor nuclear plant in the late 1960s. A leading conservation organisation, the Sierra Club, even condoned PG&E’s plans, presuming the southern Pecho Coast to be insignificant in terms of natural worth. However, in subsequent years, Diablo posed a recurrent dilemma for those concerned about California’s natural environment. In the 1970s, a local women’s group, the Mothers for Peace, launched a legal challenge to PG&E’s project. Later in the decade, a state-wide coalition of anti-nuclear activists, the Abalone Alliance, campaigned against Diablo nuclear plant. During a fortnight-long blockade of the site in 1981, 1,900 protesters were arrested.

With an emphasis on the post-1945 era, this work focuses on how Californians interacted with the Diablo Canyon lands. It shows how successive peoples shaped the coastal environment to suit their needs. It also highlights how perceptions of the southern Pecho Coast shifted over time. Views of Diablo Canyon were moulded by broader cultural fixations regarding wilderness, nuclear energy and ecology. The material landscape equally affected Californians who frequented the coastline. This text is a work of American environmental history, and, as such, pays attention to both human and non-human agency. Within “Diablo Canyon, California: An Environmental History” can be found earthquakes, rattlesnakes and abalone, alongside the usual *Homo sapiens*.

Acknowledgements

When anti-nuclear activists gathered at Diablo Canyon on the California coast to protest against a nuclear plant, the chant “No Diablo” resonated across the region. In the late 1970s and early 1980s, articles on Diablo appeared in local, state and national newspapers. The place was famous. Fifteen years later, with events on the Pecho Coast scarcely of local, let alone international interest, people questioned my decision to research Diablo’s history. I usually pointed out that Diablo had greatly influenced the development of the Sierra Club (often considered the premier US conservation group), that 1,900 anti-nuclear activists had been arrested there in 1981, and that Diablo nuclear plant had changed the local county irrevocably. I rarely mentioned the natural qualities of Diablo Canyon, but the California ravine remains a special place despite recent upheavals, well worth visiting once in a while.

For the chance to explore the Diablo lands, I thank Sally Krenn and Sue Benech, biologists on contract to Pacific Gas and Electric Company. Sue kindly provided me with a tour of the coastline, stopping off to watch sea otters, brown pelicans, and a wily coyote. Martin Litton, of the Sierra Club, flew me in his 1951 Cessna aeroplane from Palo Alto airport to San Luis Obispo and back, circling the Pecho Coast several times. I also walked the Pecho Coast trail - thanks to Mike Heler and Paul Provence for some company - and attended a ‘Sunset Tour’ of Diablo plant and its environs one balmy California evening.

During my stay in California, I relied on the hospitality of a number of people. For making their home my own, I thank Marge Lasky in Berkeley, Sandy Silver in Santa Cruz, Liz and Hank Apfelberg in Arroyo Grande, and Rochelle and Tom Becker in Grover Beach. At his home in the Berkeley Hills, David Brower provided conservation stories and pointed out an impressive spider's web on his porch. In Nipomo, Kathy Goddard-Jones took me on a stroll of the Nipomo Dunes, whilst Bill Denneen provided a horse and cart ride of the region.

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In England, I took advantage of interlibrary loans at the University of Bristol library, along with internet connections in the Arts Postgraduate building. I thank Professor William Beinart at Oxford and Dr Peter Coates of Bristol for introducing me to environmental history in the first place, and Dr Chris MacLeod for checking over my upgrade paper. As my PhD adviser, Peter Coates was always free when I knocked on his door (even when he was marking essays or writing articles), and I thank him for his scholarly expertise and friendship. Thanks too to my parents, who will probably never visit Central California, but supported my own adventure wholeheartedly. I should point out that my voyage was always a shared one. My soul-mate, Karen Jones, a Canadianist and Americanist, travelled with me to the Diablo 'wilds' and along the streets of 'Berzerkley' and San Francisco, and never failed to enliven each journey. Finally, this work is dedicated to the late Lagi, a lounge lizard I once had the good fortune to spend time with. According to one Chumash story, Snilemun (the Coyote of the Sky), Sun, Moon, Morning Star, Slo?w (the Great Eagle), and Lizard are responsible for 'the making of man.' Despite the Coyote of the Sky being chosen to shape the human hand, Lizard sneaked in first to leave his imprint.

Author's Declaration

I declare that the work in this dissertation was carried out in accordance with the Regulations of the University of Bristol. This work is original except where indicated by special reference text and no part of the dissertation has been submitted for any other degree.

Any views expressed in the dissertation are those of the author and in no way represent those of the University of Bristol.

The dissertation has not been presented to any other University for examination either in the United Kingdom or overseas.

Signed: 

Date: AUGUST 23, 2000

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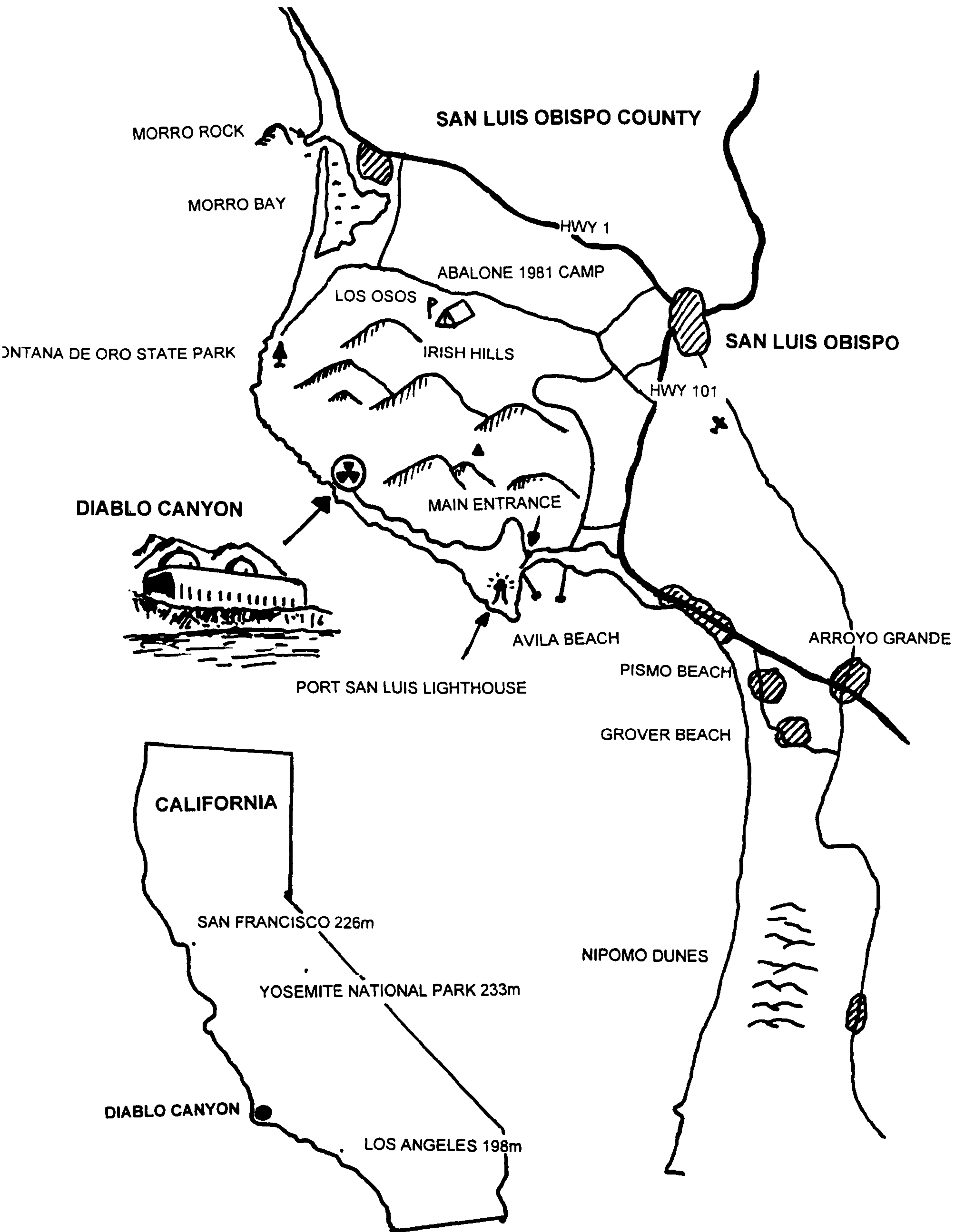
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List of Abbreviations

AAC	Abalone Alliance Collection, Abalone Alliance Safe Energy Clearinghouse, San Francisco.
AFSC	American Friends Service Committee, San Francisco Office.
BLPP	Barbara Levy Personal Papers, San Francisco.
DEPP	Don Eichelberger Personal Papers, San Francisco.
HMC	Harold Miossi Collection, Cuesta College Environmental Archives.
IMC	Ian McMillan Collection, Cuesta College Environmental Archives.
LAPP	Liz Apfelberg Personal Papers, Arroyo Grande.
MFPC	Mothers for Peace Collection, San Luis Obispo.
MMPP	Mary Moore Personal Papers, Sonoma County.
PBRG	Santa Cruz Predatory Bird Research Group, Long Marine Laboratory, University of California, Santa Cruz.
PGML	Pacific Gas & Electric Marine Laboratory holdings, Diablo Canyon Power Plant, San Luis Obispo County.
SCC	Sierra Club Collection, Bancroft Library, University of California, Berkeley
SSPP	Sandy Silver Personal Papers, Santa Cruz.



MAP OF DIABLO CANYON AND SURROUNDING REGION

Chapter One

Introduction

From its beginnings at Leggett, 190 miles north of San Francisco, California State Highway One follows the contours of the west coast so closely that it nearly falls into chilly Pacific waters. On automobile maps, a red line denoting highway and a blue trace representing shoreline together delineate the limits of westerly travel on continental American soil, or, more accurately, asphalt. Tourists treat California's first Scenic Highway as a drive-by nature theatre, whilst Hollywood appropriates it for celluloid images of tight corners, crashing waves and careening cars. Travelling south, the winding road cuts through redwood forests, Point Reyes National Seashore, the San Francisco Presidio, and the Big Sur. Then, at Morro Bay, 200 miles past San Francisco, Highway One suddenly turns inland. A range of hills rises up to block the accustomed coastal view. Hidden behind them is Diablo Canyon.

Diablo lies on the Pecho Coast, a fifteen-mile stretch of land that juts out into the Pacific Ocean. The San Luis Range, undulating hills formed by the San Andreas Fault over thousands of years, separates Diablo Canyon from the rest of California. Until the 1960s, geological forces helped insulate the Pecho promontory from industrial and commercial encroachment. The inward turn of the freeway reflects the extent to which modern civilisation had bypassed Diablo. California conservationists hailed the rugged cliffs and grassy knolls as an alluring preserve of classic, pre-industrial coastline, similar to the 'eye candy' found on Highway One, minus the concrete coating and scent of gasoline. In 1965, the northern edge of the headland,

along with the sandspit of Morro Bay, were set aside as Montana de Oro State Park. During the same period, Pacific Gas and Electric Company (PG&E), a major US utility, identified Diablo Canyon on the southern stretch as an appropriate site for a nuclear power plant. The remote and undeveloped qualities of the headland attracted two very different purposes.

Whilst the northern bluffs passed smoothly into state ownership, the fate of Diablo Canyon remained contested for several decades. In the late 1960s, the Sierra Club, a leading national conservation organisation, struck a land deal with Pacific Gas. Club directors condoned the nuclear project at Diablo as a means to free up corporate-owned land to the south for state park purchase. The controversial 'sacrifice' of Diablo Canyon almost split the club. Divisions in the local community took longer to emerge. Won over by promises of cheap electricity and nuclear-powered riches, residents of San Luis Obispo County initially welcomed their new atomic neighbour. The peaceful atom had been fervently promoted in the 1950s and 1960s, and county politicians wore atomic pins handed to them by PG&E representatives with pride. However, stories of radiation dangers and flawed reactor designs in the early 1970s led the American public to question the need for a national landscape littered with atomic artefacts. When a fault line was discovered within three miles of Diablo Canyon, doubts grew over the appropriateness of a nuclear plant perched precariously on the headland. Fresh from protesting American involvement in Vietnam, the Mothers for Peace, a local women's group, initiated a legal campaign against the atomic project. In 1977, anti-nuclear activists from across the state formed the Abalone Alliance, a non-violent direct action organisation, with the intention of

physically stopping PG&E's plant from going on-line. Two years later, an Alliance rally in San Francisco attracted 25,000 Californians, whilst 40,000 gathered in San Luis Obispo. During a fortnight-long blockade of Diablo plant in September 1981, 1,900 activists were jailed, the largest arrest in the history of American anti-nuclear protest. The controversy continued into 1984. That May, the Democratic Party's presidential candidate Walter Mondale visited San Luis Obispo, informing prospective voters that in their own backyard, "the shadow of a devil - a diablo - hangs over you."¹

Despite casting a long shadow over middle California, Diablo has attracted little attention from scholars. Historians of the Sierra Club have shown the most interest in the Pecho headland, presenting Diablo Canyon as a divisive episode in Club history, reminiscent of irascible debates over the damming of Hetch Hetchy, north of Yosemite Valley (in Yosemite National Park), in the 1910s. In *The History of the Sierra Club, 1892-1970* (1988), Michael Cohen situated Diablo Canyon in the club boardrooms of San Francisco, where directors argued over the ethics of the land deal. Diablo quickly became a dispute over conservation philosophy and "the Club's historical mission."² In similar fashion, Tom Turner mentioned Diablo as a colourful example of the Club's "battles within." According to Turner, the meteoric rise of conservation in the 1960s inevitably led to "growing tensions" inside the Club,

¹ Bernard Weinraub, "Jeers and Cheers Greet Mondale at Nuclear Site," *The New York Times*, 26 May 1984.

² Michael Cohen, *The History of the Sierra Club, 1892-1970* (San Francisco: Sierra Club Books, 1988), 395.

exemplified by the quarrel over the Pecho Coast.³ In 1992, *California History* celebrated the centennial of the Sierra Club with an issue solely dedicated to the home-grown organisation of nature conservationists. Susan Schrepfer offered an article entitled “The Nuclear Crucible: Diablo Canyon and the Transformation of the Sierra Club.” Schrepfer posited the power plant wrangle as central to the Club’s move “from a traditional, wilderness conservation agenda toward a comprehensive environmental perspective.” Diablo, she argued, forced directors to confront “complex new problems” and reconsider the dangers of atomic power.⁴ In his general study, *The American Conservation Movement* (1981), Stephen Fox suggested that “Diablo Canyon marked the end of the honeymoon between conservationists and nuclear power.”⁵ That ‘save-Diablo’ Sierrans objected to PG&E’s nuclear schemes indicated to Schrepfer and Fox the dawning of modern environmentalism within the Club. Whereas conservationists had previously welcomed nuclear plants as an alternative to damming wild rivers for electricity generation, nascent concerns over nuclear waste, radiation and thermal pollution shattered confidence in the atom.

³ Tom Turner, *Sierra Club: 100 Years of Protecting Nature* (New York: Harry N. Abrams, 1991), 179. The Sierra Club grew rapidly in the 1960s. At the start of the decade, 16,000 Americans belonged to the organisation; by 1970 the number had risen to 114,000 (figures from Turner, 278-9). The prolific expansion of the club is discussed in Ulf Hjelmar, *The Political Practice of Environmental Organizations* (Aldershot: Avebury Studies in Green Research, 1996), 88-97. Diablo Canyon was linked with a number of controversies within Sierra circles, including disputes over the role of executive director David Brower. See Cohen, 395-434, and Turner, 179-85.

⁴ Susan Schrepfer, “The Nuclear Crucible: Diablo Canyon and the Transformation of the Sierra Club, 1965-1985,” *California History*, 71/2 (Summer 1992), 212-37.

⁵ Stephen Fox, *The American Conservation Movement: John Muir and His Legacy* (Madison: The University of Wisconsin Press, 1981), 328. The Diablo fracas is also situated in a broader historical setting by Thomas Wellock in *Critical Masses: Opposition to Nuclear Power in California, 1958-1978* (Madison: The University of Wisconsin Press, 1998), 68-94. Wellock interpreted the Diablo episode as “a valuable example of the forces that turned environmentalists throughout the country from supporters to enemies of nuclear power” (69).

In contrast to the rich literature available on the Sierra Club, little has been written about the two anti-nuclear organisations that arrived at Diablo in the 1970s. Historians and other scholars have consistently overlooked the activities of the Mothers for Peace. Barbara Epstein provided the only notable commentary on the Abalone Alliance in *Political Protest and Cultural Revolution* (1991), a probing text surveying the rise of non-violent direct action in the 1970s and 1980s. Concentrating on the political dynamics surrounding protest, Epstein highlighted the contributions of the Alliance to new ways of grassroots organising in California.⁶ Robert Gottlieb, who attended an Abalone rally in 1979, commented on the environmental stance of the Alliance in his wide-ranging tract, *Forcing the Spring: The Transformation of the American Environmental Movement* (1993). Gottlieb argued that the Alliance lacked a strong environmental component, suggesting that the diverse composition of the movement prevented it from moving beyond circumscribed anti-nuclear objectives.⁷

In *Slow Reckoning: The Ecology of a Divided Planet* (1997), academic and ex-Abalone Tom Athanasiou revisited Diablo Canyon in terms of corporate greenwashing rather than anti-nuclear activity. Athanasiou highlighted PG&E's disingenuous use of public relations to propagate an image of ecological concern.⁸

⁶ Barbara Epstein, *Political Protest and Cultural Revolution: Nonviolent Direct Action in the 1970s and 1980s* (Berkeley: University of California Press, 1991), 92-124. Epstein focused on the 1977-1981 period of the Alliance's existence, neglecting sizeable Abalone protests during the spring of 1984.

⁷ Robert Gottlieb, *Forcing the Spring: The Transformation of the American Environmental Movement* (Washington: Island Press, 1993), 182. The comments made by Gottlieb on the Abalone Alliance are insightful, but lack substantiation. Gottlieb quoted Epstein to support his contentions, but Epstein's expertise lay in synthesising the political ideals of nonviolent movements, rather than detailing ecological imperatives.

⁸ Tom Athanasiou, *Slow Reckoning: The Ecology of a Divided Planet* (London: Secker & Warburg, 1997 [1996]), 226. A number of ex-Abalone members have written about Diablo Canyon.

Thomas (Tom) Turner had relayed similar sentiments on greenwashing, PG&E and Diablo in a short piece for *The Environmental Handbook* (1970), published to coincide with the first Earth Day.⁹ English professor Steven Marx and the nature writer John McKinney also reflected on the relationship between Pacific Gas, propaganda, and the nuclear project. Marx described two separate journeys to Diablo in the early 1990s, and his attendant change of heart over the atomic leviathan.¹⁰ In *A Walk Along Land's End* (1995), McKinney visited the headland as part of his mammoth sojourn along the entire California coastline. The intrepid explorer recollected protesting against the nuclear plant in the early 1980s and the feelings of wariness towards PG&E that had stayed with him.¹¹ In the 1980s and 1990s, Diablo was often employed to remind Californians of the incompetence and irresponsibility of Pacific Gas. The *San Francisco Bay Guardian* presented PG&E as the arch-enemy of the public interest, a capitalist ogre intent on pursuing illegitimate schemes. The propensity for Californians to criticise Pacific Gas led to a Hollywood movie depicting corporate malpractice at Hinkley, San Bernardino County. *Erin Brockovich* (2000) related the discovery of a contaminated local water supply by a legal assistant, and her battle to expose PG&E as the guilty party.

Marcy Darnovsky authored "Direct Action as Living Theater in the Movement Against Nuclear Power," unpublished paper, University of California, Santa Cruz, 1989. Mark Evanoff, regularly at the forefront of Alliance activities, wrote "Memorirs [sic] of a Movement: PG&E's Nuclear Power Play," unpublished manuscript, 1984. Roger Herried, who kept the Abalone Alliance's San Francisco office open past the mid-1980s, posted a number of useful pieces concerning the history of Diablo Canyon on the internet in the late 1990s.

⁹ Thomas Turner, "Eco Pornography or How to Spot an Ecological Phony," *The Environmental Handbook*, ed. Garrett de Bell (New York: Ballantine/Friends of the Earth, 1970), 263-67.

¹⁰ Steven Marx, "Priesthoods and Power: Some Thoughts on Diablo Canyon," *Mapping American Culture*, eds. Wayne Franklin & Michael Steiner (Iowa City: University of Iowa Press, 1992), 291-302.

¹¹ John McKinney, *A Walk Along Land's End: Discovering California's Unknown Coast* (New York: Harper Collins, 1995), 130-54.

In January 1973, Harold Miossi, a respected conservationist in San Luis Obispo County, wrote a short article on the Pecho Coast for the local history magazine, *La Vista*. Miossi began by commenting on how “each historian writes his [or her] own kind of history [...] To some, history is a chronology of dates, and to others, a recitation of past politics. Then there are historians who write with such sweep of geological or evolutionary time that the purview of man and his activities is but the short dimension of an interloper.” The California conservationist proffered his own approach as seeking “to tell about the scope of man, his perspective, milieu and activities, the land he occupied, all the creatures about him...and how he affected this setting.”¹² Miossi crafted a brief, prefatory environmental history of the San Luis headland. This dissertation follows a similar maxim. Successive chapters delineate shifting human attitudes towards the coastal environment. Whereas Miossi ended his coverage in 1970, “Diablo Canyon, California: An Environmental History” not only covers Native American, Spanish, and early Californian land-uses, but also details the tumultuous events of the 1970s, 1980s and 1990s - three decades of substantive change on the headland. It thus represents the first comprehensive study of Diablo Canyon and the Pecho Coast.

Scholars of legal or political history will note my lack of commentary on Nuclear Regulatory Commission documents and judicial matters. Diablo nuclear plant was the subject of courtroom quarrels for over a decade. Congress investigated the

¹² Harold Miossi, “Somnolent Cape: The Story of the Pecho Coast,” *La Vista*, 3/2 (January 1973), 2.

conduct of PG&E with regard to its construction record on the Pecho headland. The cursory attention paid to the legal arena reflects a social-environmental perspective on Diablo, rather than a desire to de-prioritise the role of nuclear regulatory issues. Neither are the following chapters restricted to the history of conservation and environmentalism. The Sierra Club, the Mothers for Peace and the Abalone Alliance all receive detailed appraisal. However, my interest lies in their connection to the Diablo landscape, rather than their distinct organisational histories. Whilst existing scholarship on the Sierra Club and Abalone Alliance has generally underplayed the role of the landscape itself in protest proceedings, Diablo Canyon receives copious attention here. The Pecho coastline joins the Sierra Club boardrooms and Abalone house-meets as a valuable ground for historical enquiry. Such an approach will shed light on the interactions between environmentalists and the land they seek to protect.

Reasserting the role of Diablo Canyon within its own history has entailed an eclectic use of sources, from archaeological reports to oral interviews, and from newspaper cuttings to scientific studies on water pollution.¹³ One of the best materials has been the landscape itself. History has, in a sense, been captured in the canyons and crags of the Pecho Coast. A quick glance at Pecho topography reveals a coastline party to human interest for thousands of years. Native American artefacts and bones relate the ancient presence of California Indians at Diablo Canyon. A modern inventory of flora elucidates the material impacts of Spanish rule on the region, exotic wild oats and

¹³ For details, see 'Field Methodology and Appraisal of Sources', 364-9, located near the end of the dissertation.

ripgut demonstrating the lasting invasiveness of ecological imperialism.¹⁴ That bovines happily munch on Diablo's foliage reminds us of the spread of domesticated cattle across the Golden State in the early nineteenth century, and their consummate ability to devour tasty indigenous plant life. A decaying wooden cabin conveys the story of American pioneers settling the coast in the latter half of the 1800s. The wildlife of Diablo Canyon has witnessed periods of human encroachment and withdrawal, influence and absence. Peregrine falcons nesting at Diablo Rock suffer the lingering maledictions of DDT poisoning, an agricultural chemical used widely in crop-spraying during the 1950s and 1960s. Coyotes and roadrunners inhabit undisturbed stretches of woodland. Poison oak, a native shrub that causes skin rashes, lurks in the canyons, whilst alongside it rests an 'exotic' nuclear plant with its own health issues.

When set against a geological time frame, or 9,000 years of Native American occupancy, the nuclear age appears only a fleeting phase in the history of the Pecho Coast. However, PG&E's nuclear plant transformed the landscape on a scale unrivalled by previous ranching and agricultural projects. Bulldozers and concrete mixers gave Diablo a new physical shape, and popular identity. Atomic energy ushered in a period of notoriety for the headland. "It wasn't until September 1966 that Diablo Canyon started to become a household word in San Luis Obispo County," explained a writer for the local newspaper, the *Telegram-Tribune*.¹⁵ The controversy

¹⁴ The theory of ecological imperialism is expounded by Alfred W. Crosby in *Ecological Imperialism: The Biological Expansion of Europe, 900-1900* (Cambridge: Cambridge University Press, 1986).

¹⁵ Warren Groshong, "There would be no nuclear plant on the dunes," *San Luis Obispo County Telegram-Tribune*, 7 September 1993.

over Diablo plant became a topic of conversation in bars, offices and homes across the Golden State. The nuclear project radicalised perceptions of the Pecho Coast. Californians looked on Diablo as part of a broader nuclear landscape, associating the coastline with glossy pictures of futuristic, clean atomic plant sites, or less-promising footage of bombed-out, irradiated test sites. Citizens smothered Diablo with a patchwork quilt of atomic images, using documentary films, press reports and Hollywood movies for materials. Diablo Canyon became part of the nuclear age, a monument to atomic history, years before Pacific Gas brought nuclear fuel on site.

Broad studies of nuclear culture have helped explain the attitudes of PG&E staff, anti-nuclear protesters and local residents towards the Pecho landscape. In particular, Spencer Weart's insightful tome, *Nuclear Fear: A History of Images* (1988), identified facets of American atomic culture that appeared in microcosm at Diablo Canyon.¹⁶ Meanwhile, works by Richard Meehan and Langdon Winner afforded valuable commentary on the philosophy and politics of nuclear technology.¹⁷ Nuclear landscapes have often been treated as wastelands or 'sacrifice zones.' The *Atlas of the*

¹⁶ Spencer Weart, *Nuclear Fear: A History of Images* (Cambridge, MA: Harvard University Press, 1988). Other treatments of atomic culture include: Paul Boyer, *By the Bomb's Early Light: American Thought and Culture at the Dawn of the Atomic Age* (New York: Pantheon Books, 1985); Paul Boyer, *Fallout: A Historian Reflects on America's Half-Century Encounter with Nuclear Weapons* (Columbus: Ohio State University Press, 1998); and Meredith Veldman, *Fantasy, the Bomb, and the Greening of Britain: Romantic Protest, 1945-1980* (Cambridge: Cambridge University Press, 1994).

¹⁷ Richard Meehan, *The Atom and the Fault: Experts, Earthquakes, and Nuclear Power* (Cambridge, MA: The MIT Press, 1984); Langdon Winner, *The Whale and the Reactor: A Search for Limits in an Age of High Technology* (Chicago: University of Chicago Press, 1986). Meehan and Winner both mention personal experiences of Diablo plant. Other worthwhile texts on technology include Mary Douglas and Aaron Wildavsky, *Risk and Culture: An Essay on the Selection of Technological and Environmental Dangers* (Berkeley: University of California Press, 1982) and Leo Marx, *The Machine in the Garden: Technology and the Pastoral Ideal in America* (New York: Oxford University Press, 1964).

New West (1997) furnished a map of “A Nuked Landscape” in a chapter entitled ‘The Ugly West.’¹⁸

However, at the same time as finding barrels of radioactive waste and high Geiger-counter readings, academics have also discovered unexpected signs of beauty and wildness surviving - even prospering - in landscapes with a nuclear history. Natural history is slowly being reintroduced into portrayals of the nuclear age, once considered the exclusive domain of technology and human pre-eminence. In *Savage Dreams: A Journey into the Landscape Wars of the American West* (1994), Rebecca Solnit found dusty, isolated tracts of the Nevada Test Site preferable to a sullied Yosemite National Park teeming with souvenir hunters and automobiles.¹⁹ Nuclear landscapes are complex, sometimes extreme, places shaped by culture and nature. The story of Diablo Canyon is part of a broader re-evaluation of nuclear lands, whereby nature is treated as an active agent in a dynamic unfolding drama, rather than an invisible and worthless victim in a simple narrative of human triumph.

From seismic fault lines to flawed reactor designs, Native American food gatherers to PG&E energy providers, and from scavenging coyotes to cattle herds, the environmental history of the Pecho Coast is a fertile narrative of human and non-

¹⁸ William Riebsame, ed., *Atlas of the New West: Portrait of a Changing Region* (New York: Norton, 1997), 134. Valerie Kuletz discussed ideas of sacrificial landscapes in *The Tainted Desert: Environmental and Social Ruin in the American West* (New York: Routledge, 1998). For those interested in making connections between atomic development and the American West, a good starting point is Bruce Hevley and John Findlay, eds., *The Atomic West* (Seattle: University of Washington Press, 1998).

¹⁹ Rebecca Solnit, *Savage Dreams: A Journey into the Landscape Wars of the American West* (New York: Vintage Books, 1994). The Rocky Mountain Arsenal, near Denver, site of toxic waste dumps and chemical seepage, is offered as ‘Unnatural Nature’ and a possible wildlife park in William Cronon, ed., *Uncommon Ground: Toward Reinventing Nature* (New York: Norton, 1995), 27-8, 57-66.

human endeavours. Whilst the following chapters highlight human attitudes and activities, Diablo is equally understood as a place shaped by geology, flora and fauna. The story of Diablo ultimately concerns a dialogue between protagonists of many species, even if the record of recent Americans is the easiest source for historians to rely on. Californians have shaped Diablo to their designs, but experiences of Diablo have unequivocally moulded them. The dialectic continues. People, peregrines, poison oak, concrete and soil co-exist on the Pecho Coast, and collectively form the identity of the region.

Chapter Two

Diablo Canyon Wilds (up to 1965)

[1] Picking up the Ancient Trail

“If you like to hike and want to experience the diversity of landscape and life that characterize this spectacular area, join docents for a seven-mile round-trip along the Pecho Coast Trail,” invited the 1990s leaflet.¹ By calling 805 541 TREK, visitors reserved their space on a guided walk across the south side of the Pecho headland, and their chance to discover first-hand the intertwining history of nature and humanity on Diablo lands.

Along the trail, ramblers took advantage of lofty hillside vantage points, pausing to peer down on the piers, boats and bathers of Avila Beach. Guides told stories of human industry on the headland, of whaling, shipping and lighthouse beacons. Weaving amongst the dense bush and oak woods, hikers immersed themselves in the grand scenery of the Pecho Coast.² As living monuments of age-old geological forces, the coastal bluffs and rugged cliffs testified to the dynamic power of nature in the region. Like the glacial carved splendour of Yosemite Valley or the fractured and buckled lands along the San Andreas Fault, the Diablo coast appeared to be another stretch of California landscape openly displaying its tumultuous natural heritage. Ocean swells and waves crashing against Diablo rocks in 1997 echoed a distant past

¹ “Hike the Pecho Coast Trail” leaflet, 1997, designed by Pandora & Co., Los Osos.

² The author participated in a guided tour of the Pecho Coast Trail on 28 August 1997.

when water travelled more freely eastwards. The sparkling expanse of the Pacific Ocean resembled the scene twenty-five million years earlier, when shallow seas covered much of western California. Ancient relatives of today's abalone, clams and whales prospered in a then-submerged San Luis Obispo County. The crumpled, crunched-up appearance of the Pecho crags and hillsides related the volatile birth of the region two-to-five million years ago, courtesy of plate tectonics. Grinding against its North American counterpart (at the San Andreas Fault), the Pacific Plate lifted and folded, raising terraces and forging hills. Sedimentary rocks formerly buried in ocean waters rose up to form the distinctive California coastal range. The local series of volcanoes known as the Morros similarly surfaced during the Pliocene period, forced above the waterline by plate faulting and retreating seas. Pacific storms then buffeted the exposed Diablo rocks, gradually refining the coastal canvas.

The shaping of the headland by elemental natural forces lent it an alluring, primeval quality. The Pecho Coast Trail leaflet proudly recounted how “[V]olcanic flows, earthquake movements and ocean sculpting formed this land.” Recasting volcanoes and earthquakes as creative tools rather than havoc-wreakers, the handout portrayed Diablo as an impressive piece of organic architecture. A series of grand, histrionic displays of natural phenomena had forged an appropriately “dramatic stretch of coastline,” capable of supporting “a wealth of life” from bobcats to surf birds. The Pecho Coast Trail offered citizens the opportunity to wonder at the resultant scene, to revel in the delights of natural creativity. In a watercolour collage of pastoral shades, the Trail leaflet also painted the contemporary coastline as a sedate, quiet and inviting place. The lava and land shudders had supposedly long passed, nature having finished

playing landscape designer in favour of a less energetic life as occasional gardener. The matching colours of native flora hinted at a new subtlety behind the brush strokes.³

In contrast to the tangible, often exposed geological history of the region, the faunal heritage of the Pecho Coast appeared well hidden amongst the bush and bramble. Successive Ice Ages had wiped clean the tracks of early residents such as the sabre-toothed cat, mammoth, giant ground sloth and mastodon. Small mammals, snakes and lizards, whose ancestors survived past climatic changes, stole past interested parties out strolling the Pecho wilds in the 1990s. The trail offered few discernible clues as to early human use of the region. Gazing down at Avila, walkers were reminded of the port's bustling late nineteenth-century heyday, whilst a visit to the restored Point San Luis lighthouse nearby offered a rare peek at the shining 'Victorian Lady.' The Pecho Coast trail seemed at best a journey back in time of a mere 100 years. Although tribal groups had walked the same coast thousands of years earlier, trail-side signs of ancient human presence remained shrouded, footprints from antiquity washed away by Pacific storms and covered by sprouting spring grasses.

The first humans to frequent the Pecho Coast probably followed a nomadic or semi-sedentary lifestyle. The search for food and shelter led them across wild and flourishing landscapes. Archaeologist Roberta Greenwood surveyed the coastal region in 1968-9, identifying the earliest residents of Diablo as likely descendants of the Early Playa-Flake peoples living in the American interior. Greenwood found

³ All quotes taken from "Hike the Pecho Coast Trail."

relics at Diablo dating back to 7,370 B.C. The coastal terrain provided a rich and diverse larder, with early settlers harvesting the shores for shellfish and hunting the woodlands for small mammals. During the first millennium of occupation, Diablo residents learned to grind seeds using manos (handstones). The evolution of an Early Milling Stone culture on the headland possibly related to contact and trade with other inland groups, or reflected a new-found recognition of fertile and edible plant-life on the bluffs. Inhabitants continued to hunt on the Pecho lands, gradually honing their skills through new technology. By 3,000 B.C., hunters used lunate knives, fish spears and projectile points to down their prey. The proliferation of bone items discovered at Diablo burial sites enshrined the Hunting Period on the Pecho Coast. Between 500-1,000 A.D., Diablo residents developed more intricate crafting methods. Vestiges of the hunting culture converged with a sophisticated (Canalino) lifestyle that valued trade and handicrafts. Greenwood discovered artefacts endemic to the Hunting Period, such as flaked stone vessels, alongside Canalino-associated J-shape fishing hooks and Olivella (small shell) disk beads. Native Americans frequenting Pecho shores gradually built upon their cultural heritage, and, by 1,000 A.D., had forged a way of life at Diablo Canyon clearly recognisable as historic Chumash.⁴

In 1891, John Wesley Powell of the Bureau of American Ethnology referred to the Native Americans of Central California as Chumashan. Powell grouped together various tribes - many with their own vernacular and cultural traits - under one common banner. Chumash came from the native word 'Michumash,' used by

⁴ For a fuller exploration of the region's archaeological past, see Roberta S. Greenwood, *9000 Years of Prehistory at Diablo Canyon, San Luis Obispo County, California* (San Luis Obispo County Archaeological Society Occasional Paper 7, 1972).

mainland villagers to describe Santa Cruz Island, or ‘place of the islanders,’ and its inhabitants, ‘those who make shell bead money.’⁵ Chumash territory historically spanned 7,000 square miles of coastal terrain, stretching from the Santa Monica Mountains to San Simeon. Greenwood speculated that the Pecho Coast may have served as one of the “early localities” responsible for seeding tribal expansion.⁶ Residents of Diablo possibly forged settlements at nearby Avila, Morro Bay and Pismo Beach. In the search for new food supplies and trade opportunities, native groups from Pecho and other early communities gradually dispersed across coastal California. Villages grew to number several hundred people. Shisholop (today’s Ventura) probably supported 400 residents, living in a few dozen round thatched dwellings. Elaborate social networks developed with the expansion of communities, Chiefs (wots), shaman-doctors, messengers (ksens) and craft guild members exerting considerable influence over village life. Trade signified a key component of Chumash culture. Chumash tribes exchanged goods with the Salinan in the north, and the Yokuts and Mojave to the East. Southern Chumash invented a planked canoe (tomol) which they used to travel between the Santa Barbara coast and offshore islands, trading acorns and rabbit skins for shell jewellery and otter pelts.

⁵ The Chumash label is a technical misnomer. Clearly, a singular ‘Chumash nation’ never existed along the California coast prior to and during Spanish rule. Most villages acted autonomously, with differences in dialects between regions. Despite the contrived nature of the Chumash name, most academics still regard it as a useful term to describe California’s indigenous coast-dwellers, especially given their shared surroundings, culture and trade practices. The validity of the Chumash phrase is briefly discussed by Thomas C. Blackburn in *December’s Child: A Book of Chumash Oral Narratives*, ed. Thomas Blackburn (Berkeley: University of California Press, 1975), 8, and by Bruce W. Miller in *Chumash: A Picture of Their World* (Los Osos: Sand River Press, 1988), 10, 105. The label is challenged in Brian D. Haley & Larry R. Wilcoxon, “Anthropology and the Making of Chumash Tradition,” *Current Anthropology*, 38/5 (December 1997), 761-94.

⁶ Greenwood, *9000 Years of Prehistory*, 94.

Pecho denizens followed a simpler, earlier form of Chumash culture to that found flourishing on coastal shores further south. Divorced from the hierarchies and social complexities at work in larger villages, the small Diablo community kept with traditions passed on by older generations. Archaeological remains reveal no population explosion or sudden adoption of new cultural mandates. Through her work at Diablo, Greenwood identified a “long span of occupation with only slight change and evolution of artefacts through time” with “no drastic shifts in subsistence pattern.”⁷ An absence of canoes or fishing nets possibly reflected their lack of knowledge of new technology. Well-honed traditional skills secured ample foodstuffs without resorting to ocean travel. Out-migration also eased pressures on the Pecho environment, leaving villagers with little need to adopt innovative means of gathering food. The Diablo Canyon settlement meanwhile remained on the periphery of Chumash trading trails, conferring a degree of isolation upon the headland community. The nearest known trade route, along the Santa Maria-Cuyama River drainage, required a week of travel, lying some 90 miles inland.

Diablo Indians spent their days wandering the bluffs and canyons, hunting, fishing, and gathering seeds. Intimate knowledge of their surroundings fuelled an overriding sense of place and belonging. The Pecho Coast undoubtedly signified the focal point of everyday existence for the small community of Indians who resided there. Meanwhile, stories, travel and trade fashioned images of the larger California landscape. As predominantly coastal dwellers, the Chumash people felt comfortable with the notion of their world as an island afloat a great expanse of water. Maria

Solares, of Chumash and Yokut ancestry, related how “[H]ere where we live is the center of our world - it is the biggest island.” This world (?itiasup) relied on two giant snakes (the ma?aqsiaq?ita?sup) to support it. When the serpents tired, they wriggled about, causing earthquakes above their heads. The movement of the reptiles provided the Chumash people with an understandable, naturalistic explanation for sudden tears and ripples in the land. Local Chumash probably subscribed to legends of two other worlds operating above and below the Pecho Coast. Beneath the snakes lurked c?oyinasup, “the other world,” inhabited by malevolent creatures known as the nunasis; whilst a third world, ?alapay, prevailed above California skies. Resting on the wings of the great slo?w (or eagle), ?alapay sustained supernatural beings such as Sun and Coyote of the Sky. Occasionally the great slo?w stretched his wings, which, according to Solares, inaugurated the phases of the moon.⁸

With the notable exception of goods procured by trade, Native Americans depended on their immediate environment for clothing, sustenance, shelter and ceremonial items. Pecho creeks provided local Indians with drinking water. Tangled oak groves and dense woodland hid acorns, berries and seeds. Mule deer, coyotes, and badgers frequented the numerous wooded canyons. Along the waterside, natives collected clams, abalone and other shellfish from tide pools and inlets. Chumash used tiny shell hooks to catch fish, whilst larger marine shells served as trading currency. For the more ambitious tribesmen, seals and sea lions resting on Pecho rocks presented

⁷ Ibid., 92.

⁸ Maria Solares was a Chumash informant for John Peabody Harrington during his ethnological and linguistic study of the Central Coast Indian in the early twentieth century. Her story, “The Three Worlds,” can be found in Blackburn, *December’s Child*, 91.

tempting targets to trap, club, and spear.⁹ Greenwood discovered a panpipe forged from pelican bone at one Diablo burial site.

Those Chumash living at, or close, to Diablo saw themselves as a natural, intrinsic part of the environment, and viewed other creatures wandering the Pecho bluffs as kindred spirits. Chumash Fernando Librado recounted how his grandfather “told him that all animals are related.” Librado believed that “we are all brothers, and our mother is one: this mother earth.”¹⁰ Chumash stories and religious beliefs fleshed out the lives of fellow fauna beyond their corporeal existence. Centipedes, eagles, swordfish and rattlesnakes took on shamanistic identities. One of the many Coyote stories told by the Chumash recalled the good times shared by roaming animal spirits, Coyote and Bat “always hunting and doing things together” prior to Bat becoming “misshapen” during a sweat-lodge endurance contest.¹¹ When Chumash chanced upon a coyote scavenging in the woody recesses of Diablo Canyon, the fur-coated animal often had a message for them.¹²

Chumash stories inferred a relatively ambiguous or non-determinist role for humans within nature. Compared with Christian writings which instructed humans to “rule

⁹ Local Chumash nevertheless lacked the necessary equipment to hunt marine mammals further out to sea. Greenwood discovered turtle and whale remains in local middens, but the creatures most likely died whilst beached on Indian ground. See Greenwood, *9000 Years of Prehistory*, 41, 51.

¹⁰ “Animals,” in Blackburn, *December’s Child*, 102-3.

¹¹ “Coyote and Bat (I)” Chumash narrative, *Ibid.*, 211.

¹² The coyote, archetypal ‘trickster’ (and ‘cultural hero’), holds a special place in the Chumash psyche, perhaps unexpected given the coastal setting and marine activities of most villagers. Chumash stories bear remarkable similarity to canine tales recanted by Sioux and Blackfeet elders. Lavish reference to the coyote, together with creation stories and religious ceremonies familiar to other

over the fish of the sea and the birds of the air, over the livestock, over all the earth” (Genesis 1:27), Native American parables rarely encouraged people to take outright control of ‘their’ environment. The Chumash Indian conceived him/herself as little different from the other residents of the natural world. The Chumash story ‘The Making of Man’ told how animal spirits of the upper-world moulded some ‘new people,’ with the shape of the human hand decided by a sly move from Lizard. Native Americans appeared the chance product of ?alapay dialogue, even trickery, in contrast to biblical tales of ‘chosen people.’¹³ On-looking spirits from ?alapay meanwhile tinkered, sometimes foolishly, sometimes wisely, with ?itiasup, reminding the Chumash of forces at play in the landscape beyond their control. A good harvest arrived as manna from the spirits of the upper world.¹⁴ Chumash interpreted beached whales as a fortuitous gift from supernatural swordfish which, with their swords as hands, played games with sea mammals, occasionally throwing them ashore.

Despite their intimate knowledge of the changing seasons and Diablo flora and fauna, local Chumash rarely took their situation for granted. Native American stories subtly worked to regulate use. Oral traditions tempered nascent desires to over-exploit the natural environment, preventing an understood right to live and hunt on the Pecho Coast from escalating into an ethos of control and dominion. Recounted tales even explained personal issues such as mortality in terms of wider ecological balance. According to a Ventureño Chumash story, the ‘matavenado,’ or cricket, ultimately

nations, situates the Chumash within a broader Native American religious tradition, despite their shoreline whereabouts setting them apart from Plains tribes.

¹³ “The Making of Man,” in Blackburn, *December’s Child*, 95.

¹⁴ “The Sky People,” *Ibid.*, 91.

decided how human death would work. Whilst Coyote proposed “throwing man into a lake when he got old and making him young again,” matavenado “said no, the earth will get too full of people and there will be no room to stand.” After hearing the story, the Ventureño Chumash nonetheless vowed to talk to, and kill, any matavenado they met.¹⁵

Archaeologists discovered an ancient Native American cemetery at Diablo Canyon in 1968. A partial excavation uncovered 54 bodies and a collection of ceremonial offerings, including bone whistles, shell beads, and knives. Chumash traditionally marked their burial grounds with whale bones or stone tablets, and in June 1969 slabs of rock were duly discovered at the Pecho site. The Diablo cemetery reflected the Chumash fascination with their coastal environment. As described in ‘The Soul’s Journey to Similaqsa,’ the Chumash believed in a land of dead souls (Similaqsa), only reachable by crossing a great expanse of water, equivalent to the Pacific Ocean.¹⁶ According to the story, before entering the sea, the Native American soul faced a number of trials, including a deep ravine with clashing rocks and an attack by two ‘gigantic qaq’ (or ravens) which pecked out the eyes of the traveller. Evil spirits also inhabited the shoreline. After the arduous journey westwards, the Chumash soul, upon entering Similaqsa, received a special reward of blue abalone eyes to compensate for the raven-pecking. Similaqsa itself served as an abundant land for resting spirits. Reinvigorated after a twelve-year stay, some souls then returned to California shores in reincarnated form. Point Conception, south of present-day

¹⁵ “The Origin of Death,” *Ibid.*, 96.

¹⁶ “The Soul’s Journey to Similaqsa,” *Ibid.*, 98-100.

Vandenburg, provided the shared spiritual gate for Chumash souls embarking upon their ethereal voyage across ocean waters. The spirits of the dead usually stayed at cemeteries such as the one found at Diablo Canyon for three to five days before moving on to Point Conception. The recently departed spent their time watching over burial ceremonies and revisiting old haunts. However, in the late 1990s, anthropologists Brian Haley and Larry Wilcoxon argued that regional differences inherent within Chumash culture led individual tribes to establish their own gateways to Similaqsa rather than using a common 'Western Gate' at Conception. Haley and Wilcoxon noted how Obispeno Chumash (those living in the region correspondingly roughly to present-day San Luis County) never mentioned the Point in conversations with anthropologist John Peabody Harrington in the early twentieth century.¹⁷ The Diablo headland, with its abalone coves, rocky ravines and ocean views, may have provided local Chumash with their own unique causeway westwards.

Haley and Wilcoxon cast a hazy cloud over Point Conception to ferment doubts over the validity of the Chumash label itself. In a controversial article for *Current Anthropology*, they argued that a homogeneous Chumash nation never existed, and that "[O]nly since the 1960s has there been a category of people who both identify themselves and are identified by others as Chumash." Haley and Wilcoxon pointed a finger of blame at their fellow professionals, highlighting how anthropologists had assisted the modern (re)birth of the Chumash nation by idealising the Native, whilst practically providing New Agers, dejected divorcees and avid canoeists with the

¹⁷ Haley & Wilcoxon, "Anthropology and the Making of Chumash Tradition," 769, 774-5.

necessary information with which to 'become' Native American.¹⁸ During the 1990s, the lives of Indians of the 'old' American West were also being reinterpreted as part of a broad rediscovery of frontier systems. 'New Western' historians such as Patricia Limerick and Richard White unearthed tales of human hardship, racial conflict, and environmental degradation buried beneath the fabricated frontier of gun-toting cowboys and western romance, dime novels and Hollywood pictures.¹⁹ Native Americans began to write their own histories.²⁰ Traditional portrayals of 'American Indians' as savages, either noble or vicious, were shot apart by a new historical ca(n)non. In terms of California, re-envisioning the Indian rendered suspect the classic image of far western lands as untouched and unkempt wilderness. Research into indigenous land practices explored how tribes manipulated ecological systems.²¹ California Indians used their intimate knowledge of the natural world to encourage the growth of edible plants and attract wildlife to hunting grounds. The Chumash intentionally burned vegetation on grasslands and savannah to accelerate fresh growth and increase seasonal food supplies. Tribes consciously spread their favourite plants across territorial landscapes. Ethnobiologist Jan Timbrook suggested Chumash

¹⁸ Ibid., 762, 766.

¹⁹ Widely acknowledged key texts in New Western History include Patricia Nelson Limerick, *The Legacy of Conquest: The Unbroken Past of the American West* (New York: Norton, 1987), Richard White, *"It's Your Misfortune and None of My Own": A New History of the American West* (Norman: University of Oklahoma Press, 1991), William Cronon, George Miles, and Jay Gitlin, eds., *Under an Open Sky: Rethinking America's Western Past* (New York: Norton, 1992), and Donald Worster, *Under Western Skies: Nature and History in the American West* (New York: Oxford University Press, 1992).

²⁰ For example, Susan Bordeaux Bettelyoun & Josephine Waggoner, *With My Own Eyes: A Lakota Woman Tells Her People's History*, ed. Emily Levine (Lincoln: University of Nebraska Press, 1998), Dee Brown, *Bury My Heart at Wounded Knee: An Indian History of the American West* (New York: Henry Holt, 1971), and Joseph Marshall III, *On Behalf of the Wolf and the First Peoples* (Santa Fe: Red Crane Books, 1995).

²¹ See Thomas C. Blackburn & Kat Anderson, eds., *Before the Wilderness: Environmental Management by Native Californians* (Menlo Park: Ballena Press, 1993).

Indians imported tobacco to Santa Cruz Island.²² Chumash hunters possibly lit fires in attempts to ‘herd’ animals into traps or cleared woodland, where prey could be killed more easily. Academics labelled California Indians expert “native gardeners.”²³ Historian William Preston argued that indigenous tribes improved, even maximised, the biodiversity of California.²⁴ The natural abundance of the Golden State that European explorers judged the fine work of a Christian God, instead reflected the efforts of the supposedly ‘idle savage.’

Over thousands of years, Native Americans used the Pecho Coast as a hunting ground, gathering place, and burial site. If the Chumash had carelessly exploited Diablo flora and fauna, Greenwood would have discovered a picture of ‘boom and bust,’ or ‘Indian capitalism,’ on the Pecho headland. Natural restoration of a despoiled coastal environment would have taken time, and caused problems for Native Americans unable to store food for prolonged periods or trade in bulk. Instead, twentieth-century archaeological findings, along with cultural accounts, indicated a long span of occupation at Diablo Canyon marked by measured human use. Local Chumash developed sustainable land practices that worked within, rather than against, the natural seasons. The coastal headland most likely remained a healthy ecosystem during years of native presence. Chumash effected changes in the coastal landscape,

²² Noted in M. Kat Anderson, Michael G. Barbour & Valerie Whitworth, “A World of Balance and Plenty: Land, Plants, Animals and Humans in a Pre-European California,” *Contested Eden: California Before the Gold Rush*, eds. Ramon A. Gutierrez & Richard J. Orsi (Berkeley: University of California Press, 1998), 38.

²³ *Ibid.*, 14.

²⁴ William Preston, “Serpent in the Garden: Environmental Change in Colonial California,” *Ibid.*, 264-5, 273-4.

but rarely on a large or permanent scale. The taking of plants and animals for food symbolised not the commodification of Diablo Canyon but the completeness of a natural cycle at work. As Kat Anderson, Michael Barbour and Valerie Whitworth pointed out in an article on the pre-European landscape, “[T]he Native Americans were not simply *in* California; they *were* California.”²⁵ Chumash locals were not the only ones using or altering the landscape. At Diablo, the seasons saw coyotes feeding on rodents, bears digging up tasty roots, sea otters toying with shellfish. Fires burned, trees fell. The Chumash, after all, learnt *from* nature how to *change* nature. Prior to European discovery, the Pecho Coast was always a living, fluid place rather than a static, timeless picture. Both human and non-human residents of Diablo only faced frozen conditions during the Ice Ages. Anderson et. al. argue that “the pace of recent change is one reason why ecologists have a difficult time reconstructing the California landscape prior to 1848” (non-native plants and concrete having replaced so much native terrain). However, another reason lies in the sheer complexity and dynamic balance of *ʔitiasup* and its two serpents.²⁶

[2] European Discovery

During the sixteenth and seventeenth centuries, European cartographers often depicted California as an island in their maps of the New World. *The North Part of America* (1625), drawn by Henry Briggs, marked a substantial channel between “the large and goodly island of California” (including Baja California) and “America

²⁵ Anderson, Barbour & Whitworth, “A World of Balance and Plenty,” 16.

²⁶ Ibid., 21.

Septentrionalis.”²⁷ Early explorers hoped the channel would provide a link between Pacific and Atlantic Oceans. In June 1542, Juan Rodriguez Cabrillo set out to discover this ‘Northwest Passage,’ or Strait of Anian, his ships navigating along the Baja peninsula. At present-day San Diego, Cabrillo officially claimed the mysterious lands north of Mexico for the Spanish flag, naming the territory Alta (Upper) California. Local Native Americans “gave signs of great fear” when approached by the Spanish landing party, an appropriate response given that Cabrillo had just unceremoniously snatched their homeland.²⁸ Storms and strong winds buffeted the ships during their slow progress northwards. The Spanish probably passed the Pecho Coast during November 1542. In a late nineteenth-century history of San Luis Obispo, Myron Angel claimed the sea captain entered San Luis Obispo Bay, then, after “[S]ailing northward from Point San Luis [the southerly tip of the Pecho Coast], he discovered a deep indentation, which he placed on his chart as ‘Los Esteros,’ and in the bay [he indicated] a high conical rock ‘El Moro.’ There Cabrillo supplied his ships with wood and fresh water.”²⁹ In contrast, Hubert Howe Bancroft, in his *History of California* (1884), suggested a less intimate experience with the San Luis shoreline, positing that, after passing Point Conception, Cabrillo travelled “along a wild coast without shelter” up to Point Gorda (south of Big Sur).³⁰ Local historian Dan Krieger sided with Bancroft, noting how “[T]he storm-tossed seas did not permit safe

²⁷ For a reprint of the map by Henry Briggs, see Iris H.W. Engstrand, “Seekers of the ‘Northern Mystery’: European Exploration of California and the Pacific,” in *Contested Eden*, 79.

²⁸ Herbert E. Bolton, ed., “A Summary Account of Juan Rodriguez Cabrillo’s Voyage,” *Spanish Exploration in the Southwest, 1542-1706* (New York: Charles Scribner’s Sons, 1916), 23.

²⁹ Myron Angel, *History of San Luis Obispo County, California; with Illustrations and Biographical Sketches of its Prominent Men and Pioneers* (Oakland: Thompson and West, 1883), 14.

³⁰ Hubert Howe Bancroft, *The Works of Hubert Howe Bancroft, Vol.18: The History of California, Volume I: 1542-1800* (San Francisco: H.H. Bancroft Co., 1884), 74.

anchorage along San Luis Obispo County's shores, and the explorer saw little that attracted comment."³¹ Perhaps Cabrillo steered his ships away from the Pecho Coast, in fear of sudden gusts of wind or strong waves slamming his wooden craft onto the rocky cliffs. The geography of the California coastline, typified by the rugged outcrops of the Pecho headland, hardly appeared to welcome European vessels in need of easy anchorage and safe refuge from Pacific storms. The Spanish ships reached the region of Point Reyes before returning southwards along the coast. Krieger related how once more "high winds and unsettled seas kept the ships far off shore."³² Volatile weather conditions, scurvy, along with the death of Cabrillo, marked the Spanish discovery of Alta California as a decidedly sombre affair.

In 1587, Spanish seafarer Pedro de Unamuno, a pilot on the Manila trade route, explored the California coast.³³ During late October, Unamuno anchored his galleon in Morro Bay. In common with other European explorers, Unamuno treated the California landscape as an untapped resource. The local coastline provided his crew with "an unlimited quantity of fish of different kinds," and timber for shipbuilding and fires.³⁴ However, Spanish intrusion angered Chumash living in the region, and native residents killed two members of Unamuno's party. Eight years later, Rodriguez Cermeno, captain of the *San Agostin*, explored and mapped the coastline.

³¹ Daniel E. Krieger, *San Luis Obispo County: Looking Backward into the Middle Kingdom* (San Luis Obispo: EZ Nature Books, 1990, 2nd edn), 14-5.

³² *Ibid.*, 15. Any commentary on Diablo Canyon nevertheless remains locked in Cabrillo's journal, a valuable document never recovered.

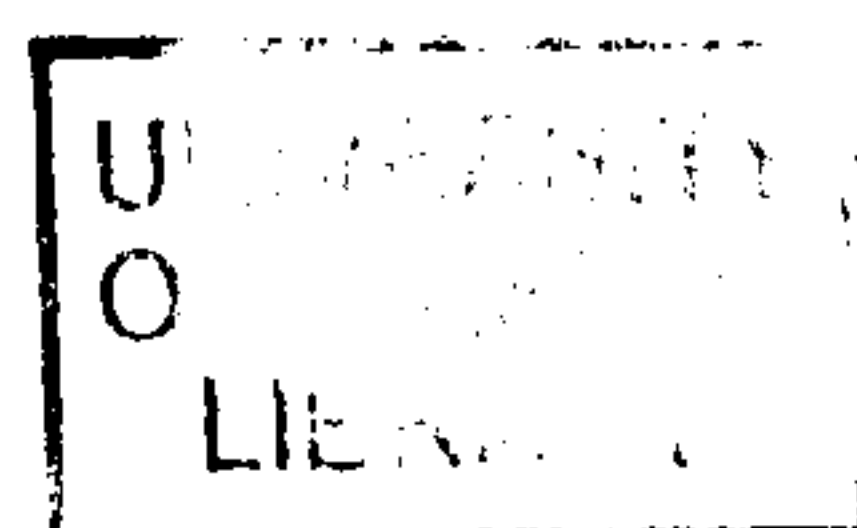
³³ The Manila trade route was used to ferry silver bullion from Spanish America to Manila to be exchanged for silks and spices.

³⁴ Engstrand, "Seekers of the 'Northern Mystery'," 90.

Cermeno's crew spotted Native Americans on rocky outcrops near Diablo Canyon. The Chumash cried 'Christinos' and 'Mexico' in response to the passing Spanish galleon, phrases presumably acquired during Unamuno's visit. During an extended navigation of California shores in 1602-3, Sebastian Vizcaino may have traded goods with the same group of Chumash. Vizcaino enthused about a great harbour further north at Monterey and recommended establishing a port there. However, his superior, the Count of Montesclaros, proved less than enamoured with the progress of exploration. Having lost a number of Manila galleons along the coast, in return for few noteworthy returns, Spanish officials deemed further ventures too risky. European interest in California ebbed.

Ideas of colonising the Golden State re-emerged some 150 years later. In 1769, Captain Gaspar de Portola and Franciscan Father Crespi, accompanied by 63 soldiers and Indian helpers, followed an overland route along the California coastline. They hoped to meet up with two Spanish galleons, the *San Jose* and *San Antonia*, making their own way to Vizcaino's fabled Monterey Bay. The Portola expedition hardly compared in size or stature to the forays of Lewis and Clark in the early 1800s, but Crespi's diary remains the first detailed description of the American Far West by a European observer.

The Franciscan Father chronicled early Spanish contact with the flora, fauna, and indigenous tribes of coastal California. On August 30, 1769, the expedition crossed the Santa Maria River into territory known today as San Luis Obispo County. On



September 4, the Spanish visited a Chumash settlement near Price Canyon, a few miles south of the Pecho Coast. Crespi described how “[T]he chief of that village has a large goitre which hangs from his neck. On account of this the soldiers named him El Buchon, which name he and the village retained.” The Franciscan priest meanwhile heard the bells of future Missionary churches ringing in his ears, alternatively christening “the place San Ladisloa, so that this saint may be its patron and protector for its conversion.” Rather than learn the Chumash name for the village as a sign of respect, the Spanish seemed far more comfortable enforcing their own labels in true colonial fashion. Crespi portrayed the villagers as hapless inferiors akin to wild animals, “poor creatures” that urgently needed godly direction to lead them towards civilised humanity.³⁵

The expedition turned inland, skirting the edges of the San Luis Range, and bypassing the Pecho Coast. Portola’s cartographer, Constanso, described the hills as Sierra de Buchon in a map of the coastline.³⁶ In a nearby valley, the party encountered “troops of bears.” Crespi noted that the bears “kept the ground plowed up and full of holes which they make searching for roots which constitute their food.” He also remarked that “the heathen,” or local Chumash, utilised the same plants “which have a very good flavor and taste.”³⁷ Portola’s soldiers named the region La Canada de los Osos, the valley of the bears, and eagerly met the resident fauna with a hail of bullets.

³⁵ Fray Juan Crespi, *Missionary Explorer on the Pacific Coast 1769-1774*, ed. Herbert E. Bolton (Berkeley: University of California Press, 1927), 182-5.

³⁶ Harold Miossi, “Somnolent Cape: The Story of the Pecho Coast,” *La Vista*, 3/2 (San Luis Obispo County Historical Society, January 1973), 7. Buchon Point on the Pecho Coast similarly bears reference to the Chumash chief.

³⁷ Crespi, *Missionary Explorer*, 184-5.

The Spanish sea and land expeditions also proved costly in human lives. Over half of the 300 men involved in the 1769-70 colonial adventure died during the journey north, and the *San Jose* never made it to Monterey Bay. On June 3, 1770, the survivors founded the second Spanish California mission and presidio at Monterey. The joyous invaders celebrated the occasion with High Mass, musket firing, flag planting and the “tearing up and scattering of grass and earth.”³⁸ The heady mixture of Catholicism, guns, nationalism, and ecological disturbance symbolised an ominous future ahead for the existing residents of California. Colonisation had begun in earnest.

The Spanish gradually expanded their occupation of Alta California. During 1771, Lieutenant Pedro Fages founded two more missions, San Antonia and San Gabriel. The following year, a severe drought decimated Spanish crops, whilst strong winds prevented supply ships from reaching the northern California missions. Fages remembered favoured hunting grounds in Los Osos valley from his earlier travels with Portola, and returned there with a party of men. Fages hunted the local fauna for three months, sending 25 loads (approx. 9,000 pounds) of bear meat and jerky back to Monterey and San Antonia.³⁹ The sound of musket shot and animal cries marked the taking of the valley from the bears. Father Serra, the religious leader of California colonisation, decided to push for a Mission at, or near, Los Osos. Renowned for its

³⁸ David Lavender, *California: Land of New Beginnings* (Lincoln: University of Nebraska Press, 1987, new edn), 46. The first California mission was established at San Diego in 1769.

³⁹ By that point, the second California mission, San Carlos de Barromeo (formerly next to the military presidio at Monterey), had been relocated to the lower Carmelo River Valley, Carmel.

seemingly inexhaustable food supplies, the region appeared well suited for mission presence. Serra also recognised the need for moral guidance and discipline in the area, expressing concern over reports that Fage's men had raped local Chumash women. In September 1772, Serra and his fellow Spaniards founded Mission San Luis Obispo "on a level plot" with "two little arroyos" for irrigation, and "in sight" of Canada de Los Osos.⁴⁰

Serra then left the region. Father Joseph Caveller, five soldiers and two mission Indians (from Baja California) immediately began construction of a small chapel and military stockade, the humble yet telling beginnings of Spanish rule over the California Central Coast. With limited food supplies of flour, wheat and chocolate, Caveller's party welcomed gifts of venison and wild seeds from friendly local Chumash Indians. The natives thanked the Spanish soldiers for previously ridding Los Osos of fearsome bears. A box of brown sugar had been set aside for trade, and Caveller duly introduced the Indians to the refined, sweet taste of European life, without mentioning the unhealthy side-effects. The Franciscan priest also presented his neighbours with a new God, who they could learn more of by working for the Spanish colonial project. During the first three months, twelve Chumash children joined the nascent Catholic flock. Armed with the Bible and musket rifle, an eminently persuasive combination, Caveller and the Spanish soldiers accelerated the conversion process, and, by 1784, 616 local Chumash had been baptised at San Luis Obispo Mission. Elsewhere along the California coast, from San Diego to San Francisco, tribes found themselves similarly co-opted into colonial and religious

⁴⁰ Comments made by Father Francisco Palou on the San Luis site, taken from Krieger, *San Luis*

servitude. Franciscan fathers referred to their Indian slaves as neophytes, or newly planted seeds.

The newly planted seeds represented one crop in a broader conversion project. The Spanish hoped to transform the wild, unfamiliar terra firma of California into something more palatable to European taste buds. Imperial idealists sought to (re)create an Old World pastoral landscape upon New World shores, envisioning a country of regimented agriculture, animal husbandry, and unmistakably *Homo sapien* design. Dispassionate colonists viewed the native terrain as akin to its indigenous human residents, merely resembling raw material to be moulded into a civilised form. The richly textured California landscape denoted a blank canvas. Ardent colonials walked through towering redwoods and enchanting oaks, yet only saw the wood rather than the trees, the future timber cabin rather than the vibrant, living ecosystem. Even Fray Francisco Palou, a Spaniard who gained some intimacy with coastal California by travelling between San Diego and San Francisco in 1774, regularly couched his commentary on local nature in terms of resource potential. Passing through the San Luis region, Palou, in utilitarian fashion, noted that the mission site had “the advantage of much good arable land, timber, firewood and water,” with fine prospects of irrigation by tapping “an arroyo with a little running water” just “a gunshot away.” The Franciscan explorer also mentioned Chumash activity close to the mission, whereby “[T]he heathen of the neighboring villages harvest an abundance of very savory and nutritious wild seeds, have game, such as deer and rabbits; and the

beach Indians catch large quantities of fish.” Palou feared that “it will not be so easy to induce them to live at the mission” with such a rich environment on hand.⁴¹

Nevertheless, intrigued by the new culture available to them, the promises of spiritual salvation, and material offerings of beads, clothing and food, some Chumash freely chose to join the missions. Franciscan fathers appointed male Native Americans as *alcaldes* - mission Indian officials with authority over their fellow converts. However, for most Native Americans, missionary life entailed strict rules, manual labour, curtailed freedom, and regular lashings. The Spanish priests took seriously their saintly quest to craft an Edenic paradise from raw California wilderness and mould local Indians into good Christians. Franciscan fathers regarded uncivilised Chumash as akin to the wild beasts of the forest. French visitor La Perouse noted the “extreme patience” needed to change the Indian, or, in the words of Father Serra’s successor, Fermin Lasuen, to “denaturalize” them: “To make them realize that they are men.”⁴² Wary fathers feared the return of the converted Indian to a life of savagery, lured by the pagan religion of his/her ancestors and drawn by dark forces lurking in the wilderness. Whilst instructed in the Spanish language, few neophytes received reading lessons for fear of too much education spawning organised rebellion.

⁴¹ Extracts from Fray Francisco Palou taken from “A Spaniard Explores the Southern California Landscape, 1774,” in *Green Versus Gold: Sources in California’s Environmental History*, ed. Carolyn Merchant (Washington DC: Island Press, 1998), 71; reprinted from Fray Francisco Palou, *Historical Memoirs of New California*, ed. Herbert E. Bolton, (Berkeley: University of California Press, 1926) vol. 3.

⁴² Charles N. Rudkin, ed., *The First French Expedition to California: Laperouse in 1786* (Los Angeles: Dawson’s Book Shop, 1959), 56; Lavender, *California*, 71.

However, the harshness of Spanish servitude, coupled with surviving native traditions, provided ample inspiration for resistance. Signs of unrest manifested themselves on church floors, bored members of the congregation turning to graffiti rather than God. Neophytes regularly fled Spanish settlements to seek refuge in familiar woods and groves or join up with sympathetic tribes. The 'heathen' (probably Yokuts rather than Chumash) burned the San Luis Mission in November 1776, possibly to distract the Spanish whilst stealing their horses. Chumash Indians deliberately torched the Santa Ynez Mission and adjacent soldiers' quarters during February 1824, in a revolt sparked by the flogging of a resident neophyte. Chumash expert Bruce Miller noted how many Central Coast Indians died inside the missions "of European enlightenment - hard work, diseases, and an unaccustomed diet."⁴³ Europeans spread diseases such as smallpox, influenza and syphilis amongst Native Americans with a naturally low immunity to Old World germs. By forcibly taking tribal members and espousing the written word of the Bible, Spanish overlords undermined Chumash oral tradition and gradually erased the living memory of the Indian nation. Native Americans needed to join the Missions and become part of the colonial picture, or risk being struck from the landscape as new Spanish masters painted a fresh layer on nature's canvas.

The El Camino Real trail linked Spanish enclaves from San Diego to San Francisco, snaking across the California landscape like a colonially crafted San Andreas fault line. The missions and presidios along the route resembled epicentres of ecological disruption, with the outward movement of airborne spores and grazing bovines akin to shock waves rippling across the country. Ships off-loaded cattle, sheep, goats, and

⁴³ Miller, *Chumash: A Picture of Their World*, 31.

pigs onto California shores, who immediately delighted in the unfamiliar taste of native grasses, basking in their new role as 'exotic' species (until the native grizzly population discovered them). Settlers cleared spaces for European crops, plants and even gardens. Unsurprisingly, most Spanish disregarded indigenous knowledge of flora and fauna, naively trumpeting their own land traditions as best, regardless of environmental circumstance. Failure to recognise the native mark on the land reflected colonial sentiments that, with the exception of Spanish destiny written across it, 'California' was a virgin, untouched, resource-laden Eden.

Unintended ecological consequences followed. Supply ships unknowingly transported insects and less favoured plants ('weeds') to the new land. Ripgut, mustard and wild oats uprooted native grasses, whilst foraging cattle overgrazed fragile flora to reveal barren earth. European practices began to unweave the ecological fabric. The Spanish had, without realising, removed the keystone species of the California ecosystem, the Native American. Whilst a few species, such as the grizzly and deer, temporarily prospered from the drop in Indian hunters, a well-established environmental system had become unbalanced.⁴⁴

Within ten miles of San Luis Obispo Mission, the Pecho Coast was close enough to experience subtle ecological changes.⁴⁵ Seeds of mustard, wild oat and filaree may well have travelled westwards to find fertile soil on Pecho bluffs. Determined cattle

⁴⁴ See Preston, "Serpent in the Garden," 270-89.

⁴⁵ In the absence of written accounts, an accurate appraisal of colonial ecological damage to the Diablo lands is impossible. This paragraph speculates as to probable effects, matched with more recent biological surveys of the coastline.

perhaps worked their way through the winding canyons, receiving a tasty reward of native foliage upon reaching the Diablo grasslands. Spaniards probably walked the Pecho Coast as part of territorial exploration or searched the woodlands during efforts to root out fugitive neophytes. However, the infrequent nature of colonial incursions tempered the impact of Spanish rule over the coastal environment. Settlers preferred to fashion land immediately surrounding missions and presidios into colonial gardens, leaving more distant territories for later transformation. Colonists drew comfort from their familiar environs, manufactured islands of empire floating above a sea of wilderness. A line had been drawn between two landscapes, and the wariest settlers avoided all unnecessary trips into otherworldly echelons. Outlying regions such as the Pecho Coast, deemed unsuitable for settlement by their distance from trading trails and tilled fields, became icons of the loathsome wild. The undulating hills of the San Luis Range embodied the divide between civilisation and isolation, safety and danger.

Spaniards who visited the Pecho Coast most likely returned to camp with tortured tales of canyons infested with poison oak and rattlesnakes. The remote bluffs and weaving valleys of the Pecho promontory hardly presented easy routes for Spanish travel. Compared to the tamed, regimented lands of Franciscan missions, the Diablo region was chaotic and disorderly, wicked and wild. Travel through the densely thicketed canyons probably reminded European visitors of their foreign status, that outside the safe enclaves of civilised missionary life, much of California had yet to bow before the Catholic priest. Whilst early explorers had once hoisted wild California as a divine 'garden of Eden,' the reality of the Pecho Coast suggested a

more malevolent, tangled web of nature. Spanish impressions of Diablo Canyon perhaps resembled those of Francis Higginson regarding New England in 1630, a “Countrey being verie full of Woods and Wildernesses, doth also abound with Snakes and Serpents of strange colours and huge greatnesse,” some “that haue [have] Rattles in their Tayles that will not flye from a Man...but will flye upon him and sting him so mortally, that he will dye within a quarter of an houre after.”⁴⁶ The reason behind the naming of Diablo remains a mystery, although a chance encounter with a serpentine resident possibly inspired the appellation. During a foray into the wild lands, a Spanish explorer may have skirmished with a basking rattler and named the valley after the ‘devilish’ reptile. Perhaps the Garden of Eden imagery applied after all, with the Diablo snake akin to the biblical serpent of Genesis 3.

Aside from rattlesnakes, the ‘Diabolic’ motif possibly reflected broader views of wild nature as evil and malevolent. In *California’s Spanish Place Names* (1980), Barbara and Rudy Marinacci noted that the Spanish used devilish nomenclature to describe “curious, evil-looking contortions in the landscape,” or “furious, hellish heat.”⁴⁷ The copious use of religious metaphor engendered a plethora of demonic ‘discoveries,’ with Lucifer lurking in anything from rock shapes to storm clouds. Perhaps a weary Spanish explorer, feeling trapped in Diablo valley, imagined satanic designs on canyon walls, or simply overexerted himself during hot summer months, and blamed his surroundings. Alternatively, the Diablo name possibly originated from ocean-

⁴⁶ The Higginson extract is taken from the seminal work on attitudes to American wilderness: Roderick Nash, *Wilderness and the American Mind* (New Haven: Yale University Press, 1982, 3rd edn), 29.

⁴⁷ Barbara & Rudy Marinacci, *California’s Spanish Place Names* (San Rafael: Presidio Press, 1980), 227.

based explorations of the California coastline. Flung towards Pecho rocks by “devilish winds,” Spanish sailors may have feared for their lives and looked to God to save them from the unwelcome craggy shoreline.⁴⁸ Accounts of Cabrillo’s 1542-43 voyage certainly vouched for the fearsome storms encountered by Spanish vessels along the Central Coast.⁴⁹

A different tale, circulating in the early 1980s, detailed how a “Spanish galleon...exploring the coast” purposely landed at the Pecho headland and sent “a party of conquistadores ashore to see if the point was a suitable place to establish a mission.” According to the gory legend: “They all went mad. Killed each other. Shot each other. All of them. So they sent in two padres to exorcise the place, as it was obviously in the hinds of the Devil. They were both bitten by rattlesnakes, and one of them died. The Spanish never went back to the place.” Although many Spanish galleons, including the missionary vessel *San Jose*, disappeared along the California coastline, no wreckage off Diablo was salvaged to validate the story. With the padres and conquistadors similarly unidentified, the bloody folklore lacks credibility.⁵⁰ Ultimately, the turning of Spanish explorers into madmen summoned images of 1970s horror movies with stumbling zombies and ancient curses rather than

⁴⁸ Explanation offered by guide on attended ‘Environmental Tour’ of Diablo Canyon, 19 August 1997.

⁴⁹ The voyage of Cabrillo was frequently impeded by storms and winds. See Engstrand, “Seekers of the ‘Northern Mystery’,” 84-6.

⁵⁰ Steve Smith, “Place of the Devil,” *Diablo Blockade: 1981 Diablo Canyon Blockade - An Illustrated Anthology of Articles, Essays, Poems & Personal Experiences*, ed. Diablo Writing Project (Santa Cruz: Diablo Writing Project, 1983), 51. Whilst an interesting tale of biblically transposed evil, including a reference to the classical association of serpents and evil, Smith’s story informs more on a time of heightened anxieties over a proposed nuclear plant at Diablo than on long-past colonial events.

historical events of the 1700s. Barbara Evans, in a story for the *Santa Barbara News & Review*, also fleshed out the notion of demonic possession with reference to Diablo's ancient heritage. "Before the Spanish claimed California for the white race, Chumash Indians buried their dead in Diablo Canyon. Chumash legends that disturbing a grave raises evil spirits helped name the canyon," charged the news reporter.⁵¹ Evans nevertheless failed to cite any Spanish or Chumash evidence in support of her theory. Spanish explorers may have desecrated native burial grounds on the Pecho Coast, but likely attributed later misfortunes to divine forces rather than heathen magic. Moreover, the claim of 'evil spirits' lurking at Diablo seemed more appropriate to a Christian vernacular of 'good versus evil' than the less dichotomised language of traditional Chumash teachings.

Native American presence, of the physical rather than spiritual kind, might provide one final clue to the mystery of 'Canada los Diablo.' In their exhaustive study of place names, the Marinaccis noted that, along with heat and rocks, Spanish colonists also interpreted "strange or fiendish behaviour among humans" as the work of the devil.⁵² Many Europeans regarded Native American rituals as debased and disdainful, cultist acts that praised false gods from the irrepressibly dark and savage wilderness. A Chumash burial ceremony on the Pecho Coast would have been treated with condemnation and suspicion by Spanish onlookers. However, modern-day archaeological investigations indicated an absence of Chumash activity on the Pecho bluffs by 1800. Use of Diablo Canyon for burials peaked several centuries before

⁵¹ Barbara Evans, "Rally 'Round - Stop the Nukes," *Santa Barbara News & Review*, 5 August 1977.

⁵² Marinacci, *California's Spanish Place Names*, 227.

Spanish exploration. Greenwood posited that the indigenous significance of the Pecho Coast had probably faded by the time of European colonisation.⁵³ John Peabody Harrington, who catalogued Chumash oral narratives in the early twentieth century, spoke with Rosario Cooper, rumoured to be the sole surviving Native American fluent in the 'obispeno' (or local) dialect. The only Chumash name on the Pecho Coast she referred to was 'tstywi,' or Rancho del Pecho (the Pecho ranch).

[3] Nineteenth-Century Ranch Lands

On April 27, 1843, a Mexican land grant declared 'Rancho Pecho y Islay' the property of Francisco Bodilla (Padillo) on the authority of Governor Micheltorena. The grant amounted to 10,300 acres of land, stretching along the Pecho Coast from Pecho Creek (near the southerly tip) to Islay Creek (on the northern slope). Pecho, the Spanish phrase for breast, sometimes inferred courage, but, in the case of the Diablo lands, more likely offered commentary on the shape of the headland. Islay meanwhile derived from slay, the Salinian Indian term for wild cherry. The name of the land grant paid homage to past Native American and Spanish eras of California history. Spanish hopes for California had died following defeat in the Napoleonic Wars. In 1821, Mexico declared independence from Spain, and claimed Alta California as a province. By the 1840s, life in California centred upon the private rancho rather than the tribal village or the Spanish mission.

⁵³ Greenwood, *9000 Years of Prehistory*, 83-4, 94-5.

Francisco Bodilla had shuffled into Central California as a convict in chains during 1825. Upon release from prison, Bodilla decided to stay in the region. Described as “a shady figure often at odds with the law,” he nonetheless mounted a successful legal claim to Pecho shores.⁵⁴ After securing a land grant, Bodilla took up residence in a cabin on the south rim of Pecho Canyon. Two years later, he sold Pecho y Islay to Captain John (Juan) Wilson and James (Diego) Scott. Wilson and Scott paid \$1,500 (500 in cash, 1,000 in merchandise) for the property. They also purchased the ‘Canada Los Osos’ land grant. The Los Osos valley, with land adjoining the northern tip of Rancho Pecho, had originally been granted to Californio Victor Linares in December 1842, but Linares succumbed to the temptation of \$1000 worth of goods and currency. Wilson and Scott then successfully petitioned Governor Pio Pico to officially recognise the combined plot of 32,430 acres, or ‘Canada de Los Osos y Pecho y Islay,’ as legally theirs.

Born in Dundee, Scotland in 1798, John Wilson found himself drawn to a life at sea. In “Captain Wilson: Trader of the Pacific” (1979), Loren Nicholson noted Wilson’s trip to Calleo at a young age, followed by regular jaunts along the coasts of South America, Mexico and Alta California.⁵⁵ In 1831, the Scot captained an English ship reputed to be ‘the fastest vessel of the coast.’ Wilson spent several years trading along the California coast, selling hides, tallow, otter and seal skins.⁵⁶ He married into

⁵⁴ Description provided on display boards in the Montana de Oro State Park Visitors Center, San Luis Obispo County, during summer 1997.

⁵⁵ Loren Nicholson, “Captain John Wilson: Trader of the Pacific,” *The Pacific Historian*, 23/2 (Summer 1979), 70.

⁵⁶ In 1835, Richard Henry Dana came upon Wilson and the *Ayacucho* along the California coast, noting the ability of the Scot to moor his vessel quickly and efficiently. See Richard Henry Dana, Jr., *Two Years Before The Mast* (New York: Penguin Books, 1981 [1840]), 100, 111.

the Mexican aristocracy in 1836. When the United States took control of California in 1848, Wilson had established himself as “far and away the wealthiest man in San Luis County at that time.”⁵⁷

With its crashing ocean waves and weathered feel, the Pecho Coast seemed an ideal location for a ‘sea dog’ to set up home. However, the Wilson family generally stayed further inland, at a two-storey house next to the San Luis Obispo Mission (Wilson, Scott, and James McKinley purchased the Mission for \$510 in December 1845). Living on mission land in the centre of San Luis Obispo reflected the high social standing of the Wilson clan. In comparison, the remote, unknown shores of Diablo Canyon threatened to isolate the family from county affairs and Pecho soil lacked ingrained prestige. By 1850, Wilson had accumulated 53,434 acres of ranch and farmland, along with sizeable property holdings in San Luis Obispo town. His tax bill totalled \$639.20, the highest in the county. Nevertheless, Captain Wilson paid just 28 cents per acre on his Pecho estate.⁵⁸ The County Board of Supervisors traditionally charged between 50c and \$1.25 on Rancho property, with the 50c figure generally levied upon arid eastern lands. In a special motion, however, the Board valued Pecho y Islay at an unusually low rate. The 28c reflected a degree of ‘worthlessness’

⁵⁷ Montana de Oro Advisory Committee, “Prospectus Montana de Oro State Park,” (March 1968), 4, held in the Harold Miossi collection, Cuesta College Environmental Archives, box 4, file 001. Mrs Annie L. Morrison also described Wilson as the wealthiest man in San Luis County in 1850. See Mrs Annie L. Morrison & John H. Haydon, *History of San Luis Obispo County and Environs, California, with Biographical Sketches of the Leading Men and Women of the County and Environs* (Los Angeles: Historic Record Company, 1917), 37. Morrison provided a history of San Luis, whilst Haydon detailed events in the Santa Maria Valley.

⁵⁸ The figure of 28c is cited in Miossi, “Somnolent Cape,” 13. By contrast, Loren Nicholson documented values on Wilson property ranging from 25c to \$1.00 per acre, presumably the lower amount relating to Diablo lands: Nicholson, “Captain John Wilson,” 85.

attached to the Diablo coastline, although, given Wilson's sizeable tax bill, the special price might also be taken as a subtle form of political discount.

Captain Wilson's business partner, James Scott, continued trading along the California coast. After several run-ins with American authorities, Scott left for Chile. Wilson remained in San Luis County. During the 1850s, he invested in ranching, owning 6,300 animals at one point. In 1851, the Captain registered his 'Pecho y Islay' breed of cattle, allegedly "the first brand recorded in San Luis Obispo County after American statehood."⁵⁹ 'Choice' cattle thus roamed the Pecho Coast, although only a percentage of terrain offered them quality feed. Whilst the coastal terraces provided bovines with fine pasture, the steeper slopes of the Irish Hills and dense, wooded valleys afforded limited grazing opportunities. Ranchers could also 'lose' their cattle down Pecho ravines. The 'Diablo' name-tag may even refer to the 'devil of a time' spent herding branded cattle out of the tight and twisting canyon.⁶⁰ For some cows earmarked for slaughter, the thick foliage of Diablo perhaps offered temporary sanctuary.

The California Gold Rush of 1849 fuelled a sudden demand for beef. The new mines and cities of the Far West needed meaty sustenance to keep dreams of mineral wealth and prosperity alive. Across the state, ranchers filled their lands with bovine herds, hoping to trade bulls for bullion. Captain Wilson's interest in ranching no doubt stemmed from the tasty lure of the quick buck as much as a fondness for fine cattle.

⁵⁹ According to Montana de Oro State Park Visitors Center.

⁶⁰ Theory noted on Environmental Tour of Diablo Canyon, 19 August 1997.

Even the remote and isolated Pecho Coast possibly felt the effect of Gold Rush fever, with the Pecho y Islay brand an unlikely hallmark of the mining era. Environmental repercussions were scarcely considered in the rash pursuit of profit. The excesses of the 1850s cattle era exacerbated problems of land management endemic to prior decades of colonisation. Spanish and Mexican ranchers had paid scant regard to the deterioration of California range-lands. Typical *ranchero* practice between the 1830s and 1860s left cattle herds to fend for themselves and wander roughshod over fine native grasses. Historian Hazel Pulling pointed out in a 1945 essay on range lands that “Spanish and Mexican Rancheros, and indeed the early American range-cattle owners, were not in the least disturbed by any impending damage to range forage. The range was grazed for decade after decade, and if the flora changed at all during the time, little attention was paid to it.”⁶¹ Indeed, the native flora usually did change, usurped by Old World plants and consumed by hungry herds. In 1846, Edwin Bryant, staying at a ranch close to Mount Diablo, east of San Francisco, remarked how “[T]he horned cattle of California which I have thus far seen, are the largest and handsomest in shape which I ever saw. There is certainly no breed in the United States equalling them in size. They, as well as the horses, subsist entirely upon the indigenous grasses, at all seasons of the year; and such are the nutritious qualities of the herbage, that the former are always in condition for slaughtering, and the latter have as much flesh upon them as is desirable.”⁶² Meanwhile, at Diablo Canyon, Wilson’s cattle enjoyed the native grasses on offer along Pecho bluffs. An 1858 map of Rancho ‘Canada de

⁶¹ “A Woman Describes the Decline in Range Forage, 1945,” in *Green Versus Gold*, 189; extracted from Hazel Adele Pulling, “Range Forage and the California Range Cattle Industry,” *Historian*, 7 (spring 1945), 113-29.

⁶² Edwin Bryant, *What I Saw in California* (Lincoln: University of Nebraska Press, 1985 [1848]), 305.

Los Osos' and 'Pecho y Islay' by the US Surveyor General bore the unexpected description of land immediately north of Diablo Canyon as a "Beautiful Plain covered with wildoats."⁶³ The beautiful, and exotic, wild oats had flourished in the place of indigenous grasses.

[4] Pacific Views

Maritime explorers and traders viewed the Pecho Coast from a different perspective to those onshore. Land dwellers approached the coastal bluffs through the Irish Hills and dense, winding canyons, their views constrained by the contours of the terrain. Sailors witnessed the broad coastal expanse on passing ships. Whilst colonists focused on land acreage and cattle carrying capacity, ocean explorers defined land, as in the case of Diablo, by its points, length and oceanographic position. Between 1792 and 1794, George Vancouver, captain of the HMS *Discovery* surveyed the California coastline. The seafarer drew up maps charting possible trade routes and documented the progress of Spanish colonisation. In November 1793, Vancouver sailed past the Diablo lands, which, according to his map, carried the mark of Buchon, dating back to Portola's expedition. Vancouver described the Pecho Coast as a "conspicuous promontory," noting its length and "rounding direction about S.36E." He also related rumours of an island lying eight leagues off the headland, although coastal fog limited

⁶³ Brice M. Henry, under instruction from US Surveyor General, "Plot of the Rancho 'Canada de Los Osos' & 'Pecho y Islay'," confirmed to John Wilson, August & September 1858. A copy of the land survey is currently held at San Luis Obispo Public Library.

his view to “two to four leagues in any direction.”⁶⁴ Meanwhile, Mount El Buchon (today’s Saddle Peak, 1,819ft), rising up behind Diablo Canyon, provided seafarers with a familiar beacon, drawing them to nearby San Luis Obispo Bay. French traveller Duflot de Mofras on a visit to San Luis Obispo in 1841 noted that “[B]y sea approach, the leading landmark is the mountain of El Buchon...The mountain is cone-shaped and stands sharply from the chain that parallels the coast.”⁶⁵

Seafarers glimpsed stretches of coastline untouched by colonisation. However, desires for profit and power doubtless blinded many sailors to the beauty of the wild. Ocean traders often worked according to the same dictates as land-based colonisers. During the early nineteenth century, Yankee, Russian and English vessels moved into California waters, eager to seize new trading opportunities and hunt down sea creatures in pursuit of riches.

The Spanish hoped to thwart trade by other nations along California shores, but lacked the ships to launch frequent patrols. Tiny bays along the Central Coast offered a degree of privacy for illicit traders keen to avoid checks by Spanish troops. At San Luis Obispo Bay, Duflot de Mofras noted that “[I]n a large cliff near the shore there is a natural grotto of considerable beauty, and here, ships sometimes store hides procured from San Luis.”⁶⁶ Just south of Avila Port, New England traders unloaded

⁶⁴ George Vancouver, *A Voyage of Discovery to the North Pacific Ocean and Round the World, 1791-1795*, ed. by W. Kaye Lamb (London: The Hakluyt Society, 1984) volume III, 1088-89. A clear day would have revealed no island off the Pecho Coast.

⁶⁵ Account of San Luis by Duflot de Mofras in “How to get to San Luis Obispo,” *La Vista*, 2/4 (January 1972), 4.

⁶⁶ De Mofras, “How to get to San Luis Obispo,” 5.

their cargoes by night at a sheltered cave known today as ‘Smuggler’s landing’ or Pirates Cove. Diablo Canyon played no official role in coastal exchange, yet a “romantic legend” grew up around ocean smuggling off the Pecho Coast.⁶⁷

Transporting goods between boats and shore entailed a lot of hard work at the best of times. Shipmate Richard Henry Dana, writing in 1840, described the loading of hides aboard a vessel at San Pedro:

Now, the hides were to be got down; and for this purpose, we brought the boat round to a place where the hill was steeper, and threw them down, letting them slide over the slope. Many of them lodged, and we had to let ourselves down and set them agoing again; and in this way got covered with dust, and our clothes torn. After we had got them all down, we were obliged to take them on our heads, and walk over the stones, and through the water, to the boat. The water and the stones together would wear out a pair of shoes a day, and as shoes were very scarce and very dear, we were compelled to go barefooted. At night, we went on board, having had the hardest and most disagreeable day’s work that we had yet experienced.⁶⁸

Without access to established ports or large crews, smugglers faced an even harder life. The Pecho Coast offered secluded landing points for rowing boats, but illegal traders faced an arduous journey inland. Smugglers encountered windy canyons, few serviceable tracks, and an uphill struggle taking wares across the San Luis Range. Harold Miossi also raised doubts over the appropriateness of the foggy stretch of

⁶⁷ Harold Miossi referred to the ‘legend’ in “Somnolent Cape,” 8.

⁶⁸ Dana, *Two Years Before the Mast*, 150.

coastline for drying hides in preparation for transport and sale.⁶⁹ The Diablo lands hardly represented the ideal location for illicit trade. It is highly unlikely that smugglers used Diablo Canyon after 1821, when Mexico rescinded Spanish laws restricting foreign trade. Official ports represented far more attractive harbours, providing trading opportunities and entertainment instead of treacherous rocks and poison oak.

Whilst the Pecho headland itself never attracted many coastal traders, marine life in the waters off Diablo Canyon sought refuge from human pressures. Russian, Spanish, Mexican, and English sailors, along with Native American hunters, targeted sea otters for their skins and whales for their bone, oil, and blubber. Hearing tales of fortune, Yankees on the East Coast moved in for the kill. Whaling vessels arrived from New Bedford in the early 1800s to scout Pacific waters. Meanwhile, veteran beaver hunters, moving from one fur-bearer to another, crossed from their traditional killing grounds in the Rockies to the otter territories of California. Equivalent to land-based scenes of carnage, where market hunters proudly accumulated piles of bison and wolf skins, marine hunters amassed otter pelts on ship decks and lined their fur-trimmed pockets. With the Pacific Ocean deemed a limitless sea of opportunity, sailors along California shores lived by a similar rationale to pioneers on the frontier. Far Western exploiters of the aquatic frontier shared the rampant acquisitiveness and sheer wastefulness of the forty-niners. Faced with an international force of seasoned killers, whales and sea otters relinquished their time-honoured coastal routes to patrolling sea vessels. Numbers of marine mammals dwindled. Captain John Rogers Cooper sailed

⁶⁹ Miozzi, "Somnolent Cape," 8.

from Boston in the 1820s for the California coast. In 1832, Cooper lamented his declining fortunes: “Whereas there was taken 700 a few years ago, I took but 32 from San Francisco to Monterey and I do not think we shall get 600 [otter] skins on all the coast.”⁷⁰ Despite the disappearance of California’s sea otters, ocean trade persisted. During the 1830s, demand for hide and tallow soared, offering coastal vessels a lucrative cargo. Animal skins remained a common sight on deck, many seafarers reliant on butchered carcasses for their own livelihoods.

[5] From Unexpected Drought to Entrepreneurial Optimism

A severe drought between 1862 and 1864 that claimed up to 300,000 cattle and 100,000 sheep brought an end to the California cattle boom. In her *History of San Luis Obispo and Environs* (1917), Annie Morrison described how “owners could not stand the moanings of their herds, nor bear to see them falling by hundreds before their eyes.” Whilst some breeds sold for rock-bottom prices, “many thousands of cattle and horses were driven over the bluffs into the sea and drowned.” Morrison partially blamed the ranchers for the calamitous “dry years,” noting that traditionally “[N]o hay was raised, no attempt whatever was made to provide food for the cattle, if Nature failed to do it.” After years of fine pasture and easy pickings, the ‘failure’ of Nature with a capital ‘N’ appeared almost inevitable. The scenes of turmoil reminded Morrison of the bloody conflict between Union and Confederate armies in the early 1860s: “While in the East men were fighting the awful battles of the Civil War and

⁷⁰ John Woolfenden, *The California Sea Otter: Saved or Doomed?* (Pacific Grove: The Boxwood Press, 1985, rev. edn), 89.

meeting death, here on the great ranges hundreds of thousands of cattle were fighting a losing battle with Nature.”⁷¹

Both Francisco Bodilla and John Wilson died during the same period, although not from war wounds or starvation.⁷² Amongst an array of titles, the late Wilson bequeathed Rancho Los Osos to his son, John Wilson, and Pecho y Islay to his daughter, Ramona Hilliard (following her marriage to Frederick Hilliard). According to Harold Miossi, Wilson’s daughter probably held “permanent residency” at the Palace Hotel, San Francisco, during the period.⁷³ She presumably took little interest in her land inheritance. The young John Wilson lived in Europe.

Luigi Marre arrived in California in 1854 from Borzonasca, Genoa, aged 14. The young Italian spent three years at mining camps in Penitta, Amador County, then turned to storekeeping in Calveras. During the 1860s and 1870s, Marre traded in cattle, often driving herds from the Mexican border to be sold in San Francisco or Nevada. In 1879, he leased 3,800 acres of land on the Pecho Coast from Romana Hilliard. Wilson’s daughter granted Marre use of the coastline immediately south of Diablo Canyon. Two years later, Luigi married Angelina Marre, his cousin, and the couple moved into an adobe close to Pecho Creek which had probably been constructed during mission times and had supported Wilson’s ranch employees in

⁷¹ Morrison & Haydon, *History of San Luis Obispo County*, 72.

⁷² Bodilla, having sold the Pecho grant to Wilson in the 1840s, regularly returned to his old land to deal in stolen cattle. Vigilantes caught and hung him in 1859. Captain Wilson died in October 1861.

⁷³ Miossi, “Somnolent Cape,” 14.

previous years.⁷⁴ With the introduction of the Mexican Land Grants, the southerly tip of the Pecho Coast fell under the San Miguelto Rancho, which comprised 6,500 acres of land on the northern edge of San Luis Obispo Bay. Marre wisely purchased the grant in 1882. He bought up the Pecho lease ten years later.

Reverend Alden Bradford Spooner journeyed from Maine to California, finally settling in San Luis Obispo where he became the first Protestant minister in the County. He drowned off Morro Bay in 1877. His oldest son, Alden Spooner II, ran a livery stable in San Francisco, before returning to San Luis Obispo in the 1880s. In 1892, Spooner took out a lease on 6,500 acres of coastline north of Diablo Canyon, the portion of the Pecho y Islay lands unoccupied by Luigi Marre. He obtained the land from the Cowell family of San Francisco. Ramona Hilliard had died in 1886, and for a number of years official ownership of Pecho y Islay passed from one assignee to another, ending with the Cowells. In 1902, Spooner bought the lease. Three years later, he extended his property northwards by purchasing the Bernard Coll ranch, located on the coastal edge of the historic Rancho Canada de Los Osos land grant. The Pecho Coast had been split into two significant properties, the Spooner Ranch to the north of Diablo Canyon, and the Marre Ranch to the south.

The arrival of Marre and Spooner signalled a renewed interest in moulding the Pecho Coast to human design, following two decades of indifferent land management.⁷⁵

⁷⁴ The adobe is now in ruins. Krieger suggested its original purpose was a vista for the San Miguelto ranch: see Krieger, *San Luis Obispo County*, 57.

⁷⁵ The Montana de Oro State Park Prospectus (March 1968), 4, noted a period of “absentee and neglectful management” following the death of John Wilson.

Marre, treading a similar path to the late John Wilson, envisaged the land about him as cattle country. The hills and canyons that dominated his property appeared less than ideal for rearing bovines. Nonetheless, Marre fostered a successful ranching enterprise. According to Morrison, he not only “became one of the largest stockmen of central California as well as the wealthiest man in San Luis Obispo County,” but “was known, in fact, as the cattle king of the central coast section.”⁷⁶ Along with stocking the southern Pecho Coast with domestic animals, he also attempted agriculture. The sloping coastal terraces south of Diablo Canyon provided a degree of fertility and accessibility, and over several decades of ownership, the Marre family planted grain, beans, peas, and sugar beet. Marre lived for a time at the Pecho Adobe. However, following his purchase of Rancho San Miguelto in 1882, his interest gravitated southwards, past Diablo, and onto Avila Beach. As a fledgling port and tourist town, the resource potential of Avila far outshone that of nearby Diablo Canyon. Marre acquired the Ocean Hotel as part of the land deal. He renamed it ‘Hotel Marre,’ and brought in a friend, Antonia Gagliardo, to help with everyday running. During the 1880s, Marre entertained the first tourists to frequent San Luis Obispo Bay. Despite his enthusiasm for developments at Avila, Marre continued to ranch cattle on his Diablo lands. When Luigi died in February 1903, his sons took over the operation, founding the ‘Luigi Marre Land and Cattle Company.’

Spooner called his land venture El Pecho Ranch after the original Pecho y Islay grant. He built a simple cabin on the bluffs next to Buchon Landing (now Spooner’s Cove), north of Buchon Point, with fine ocean views. He quarried rock near the landing

⁷⁶ Morrison & Haydon, *History of San Luis Obispo County*, 213.

point to provide materials for a breakwater at Avila (then Port Harford). The subsequent cavern (or 'glory hole') dug through the cliff side provided Spooner with a loading chute for transporting goods onto docked vessels. Krieger described how "Spooner used the tunnel and trestle to load sacks of beans, wheat, barley and even live hogs into the holds of schooners which were safely tied by iron rings just off the base of the bluffs."⁷⁷ The San Luis Obispo *Morning Tribune* remarked upon this "new shipping point...of much importance to this neighborhood" in October 1892. The local newspaper described how a steamer "discharged a consignment of lumber," then "took on board 2500 sacks of beans and grain by means of a shoot...The Captain and pursuer said they were delighted with the harbor and thought it the prettiest natural one they had ever seen."⁷⁸ Enthused by the possibilities of ocean trade, Spooner expanded his output of dairy products. He dammed Islay Creek, using an elaborate scheme of trenches, pulleys and a waterwheel to power his milk house and increase butter production. He also tried his hand at grain. The *Morning Tribune* declared the first year of planting "a brilliant success...The crop averaged 2500 pounds [sic] to the acre."⁷⁹ He additionally kept around 500 cattle and a number of well-bred horses on the ranch. Spooner built his success on the Pecho Coast, taking full advantage of its coastal access, fine pastures and winding streams. The basic three-room cabin became a ten-room ranch house, a residential testament to his entrepreneurial talents. Annie Morrison presented Spooner as a man who "entered into the spirit of progress

⁷⁷ Dan Krieger, "Yesterday can almost be seen at Spooner's Cove," San Luis Obispo County *Telegram-Tribune*, 8 August 1992.

⁷⁸ "Pecho Landing" dated 9 October 1892, found in Wilmar N. Tognazzini, ed., '100 Years Ago': *Excerpts from the San Luis Obispo Morning Tribune, 1892*, 120, held by the San Luis Obispo Public Library.

⁷⁹ *Ibid.*, 120.

of the western country, has witnessed the development of the Pacific Coast country from Portland to San Diego, and has often had a part in the upward trend.”⁸⁰ Alden Spooner linked the remote Pecho lands to the wider forces sweeping California at the turn of the century.

In 1897, County supervisors travelled to the Pecho Coast to consider plans for a road linking the coastal ranches to Los Osos valley and regional infrastructure. The *Morning Tribune* recounted: “In the early morning hours when the first sunbeams were still lingering behind the Santa Lucia range the members bundled themselves into the Commercial hotel bus, and behind four prancing steeds driven by Fred Hazzard, sped away through the beautiful valley of the Osos.” The newspaper projected a romantic image of the Pecho Coast. An eccentric collection of characters involved in humble, earthly pursuits could be found on the California headland, including ‘Old John’ the fisherman, who had “dropped his hook for many years” at Lion Rock. Hazzard owned the ranch just north of Spooner, on the farthest edge of the Pecho Coast, close to Morro Bay. He expressed concern over the road passing through his property, and the collection of supervisors duly procrastinated. In comedic fashion, the *Tribune* writer reported: “The Pecho Road has long been a matter of consideration and it has been somewhat Hazzardous (sic) to go over it.”⁸¹

⁸⁰ Morrison & Haydon, *History of San Luis Obispo County*, 289.

⁸¹ “On the Hills of the Pecho,” originally published week beginning 6 April 1897, found in Wilmar Toganazzini, ed., *‘100 Years Ago’: Excerpts from the San Luis Obispo Morning Tribune, 1897*, 32.

Providing a state road through Diablo lands seemed a small-time, local, even personal, affair, rather than a matter of county prestige or corporate development. The landscape still appeared wild and remote, despite the inroads of 'progress' and civilisation fashioned by Marre, Spooner and Hazzard. However, all three men stamped their authority on the land, transforming portions of the coast into fields, pasture, even pig pens. In contrast to former Chumash residents of the Pecho Coast, late nineteenth-century settlers exercised little restraint when managing local habitat. Having imported the first Holt Caterpillar tractor to the County by way of his landing cove, Alden Spooner worked the landscape with bold, abrasive strokes. Steel machinery had replaced Chumash stone tools. Hazzard and Spooner planted eucalyptus trees on their properties. The Australian eucalyptus took root at the expense of other flora, monocultural groves replacing complex ecosystems. Californians planted them for quick timber, but the wood of the eucalyptus fell short of expectations. Several decades passed before horticulturists realised the long-term environmental damage. From the first bovine hooves and alien seeds to modern tractors and exotic plantings, the momentum of change had gathered speed on the Pecho Coast. At the turn of the century, Diablo no longer appeared the wild land of pre-colonial times. Rickety fences amongst overgrown bushes and cattle wandering Pecho bluffs indicated a pastoral or rancharo wildness. The noise of farm machinery heralded further transformations.

[6] The 'Devil-Fish' and Diablo Canyon

The publication of *Moby Dick* in 1851 coincided with clear signs of whaling excess in California waters. A fifty-year assault by international forces had rendered the right and sperm whales as rare and elusive as the mythic white whale hunted down by Captain Ahab. Herman Melville drew from his own experiences of the high seas to create *Moby Dick*, and the bestseller familiarised its readers with a vast, mysterious ocean wilderness. Explorers had once hoped the whale would lead them through uncharted seas to the North-West Passage.⁸² However, the mysticism and adventure disappeared in charted Pacific waters, perennially overpopulated with whaling vessels and under-populated with large marine mammals. In response to declining whale numbers, the industry shifted its attention to waters nearer the shore. From the 1850s, smaller boats, operating close to land, homed in on abundant (but less commercially valuable) California gray and humpbacks migrating up and down the west coast. San Luis fishermen used Point San Luis, the southerly tip of the Pecho Coast, as a base for whaling operations. The tiny shore and rocks offered a sheltered hauling site ideal for carcass trimming. Locals referred to the landing place as Whaler's Point. Close to Whaler's Point lay a small rocky mound just above the waterline, nicknamed 'Whaler's Island.' Whilst local hunters no longer committed themselves to long voyages across ocean waters, killing whales close to home still entailed considerable risk. Charles Scammon, who hunted gray whales at lagoons in Baja California during

⁸² "These things are reciprocal; the ball rebounds, only to bound forward again; for now in laying open the haunts of the whales, the whalers seem to have indirectly hit upon new clues to that same mystic North-West Passage," historical extract, unidentified origin, noted in the preface to the 1988 Newberry Library edition of Herman Melville, *Moby Dick* (Evanston: Northwestern University Press & The Newberry Library, 1988 [1851]), xxvii.

the nineteenth century, explained the popular 'Devil-Fish' tag as "significant of the danger incurred in the pursuit of the animal."⁸³ Scammon's 'Devil-Fish' (at least, the ones that avoided his whaling boat) migrated along the coast, passing close to Diablo, or Devil's, Canyon. There they met fishermen from Whaler's Point, armed with sharpened harpoons. Sometimes whales rocked hunting boats, or even sent Obispans to ocean bottoms. However, Scammon, in his keenness to stress the danger of the ocean beast, had ultimately forgotten the greater threat posed by the human hunter. During the 1870s, California's shore-whaling industry collapsed. Herds had been decimated, whilst the price for whale oil dropped in the face of cheaper petroleum products.

In the 1890s, San Luis County financed a breakwater extending southwards from Whaler's Point to protect vessels docked at Port Harford (now Port San Luis/Avila Beach) from adverse Pacific weather. John Harford's Chinese labourers had built a substantial wharf on the northern reaches of San Luis Obispo Bay in 1875, the wooden jetty marking the divide between the sandy shores of Avila Bay and the cliffs of the Pecho promontory. By 1883, the wharf reached over 3,000 feet long and 80 foot wide, and attracted numerous ships to the San Luis region. County officials invested \$300,000 in the construction of a breakwater to protect "the ample area for a great commerce" from "southwest storms and seas." Only the best local materials appeared sufficient for the job, with granite of "splendid quality" ordered to be

⁸³ See "Harpoons and Pens: Melville and Scammon," in Wayne Hanley, *Natural History in America: From Mark Catesby to Rachel Carson* (New York: Quadrangle & New York Times Book Co., 1977), 169.

quarried from nearby Morro Rock.⁸⁴ The *Morning Tribune* related how the “Stately Moro rock, knowing full well the great service she is performing in building the Port Harford breakwater, seems to watch westfully for the return of the rock rollers.”⁸⁵ The development of Port Harford augmented the hopes and ambitions of local business magnates. Luigi Marre operated his hotel at the entrance to Harford wharf. Marre fancied the Central Coast as a California trade centre, and fervently supported any moves to lure investment to the region. Despite the economic depression of the 1890s, he remained focused on an optimistic future for Port Harford. In February 1892, Marre wrote a letter to the *Morning Tribune* imploring citizens not to hold back development of a county-funded rail service linking the port with a main state-wide line:

My home is at Port Harford, on the fair bay of San Luis Obispo... While observing its placid surface and contemplating the great country naturally contributory to it, I have likened the scene to that of a strong man lying with his feet in the bay, his head pillowed on the Sierra Nevadas, his arms stretched out with Los Angeles sitting on one hand and San Francisco on the other, and the Southern Pacific railroad running across his breast. Thus he is bound and helpless. The body, the most important part, represents the region which we occupy and wish to arouse to the life and energy of its natural position.

At

⁸⁴ “The Breakwater,” *Morning Tribune*, week beg. 28 October 1891, reprinted in Wilmar Tagnazzini, ed., *‘100 Years Ago’: Excerpts from the San Luis Obispo Morning Tribune, 1891*, 138.

⁸⁵ *Morning Tribune*, week beg. 1 March 1892, reprinted in Tagnazzini, *‘100 Years’: Excerpts, 1892*, 34.

Port Harford is the gateway to commerce, to the great sea where all tracks are free, and to reach it no exorbitant exaction or tolls shall ever block the way.⁸⁶

Marre exaggerated Port Harford's significance to the rest of California. If Pacific waters could be considered awash with free trade, plenty of other ports along the California coast offered similar, if not superior, 'gateways of commerce.' Ultimately, such grand allusions smacked of fantasy. Marre's image of a California giant (of the *Homo sapien* rather than *Sequoia* variety), restricted in his movement by a lack of local money, resembled the classic scene from *Gulliver's Travels* (1726), in which wary, diminutive citizens of Lilliput tied down the 'Man Mountain' Lemuel Gulliver on his arrival to their island. Two decades on from Marre's letter, Avila did witness a golden age of industry, but driven by oil interests rather than the steam engine.

Breaking storms and laying tracks were not the only issues surrounding Port Harford in the 1890s. During the same time, citizens discussed the need for a lighthouse on the Pecho Coast. The United States Coast Survey of 1867 had first drawn attention to the rocks off Point San Luis, recommending that "in making the anchorage [at San Luis Bay] vessels should give this point a berth of a half a mile."⁸⁷ A lighthouse beacon could alert ships to potential danger, whilst inviting them to safely dock in San Luis Obispo Bay. In April 1888, the ocean steamer *Queen of the Pacific*, taking in water, struggled to find Port Harford during the night, and eventually sank. News of

⁸⁶ "A Delegate Speaks," *Morning Tribune*, week beg. 9 February 1892, Tagnazzini, '100 Years': *Excerpts*, 1892, 24. A narrow gauge Pacific Coast railway connected Port Harford with the local region, but Marre backed a county-funded rail link with the main Southern Pacific line.

⁸⁷ Extracts of the Coast Survey of 1852 and 1869 pepper Mrs. Yda Addis Storke's *A Memorial & Biographical History of the Counties of Santa Barbara, San Luis Obispo & Ventura, California*

the accident pressured Congress into providing \$50,000 for a lighthouse. A pre-fabricated redwood building travelled from Oakland to the chosen thirty-acre site, just north of Point San Luis. Construction workers struggled to procure a freshwater supply for the Pecho lighthouse and dwellings. After locating a suitable source at Pecho Creek, four miles from the lighthouse, twenty-seven men laid the necessary pipes and dug a reservoir. The *Morning Tribune* claimed that once completed “the lighthouse will then have a [water] supply greatly superior in quantity and quality to that of San Luis Obispo.”⁸⁸

The *Tribune* exaggerated the amount of freshwater on tap, but congratulations were in order. The Point San Luis Lighthouse began operation in June 1890. Unfortunately, passing vessels still managed to miss port. In July 1890, the local paper related the “great sadness in scores of drouthy admirers of Weiland’s beer...for by some blunder the shipment which should have been landed at Port Harford, was carried past, and left this city without its favorite beverage.”⁸⁹ The round-the-clock operation of Point San Luis Lighthouse required three keepers, each working an eight-hour shift. Their families lived out on the Pecho headland, in purpose-built houses next to the lighthouse. Surrounded by coastal shrub, oak woodland, and Pacific waters, the collection of buildings appeared dwarfed by their wild surroundings. The closest town, Avila, required a three-mile walk along the southern stretch of the headland,

(Chicago: The Lewis Publishing Company, 1891). References to Point San Luis can be found on pages 127 and 128.

⁸⁸ “Lighthouse Water Supply,” *Morning Tribune*, week beg. 24 June 1890, William Tagnazzini, ed., ‘100 Years’: *Excerpts from the San Luis Obispo Morning Tribune, 1890*, 134.

⁸⁹ “Point San Luis,” *Morning Tribune*, week beg. 15 July 1890, Tagnazzini, ‘100 Years’: *Excerpts, 1890*, 146.

and could not be seen until passing Whaler's Point. On stormy nights, lighthouse families probably felt as though they had been planted on a remote, rocky island adrift from civilisation, despite their mainland location.

One resident of the Pecho Coast who felt genuinely at home amongst the poison oak and shrubbery was Manuel Morales, commonly known as 'Cabazon.' Cabazon espoused a wild life appropriate to his surroundings, living off berries, roots and fish. He stayed in a cabin on the hillside overlooking Port Harford, presumably as an unofficial tenant on the Marre Ranch. Cabazon regularly sold abalone, along with other fish and animals, to the residents of Avila. Three abalone cost 25 cents. A local story claimed that he also "caught ample harvests of 'grasjopers' in his sombrero" doing "his best to rid the surrounding Marre Ranch of all such crop-devouring critters."⁹⁰ The eccentric wild-man of Pecho watched the significant changes at Avila from a relatively unaltered hillside, his small cabin the only human sign amongst the thick coastal scrub. Cabazon claimed Chumash lineage, and seemed uneasy with modern American life. He reputedly stopped Pacific Coast Railway crews from digging into Pecho cliffs during construction of a line into Harford Wharf, citing his concern for the graves of Native American ancestors.

[7] A 'piece of rough country'

J. Smeaton Chase travelled the California coastline on horseback during 1911. Despite being a relative newcomer to America (he emigrated from England in 1890),

⁹⁰ Janet Farris, "Cabazon: A Link to Avila's Past," *The Avila Pilot* (June 1992), 6.

Smeaton had become enraptured with the California of old. Chase interpreted his coastal journey as a last look at natural and human landscapes about to be swept away by a new century of development. Artist Carl Eytel accompanied Chase on the early part of his trip. The two men hoped,

to view at our leisure this country, once of such vast quiescence, now of such spectacular changes. Especially we wished we see what we could of its less commonplace aspects before they should have finally passed away: the older manner of life in the land; the ranch-houses of ante-Gringo days; the Franciscan Missions, relics of the era of the padre, and the don, the large, slow life of the sheep and cattle ranges, and whatever else we could find lying becalmed in the backwaters of the hurrying stream of Progress.⁹¹

Working his way northwards along the coast, Chase entered San Luis County, noting how “[I]t opened hopefully, with a rougher look, and I felt by many tokens that I was no longer in southern California.” He visited Nipomo, Arroyo Grande, and then Pismo Beach, taking an instant dislike to the “newly exploited beach resort. The place had no attractions for me.” From San Luis Obispo Bay, Chase looked north towards the Pecho headland, noting the end of sandy shores and the beginning of rocky cliffs. Comparing California’s geological forces with a gentleman coaxing his steed, Smeaton noted that “[F]rom this point northward the Coast Range pushes its spurs sharply into the waters of the Pacific, and the scenery becomes bolder and continuously attractive.” Entertained at Avila with California stories, Shakespeare,

⁹¹ J. Smeaton Chase, *California Coast Trails: A Horseback Ride from Mexico to Oregon* (Cambridge, Mass.: The Riverside Press, 1913), 2.

cigars and locally caught rabbit, Chase then considered his contour map which “showed an interesting piece of rough country lying near the coast, which would be missed if I took the direct road.”⁹²

The ‘piece of rough country’ was the Pecho Coast. Rather than approach the headland direct from Avila, Chase decided to travel north for a couple of miles before traversing the San Luis Range. He stayed the night with a rancher. The next morning, whilst searching for an appropriate place to cross the hills, Chase discovered a burned forest of knob-cone pine. Chase noted how “most of the old trees [knob-cone pine] were dead,” yet “around them flourishing squads of pinelings were growing. There were already bearing cones, as if Nature had hurried to forestall another fire, which, if it had come before the young trees bore their fruit, would have ended the succession.” Chase construed the recovery of the pines as “a vivid illustration of St. Paul’s eloquent argument for the resurrection.”⁹³ Divinity apparently lurked in the wilderness.

Chase encountered difficulties working his way westwards towards the Pecho bluffs. His horse, Chino, nearly lost his footing on the hill ridges. Smeaton appeared threatened by the wildness and remoteness of the region. He decided to stay at a cabin that “was deserted and had fallen into the quick decay that overtakes man’s abandoned outposts in the wilderness.” That a family had suffered “defeat” before nature made the rundown cabin “far from...a cheerful spot,” although “supper and a rousing pine-

⁹² Ibid., 140, 142-3, 147.

⁹³ Ibid., 148.

wood fire soon put me in happy mood.” The following day, Chase encountered a rattlesnake in Diablo Creek. His journal related: “We had a lively engagement for a minute or two, but as I was not wearing my revolver and he was too discreet to come into the open, I had the mortification of seeing him slip into a cranny where neither shot, stick, nor stone could reach him.” Smeaton usually killed any rattlesnake he came across, and regretted missing the “evil-doer” at Diablo.⁹⁴ Chase felt none of the remorse of his contemporary, John Muir, who on killing a rattler, decried “the killing business” as a “degrading” endeavour which pushed him “farther from heaven.”⁹⁵ Smeaton noted Muir’s anti-hunting eulogy, but preferred the advice given by St. Paul, who, upon being attacked by a serpent “shook off the beast into the fire.” Whilst Chase interpreted the rejuvenation of local pine (following fire) as proof of biblical rebirth, he evidently took the exploits of one apostle in Acts 28:5 as a theological rationale for slaughter. Despite expressing distaste for development along the California coast, Chase brought a little of the pioneer spirit with him on his travels, the explorer’s discomfort in the Diablo wilds and excuses for killing being reminiscent of a typical settler mentality. After a ‘debate’ with his horse over the arduousness of the journey and the accuracy of “Uncle Sam’s map,” Chase eventually found an exit from Diablo Creek, and headed northwards to Morro Bay.⁹⁶

⁹⁴ Ibid., 150-1, 113.

⁹⁵ John Muir, *Our National Parks* (Madison: University of Wisconsin Press, 1981 [1901]), 57-8. Chase quoted Muir’s testament in *California Coast Trails*, 113.

⁹⁶ Chase, *California Coast Trails*, 151.

The First World War offered farmers across the United States the opportunity to make a killing on their agricultural commodities. Prices soared on the dried navy bean, an ideal emergency food with no need for refrigeration. Crops brought in as much as \$10-15,000 per harvest. The 'bean boom' hit San Luis Obispo County, with local farmers temporarily abandoning their traditional harvests in preference for the money-spinning crop. During the 1900s, Spooner and Marre began planting barley and pink beans on their ranches. In response to wartime prices, the two men increased their crop beyond fertile coastal terraces onto land unfit for sustainable agriculture. Harold Miossi, writing in 1973, described how "beans were farmed even on the steeper hillsides where the plow lines are still visible."⁹⁷ Fleeting prosperity left marks on the land. Meanwhile, concerns grew over the vulnerability of Port San Luis to wartime attack. US Infantry defended the valuable oil supplies and shipment operations of Avila. Coast Artillery units occupied Diablo lands, transforming the headland into a strategic military point. Military officials considered the Pecho Coast vulnerable to enemy landings. Soldiers conjured images of Axis invaders wreaking havoc at Diablo, a foreign foe far more formidable than the native rattler encountered by Chase. Despite its distance from military conflict, the Pecho Coast was temporarily enlisted in the United States' global war machine. Generals plotting total war transformed even the remotest, wildest and least significant places into hypothetical battlefields, sometimes actual war zones. Fortunately for Diablo Canyon, the front-line fell elsewhere.

During the 1900s and 1910s, Alden Spooner remained eminently in command of his entrepreneurial forces and ranching business. Local historian Annie Morrison, writing in 1917, complemented Spooner for his prodigious collection of hogs and cattle, including “some of the finest Holstein cattle to be seen in the county.” Morrison applauded the Spooner ranch, “modern in equipment” with “the machinery operated by steam power.”⁹⁸ In keeping with his fondness for machines, Spooner also headed the local Overland Automobile Agency. On the Pecho Coast, Spooner had turned a wild plot of land into a successful dairy, cattle and agricultural ranch. His enthusiasm for working the soil pastiched the Jeffersonian pastoral ideal, and genuine dedication to toiling the land had rewarded Spooner with financial profit and local respect. Behind his success lay an exploited coastline of diverted streams, quarried rocks, cut timber and overgrazed grasses. The ecological legacy of Spooner’s achievements passed unnoticed for the time being. He died in 1920, leaving the ranch to his three sons.

During the conservative 1920s, national prohibition reached as far as California, home of free thinkers and wine-drinkers, progressive circles and well-established vineyards. The outlawing of the sale, manufacture and transportation of alcohol forced drinking under the table, and procuring booze became a clandestine act. Smuggling returned to the Pecho Coast. The remote coves attracted shady importers of Canadian liquor during the 1920s and early 1930s. Harold Miossi described how Pecho smugglers

⁹⁷ Miossi, “Somnolent Cape,” 24.

⁹⁸ Morrison & Haydon, *History of San Luis Obispo County*, 288-9.

disguised their alcoholic goods by stashing bottles in “camouflaged produce trucks piled high with hampers of peas, and then routed to metropolitan markets.” Intoxicating tales of “‘illegal entry’ affairs and their subsequent prosecution” apparently “enlivened reporting during the otherwise dull twenties and thirties.”⁹⁹

The Great Depression stretched county resources and tested the resolve of struggling Obispans. Poor Portuguese families living in the Irish Hills behind Diablo relied on a local grocer for provisions, who in turn required a loan from the mayor to keep his shop running. Both Spooner and Marre Ranches survived the depression, although scant information remains concerning how Pecho residents endured these difficult years. With the high prices of the Bean Boom a distant memory, Japanese tenant farmers working at the Spooner Ranch eked out an existence cultivating peas on coastal terraces.

The surprise attack on Pearl Harbor in December 1941 spawned a backlash against Japanese-Americans across America. “Free shaves for Japs,” advertised one barbershop in California, with the small print accepting no responsibility for “accidents.”¹⁰⁰ The Japanese farmers at Diablo found themselves the victims of wartime prejudice, removed by the government to a War Relocation Camp. Elliot Curry, in an article on wartime San Luis Obispo, described the “general fear and suspicion that the Japanese might have saboteurs or spies along the coast, ready to direct an attack on California.” The Pecho Coast apparently represented “[O]ne of the

⁹⁹ Miossi, “Somnolent Cape,” 26.

¹⁰⁰ George Brown Tindall & David Emory Shi, *America: A Narrative History* (New York: Norton, 1997, 4th edn), 917.

most likely spots for an enemy hideout” in the county, and 600 cavalymen searched the Diablo lands for lurking foes. Whilst the wild terrain supposedly offered ideal protection for invaders, Curry related how “[N]either riders nor horses were ready for the oak and chaparral covered mountains and deep cut canyons.” The two cavalry units used at Diablo were mechanised soon after.¹⁰¹

In 1942, the Spooners sold their 9,000-acre ranch to Oscar and Ruby Field for \$250,000. The Fields settled down on the Pecho Coast, establishing a ranch near Point Buchon, along with “a comfortable weekend retreat” amongst “a high oak grove” in “direct line of sight to Lion Rock off Diablo Cove.”¹⁰² In 1954, they sold the northernmost half of their land (4,500 acres) to Irene Starkey McAllister. She named her new entitlement Montana de Oro, or Mountain of Gold. The Marre Land and Cattle Company meanwhile continued to run the southern Pecho Coast, apart from the military interruptions. Wartime anxieties fuelled the return of the Coast Artillery, along with cavalry units, to Diablo. Between 90 and 300 troops reinforced the Coast Guard at Point San Luis Lighthouse following Pearl Harbor. San Luis Obispo County resembled one large military camp during World War Two. 436,000 men received combat training at Camp Roberts in the far north. Conscripts were also put through their paces at Camp San Luis, in the Chorro Valley. An Army Air Corps field at Paso Robles, naval station at Morro Bay, and Camp Cook (later Vandenberg Air Force Base) added to the martial contingent. The military presence alerted locals

¹⁰¹ Elliot Curry, “Cavalry in the San Luis Range,” San Luis Obispo County *Telegram-Tribune*, 7 December 1968, reprinted in *La Vista*, 4/2 (1981), 71.

¹⁰² Miossi, “Somnolent Cape,” 27.

to the changing shape and fortunes of their county. Since the 1880s, the “sleepy little Spanish town” had gradually been incorporated into mainstream California, awakened by the sound of road and rail traffic to the developmental opportunities of the Golden State. A siren on top of San Luis Obispo’s City Hall announced the end of World War Two “with a mighty series of blasts,” echoing the success of American atomic bombs dropped on Japan. The ‘all-purpose’ siren sounded an American victory tied to the dawning nuclear age. In subsequent years, a sanguine group of atomic industrialists would focus their attentions on Diablo Canyon. As Elliot Curry surmised, “it was plain to see that San Luis Obispo would never be the same again.”¹⁰³

¹⁰³ Elliot Curry, “How News of Peace Came to SLO Town,” *Telegram-Tribune*, 19 July 1978, reprinted in *La Vista*, 4/2 (1981), 71. For wider analysis regarding the impact of World War Two on the American West, see Gerald Nash, *The American West Transformed: Impact of the Second World War* (Bloomington: Indiana University Press, 1985), and White, “It’s Your Misfortune...”, 496-533.

Chapter Three

From Cattle Ranch to Atomic Homestead (1965-1970)

[1] Diablo Canyon Enters the Nuclear Age

At an isolated location on the San Luis Obispo County shoreline, about 200 miles south of San Francisco, PG&E is proposing to build an essential power plant. This is Diablo Canyon - situated in an area of private ranchland, where hardy Mexican cattle graze on the short native grasses.

PG&E Life (June 1967)¹

In the 1960s Diablo Canyon was passed from one pioneer to another. The *Buttonwillow Times* commented that for “many years” the Marre family had been “pioneers in San Luis Obispo County.”² In 1966, 600 acres of their land was leased to a California private utility by the name of Pacific Gas and Electric (PG&E). It, too, had a frontier past, as a combination of “rough-and-ready pioneer gas and electric companies” with beginnings in 1852.³ By the 1960s PG&E had become the state’s main energy provider and a nuclear trailblazer. Diablo Canyon appeared an ideal place to venture further into atomic power.

¹ “Special Report on Diablo Canyon,” *PG&E Life*, X/6 (June 1967), 2. A copy can be found in the Sierra Club Collection (hereafter SCC) 71/103c, box 113, file 40, Bancroft Library, University of California, Berkeley.

² *Buttonwillow Times*, 6 October 1966, SCC 71/295c, box 18, file 29.

³ “The PG&E Story,” presently at PG&E’s internet website (<http://www.pge.com>), based largely upon Charles Coleman, *P.G.&E. of California: The Centennial Story of Pacific Gas and Electric Company, 1852-1952* (McGraw-Hill, 1952).

In 1953, President Eisenhower had offered the nuclear dream not just to California, but to the whole world in his 'Atoms for Peace' speech to the United Nations. In 1957, Eisenhower started up the first American commercial nuclear power plant at Shippingport, Pennsylvania, using an appropriate 'magic wand' for televisual impact. During the same year, Pacific Gas joined the atomic era, no doubt attracted by government subsidies and the idea of limitless energy translating into unlimited profit. Together with General Electric, PG&E constructed what it called a "pioneer plant," Vallecitos, in Livermore Valley, California, not far from the nuclear weapons research being conducted at Lawrence Livermore National Laboratory.⁴ Throughout the 1960s PG&E promised a new era on account of its "fuel of the future."⁵ The company bought heavily into the nuclear dream, and encouraged its investors to do likewise. Uranium had replaced gold as the new ore of optimism for the West.

PG&E advertised for investors to 'Join the Second Gold Rush.'⁶ The 'rush' was to supply enough atomic 'gold' to fuel California's post-1945 boom in population and economic development. Predictions that demand might outstrip supply, that "[T]he appetite for energy in home, factory and field has grown even faster than the population," brought a sense of urgency to energy planning.⁷ PG&E's conviction that "[A] growing California has growing needs" propelled plans to double the company's

⁴ PG&E's description of Vallecitos as a "pioneer plant" taken from "Special Report on Diablo Canyon," 12.

⁵ "Special Report on Diablo Canyon," 13.

⁶ *Sierra Club Bulletin*, 54/2 (February 1969), 7, SCC 71/103c, box 117, file 33.

⁷ PG&E, "Background Information for the Press" (February 1967), 1, SCC 71/295c, box 81, file 19.

electrical capacity every ten years.⁸ The company responded with a “mammoth-scale state wide PG&E expansion program” that promoted the use of nuclear power.⁹ The atom seemed ideal for a state with boundless possibilities but restricted energy resources. As Californians were taking to futuristic electrical kitchens, introducing an energy source to match appeared symbolic of Golden State progress. Only the question of suitable land remained.

PG&E seemed particular adept at acquiring sites of natural beauty for power plant construction. The list included Morro Bay, next to a volcanic peak, and Moss Landing, an attractive coastal spot. PG&E spent approximately \$4 million between 1958 and 1964 on its plans for a nuclear reactor at Bodega Head, fifty miles north of San Francisco. At the same time that Alfred Hitchcock filmed *The Birds* (1963) at Bodega, residents expressed concern over a nuclear rather than a ‘natural’ threat.¹⁰ A campaign was launched against PG&E under the leadership of local citizen David Pesonen. The outcome of the controversy seemed uncertain until a geologist hired by Pesonen, Pierre Saint-Amand, discovered that the San Andreas Fault ran next to the site of the proposed reactor. PG&E was forced to withdraw its project. In 1963, the utility purchased from Union Oil the Nipomo Dunes, representing 1,100 acres of coastal land, south of San Luis Obispo, and part of the larger Santa Maria Dunes region. PG&E’s purchase was based upon the proviso of constructing a line of

⁸ “Special Report on Diablo Canyon,” 10.

⁹ Anon., “Information Sheet on Nuclear Reactors” (March 1963), 1, SCC 71/103c, box 78, file 13.

¹⁰ Alfred Hitchcock’s movie *The Birds* (1963) is hardly an accurate interpretation of natural bird behaviour.

nuclear power plants to serve the south coastal area.¹¹ The local newspaper, the San Luis Obispo County *Telegram-Tribune*, interpreted five reactors as a lucky number, hoping that, “[W]hen the five projects are completed, San Luis Obispo County will be number one ‘power county’ in the state.”¹² However, Nipomo had other admirers who preferred a more benign, recreational purpose for the sand dunes. Local conservationists campaigned for the picturesque site to become a state park rather than a nuclear park. Encouraged by local members, the Sierra Club, a leading national conservation group, took an interest in the plight of the Dunes, and officials recommended the preservation of Nipomo in June 1963.¹³

Just as the situation over Nipomo seemed to be heading towards what the local press thought would be ‘a long hard battle,’ or “another Bodega Head,” confrontation was averted by a surge in diplomacy.¹⁴ PG&E opened a dialogue with conservationists. The company met with Kathy Jackson, a local Sierran, Club directors Richard

¹¹ “Background Information for the Press,” 3.

¹² Comments by the San Luis Obispo County *Telegram-Tribune*, 27 January 1963, highlighted in “Information Sheet on Nuclear Reactors,” 1.

¹³ The Sierra Club had been established in 1892 partly in response to the encroachment of development on remaining wilderness areas in the Sierra Nevada Mountains of California. The twenty-seven founding members aimed to encourage recreation in the mountains, generate scientific information about the area’s worth, and do what they could to protect the region. John Muir, naturalist, writer and co-founder, hoped “we will be able to do something for wilderness and make the mountains glad.” It was not long before the Sierra Club had a fight on its hands with the proposed damming of Hetchy Hetchy Valley, in Yosemite National Park. The Club lost its battle in 1913, and Muir died the following year, no doubt still hurting over the loss. The recreational side of the Club dominated from that point, and increasingly ‘High Trips’ to the Sierra Nevada came to symbolise the Club’s identity as a hiking group. Nonetheless, during the 1950s, members such as Richard Leonard and David Brower began changing the focus of the organisation. Entering the 1960s, the Sierra Club was gaining members, increasing in status, and taking on a far more ambitious role than ever before.

¹⁴ *Paso Robles Press*, 11 February 1965, predicted a conservation fight ahead. In a letter to David Brower (March 6, 1963), Sierra Club member Frederick Eissler suggested, “[T]here is every reason to believe that the Nipomo Dunes situation is another Bodega Head,” SCC 71/103c, box 78, file 13.

Leonard and Will Siri, and Leonard's wife, Doris, who represented Conservation Associates, a small foundation which mediated between industrialists and conservationists. Both sides courted each other. Whilst Jackson took PG&E on a nature trail across the Dunes to win them over, PG&E returned the favour by giving a nuclear power plant tour. PG&E officials agreed to consider alternatives to construction at Nipomo. After rejecting several locations including Morro Bay and Wild Cherry Canyon (also part of the Marre property), the utility settled on Diablo Canyon as a suitable site. In May 1966, the Sierra Club Board of Directors recommended that the Club consider Diablo Canyon "a satisfactory alternative site" to the Nipomo Dunes in order for PG&E to release the latter property for state park purchase.¹⁵ PG&E emerged as a veritable ally of conservation, and duly pledged to transfer the Dunes to state park lands.

In San Luis Obispo County, most locals welcomed PG&E's plans for a nuclear plant at Diablo Canyon. In Walt Disney's promotional cartoon, *Our Friend the Atom* (1956), a fisherman discovered an atomic vessel with its own magical genie. The nuclear genie granted humanity 'power' (predictably in the form of nuclear energy), 'food and health' (courtesy of radioisotopes and research) and 'peace.'¹⁶ The Diablo genie promised gifts of tax revenue, jobs, and new schools for the San Luis Obispo community. Pacific Gas claimed that an atomic plant was unrivalled in terms of economics, environmental protection, human safety and aesthetics. The company's

¹⁵ Board of Directors: Minutes of the Annual Organisation (7-8 May 1966), 9, SCC 71/103c, box 4, file 5.

¹⁶ Heinz Haber, *The Walt Disney Story of Our Friend the Atom* (New York: Golden Press, 1956), 134, 136, 137-59.

predictions of a \$150 million price tag, and “electricity at a lower cost than any post-war steam or hydro plant on the PG&E system” went unchallenged.¹⁷ PG&E also declared that the “[E]nvironment is our concern”, demonstrated by photographs contrasting ‘clean’ Vallecitos to the smoke and smog of factories.¹⁸ Few people appeared interested in the negative effects of a nuclear project on Diablo’s landscape. The utility claimed “widespread” support for Diablo nuclear power plant, not only from the San Luis community but state-wide too.¹⁹ *PG&E Progress* magazine noted that “the project” was “expected to be another landmark in the economical generation of electric energy.”²⁰

[2] The Sierra Club Debate: Seeds of Doubt and Dissension

Whilst PG&E moved forward with its plans for Diablo, all was not well in the Sierra Club. Club directors had accepted the sacrifice of Diablo Canyon as a means to protect the ineffable qualities of the Nipomo Dunes. With attentions focused on the plight of the Dunes, few concerned themselves with the fate of Diablo Canyon. Diablo was simply presumed to be of little interest to conservationists. In their desire to rush through a deal with PG&E, Sierra directors preferred to label Diablo worthless, and not dwell upon its true features. Those who vouched for Diablo having “no special merit” included Kathy Jackson, with her eyes clearly focused upon the

¹⁷ “Background Information for the Press,” 10.

¹⁸ “Special Report on Diablo Canyon,” 6.

¹⁹ *Ibid.*, 22.

²⁰ “Groundwork for an Atomic Plant,” *PG&E Progress* (January 1967), 4, SCC 71/295c, box 18, file 29.

natural worth of Nipomo rather than Diablo.²¹ Only two directors at the most knew of the Canyon, whilst none had experienced that section of coastline for any length of time.²² However, there were signs of doubt and dissension at the board meeting. Director Fred Eissler disagreed with the callous assessment of Diablo Canyon. Club minutes further related that “Executive Director Brower was disturbed by the speed with which the latter [Diablo issue] was brought before the Board without adequate study and without more people having had a chance to be aware of the importance of the terrain.”²³

Director Martin Litton, who missed the May meeting, was angered to find on his return to California that a land deal had passed. Litton had seen the Pecho Coast, and immediately set about challenging the Board’s decision. He sent a letter to the President of PG&E, Shermer Sibley, claiming that the Club vote had been “fraudulently obtained” (referring to descriptions at the meeting of Diablo as a ‘treeless slot’), and indicated that the issue was far from over.²⁴ He also requested of

²¹ Board of Directors: Minutes of the Annual Organisation (7-8 May 1966), 8.

²² Elizabeth B. Barrett to Dick Sill, 7 June 1967, SCC 71/289c, box 40, file 15. Hugh Nash argued “that no Director present at the May 1966 meeting professed any familiarity with the Diablo area” in response to George Marshall’s contention that two Directors knew the region (Marshall offered such comments in his rewrite of the *Sierra Club Bulletin* (February 1967) editorial – see page 94). Hugh Nash to David Brower, “Diablo Canyon Issue of Bulletin,” 11 March 1967, SCC 71/289c, box 40, file 15.

²³ Board of Directors: Minutes of the Annual Organisation (7-8 May 1966), 8. The lack of first-hand knowledge of Diablo angered the Club rank and file. Realising the shortage of Club reports on Diablo, one member accused Kathy Jackson and Will Siri of “bulling through a vote before they or the Club has done a comprehensive study on the area.” See Mrs. L. E. Fowler, of Santa Barbara, to David Brower, 9 February 1967, SCC 71/295c, box 18, file 26. Another suggested that the Canyon should not be sacrificed, as members did not know what was at stake: Mrs. Frederick Golding, of Colorado, to Sierra Board, 22 March 1967, SCC 71/103c, box 113, file 38.

²⁴ A copy of the original letter can be found in a communication between George Marshall and Martin Litton, 25 June 1966, SCC 71/103c, box 110, file 1. Marshall called the letter “outrageous” and a work that “undermines the Sierra Club.” Litton defended his actions in a letter to the Board of Directors, 9 September 1966, SCC 71/103c, box 110, file 1.

President Sibley: “I hope you will not consider this matter settled until you have personally watched the wonderful pageantry of marine wildlife below the low bluffs of the proposed site and have walked into and through the exquisite woodland of Diablo Canyon itself.”²⁵ With the aid of his prodigious camera skills and vociferous campaigning, Litton hoped to transform Diablo from an unknown place to one valued for its natural worth. He declared: “If the people of all the United States had an opportunity to walk through this canyon I wonder what they would say about this [nuclear] plant.”²⁶ Diablo Canyon was about to be thrust into the public limelight. PG&E had failed to recognise that the remote, uninhabited, and untouched qualities of Diablo made it an ideal site not just for a nuclear plant, but for a nature park. Diablo had attracted both nuclearists and naturalists.

By early 1967, two sides had emerged within the Sierra Club. Leonard, Siri and Ansel Adams represented the key proponents of the deal, whilst Brower, Litton and Eissler had become its leading challengers. The save-Diablo lobby wanted both Nipomo and Diablo protected from development, and offered the southern Pecho Coast as “the kind of remote, unspoiled, essentially natural terrain that the club has normally tried hard to preserve for the enjoyment of future generations.”²⁷ Pro-dealers responded by lauding the unique splendours of Nipomo over the ‘typical’ canyons of the Pecho Coast. One Sierran reminded his colleagues: “The importance of saving the

²⁵ Martin Litton to Shermer Sibley, 13 June 1966, SCC 71/103c, box 110, file 1.

²⁶ Litton quoted in *Herald Recorder* (Arroyo Grande), 8 February 1968, SCC 71/103c, box 117, file 33.

²⁷ “The Diablo Canyon Area: *California’s Last Unspoiled Pastoral Coastland*,” signed by David Brower, Polly Dyer, Jules Eichorn, Fred Eissler, Martin Litton, Daniel Luten, David Pesonen, Eliot Porter, & Georg Treichel, *Sierra Club Bulletin*, 52/2 (February 1967), 7, author’s personal copy.

dunes was and is uppermost. Diablo Canyon is not unique to the point that no substitutions can be had.”²⁸ Newsletters and articles during 1966 and 1967 usually described the Dunes as ‘rare’ and ‘exceptional’, whilst Diablo’s nature was derided as ‘common’ and ‘barren.’²⁹ It was all too easy to envisage Nipomo as the nature park and Diablo as the nuclear construction site.

At a board meeting in January 1967, the save-Diablo group brought forward a petition for the Club membership to vote on the issue, with opposing arguments to be presented in the February edition of the *Sierra Club Bulletin*. The wording of the petition and the proposed contents of the Bulletin were fiercely debated. In the final version of the *Bulletin*, Siri and Adams asserted that “Diablo Canyon was prophetically named. It grew as a contentious issue out of the moving sands and rare flora of the Nipomo Dunes to sow doubt and dissension.”³⁰ Diablo Canyon was cast as the serpent in the Garden (or Dunes) of Eden, a malignant force luring conservationists from their true task.³¹ In the April referendum, members were presented with the choice to reaffirm or reject board policy concerning Nipomo Dunes and Diablo Canyon.

²⁸ James W. Clark, of Porterville, to Sierra Club, 15 February 1967, SCC 71/295c, box 18, file 26.

²⁹ For example, Richard Leonard to Shermer Sibley, President of PG&E, 4 July 1966, mentioned all four phrases noted in main text, SCC 71/295c, box 81, file 18.

³⁰ William Siri and Ansel Adams, “In Defense of a Victory: The Nipomo Dunes,” *Sierra Club Bulletin* (February 1967), 4.

³¹ In contrast, a walk along the sand dunes of Nipomo proffered a far greater spiritual experience. Kathleen Goddard-Jones (formerly Jackson) identified Nipomo as “a spiritual place” that

[3] Diablo's Natural Worth

In order to compete with the natural charms of Nipomo, the save-Diablo lobby presented the Pecho Coast as an equally alluring landscape. Diablo, with its tall trees, rugged formations, 'sheer cliffs and waterfalls,' fast became a place of monumental scenery.³² Eissler promoted Diablo Canyon as "the region's geographical and scenic climax" with "the embayment at Diablo Canyon ...the largest most impressive along this Point Buchon coast."³³ Litton claimed the coastal live oaks came close to world record size, with one specimen's lower branches spreading out 123 feet, another roughly 129 feet.³⁴ He wrote to Stewart Udall, Secretary of the Interior, over the potential loss of Diablo and its record-breaking trees.³⁵ Photographs of the Canyon focused upon complex spider webs of oak branches, winding around each other in intricate patterns. The pictures relayed an alternative form of natural beauty to that of Nipomo's stark sand shapes. Diablo's oaks were all the more impressive given the opposition's contention of a 'treeless slot' at the original board meeting. Thomas Jukes attempted to undermine Diablo's new found icon (and those members in the Sierra Club's Atlantic Chapter who believed in it) by insisting that "[H]ills far away look green; from New York, 3,000 miles away, the vision of a coast live oak in Diablo

she hoped to protect. "The Dunes offer tranquility for the human spirit" was her personal banner. Interview with Kathleen Goddard-Jones, Arroyo Grande, 20 August 1997.

³² For the concept of scenic monumentalism, see Alfred Runte, *National Parks: The American Experience* (Lincoln: University of Nebraska Press, 1979). Runte described the "sheer cliffs and waterfalls of Yosemite Valley" as the epitome of 'monumentalism,' plate following page 16.

³³ Frederick Eissler to George Marshall, David Brower & Michael McCloskey, 20 June 1966, SCC 71/103c, box 110, file 1.

³⁴ Martin Litton to Hugh Nash, 25 July 1966, SCC 71/103c, box 110, file 1.

³⁵ Martin Litton to Stewart Udall, 13 November 1967, SCC 71/295c, box 87, file 28.

Canyon assumes the proportions of a giant redwood.”³⁶ Pro-dealers even claimed that the trees were dying.³⁷

Reflecting the Club’s preference for natural areas unspoilt by development, Diablo was duly offered as a pristine wild landscape. One member suggested: “The Diablo Canyon area is of finer value than the Nipomo Dunes area since it is roadless and not near other municipal areas and industrial plants.”³⁸ Whilst Diablo featured a single dirt track and was surrounded by wild land, Nipomo suffered a highway close-by and an oil refinery in full view.³⁹ The *Star News* reported that, “[C]onservationists do not want the site here because the area is unspoiled. The sea life, the animal life, the plant life are untouched.”⁴⁰ Looking back on the issue, Club member Stewart Ogilvy remembered Diablo as a ‘totally wild’ place.⁴¹ Eissler’s own perception of Diablo was of a “landscape made by the forces of nature, by the Creator. It is not landscape altered or created by man with his buildings and highways and his artificially designed and controlled plantings...Here at Diablo is Californian landscape virtually

³⁶ Thomas Jukes (untitled, undated) in Ansel Adams collection of Club items, SCC 71/295c, box 1, file 13.

³⁷ *Grover City* (CA Press), 8 February 1968, SCC 71/103c, box 117, file 33.

³⁸ Harry Purlam, Modesto, to Sierra Club, 10 April 1967, SCC 71/103c, box 113, file 39.

³⁹ Nonetheless, the majority of save-*Diablo* conservationists felt that saving the Dunes represented a valid conservation goal. Litton and Eissler both campaigned on behalf of Nipomo prior to the *Diablo* deal. They wanted both places saved rather than desecrated, by word or bulldozer.

⁴⁰ *Star News* (Pasadena), 6 May 1968, SCC 71/103c, box 117, file 33.

⁴¹ Stewart Ogilvy, “Stewart M. Ogilvy Memoir: Oral History Transcript,” 17, SCC 79/10z.

the way it was originally created. In a real sense it is God's country."⁴² Pro-dealers vehemently argued against moves to portray Diablo Canyon as virgin wilderness. They drew attention to the region's years of ranching history. Doris Leonard pointed out "places badly eroded from over grazing" in the Canyon itself.⁴³ Jackson resiliently argued that "Diablo Canyon has not been wilderness since 1832. It is an overgrazed oak woodland and chaparral canyon."⁴⁴ As for claims of a roadless sanctuary, Diablo may not have had Highway One, but "little mention is made of the good dirt road which runs the 3-mile length of this obviously overgrazed 'wilderness' canyon; and no listing of the buildings existing at the end of this road: a substantial padlocked tool shed and a privy."⁴⁵ To pro-dealers, Diablo had already been spoiled, and it did not matter if a tool shed and a privy were replaced by two nuclear reactors and a turbine building.

Defenders of Diablo nonetheless highlighted the lack of rail or road damage to the region as unrivalled. By the 1960s, the California coast had become a symbol of the recreational spirit, a vision that accorded a dominant position to the automobile. California's scenic coastal drive, several hundred miles long, marked most of the coastline. Pecho Coast proved a rare exception. Highway planners had chosen a route behind the San Luis Range, the hills providing Pecho with a natural defence

⁴² "Testimony of Frederick Eissler Before the California Public Utility Commission in the Diablo Canyon Case," (May 1967), 8-9, SCC 71/103c, box 113, file 39. Litton was more reserved over presenting Diablo as pristine wilderness, preferring 'wildness' as a description.

⁴³ Doris Leonard to George Marshall, 19 August 1966, SCC 71/295c, box 81, file 18.

⁴⁴ Kathy Jackson, "Correction: John Muir Would Vote No," February 1969, SCC 71/103c, box 123, file 11.

⁴⁵ Ibid.

from the highway.⁴⁶ Diablo's defenders were keen to promote the Canyon as the only place in coastal California south of Humboldt County untouched by roads. Given the ubiquity of the freeway in American culture, the southern Pecho Coast seemed especially remote and wild. The Diablo area was declared "the only extensive coastland still unmarred by highway or railroad rights of way in 600 miles of shoreline between the Mexican border and Humboldt County."⁴⁷ A draft Sierra Club resolution suggested: "The area is indeed of scenic importance to the state and, in view of rapid encroachment of development of seacoast, to the nation as a whole."⁴⁸ Diablo's importance was being defined by the loss of similar coast to human activity.

The quarterly conservation journal, *Cry California*, carried an article detailing the dangers facing the California coastline. In "Life and Death along the California Coast," Vladimir and Nada Kovalik contrasted an elegant photograph of the Nipomo Dunes as "the living coast" with a picture of Huntington Beach, its 'nodding donkey' of the oil variety and ugly telegraph poles symbolising "the dead coast."⁴⁹ The tangible effects of environmental ignorance could be found all along the California coastline, from southern oil refining to northern logging. Litton drew attention to Raymond Dasmann's warning in his book *The Destruction of California* (1966), and

⁴⁶ 'Roadlessness' also jeopardised the fate of Diablo. Litton noted the sad irony in road access promoting public awareness. Without highways passing close to Diablo, nobody managed to see (or care) for the Pecho Coast. Interview with Martin Litton, Portola Valley, 25 July, 1997.

⁴⁷ "The Diablo Canyon Area...," *Sierra Club Bulletin* (February 1967). The *San Francisco Chronicle* (12 February 1967) similarly described the Pecho headland as "the last long stretch of the Californian coast - south of Mendocino county - unmarred by highways, railroads, or any other form of development," SCC 71/289c, box 40, file 16.

⁴⁸ Draft [resolution] for Sierra Club, 7 January 1967, SCC 71/295c, box 18, file 25.

⁴⁹ Vladimir and Nada Kovalik, "Life and Death Along the California Coast," *Cry California: The Journal of California Tomorrow*, 2/4 (Fall 1967), 16-7.

applied it to Diablo as a case study: "In *The Destruction of California*, Ray Dasmann says the way to stop 'growth' is not to prepare for it. It is a sad mistake to believe that PG&E's ambition must be accommodated by the Sierra Club, when in our hearts we know that it can only result in the destruction of what we hold dear."⁵⁰ The largest live oak giving way to a nuclear switchyard appeared just one example of greed outweighing conscience. The Canyon represented the once typical California coastline, that by the 1960s had mostly been relinquished to industry and capital.⁵¹ Diablo's defenders suggested its representative character deserved protection just as much as the unique dunes of Nipomo. Representative landscape was arguably as important as monumental scenery. Diablo symbolised a last chance to save a quintessential slice of wild California coastline. Litton and Eissler's 1967 *Bulletin* piece appropriately went by the title, 'The Diablo Canyon Area: California's Last Unspoiled Pastoral Coastline.'⁵² Diablo also served as an uncomfortable reminder of the Club's failure to protect more of the California coastline. At the February 1967 Board meeting, Diablo was linked with the suggestion that "preservation of the scenic coastlands that are left in California should be one of our highest conservation

⁵⁰ Litton to the Board of Directors, 9 September 1966.

⁵¹ Rising Sierra Club concern over coastal damage had translated into a statement against power plants on scenic ocean shorelines in September 1963, as well as an increasing interest in other plans for coastal development. The National Park Service completed a coastline survey in 1959 identifying the more precious natural areas. There were hopes for a state-wide shoreline master-plan. The idea of 'rationalising' coastal development before it was too late became a common concern of the period. Proponents argued for planned co-existence between natural, open spaces, and less natural, confined areas of development. In the 1960s the fate of the Diablo Canyon illustrated exactly what was happening without such a plan.

⁵² "The Diablo Canyon Area...", *Sierra Club Bulletin* (February 1967), 7.

concerns of a priority at least equal in importance with the redwoods and Grand Canyon issues.”⁵³

Sierra Club directors were not alone in their fear for California’s wildness. Prominent local conservationists such as Ian McMillan and Harold Miossi lambasted Diablo plant for its effects upon the county. Living the life of a ‘rural homesteader’ as a wheat and cattle rancher near Shandon (thirty miles north-east of San Luis Obispo), McMillan resented industrial intrusions. Diablo’s appeal for McMillan lay in its isolation from twentieth-century forces and its small-scale ranching heritage. To McMillan, the Pecho Coast was part of “cow country,” the landscape of San Luis Obispo County he had grown up with and come to cherish.⁵⁴ PG&E represented an uninvited nuclear pioneer, with a wagon train of other unwelcome developers sure to be following its electricity cables and bulldozer tracks. Whilst McMillan and other local conservationists tried desperately to hold on to their traditional ranching and agricultural lifestyle, PG&E offered a new atomic age to the region that promised to turn ‘swords into plowshares, and their spears into pruning hooks.’⁵⁵ Nuclear power symbolised fertility, the breeder reactor as atom farmer, the taming of the atom

⁵³ Board of Directors: Minutes of the Regular Meeting (18 February 1967), 9, SCC 71/103c, box 4, file 6.

⁵⁴ Jim Hayes, “Our Nuclear Neighbor – IX: The fight goes on against reactors,” San Luis Obispo County *Telegram-Tribune*, 12 September 1973.

⁵⁵ Chairperson of the AEC, Lewis L. Strauss, at his swearing-in ceremony in July 1953 quoted Micah 4/3 from the Bible. See Brian Balogh, *Chain Reaction: Expert Debate and Public Participation in American Commercial Nuclear Power, 1945-1975* (Cambridge: Cambridge University Press, 1991), 113.

compared to ploughing and harvesting fields.⁵⁶ A nuclear plant both symbolised and encouraged development in the region. Whilst the majority of San Luis residents welcomed taxes, incomes, and jobs, the likes of Miossi and McMillan believed they were losing a larger landscape than just the 585 acres that would be directly consumed by the plant at Diablo. Rural, peaceful, endearing San Luis Obispo was also at stake.

[4] The Park Question

When Diablo Canyon was first raised as an alternative plant site in 1966, a lot of work had already been done to secure park status for Nipomo Dunes. Trips had been led through the dunes. Many believed the area was overdue for protection. By contrast, preserving Diablo for parkland was a new idea, and lacked a groundswell of support. Whereas a 1965 statement of Sierra Club policy described the dunes region as one with “unique grandeur of distinguished park value,” initial discussions of Diablo claimed “the site has no special merit as a scenic or natural area such as other parts of the coast possess.”⁵⁷ Critics argued that Diablo was a lost cause in recreational terms - even if PG&E were defeated, the area would likely serve as a housing estate rather than a wildlife refuge.⁵⁸ Pro-dealers further drew attention to the state park acquisition

⁵⁶ Spencer R. Weart, *Nuclear Fear: A History of Images* (Cambridge, Massachusetts: Harvard University Press, 1988), 303. Oak Ridge atomic enthusiasts indeed planned a ‘nuclear-powered agro-industrial complex,’ but for export to the Middle East rather than the American West.

⁵⁷ “Sierra Club policy on the proposed construction of industrial facilities in the Santa Maria River dunes,” 24 June 1965, SCC 71/295c, box 88, file 19; Board of Directors: Minutes of the Annual Organisation (7-8 May 1966), 8.

⁵⁸ *Bonanza*, Mother Lode Chapter Newsletter (March 1967), noted the impression given by Leonard that the Diablo region was “subject to residential encroachment,” with no plans for park acquisition, SCC 71/103c, box 113, file 39. The same chapter claimed that “we have been informed that even if a power plant is not located in Diablo Canyon, the owner of the land plans to develop the area as an exclusive real estate development.” See Mother Lode decision to accept Diablo as a suitable

list that failed to grant Diablo priority status. Sierra Club member Mrs Bradley wrote to the *San Francisco Chronicle* suggesting that if Diablo was so important why had nobody taken steps to secure the area before the nuclear controversy began.⁵⁹

Frederick Eissler was vociferous in defence of Diablo Canyon. Visiting the area convinced him that “the whole territory is of superb park quality.”⁶⁰ Eissler pointed out at the Sierra Club’s 1966 board meeting that the Pacific Coast Recreational Area Survey (1959) had rated the Point Buchon region as equal to the Santa Maria Dunes.⁶¹ The National Park Service, which carried out the survey, suggested that, “[T]his large, unspoiled area possesses excellent seashore values and should be acquired for public recreation and conservation of its natural resources.”⁶² A save-Diablo draft resolution for the Club in 1967 carried forward this idea, but met with little success.

The establishment of Montana de Oro State Park only a few miles north of Diablo Canyon only complicated the situation.⁶³ In 1965, the state of California purchased

reactor site, “RE: Diablo Canyon Nuclear Power Plant Site,” 7 July 1966, SCC 71/295c, box 81, file 18.

⁵⁹ Mrs Harold C. Bradley, of Berkeley, to the editor of the *San Francisco Chronicle*, 8 January 1969, SCC 71/103c, box 123, file 11.

⁶⁰ Eissler to Marshall, Brower & McCloskey, 20 June 1966.

⁶¹ Board of Directors: Minutes of the Annual Organisation (7-8 May 1966), 8.

⁶² National Park Service Pacific Coast Recreation Area Survey (1959), 175, SCC 71/103c, box 110, file 1.

⁶³ The name ‘Montana de Oro’ itself became a minor controversy when conservationists discovered in the late 1960s that the ‘mountain of gold’ description was actually coined in the 1950s. Unsure if owner Irene Starkey McAllister had named the region after “beholding the ranch abloom in spring,” or in memory of her late husband’s home state of Montana, a few conservationists preferred a return to the older ‘Pecho y Islay’ title. After some discussion, the title of Montana de Oro remained. See “Prospectus Montana de Oro State Park,” March 1968, 5, Harold Miozzi Collection, Cuesta College Environmental Archives 001, box 4, file 10.

4,481 acres of coastal land between Morro Bay and Point Buchon. Supporters of the newly-formed park were tempted by ideas of expansion southwards, especially given the alternative fate of the Diablo region. Eissler hoped Montana could be extended to include the Diablo lands, a promising idea given their ecological similarity and shared historical past.⁶⁴ He extended the praise of the California Department of Parks and Recreation for Montana to the surrounding area, suggesting that “the high rating received by Montana de Oro,” applied, “with similar cogency to the Diablo region.”⁶⁵ Local conservationists also pointed to plans already in existence that incorporated Diablo lands into the State Park. A 1965 General Development Study by the Division of Parks and Beaches for Montana de Oro referred to the area’s “outstanding resource potential.”⁶⁶ Financial considerations served to compromise securing the region for recreation. Meanwhile, pro-dealers claimed the ‘representative coast’ was represented enough in Montana without the need to secure any more shoreline.⁶⁷ In a bizarre twist of logic, a number of conservationists used Montana Park as a reason to sacrifice Diablo Canyon.

⁶⁴ Eissler to Marshall, Brower & McCloskey, 20 June 1966.

⁶⁵ “Testimony of Frederick Eissler,” May 1967, 14.

⁶⁶ Resources Agency of California - Division of Beaches and Parks, “Montana de Oro State Park - General Development Study,” 1965, Ian McMillan Collection, Cuesta College Environmental Archives, II/05, box 15, file 24. Contrary to the idea of a park as an untouched preserve, the Division of Parks and Beaches foresaw the need for recreational infrastructure and facilities. Proposed development of the region included various campgrounds, car parks, a golf course complete with club house, and a ‘marine development’ close to where Pacific Gas planned to construct its nuclear reactors. Transforming Diablo into a state park implied significant changes, albeit not on the same scale as PG&E’s nuclear plans.

⁶⁷ Ansel Adams and William Siri offered such an argument in the *Sierra Club Bulletin* (February 1967), 5.

[5] Looking to Science to Solve the Debate

Looking back on the Diablo-Nipomo controversy, Leonard suggested the issue pivoted on “the relative natural values of the two locations.”⁶⁸ However, in practice the Sierra Club struggled to compare the two places without conceding to personal interest or biased comment. A clear opportunity existed for science to offer some much-needed objectivity in the disagreements over Diablo’s worth. Scientific reports of various kinds circulated through the Club’s offices during 1966 and 1967. Unfortunately, they revealed not so much indisputable facts but a highly subjective scientific debate, not far removed from Board confrontations. A botanical report by Clare Hardham incorporated political comment on the Club (“I am sure that a conservationist who refuses to consider alternative solutions to a problem will end by destroying more than he saves”) with a narrative aimed at demoting Diablo (“The only reason to mention these oaks is to demonstrate that those who admire them do so emotionally rather than with any real appreciation of their nature or significance”).⁶⁹ By contrast, to botanist Carl Sharsmith, Diablo represented “an unchanged natural area”, and “[A] fine place to linger!” where “[O]ne is reminded of certain passages of Muir’s writings concerning other places and times.”⁷⁰

⁶⁸ Richard M. Leonard, “Richard M. Leonard: Mountaineer, Lawyer, Environmentalist: Oral History Transcript,” (Volume II), 404, SCC 76/194c.

⁶⁹ Clare Hardham, “Botanical Report on the Flora of Diablo Canyon” (undated), 7, SCC 71/295c, box 190, file 5.

⁷⁰ Carl W. Sharsmith, “Diablo Canyon: A Botanist’s Impressions” (14 February 1967), 1, 2, SCC 71/103c, box 113, file 38.

Neither Hardham's or Sharsmith's reports indicated the clinical approach or detachment from place associated with modern science and its assumed advantages. Their science was more likely to reinforce the conservation era than open it up to modern environmentalism. Both scientists were clearly taking sides. The local *Telegram-Tribune* carried a story entitled, "Botanists battle on Diablo's value" detailing the key players in the "undeclared war" over "uniqueness and value."⁷¹ Hardham reported not only to the Sierra Club but also to PG&E. She explained to Pacific Gas how "[T]he average Conservationist, you must realise, is governed more by sentiment than reason or knowledge and the biologically educated conservationists curse them just as much as you must."⁷² As she saw it, on one side stood the objective science of 'real' biologists, PG&E, and a few Sierra Clubbers, while on the other side were arraigned those who wanted to save Diablo, who "know the jargon of biology, especially ecology, though they do not, in my opinion, know what it is really about."⁷³

In January 1967 the board commissioned a committee to investigate the ecology of Diablo Canyon. The ecological committee presented its findings at the February meeting, arguing that "the Diablo Canyon region was remarkably worthy of preservation."⁷⁴ Nonetheless, scientific comment failed to reverse the majority view on Diablo's sacrifice. Eissler's appeal for the findings to be honoured, that "[T]he

⁷¹ San Luis Obispo County *Telegram-Tribune*, 1 April 1967.

⁷² Clare Hardham to Ken Dierks, PG&E, 24 April 1968, SCC 71/295c, box 189, file 11.

⁷³ *Ibid.*

⁷⁴ Board of Directors: Minutes of the Regular Meeting (18 February 1967), 9.

club's greatest strength...is its appeal to the nation's conservation conscience on the basis of firmly-grounded facts" went ignored.⁷⁵

[6] Uncertain Hazards

Sierra Club arguments over Diablo were also confused by the uncertain impact of a nuclear power plant upon a coastal landscape. Pro-dealers argued that Diablo Canyon would effectively 'hide' PG&E's nuclear plant from the county.⁷⁶ Jackson suggested that people would be able to walk the Pecho Coast "and yet could be unaware of power plants nested in nearby Diablo Canyon."⁷⁷ A nuclear plant was essentially treated little differently from a housing development or shopping mall. The Mother Lode Chapter commented: "Many people feel that nuclear power plants contemplated for construction along the California coast are no more aesthetically damaging to the beauty of the coast than the multitude of industrial and tract housing developments which continue to proliferate without significant opposition from conservation groups."⁷⁸ Mother Lode really wanted to know why so much time had been wasted on Diablo when other construction schemes passed unchallenged.

By contrast, defenders of Diablo portrayed a nuclear plant as a devourer of nature. On first hearing of the Diablo deal, Litton was shocked by the Club "endorsing a PG&E

⁷⁵ Ibid., 10.

⁷⁶ Kathleen Jackson to Martin Litton, 15 June 1966, SCC 71/103c. box 110, file 1.

⁷⁷ Kathleen Jackson to William Siri, 14 June 1966, SCC 71/103c, box 113, file 38. Jackson later regretted the final placement of the plant on the coastal bluffs, obvious not only to illegal hikers but passing ships as well. Interview 20 August 1997.

⁷⁸ Mother Lode Chapter, "RE: Diablo Canyon Nuclear Power Plant Site," 7 July 1966.

site only eleven miles from PG&E's present monster steam plant at Morro Bay."⁷⁹ Once PG&E began to bulldoze and clear parts of Diablo, Litton chose to highlight the visual changes to show how the landscape was being lost.⁸⁰ He homed in on the earth-moving and trenches, showing an area of vehicle tracks and mud seemingly devoid of nature through the presence of machine. The natural beauty of remaining land surrounding the construction activity was highlighted in the contrast. It was a landscape clearly under immediate threat, conjuring images of redwood clear-cutting further up the coast. Such pictures further produced a vision of complete landscape loss, that the bulldozers would just keep going - hence dramatising the save-Diablo cause. Some members may have been touched by nature's loss, and hence converted to Litton's side. But to others the photographs embodied visual proof of a lost cause. Meanwhile, the dominance of aesthetics on both sides reflected a Club used to debating the impact of humans on landscape in scenic terms, but not in ecological or nuclear dimensions.

Frederick Eissler was the only director outspoken in his fears of an *atomic* plant at Diablo. Eissler expected the whole ecology of Diablo Cove to be disturbed by nuclear operations, and expressed reservations over relying too much on an unproven energy source.⁸¹ In the anti-nuclear climate of the 1970s, Eissler's fears would have seemed cautious and probably identified him as a 'conservative' Sierra Clubber, yet in the

⁷⁹ Litton to the Board of Directors, 9 September 1966.

⁸⁰ For example, see Litton's construction site photograph, and its pertinent placing alongside a picture of Morro Bay power plant, in *This is the Issue*, a pamphlet sent out by the 'Committee to Clarify the Diablo Issues', New York, SCC 71/103c, box 64, file 13.

⁸¹ *Sacramento Bee*, 30 June 1969, SCC 71/103c, box 123, file 11.

1960s, he was duly labelled unscientific and obsessive.⁸² For the save-Diablo group as a whole, there did appear some underlying recognition that a *nuclear* power plant at Diablo threatened the local environment, but without sufficient evidence (or a sympathetic public), members were wary of speaking out.⁸³ Proof would arrive in the late 1970s, too late for the Sierra Club, but perhaps not too late to stop nuclear power and ultimately save Diablo's land.⁸⁴

[7] The Club Votes

During the run-up to the Club referendum, personal accusations appeared not only in members' private letters, but in San Francisco newspapers as well. There was a public airing of the Club's dirty laundry. One member protested that "[T]he Sierra Club is no place for the kind of dirty pool that is being played at present by Siri and

⁸² The conservation chairman of the Great Lakes Chapter criticised Eissler's "highly emotional involvement with nuclear energy," in a letter to Eissler, 31 January 1967, SCC 71/295c, box 18, file 25. Betty Hughes also mentioned to Martin Litton that two chairman she knew considered Eissler a fanatic. Hughes to Litton, 24 February 1967, SCC 71/295c, box 18, file 26.

⁸³ In a letter to Mr Gros, PG&E, on 10 March 1966, Martin Litton defended a *Sunset* article, suggesting it could have gone further in attacking nuclear power. "If we had wanted to raise the real bogey, it would have been the danger of radioactive contamination, which was omitted completely from the list of conservationists fears because we ourselves could not have produced positive evidence to suggest it. Yet it is there," commented Litton, SCC 71/295c, box 88, file 19.

⁸⁴ Anxieties over thermal pollution were raised in the late 1960s, yet failed to dampen spirits concerning nuclear development. Similar to other nuclear issues (for example, low-level radiation), thermal pollution had to be decisively proved before momentum towards atomic power could be questioned. The save-Diablo lobby insisted that thermal pollution contravened a condition of the original 1966 land deal that 'marine resources will not be adversely affected' (from original resolution conditions passed at the Board of Directors: Minutes of the Annual Organisation (7-8 May, 1966), 9.) Brower suggested that "[T]he likelihood of damage to marine resources is of such magnitude that the Diablo development, in my opinion, is now in conflict with the club's existing resolution," David Brower to Edgar Wayburn, 11 June 1968, SCC 71/103c, box 117, file 33. Litton wrote to the Honorary Officers of the Sierra Club, 11 October 1968, claiming that "expert testimony" proved thermal danger existed, and that the Board had never received "convincing evidence" of no adverse effects. Leonard argued otherwise in a reply, dated 14 October 1968, SCC 71/295c, box 5, file 17. The burden of proof unfairly fell on linking pollution with nuclear power, rather than any attempts to prove the safety of atomic systems before installation.

his group.”⁸⁵ Another sent in a telegram to “[R] equest that directors discuss how to stop rumors and innuendoes that are perverting philosophy of club.”⁸⁶ The advice went ignored.

One of the biggest controversies surrounded the publication of the *Sierra Club Bulletin* on Diablo Canyon, due for print in February 1967. It was meant to be a chance for the two sides to put their cases so that the membership had an opportunity to register an informed vote. The *Bulletin* instead became a battleground between the two sides. Siri and Adams delayed their submission. In response, partisan staff mailed out a ‘half-bulletin’ containing only the save-Diablo side. President Marshall rewrote the bulletin editorial offered by Nash. Even the front cover was associated with controversy. Cartographers had allegedly exaggerated the size of Diablo over Nipomo. Marshall accused Nash of engineering “a good propaganda piece.”⁸⁷ Similarly, members bickered over the wording of the petition. Whilst save-Diablo members wrote the original petition, granting members the simple choice to either work to save Diablo or accept its sacrifice, pro-dealers adapted the final version so that Sierrans could only reaffirm or reject Club policy over both Nipomo and the southern Pecho Coast. Hence voting to save Diablo appeared tantamount to losing the dunes and sullyng the Club.

⁸⁵ Donald W. Aitken, Dept. of Physics, Stanford University, to Hugh Nash, 9 March 1967, SCC 71/295c, box 18, file 27.

⁸⁶ Dale R. Jones, of Mills Tower, to Edgar Wayburn (telegram), 18 October 1968, SCC 71/295c, box 228, file 43.

⁸⁷ George Marshall to Hugh Nash, “RE: Revisions of February, 1967 Bulletin,” 1 March 1967, SCC 71/295c, box 18, file 27.

When the vote was finally counted, 11,341 members reaffirmed the original deal with PG&E, whilst 5,225 opposed it. The membership of the Sierra Club supported the sacrifice of Diablo in order to save Nipomo, although issues of Club loyalty, tradition, and consistent policy also swayed opinion. After the count, pro-dealers (and many other Club members) assumed the Diablo controversy was officially over.

However, in April 1968, the membership voted several new directors on to the Club board. All were known to support David Brower, and the issue of Diablo Canyon soon resurfaced. Representing a majority on the board, eight save- Diablo directors signed a note to the President of PG&E warning him that Diablo was about to be reconsidered by the Club. The letter featured an official Sierra Club stamp. Pro-dealers lambasted the letter as “back-handed” and something that “can do nothing but impair the Club’s image.”⁸⁸ The Los Padres Chapter labelled the action a “devious manoeuvre.”⁸⁹ President Wayburn called it “a hell of a way to run a railroad.”⁹⁰ In December 1968 the board also voted to protect Diablo Canyon.

Having reversed policy, save- Diablo directors sought the approval of the Club membership for their about-face. The *Sierra Club Bulletin* again presented the two sides of thought. Siri and Adams produced a piece entitled “DIABLO CANYON AGAIN - And Again, and again...,” whilst Litton and Eissler chose to go further back

⁸⁸ Nathan Clark to Directors (Berry/Eissler/Goldsworthy/Leopold/Litton/Moss/Oaks/Porter), 29 August 1968, SCC 71/295c, box 5, file 17.

⁸⁹ *Condor Call*, Los Padres Chapter Newsletter, vol.XVII no.8 (September 1968), SCC 71/295c, box 81, file 23.

⁹⁰ Edgar Wayburn to the Directors of the Sierra Club, 9 July 1968, SCC 71/295c, box 5, file 17.

into Sierra Club history for inspiration, claiming “John Muir Would Have Voted YES” to protecting Diablo.⁹¹ Despite *Bulletin* pictures of sandy dunes and rocky canyons, the issue of Diablo Canyon had become more a matter of Club politics than nature evaluation. As early as March 1967, chapter newsletter *Toiyabe Tattler* had declared: “Somewhat obscured by this rather local but complex problem are bigger problems bearing on the basic executive, administrative, and conservation policies of the Sierra Club. It is clear that the main issue is not the intrinsic merit of Diablo Canyon.”⁹² The transformation was complete. The Pecho landscape had been lost beneath a multitude of conservation questions and organisational disputes. Conservationists had rendered ‘Diablo’ into an argument over Club philosophy.

[8] Club Philosophy: From Conservation to Environmentalism

The 1960s represented a time of change for the Sierra Club. For several decades, the organisation had focused upon hiking activities and traditional, conciliatory conservation. Gathering momentum in the mid-1950s, the Sierra Club gradually expanded its activities. Hoping to save Echo Park inside Dinosaur National Monument from damming, Sierrans embarked upon their biggest campaign since Hetch Hetchy.⁹³ By the mid-1960s, the Sierra Club was fighting the US government

⁹¹ *Sierra Club Bulletin* (February 1969), 4-7, SCC 71/103c, box 117, file 33.

⁹² *Toiyabe Tattler*, *Toiyabe Chapter Newsletter*, vol.X-9, March 1967, SCC 71/295c, box 18, file 27.

⁹³ For details of the Club campaign to save Echo Park, see Mark W. T. Harvey, *A Symbol of Wilderness: Echo Park and the American Conservation Movement* (Albuquerque: University of New Mexico Press, 1994). For commentary on the shift from conservation to environmentalism in the post-1945 period, see: Stephen Fox, *The American Conservation Movement: John Muir and His Legacy* (Madison: The University of Wisconsin Press, 1981), 291-329; Samuel P. Hays, *Beauty, Health, and Permanence: Environmental Politics in the United States, 1955-1985* (New York: Cambridge

over its tax status, and clamouring for a Redwood National Park in northern California. Sierran conservationists adopted controversial tactics. “Should we also flood the Sistine Chapel so Tourists can get nearer the ceiling?” read a Club advert (1966) to save Grand Canyon from being dammed and damned.⁹⁴ Despite seizing the high ground, and winning handsome conservation victories, some members expressed concern over the new Club stance. This was new territory after all, and older members were wary of the push by David Brower towards more radical paths of organising. Diablo Canyon appeared at this difficult time. The Canyon came to symbolise two conservation visions for the Club, two choices of route that appeared in the mid-1960s. An unofficial mail-out by the Grand Canyon Chapter explained: “Basically at issue are two philosophies of conservation - whether to compromise with the opposition or pursue the objectives of conservation without equivocation.”⁹⁵ Whilst pro-dealers usually identified themselves with a well-trodden conservation direction, most defenders of Diablo Canyon preferred to climb up to ‘higher ground.’

For Brower and Litton, preservation was essentially a pure, resolute and uncompromising act. With reference to the defence of the Grand Canyon from damming, Brower explained simply that “[W]e have no choice.”⁹⁶ Never giving in to

University Press, 1987); and Hal K. Rothman, *Greening of a Nation?: Environmentalism in the United States Since 1945* (Fort Worth: Harcourt Brace, 1998).

⁹⁴ As quoted in Michael P. Cohen, *The History of the Sierra Club, 1892-1970* (San Francisco: Sierra Club Books, 1988), 363.

⁹⁵ “To All Grand Canyon Chapter Members,” unofficial mail-out (undated), SCC 71/295c, box 218, file 70.

⁹⁶ Philip Hyde, of Taylorsville, to Tom Hoffer, Chairman, Toiyabe Chapter, 6 December 1968. Hyde quoted Brower’s exchange with Morris Udall over the Grand Canyon, and applied the same principles to the Diablo Canyon issue, SCC 71/295c, box 228, file 43.

industry, fighting battles to win protection for wilderness, and always putting nature first were hallmarks of a new style of conservation, later to be renamed environmentalism. Such ideas had already gained precedence in the Club, providing victories including the halting of Echo Park Dam. The 1966 Diablo land deal represented a stinging affront to, even rejection of, new environmental principles. It was “a mistake of principle and policy,” reeking of compromise and unnecessary sacrifice.⁹⁷ Shocked at the deal, one member strongly recommended that “[W]hen both alternatives, in any given scheme, are unacceptable, you reject both of them,” else, “[W]hat would you do if the Bureau of Reclamation asked the club whether it preferred a dam in Yosemite Valley or Yellowstone?”⁹⁸

That the deal had been entered into with PG&E rather than a government agency made it even worse. Member Betty Hughes wrote to Will Siri: “I remember taunting you in September with sounding like a PG&E man, but I thought I was mostly kidding. I begin to think its true. Candidly, I also begin to think you should resign from the Board. I do not see that the Sierra Club as a conservation organisation has any need to fraternize with PG&E, or any other commercial enterprise as much given the uglification of our landscape and the utter disregard of our natural beauties, in pursuit of the almighty dollar.”⁹⁹ Another member simply asked Dick Leonard: “Do you work for PG&E?”¹⁰⁰ Antipathy towards Pacific Gas reflected growing scepticism

⁹⁷ *Paso Robles Press*, 18 September 1968, SCC 71/103c, box 117, file 33.

⁹⁸ D. H. Kieselhorst, of San Francisco, to Richard Leonard, 30 December 1968, SCC 71/295c, box 81, file 22.

⁹⁹ Betty Hughes to William Siri, 20 February 1967, SCC 71/295c, box 18, file 26.

¹⁰⁰ Kieselhorst to Leonard, 30 December 1968.

towards commerce and industry in conservation circles. Director Eliot Porter suggested that “[T]o compromise with private interest and industry will save no wild areas; it will only lead to their gradual loss. Industry is not concerned to preserve conservation values; its concern is profits.”¹⁰¹

The save-Diablo lobby also had its reservations over atomic energy apart from its effects upon the coastal scenery. Frederick Eissler read anti-nuclear literature. As early as June 1966 he called for a Sierra Club committee to examine “the pros and cons of fission, fusion, etc.” in the aftermath of Bodega and in light of the Diablo deal.¹⁰² For others, working to save Diablo led them to uncover the dangers of the atom for the first time, from thermal pollution to radiation concerns. Brower himself had previously accepted atomic fission, but changed his mind in the 1966-69 period. The North Group Redwood Chapter feared that PG&E did not intend to finish its nuclear programme at Diablo Canyon, claiming “[T]here is a long list of other outstanding coastal areas earmarked for a nuclear disaster.”¹⁰³

Nuclear plants were also associated with economic, industrial, and population growth. In the late 1960s, a number of Sierrans came to look upon growth in all its guises as the anathema of nature conservation. David Brower took note of Paul Ehrlich’s *The*

¹⁰¹ Eliot Porter to William Simmons, Secretary, San Francisco Bay Chapter, 22 July 1968, SCC 71/295c, box 81, file 21.

¹⁰² Fred Eissler to George Marshall, 26 June 1966, SCC 71/103c, box 110, file 1.

¹⁰³ North Group Redwood Chapter Newsletter, 27 October 1968, SCC 71/295c, box 87, file 29. Others were less concerned over the atomic threat. Hugh Nash, a clear proponent of saving Diablo, made a good case that “[W]hat difference does it make from the club’s viewpoint whether a scenic resource is sacrificed for hydro or nuclear power.” After all, “[W]hat difference does it make that Diablo Canyon and its oaks are to be buried under 400 feet of earthfill instead of water?” Hugh Nash to David Brower, “Diablo Canyon Issue of Bulletin,” 11 March 1967.

Population Bomb (1968). He duly connected Ehrlich's ideas with this own conservation ethic. Brower explained: "We began to realise...just about a decade ago" that "[S]uppose we simply didn't keep believing the myth that some divine law requires unending growth in the number of people, in their appetite for using up resources, and in their proclivity in fouling nests...Suppose, in short, we simply didn't try to kill a Golden State."¹⁰⁴ Members linked Diablo with other nascent environmental concerns. Local conservationists compared the Santa Barbara oil spill in late January 1969 to a potential accident at Diablo Canyon. The eruption at a Union Oil platform in the Santa Barbara Channel polluted the Central Coast with thick black oil, just as Diablo nuclear plant could vent an invisible - but even more deadly - cloud of radiation throughout the same region.¹⁰⁵ To the Scenic Shoreline Preservation Conference, a small group of conservationists (including Sierra Club members) local to San Luis Obispo and Santa Barbara counties, the oil spill appeared "another tragic demonstration of the high risks from the rush of uncontrolled technology." Scenic Shoreline members predicted that oil disasters such as the Santa Barbara spill, along with the earlier Torrey Canyon accident off the English coast in 1967, might soon have atomic bedfellows, that "similar precipitate action leading to technological blunders...will result from the hasty promotion of nuclear power."¹⁰⁶ Sue Schmitt from British Columbia, Canada, interpreted Diablo as an example of "[G]overnment policies [that] favour commercial enterprises and profits, and not the

¹⁰⁴ David Brower to Miss Iva May Warner, of Boonville, 22 October 1968, SCC 71/103c, box 117, file 33.

¹⁰⁵ For details of the Santa Barbara oil spill, see Robert Easton, *Black Tide: The Santa Barbara Oil Spill and Its Consequences* (New York: Delacorte Press, 1972).

¹⁰⁶ Scenic Shoreline Preservation Conference Inc. (SSPCI) Newsletter (March 1969), SCC 71/295c, box 90, file 19.

health and welfare for people now and in the future”, and placed Canyon development alongside Canadian examples of pollution, pesticides, effluent and mills. Schmitt also associated concern for Diablo with the growing role of ecology in environmentalist work. To Marshall and Brower she suggested: “Those of us who understand ecology must fight these things on all sides,” and drew attention to the burgeoning view amongst environmentalists and independent scientists that “[R]adiation is dangerous and there is no threshold for safety.”¹⁰⁷ The less than positive response to Diablo nuclear plant indicated an increasing scepticism towards science and big technology. Rachel Carson’s environmental warnings about synthetic pesticides in *Silent Spring* (1962) also influenced popular debate. Whilst commenting on the unknown consequences of Diablo plant on local marine life, Brower noted that during “the pesticide controversy” there had been a “tendency in case of doubt to use pesticides first and study later.” Fearing unforeseen damage on the Pecho Coast, Brower motioned for the Sierra Club to “make clear that Diablo should wait.”¹⁰⁸

The proliferation of confrontational tactics within the Sierra Club indicated that the organisation had begun to shift direction. There was something fresh and dynamic concerning even token gestures. Member Stewart Ogilvy planned to “sneak in early” at a meeting of the Conservation Society of America to place copies of a save-Diablo pamphlet on chairs before “the PG&E man, A E Smith gets up and gives his spiel on

¹⁰⁷ Sue Schmitt, of South Penda Island, British Columbia, to George Marshall and David Brower, 2 April 1967, SCC 71/103c, box 113, file 39.

¹⁰⁸ David Brower to the Board, “New Diablo Material,” 10 September 1968, SCC 71/295c, box 81, file 21.

industry's role in the beautification of the California Coast."¹⁰⁹ Recent successes at Grand Canyon and Echo Park suggested the Club was ready to lead the way towards a modern environmental era.¹¹⁰

To the save-Diablo lobby, the Sierra Club was nothing without a pure conservation philosophy, and modern environmentalism carried this notion forward. Litton was dedicated to assuring preservation above compromise. To one concerned member, he replied: "Let me assure you that we are not going to write the Sierra Club off. But 'a number' of us will strive to make it and keep it an uncompromising, consistent champion of wilderness and nature, always appealing to a higher tribunal than that of the exploiters we oppose, and ever wary of 'deals' offered by commercial or bureaucratic vandals."¹¹¹ A modern environmental approach was rarely seen as divergent from past Club ideals. In fact, Hugh Nash welcomed the revival of the coastal question in 1968, suggesting that, "the club, which mortgaged its soul on the Diablo issue, has a chance to recover it. Even a pro-forma reversal would put the club comfortably back on the side of the angels."¹¹² Save-Diablo Sierrans also presented their actions as true to the spirit of John Muir, co-founder and 'patron saint' of the

¹⁰⁹ Stewart Ogilvy to Martin Litton, 18 January 1968, SCC 71/295c, box 87, file 29.

¹¹⁰ Philip Hyde, Taylorsville, wrote to George Marshall on 17 March 1967 complaining over the failures of compromise as a conservation tactic. Hyde interpreted Diablo Canyon as symbol with which to fight industrial development, SCC 71/103c, box 113, file 39. Hasse Bunnelle, in a letter to James McCracken, dated 10 October 1968, saw Diablo as a symptom "of the weakness in our method of using conservation as an educational and political tool. We have ignored it for far too long, enjoyed and explored, but forgot to work at the preservation of resources that are dying before our eyes," SCC 71/295c, box 87, file 29. The Diablo issue invigorated some members to push further ahead with conservation, rather than 'retreat' into compromise.

¹¹¹ Martin Litton to David Saxe, Woodland Hills, 26 August 1968, SCC 71/295c, box 81, file 21.

¹¹² Hugh Nash to David Brower, "Re: Background on Diablo Canyon," 4 September 1968, 5, SCC 71/289c, box 40, file 15.

Club. Contemporary, ethical environmentalism was tied to the distant past of the Sierra Club. Brower explained: “We worked with an old religion - Muir’s - and new techniques - books, films, ads, TV, and we grew as we never had before.”¹¹³ Brower himself was likened to the grandfather of the Club - Leonard was not alone in calling him “reminiscent of Muir.”¹¹⁴ In the 1969 *Bulletin* article on Diablo, the plea for membership support by Litton and Eissler was appropriately entitled “John Muir Would Have Voted YES.” The article mused, “Can Diablo be saved? John Muir would not have asked; he would have rejoiced in the conviction that what must be done can be done. Let us do the same.”¹¹⁵ When Kathy Jackson disagreed, claiming that, in fact, “John Muir would vote no,” she received a reply reputedly from the man himself (most likely via Litton), now residing at the ‘Third Pew, Second Row, Nature Corner, Heaven.’¹¹⁶ The mythical Muir was shocked by her comments: “Someone, (I suspect a departed PG&E official from across the hall,) has either been forging my name on fiery rocks or has bribed your medium.” Seeming to have inside knowledge of the Diablo Canyon controversy, no doubt one of the benefits of higher ground, he

¹¹³ “Viewpoint: What’s Eating the Sierra Club?,” 26 February 1969, in David Brower’s Scrapbook (10 February to 30 June, 1969), SCC 79/9c, box 3.

¹¹⁴ Richard Leonard, “Mountaineer, Lawyer, Environmentalist,” vol.2, 337. If Brower was like Muir, then Diablo signified his Hetch Hetchy. Both campaigns became personal crusades, alienating Muir and Brower from key Sierra Club members and the public. Despite their efforts, Hetch Hetchy was dammed, and Diablo used for a nuclear plant site. Although Diablo probably was not as dear to Brower as Hetch Hetchy was to Muir, both Sierrans committed themselves almost sacrificially. Hetchy split the Club between purists and those who felt more comfortable with business and compromise, as did Diablo. Those accepting Hetch Hetchy’s demise argued that San Francisco needed the power supplied by the dam, just as pro-dealers at Diablo believed PG&E’s projected electricity demands. Whilst Muir was heart-broken by the loss of Hetch Hetchy, and died a year later, Brower was turned away from a Club he had spent his life building. For discussions of the Hetch Hetchy episode in Club history, see: Cohen, *The History of the Sierra Club*, 22-33; Fox, *The American Conservation Movement*, 139-47; Thomas Turner, *Sierra Club: 100 Years of Protecting Nature* (New York: Harry N. Abrams, 1991), 66-78.

¹¹⁵ *Sierra Club Bulletin* (February 1969), 6-7.

¹¹⁶ Kathy Jackson, “Correction: John Muir Would Vote No,” February 1969.

explained: "If I were still fortunate (?) enough to be a voting member of the Sierra Club, I can assure you that I would, as Mr. Litton suggest, vote YES on this proposition."¹¹⁷ The Save-Diablo lobby further drew attention to Muir's valiant work to save Hetch-Hetchy from damming in the early 1910s, despite a large number of Sierrans supporting the engineering project. Brower literally rewrote Club history by editing an extract from Holway Jones' *John Muir and the Sierra Club* (1965) that dealt with Hetch Hetchy. By simply replacing mentions of 'Hetchy' with 'Diablo,' 'San Francisco water' with 'PG&E,' and 'national park' with 'coast,' Brower demonstrated how similar the two controversies were. He entitled the piece: 'Need history repeat itself so soon?'¹¹⁸

Whilst recognising that the save-Diablo group were taking "a pure approach to conservation," pro-dealers such as Will Siri and Dick Sill cautioned that the Sierra Club was also heading towards disaster.¹¹⁹ The fate of Diablo paled alongside "the most important problem facing the Sierra Club at this time...to maintain its fine public image and momentum unweakened by dissension."¹²⁰ The pro-dealers portrayed the save-Diablo Sierrans as leading an assault on the Club, with the fear that such a fine

¹¹⁷ 'John Muir' to Kathleen Jackson (undated), SCC 71/295c, box 18, file 28. Voters in 1969 probably would have related more to the question mark over being "fortunate enough to be a voting member," than the actual recommendation of the letter.

¹¹⁸ David Brower, "Need history repeat itself so soon?" (undated), SCC 71/103c, box 113, file 38.

¹¹⁹ Dick Sill to Fred Eissler and Martin Litton, 7 February 1967, SCC 71/289c. box 40, file 15.

¹²⁰ Harold Bradley Statement (prepared for 18 February, 1967 Board meeting), SCC 71/295c, box 5, file 17.

organisation could be “destroyed from within.”¹²¹ Save-Diablo directors were commonly portrayed as ‘club dissenters’ even during their majority reign on the board. The determination of Litton and Eissler to reverse policy was taken as a veiled threat to Club democracy. Pro-dealers expressed unease over staff loyalties on the Diablo matter. Brower’s open support for saving Diablo led to an attempted crack down on staff actions by President Marshall. Diablo became a question of Club authority. Increasingly, the issue focused “not [on] Diablo Canyon but who was going to run the Sierra Club, the board or the paid staff.”¹²² By reviving the debate in 1968, the save-Diablo group appeared to reject not only the wishes of the previous board, but also the vote of the general membership. George Marshall repeatedly called for Club unity on the issue, although he, like others, envisaged concord solely in its guise of unanimous support for the original 1966 deal.

The split within the Club had its greatest impact on those best referred to as the ‘old guard.’ Veteran members including Marshall and Siri valued the Club for what it was, not what it could become. Although receptive to some of the changes Brower and his ilk instigated, they were wary of losing the hiking organisation of old. In the 1966-1969 period, the ‘old guard’ attempted to regain authority both inside and outside the Club. The fracas over Diablo led them to publicly promote their vision of the Club, and the danger posed by ‘extremists.’ The ‘old guard’ stood for a traditional conservation philosophy based on compromise. Adams portrayed the purists as

¹²¹ ‘A Sierra Club Member’ to the Executive Director and Board of Directors, 3 October 1968, SCC 71/295c, box 1, file 13.

¹²² *Condor Call*, Los Padres Chapter Newsletter, vol.XVI no.3 (March 1967), SCC 71/103c, box 113, file 39.

rebellious idealists that in his youth he had related to. But Adams now had a “better perspective,” whereby to “co-operate with reality” could lead to major victories such as saving Nipomo Dunes.¹²³ For Adams, protecting Nipomo by sacrificing Diablo signified a conservationist’s victory rather than an environmentalist’s loss. Traditionalists only partially linked Diablo Canyon with wider environmental debates. To members such as Dick Leonard, industrial growth and technological progress were simple realities. Although sometimes reticent over the loss of open space, Adams and his allies did not consider it their (or the Club’s) duty to question wider forces. Adams elaborated: “We would, of course, like to see all of the beautiful coast saved as wilderness, but that is a rather impractical dream in view of the increasing demands of growing population.”¹²⁴ Challenging development at Diablo was considered tantamount to challenging California’s growth and progress. Whereas saving Nipomo was tied to ‘reasonableness,’ saving Diablo was associated with “blind obstructionism.”¹²⁵

At a time when the dangers of nuclear power were not widely accepted, traditionalists had few qualms over an atomic plant on the Pecho Coast. Nuclear power represented a welcome alternative to unsightly dams. The Mother Lode Chapter supported the sacrifice of Diablo Canyon, explaining: “If we are to save scenic resources such as parks and wilderness areas from being seriously damaged by hydroelectric development, conservationists must encourage the development of alternate sources of

¹²³ Ansel Adams to Edgar Wayburn, 18 June 1968, SCC 71/295c, box 171, file 1.

¹²⁴ *Santa Maria Times*, 25 September 1968, SCC 71/295c, box 1, file 13.

¹²⁵ *San Francisco Examiner*, 20 December 1968, SCC 71/103c, box 117, file 33.

power whether they are steam or nuclear produced.”¹²⁶ An editorial in the *San Francisco Examiner* warned against the Club opposing nuclear plants along the coast, suggesting: “It is a fact that nuclear technology offers the best hope for avoiding construction of large hydroelectric dams, including those proposed for the Grand Canyon... Conservationists, of all people, should be eager to see the production of electric power shifted to nuclear piles as soon as possible.”¹²⁷ The threat of atomic power proved especially hard for some members to accept. One Sierran noted: “I cannot conceive of a reactor near the ocean creating as serious a conservation problem as hydro-electric dams.”¹²⁸ Meanwhile, William Siri worked for Lawrence Livermore Laboratories. Siri believed nuclear power to be statistically a lesser risk than flying, and felt that claims of danger to public health would never hold on scientific grounds.¹²⁹

Whilst the 1960s signified a shift in popular culture, with growing criticism of institutions, corporations and government, pro-dealers attempted to insulate the Sierra Club from wider social changes. They hoped to keep the Club as a gentlemanly organisation, happy to co-operate with business and industry, and faithful to its origins as a hiking and camping outfit. For Adams and Siri, the land deal over

¹²⁶ Mother Lode Chapter, “RE: Diablo Canyon Nuclear Power Plant Site,” 7 July 1966.

¹²⁷ *San Francisco Examiner*, 1 July 1966, SCC 71/103c, box 110, file 1.

¹²⁸ J. G. Gerstley, Sherman Oaks, to Edgar Wayburn, 3 September 1968, SCC 71/295c, box 1, file 13.

¹²⁹ William Siri to Fred Eissler, 24 January 1965, SCC 71/295c, box 189, file 23. Siri explained: “Some 20 years of research and study in radiobiology and related fields convinces me that nuclear power plants involve less risk to health, life span, etc., than those we face from cigarette smoking, smog, driving, bathtubs, and flying.” Siri was not the only one to use comparative risk arguments to support the application of nuclear energy. Nuclear proponents in the 1960s and 1970s often drew attention to the lesser chance of civilians dying in a nuclear accident than by driving daily to work.

Diablo-Nipomo was verbatim proof that old-style conservation still worked. A newspaper recounted how “Adams said...the co-operation demonstrated between the club and PG&E was one of the greatest steps ever taken by the club. ‘It showed we’re not against everything’.”¹³⁰ Adams called it “a milestone in the progress of conservation.”¹³¹ The land deal with Pacific Gas signified a conciliatory gesture to set alongside the fierce battles over Grand Canyon and Echo Park. The deal sent out a message that the Sierra Club had not become an unreasonable force in the 1960s, and that the possibility existed of a return to a more dignified approach to conservation lobbying. Diablo Canyon was a sacrifice to revive the ‘old’ Sierra Club and traditional conservation values.

[9] The Brower controversy

During drawn-out debates over conservation philosophy, executive director David Brower was often identified as the key proponent of radical, environmental campaigning. His liking for fresh ideas and new ecological causes alienated him from the ‘old guard.’ Brower was a threat to the traditional Sierra Club. Looking back, Siri claimed that “[T]he club’s internal problems began in the early sixties when Dave began to assert himself in a progressively more independent fashion, first in the publication program, then in conservation activities, and the club’s financial

¹³⁰ *Sacramento Bee*, 16 September 1968, SCC 71/103c, box 117, file 33.

¹³¹ Ansel Adams to Miss Bottemanne, Editor, *The Toiyabe Tattler* (draft), 13 January 1969, SCC 71/295c, box 1, file 13.

affairs.”¹³² His financial ‘irregularities’ particularly worried directors such as Dick Leonard who liked to think of the Club as his own well-run business. Brower had also become an eminent conservation figure. Traditionalists felt uneasy over claims “[T]hat David Brower is Sierra Club [sic].”¹³³ When Brower placed advertisements for Earth National Park in national newspapers and planned to set up a London office before asking for Club approval, pro-dealers considered the Club’s mandate to be threatened by one man. Although members thanked Brower for modernising the Sierra Club in the 1960s, a number of directors resented being dragged (against their will) into a new era of environmentalism.

Brower’s motivation on the Diablo issue partially derived from his regret at losing Glen Canyon to damming interests in the late 1950s.¹³⁴ Diablo, like Glen, was an unknown canyon, whose fate had been decided by a combination of Club ignorance, compromise, and dogmatic pursuit of conservation victory elsewhere. Sierra directors had failed to visit Glen Canyon before sacrificing the region in a bid to save Dinosaur National Monument. A Sierra Club exhibition book later referred to Glen Canyon as *The Place No One Knew* (1963). Brower no doubt empathised with one member who commented on the Diablo controversy: “We cannot allow another Glen Canyon, no matter how small we may think it is.”¹³⁵ Instead of upholding the original board

¹³² William E. Siri, “Reflections on the Sierra Club, the environment and mountaineering 1950s-1970s: Oral History Transcript,” 118, SCC 80/4c.

¹³³ John L. Harper, of Bakersfield, to William Siri, 25 February 1967, SCC 71/295c, box 189, file 8.

¹³⁴ David R Brower, “Environmental Activist, Publicist, and Prophet: Oral History Transcript,” 141, SCC 80/133c.

¹³⁵ Dave Van de Mark, of Eureka, to David Brower, (undated) 1967, SCC 71/103c, box 113, file 38. Considering the implications of Diablo’s loss, Litton commented: “At least we can make

decision over Diablo, Brower threw his support behind the save-Diablo lobby. Such partisan behaviour placed him in a reckless position. As one member pointed out, an executive director (or any staff person) was meant to be neutral on such matters, rather than side with Club dissidents.¹³⁶ Prior to Diablo Canyon, critics had remained quiet on the role of Brower within the organisation. From 1966 onwards, rumours grew of schemes to restrict the activities of the executive director. Previously close friends of Brower, Adams and Leonard turned against him. There were even suggestions of a conspiracy behind plans to discharge the executive director. However, the uncompromising attitude of Brower had also gained him a dedicated support network. Brower was seen as a true environmentalist. One member commented: "If it is felt he has acted too independently of the Board, perhaps the Board has invited this independence. I think the Diablo Canyon matter may be a case in point."¹³⁷

Californians sorry for what they will have then permitted to happen. As in the case of Glen Canyon, it will be something like a murderer mourning his crime, but it may contain a lesson that will be needed in the future and might help to save what little remains of our shoreline's beauty" (Martin Litton to Paul McCloskey, House Representative, Washington D.C., 17 January 1968, SCC 71/295c, box 87, file 29). Brower's regret over Glen Canyon stayed with him for years. In 1997, Brower offered the idea of re-naturing the region in his article in *Sierra* magazine entitled, "Let the River Run Through It," (*Sierra*, 82/2 (March/April 1997), 42).

¹³⁶ Robert R. Marshall to Editor, *Southern Sierran*, 22/2 (March 1967), SCC 71/295c, box 81, file 20.

¹³⁷ Elizabeth B. Barrett, Executive Committee Member and Secretary, Grand Canyon Chapter, to George Marshall, 19 May 1967, SCC 71/289c, box 40, file 15. For further insights into the role of David Brower in the Sierra Club, see Susan Schrepfer, *The Fight to Save the Redwoods: A History of Environmental Reform, 1917-1978* (Madison: The University of Wisconsin Press, 1983), 163-185, and Peter Wild, *Pioneer Conservationists of Western America* (Missoula: Mountain Press, 1979), 151-159.

[10] At the Chapter Level

The Diablo controversy affected all levels of the Sierra Club, not just the highest echelons. For several years, individual chapters debated the Diablo-Nipomo question, and pondered which candidates to support at election time.

Los Padres was the chapter closest to the Pecho Coast.¹³⁸ In 1966, the Sierra Club Board of Directors made their decision on Diablo-Nipomo without soliciting an official statement from the local chapter. Such ignorance of regional opinion outraged Robert Hoover, a county biologist who went on to campaign on behalf of Diablo. Hoover interpreted the Board's actions as showing "contempt for members."¹³⁹ In a less than sympathetic reply, George Marshall suggested Hoover was "extraordinarily emotional" and "misunderstanding."¹⁴⁰ However, Hoover made an important point when insisting that "the Directors have the duty to consider the interests of the members who elected them before making any public pronouncements" when such a decision clearly affected a local chapter's domain. Such splendid advice was nonetheless coloured by Hoover's open admiration for the southern Pecho Coast. In response to the 1966 deal, the Los Padres chapter passed its own resolution challenging the sacrifice of Diablo, and called for members to be consulted on conservation issues relevant to their region. Chapter secretary Delee S. Marshall duly

¹³⁸ Los Padres was the only chapter in the vicinity of Diablo Canyon in 1966. Another chapter, Santa Lucia, was established along the coast of middle California in October 1968. It too expressed interest in the fate of the Pecho Coast.

¹³⁹ Robert P. Hoover, of San Luis Obispo, to George Marshall, 13 March 1967, SCC 71/295c, box 18, file 27.

¹⁴⁰ George Marshall to Robert P. Hoover, 18 March 1967, SCC 71/295c, box 18, file 27.

informed President Marshall that “Diablo Canyon is of much concern to Los Padres Chapter.”¹⁴¹ The Club President replied with a persuasive letter, applauding “the vigor with which different points of view are maintained by members of the Club and this is healthy,” but also warning that such difference of opinion jeopardised the Sierra Club as a working organisation.¹⁴² Taking note of Marshall’s plea for Club loyalty, Los Padres then rescinded its resolution, and stood by the Board.

The majority of chapters affirmed the pro-deal stance over Diablo Canyon at the time of the first referendum. Sixteen out of nineteen chapters passed resolutions supporting the Nipomo-Diablo transaction. Chapter newsletters recommended, in no uncertain terms, that their members needed to affirm board policy for the sake of the Club. Diablo was consistently portrayed as a test of member loyalty, rather than a deeper question of conservation philosophy. The John Muir and San Francisco Bay Chapters proved particularly vehement in their support for a pro-deal position. John Muir Chapter called for its members to affirm the deal as “a desired means of retaining the integrity of the Club,” ending on “[W]e trust that you will concur with the actions of your Executive Committee in the Diablo Canyon issue.”¹⁴³ Chapter committees seemingly imagined themselves as miniature versions of the Sierra Club Board. Upholding the deal made sense to local executives that valued Sierran

¹⁴¹ Delee S. Marshall, Secretary, Los Padres Chapter to George Marshall, 16 June 1966, SCC 71/103c, box 64, file 13.

¹⁴² George Marshall to Delee S. Marshall, 24 June 1966, SCC 71/289c, box 40, file 15. See Norman F. Rohn to George Marshall for an insight into Los Padres’ change of mind: 14 July 1966, SCC 71/289c, box 40, file 15.

¹⁴³ John Muir Chapter, “Special Bulletin,” 9 March 1967 from J. J. Werner, Secretary, SCC 71/289c, box 40, file 15.

tradition and hierarchy. They felt no guilt in telling their members how to vote. Most chapter committees reneged on the opportunity to provide their members with objective information on Nipomo or Diablo. Whilst geographical distance prevented visits to the region by chapter staff, Diablo was so subsumed in the vagaries of Club politics that remoteness was never the deciding factor. After all, the most outspoken group in favour of saving Diablo from development happened to be the Atlantic Chapter.

When the issue resurfaced in 1968, San Francisco Bay Chapter's newsletter responded with five pages criticising the new board. *The Yodeller* piece claimed: "The unity of the voices speaking against the reopening is probably unparalleled in club history."¹⁴⁴

The author of the article defended his work as simply showing the "perversion of the Sierra Club from a group controlled by the wishes of its members into an autocracy."¹⁴⁵ Loma Prieta argued that Diablo Canyon "should be considered a dead issue."¹⁴⁶ The majority of chapters agreed.

Individual members varied in their response to the Diablo controversy. Some saw it in exactly the same light as their chapter committees. Others were understandably puzzled why an unknown place had consumed so much Club time.¹⁴⁷ In a rare

¹⁴⁴ *The Yodeller*, San Francisco Bay Chapter Newsletter (October 1968), SCC 71/295c, box 190, file 4.

¹⁴⁵ James McCracken to Martin Litton, 12 October 1968, SCC 71/295c, box 87, file 29.

¹⁴⁶ River Touring Section, Loma Prieta Chapter to Board of Directors, 13 November 1968, a petition signed by thirty-seven members, SCC 71/295c, box 87, file 29.

¹⁴⁷ Ruth Weiner, Rocky Mountain Chapter, Denver, to Editor, *Sierra Club Bulletin*, 22 February 1967. Weiner noted that "the whole issue is confusing, especially to those of us who don't live in

allusion to popular culture in the 1960s, one member saw the Diablo revival as “the first case of the ‘Establishment’ rebelling against the people...while many sections of the US people are rebelling against the Establishment.”¹⁴⁸ Club members felt confused over the merits of nuclear power. Siri and Eissler were in the minority with their clarity of vision. Whilst Diablo differentiated atomic believers from non-believers, the *San Francisco Examiner* was wrong to suggest that the atom alone was responsible for splitting the Club.¹⁴⁹ Chapters had their own regional ‘dissenters’ on the Diablo-Nipomo matter, such as James Hupp, who criticised *The Yodeller* for its “biased - no, bigoted - reporting”, and Betty Hughes, an active friend of Martin Litton.¹⁵⁰ Reflecting a desire for the Sierra Club to be a mix of radical environmentalism and traditional conservation, members articulated their support for Club visions offered by Siri and Adams *and* Litton and Brower. Hence, they affirmed the Diablo deal in 1967, showing their loyalty to the Club, yet voted in save-Diablo directors, showing their admiration for dedicated, confrontational lobbying. The matter of Club democracy was also a contentious issue. The Sierra Club had traditionally carried an elitist badge, with sponsorship the only way to membership. However, the ‘new’ Club of the 1960s allowed anyone to join. One member saw the revolt against the 1966 deal as an example of letting people into the Sierra fraternity

California and never heard of Diablo Canyon until a few weeks ago. It is hard to know how to vote intelligently on the Referendum,” SCC 71/103c, box 113, file 38.

¹⁴⁸ Robert Katz, of San Francisco, to Edgar Wayburn, 16 October 1968, SCC 71/295c, box 1, file 13.

¹⁴⁹ *San Francisco Examiner*, 20 December 1968, SCC 71/103c, box 117, file 33.

¹⁵⁰ James Hupp, of Orinda, to Board of Directors, 13 October 1968, SCC 71/295c, box 1, file 13, as well as John Jencks’ (of Berkeley) criticisms of *The Yodeller* and his local chapter in a letter to Bill Simmons, 15 September 1968, SCC 71/291c, box 8, file 28. Betty Hughes consistently defended Diablo Canyon in letters to Adams, Siri and Marshall, SCC 71/295c, box 18, file 26.

who lacked the necessary qualities. Some Sierrans preferred Club directors to make conservation decisions for them.¹⁵¹ By contrast, one member noted his distrust of the Club elite, remarking how the directorial infighting reminded him of ‘Congressmen’ at work.¹⁵²

[11] The 1969 Vote

In the board elections of 1969, save-Diablo directors and pro-dealers represented themselves on separate conservation platforms. An ABC coalition, standing for Active Bold Constructive (also known as Aggressive Brower-Style Conservationists), promoted an internationalist and confrontational Club, whilst the opposing CMC (Concerned Members for Conservation) group offered a traditional, well-managed approach to organising. The ABC group spoke of unrelenting pressures on the environment and the need for the Club to look beyond the Sierra Nevada and take up fresh campaigns. The CMC platform offered a more cautious approach to conservation, hinting at a return to the settled past, to the old Sierra Club.

Both the Diablo petition and the ABC platform were overwhelmingly defeated. Diablo lost by a vote of 10,346 to 30,579. David Brower tendered his resignation at the next board meeting, on May 3, 1969. In a farewell speech, Brower remained true to his reputation as an uncompromising environmentalist, declaring: “We cannot go on

¹⁵¹ See Donald McKinley, Chairman of Pacific Northwest Chapter to ‘Members of the Board of the Sierra Club,’ for a perceptive analysis of member actions in the 1967 referendum: 18 December 1968, SCC 71/295c, box 1, file 13.

¹⁵² Mr. Dashiell to Edgar Wayburn, 6 November 1968, SCC 71/295c, box 228, file 43.

fiddling while the earth's wild places burn in the fires of our undisciplined technology."¹⁵³ Sierra Club stewards had cut Brower loose in the hope of securing less fiery times for the conservation lobby.

The exit of Brower, and the loss of Diablo (along with the success of the CMC platform) suggested that the Sierra Club was far from ready to embrace, let alone lead, the new environmental movement of the late 1960s and early 1970s. The Club remained tethered to its conservative, elitist roots, unprepared (and unwilling) to incorporate the radical, grassroots, and anti-establishment tendencies of modern environmentalism. However, David Brower and Diablo Canyon had altered the course of Sierra Club conservation by encouraging members to adopt a more politicised and pro-active environmental philosophy. As Philip Shabecoff surmised in *A Fierce Green Fire* (1993), Brower "led several victorious campaigns to save the land, helped rekindle the transcendental flame lit by Thoreau and Muir, and played a major role in pulling the old preservation movement out of the comfortable leather armchairs of its clubrooms and into the down-and-dirty area of local and national policy making."¹⁵⁴ Despite the official defeat of the ABC manifesto in 1969, Brower's ecological mandate continued within the organisation during the 1970s and beyond. Meanwhile, Diablo Canyon forced many Club members to reconsider their opinions on industrial and technological progress (particular in the guise of nuclear energy), and ponder the dangers of unbridled growth in California. Those who

¹⁵³ "David Brower's Statement," Board of Directors meeting, 3-4 May 1969, SCC 71/103c, box 4, file 8. For details of Brower's exit, see John McPhee, *Encounters with the Archdruid* (New York: Noonday Press, 1971), 208-20.

¹⁵⁴ Philip Shabecoff, *A Fierce Green Fire: The American Environmental Movement* (New York: Hill & Wang, 1993), 101.

worked to save Diablo also recognised that nature conservation encompassed the protection of anonymous, 'representative' landscapes as well as famous tracts of 'monumental scenery.' Beauty, wildness and ecological vitality could be found in the rugged canyons of the California coast and the lofty ranges of the Sierra Nevada.

[12] Changes at Diablo Canyon

In February 1969, the *Daily Commercial News* ran an article on Diablo Canyon. The *Commercial News* was keen to suggest that controversies over Diablo were comfortably behind it. "[A]ll the technical, economic, ecological, aesthetic questions were thoroughly settled long ago," the newspaper declared. A new nuclear landscape was about to be forged, and an attractive one at that: "The twin-domed structure will never become an American pantheon, to be sure, but it is a clean-lined, well-designed bit of industrial architecture, actually quite handsome in the canyon setting."¹⁵⁵ For atomic enthusiasts, nuclear plants replacing existing flora symbolised human progress beyond nature's limited growth, with a healthy yield of dollars in the offing. For conservationists, the record sized coastal oak being replaced with common pylons indicated the exact opposite. Litton had confronted developmental optimism with pictures of barren soil circled by bulldozers, showing the harsh reality of PG&E's creative process. Although Pacific Gas consciously preserved a few of the larger oak 'specimens' and claimed the architecture of the nuclear plant befitted its

¹⁵⁵ *Daily Commercial News* (San Francisco), 14 February 1969, SCC 71/103c, box 123, file 11.

wild setting, the fundamental contrasts went ignored.¹⁵⁶ Construction signalled a new beginning for Diablo Canyon whereby the natural world would have to fit in with the atom. To defenders such as Martin Litton, Diablo's nature had been lost.¹⁵⁷

¹⁵⁶ PG&E displayed some concern for the larger oaks, see C.C. Apra to J.W. Woodward, 4 June 1968 and J.A. Cameron to R.W. O'Neill, 29 May 1968, SCC 71/295c, box 189, file 29. Pacific Gas further contacted William Siri over his views on the architectural design of Diablo Canyon nuclear plant. Siri criticised the 'functional' approach used in the plans. See William E. Siri to Robert Gerdes, Chairman of the Board, Pacific Gas and Electric Company, 20 June 1968, SCC 71/295c, box 189, file 23. PG&E apparently took note of his recommendations: see letter to William Siri from Robert Gerdes, 6 December 1968, SCC 71/295c, box 189, file 28.

¹⁵⁷ Interview with Martin Litton, 25 July 1997.

Chapter Four

Local Mothers, 'Earthquake Country,' and the 'Nuclear Center of America'

(1970-1977)

[1] Green Paint

Converting Diablo Canyon into a viable nuclear complex officially began in June 1968 after Pacific Gas received its construction permit for Unit 1 reactor (the permit for Unit 2 followed in 1970). During the first year, the site area was levelled and paved, and land excavated where buildings would soon arise. Diablo Creek became home to the plant's switchyard. PG&E also laid a private access road between the plant site and the nearest public road at Avila Beach. Due to the size of construction components passing through (specifically Unit 1 and 2 reactor vessels), PG&E designed a route with gentle slopes and gradual corners. The prized roadlessness of the Pecho Coast had come to an abrupt end. PG&E staff had their own seven-mile drive to rival the finest of California's coastal highways. In a region where whales had once been caught and hauled to port, the 'big catch' for Avila in the early 1970s were two reactor vessels brought in by barge. In March 1973, the installation of Unit 1 reactor marked an "important milestone" not only for Pacific Gas but also for Diablo Canyon.¹ The nuclear landscape had started to take shape.

¹ Quotation taken from Bruce Deberry, "Diablo Canyon Project History," vol. 1 (March 1987), California Public Utilities Commission - Public Staff Division - Diablo Canyon Rate Case, 12, Abalone Alliance Collection (AAC), Abalone Alliance Safe-Energy Clearinghouse, San Francisco.

The first few years of the 1970s went well for Pacific Gas. PG&E promoted its project as an environmentally friendly energy source far superior to gas or coal powered plants. Nuclear power was sold as a green product. Those seeking to 'save' Diablo in the Sierra Club had considered nature lost with the arrival of PG&E bulldozers on the southern Pecho Coast. Despite the construction site being a mess of vehicles, concrete and machinery, many wild animals adapted to the noise and disruption. Whilst most work centred upon the canyon itself, surrounding acres remained undisturbed and ecologically intact. When construction processes despoiled hillsides close to the nuclear plant, PG&E employees literally painted Diablo Canyon green to cover up the damage.²

PG&E also boasted a "mobile van...with exhibits explaining atomic energy" to 'educate' the masses.³ It started out in San Francisco, with the aim of travelling elsewhere across the Golden State. Local politicians were even given atomic pins to wear, as though anointed apostles of the nuclear priesthood. Most locals at least tacitly supported the nuclear enterprise. In 1973, Jim Hayes wrote a series of articles for the *Telegram-Tribune* focused upon "Our Nuclear Neighbor." Hayes relayed the enthusiasm of Supervisor John Freeman that "the new plant will bring in a great deal of money to San Luis Obispo - so much, in fact, that if other counties knew how much, they would all be clamoring for a nuclear plant all their own." According to

² For a reference to the discovery by local conservationists of PG&E painting rocky areas with green paint see "Did the Sierra Club Bargain with the Devil at Diablo?" *Big Sur Gazette* (mid-July to mid-August 1979). In a letter to Al Gustus, Gualala, 6 May 1971, Harold Miossi commented: "As for the painting rocks green, that shows the true cosmetic attitude of the operation," Harold Miossi Collection (HMC) 001, box 07, file 04, Cuesta College Environmental Archives.

³ "Special Report on Diablo Canyon," *PG&E Life* (June 1967), 19, Sierra Club Collection (SCC) 71/103c, box 113, file 40, Bancroft Library, University of California, Berkeley.

Hayes, some residents had already asked for more plants, a clear indication that “San Luis Obispo is no longer afraid of the nuclear age.”⁴ Considering the county’s reputation as a conservative, middle class community, Hayes surmised that “there is little organized opposition” to PG&E “generating 2,000 megawatts of electrical energy and shipping it over the two transmission lines that march two abreast across the landscape. Most people seem to regard the plant and its steel-tower army as fait accompli.”⁵

With similar sentiments, the *San Diego Union* printed a story entitled “San Luis Obispo eagerly awaits nuclear power plant.” The article described how “on a fog and rock bound beach in Central California the nation’s biggest nuclear power plant is being built. The reactor looks like something straight out of an early science fiction movie. The sea dashes on the rocks below and the fog drifts around the big steel dome that will soon house 30 tons of nuclear fuel.” By combining the natural features of Diablo Canyon with its nuclear constructions, the *San Diego Union* had created something akin to a romantic vision on top of a material landscape. Rather than a conflict between the needs of industrial construction and native flora, as local conservationists had duly expected, the newspaper implied something far greater would come from nature and the atom sharing the same abode. The paper described coastal fog swirling around the reactor as though in harmony with the radioactive elements. The nuclear dream, ‘straight out of an early science fiction movie,’ recalled

⁴ Jim Hayes, “Our Nuclear Neighbor - VIII: A Change in political climate,” *San Luis Obispo County Telegram-Tribune*, 11 September 1973.

⁵ Jim Hayes, “Our Nuclear Neighbor - XI: People think plant is sure thing,” *Telegram-Tribune*, 14 September 1973.

a much older American vision of manifest destiny. At Diablo Canyon, Americans had made 'progress' by exploiting 'free' land. "The huge modern reactor on the edge of a primitive beach" symbolised how far manifest destiny had come, both geographically and technologically.⁶

In contrast, local conservationists recognised only the damage being done to the landscape. In 1966, Pacific Gas had entered into a legal agreement with the State of California's Resource Agency that "the physical appearance of the entire installation will be aesthetically compatible with the surroundings." But the landscape of Diablo Canyon in the early 1970s suggested otherwise.⁷ PG&E's plant seemed far from 'aesthetically compatible' with native flora and fauna. The local Sierra Club's newsletter, *The Santa Lucian*, highlighted "mutilated wild canyons, great patches of orphaned soil, ghastly, unhealable cuts which PG&E cosmetically paints green - in all, an upheaval almost unmatched since the age of the glaciers."⁸ Meanwhile, the fervent construction activities at Diablo contrasted with the slow pace of change at Montana de Oro State Park. In May 1973, *PG&E Progress* magazine, in a series of articles on the 'Parks of California,' featured the landscape just north of Diablo nuclear plant. *Progress* celebrated how, "relatively undeveloped, with primitive campsites, Montana de Oro has been little changed by time."⁹

⁶ "San Luis Obispo County eagerly awaits nuclear power plant," *San Diego Union*, 29 August 1971, Ian McMillan Collection (IMC) II/07, box 19, file 08, Cuesta College Environmental Archives.

⁷ Agreement between Resources Agency, State of California with Pacific Gas and Electric Company, 6 December 1966, 2, SCC 71/295c, box 81, file 18.

⁸ *Santa Lucian*, Santa Lucia Chapter Newsletter (April 1971), SCC 71/295c, box 87, file 30.

⁹ *PG&E Progress*, L/5 (May 1973), 8, HMC 001, box 04, file 10.

The fight to 'save' Diablo continued into the 1970s. San Luis Obispo's California Polytechnic State University (CalPoly) had "the reputation of being a guardian to which parents could entrust their sons and daughters without fear of their becoming hippies or radicals," according to Julie Kresja (wife of Richard Kresja). It was apparently Governor Ronald Reagan's favourite campus.¹⁰ During the 1970s, a small but significant number of students and professors nonetheless offered their own 'counter-expertise' against that of Pacific Gas. A student group, Ecology Action, intervened in early licensing hearings, and picketed California Public Utility Commission (CPUC) discussions on power line issues in 1971, flourishing the banner, "Mother Nature Has Rights Too."¹¹ Both Richard Kresja and Ralph Vrana taught at CalPoly, and several members of the Mothers for Peace had husbands there. Despite CalPoly maintaining the impression of "Reagan Country" throughout the period, a few individuals became crucial actors against Diablo nuclear plant.¹²

A number of local conservationists, under the title of the Scenic Shoreline Preservation Conference, also challenged PG&E's project in nuclear licensing hearings from the late 1960s to early 1970s. Leading members of Scenic Shoreline included Fred Eissler, Harold Miossi, and environmental historian Roderick Nash who taught at University of California, Santa Barbara. The group questioned the economic and ecological claims of PG&E concerning Diablo plant. Members

¹⁰ Julie Kresja, "No Diablo: A First Hand Account of the Evolution of Activism on a Conservative Campus," *Radical Teacher*, no.21 (no date), 20, IMC II/07, box 19.

¹¹ *Telegram-Tribune*, 12 March 1971.

¹² Kresja, "No Diablo," 20.

criticised the speculative choice of nuclear power above other conventional energy sources. In stark contrast to Ansel Adams' declaration of the Diablo land deal as a 'milestone in conservation,' Scenic Shoreline claimed that "the nuclear plant will be a white elephant and nothing more than a millstone around the necks of Pacific and its ratepayers." Conservationists feared that thermal pollution would ruin the marine ecology of Diablo Cove. Restricting the damage caused by PG&E's power-lines along their route out of Diablo plant and across adjacent lands signified another challenge. Scenic Shoreline presented arguments at California Public Utility Commission hearings over Diablo. However, with the exception of William Bennett (a vociferous anti-nuclear critic), the majority of attendees approved PG&E's plans. Scenic Shoreline attorney Bruce Sharpe meanwhile noted his disillusionment with stacked Atomic Energy Commission (AEC) hearings: "You could intervene in 600 licensing hearings and probably AEC would wind up granting 600 licenses. But you have to go on fighting, plant by plant until you can come up with a better answer."¹³ Local resident Ian McMillan reflected how "intervention was lonely at the time." He recalled that "to testify against the plant was heresy. Opposing the plant was the equivalent of being called a Communist. Everybody at the hearings was against us."¹⁴

¹³ Jim Hayes, "Our Nuclear Neighbor - IX: The fight goes on against reactors," *Telegram-Tribune*, 12 September 1973. Hearings organised by the nuclear establishment, be it the AEC or Atomic Safety Licensing Board (ASLB), offered Scenic Shoreline conservationists few genuine opportunities to undermine PG&E's plans. The organisation had mixed results in pushing the highly relevant issue of seismicity. Scenic Shoreline did, however, hold PG&E to at least cursory compliance with the demands of the National Environmental Policy Act (NEPA), pressuring the corporation to provide a comprehensive environmental impact report, emphasising detail rather than atomic propaganda.

¹⁴ Mark Evanoff, "Memorirs [sic] of a Movement: PG&E's Nuclear Power Play," (unpublished manuscript, 1984) ch.7, 31, author's personal copy.

Members of Scenic Shoreline longed for other groups to get involved. In 1973, Fred Eissler convinced members of a local women's organisation to take over the challenge at licensing hearings. The Mothers for Peace quickly became the arch-enemy of Pacific Gas. In contrast to prior conservationist arguments that focused upon damage to natural scenery, the Mothers articulated anti-nuclear concerns very much in tune with popular fears. The 1970s had started with Earth Day and the blooming of modern environmentalism. The decade ended with mass anti-nuclear protests and an atomic accident at Three Mile Island, Pennsylvania. The Mothers were part of an escalating turn against the peaceful atom.

[2] From Vietnam to Diablo

The Mothers for Peace had campaigned against the Vietnam War prior to becoming involved in Diablo Canyon. Towards the end of 1969, a young mother sent a letter to the *Telegram-Tribune* asking for similar people to join with her in sharing sadness and frustration over the Vietnam War. Mostly educated, white, middle class mothers went on to form an independent protest group.¹⁵ For the next few years, the Mothers provided local residents with draft information and a counselling centre, visited schools, organised vigils and parades, and leafleted the local Greyhound bus station where draftees assembled for departure.

¹⁵ The San Luis Obispo Mothers for Peace are not affiliated with any national women's group. They originally considered serving as a chapter of 'Another Mother for Peace,' based in Los Angeles, but discovered that the southern group operated without chapters. Interview with Liz Apfelberg, Arroyo Grande, 9 July 1997.

In 1972, a few members became interested in the construction of Diablo Canyon nuclear power plant. The series of articles in the *Telegram-Tribune* by Jim Hayes sparked their interest. The articles appeared to consciously downplay the dangers of atomic energy. One story relayed a plant engineer's comparison of the dangers of shaving with nuclear accidents, and Hayes himself seemed quite taken with a Geiger Counter's slang industry name as 'cutie pie' (after its technical initials, CP). His fifth article, entitled "Just don't call it disaster," revealed the fine line between reassuring the reader of the good intentions of 'our nuclear neighbor' and subconsciously arousing nuclear fear.¹⁶

Rather than taking PG&E's safety claims at face value, Mothers Sandy Silver and Liz Apfelberg researched the implications of atomic power. John Gofman's and Arthur Tamplin's *Poisoned Power: The Case Against Nuclear Power Plants* (1971) proved useful. In questioning "the gospel of the peaceful atom," former AEC scientists Gofman and Tamplin chose a path of nuclear dissidence. *Poisoned Power* described a "nuclear juggernaut" out of control, threatening human embryos and children while also colliding with "our democratic rights to the pursuit of happiness, in the form of a livable environment."¹⁷ As long vehicles carrying reactor parts travelled along PG&E's private highway to Diablo from Avila Beach, the Mothers applied Gofman and Tamplin's image of a dangerous nuclear juggernaut to their predicament in San Luis County. Concerns over atomic weapons proliferation and the 'cover-up' of

¹⁶ Jim Hayes, "Our Nuclear Neighbor - III: A Patient enters the nuclear 'hospital'," *Telegram-Tribune*, 5 September 1973, and Jim Hayes, "Our Nuclear Neighbor - V: 'Just don't call it disaster...'," *Telegram-Tribune*, 7 September 1973.

¹⁷ John W. Gofman & Arthur R. Tamplin, *Poisoned Power: The Case Against Nuclear Power Plants* (London: Chatto & Windus, 1973), 185, 21, 171-2.

bomb tests and radiation effects further magnified their worries. The Mothers were both cognisant of, and influenced by, a growing anti-nuclear climate. Cultural unease over the atom could now be found on television. In a 1971 documentary entitled "Powers That Be," actor Jack Lemmon declared, "nuclear power is not only undependable...it's about as safe as a closetful of cobras."¹⁸ Lemmon's analogy seemed appropriate for Diablo Canyon considering its past notoriety as a dangerous valley of snakes.

With America's gradual withdrawal from Vietnam, Silver and Apfelberg sensed an opportunity for the Mothers to challenge Diablo Canyon power plant. For some members this change of direction appeared natural. Having protested the stationing of a naval destroyer at Avila Beach in September 1971, attentions turned to PG&E's nuclear plant just around the headland as another threat lurking in San Luis Obispo County.¹⁹ As a pacifist group, the Mothers objected to the nuclear arms race, and were well aware of the dangers of the atomic bomb. The bomb provided a psychological bridge between opposing the Vietnam War and challenging Diablo plant. Sceptical of the 'peaceful' intentions of nuclear power, it seemed only reasonable to show concern over their new neighbour. For others, Diablo appeared an inappropriate cause for the Mothers for Peace. Opposing the Vietnam War was the essence of the Mothers. An anti-war group did not necessarily translate into an anti-

¹⁸ Spencer R. Weart, *Nuclear Fear: A History of Images* (Cambridge, Mass.: Harvard University Press, 1988), 315.

¹⁹ "A Partial, Chronological Listing of Projects, Events, and Achievements of the San Luis Obispo Mothers for Peace," detailed the leafleting near a naval destroyer stationed at Avila Beach during September 1971, Sandy Silver Personal Papers (SSPP), Santa Cruz.

nuclear one, for the routine construction at Diablo Canyon seemed far removed from the exceptional horrors of conflict in Vietnam. In case the group withdrew from proceedings, Silver and Apfelberg registered both as individuals and as Mothers in their application to intervene in the plant's licensing process. However, hesitation soon gave way to determination, and one year later the Mothers for Peace represented the major opposition to Diablo nuclear plant. With a paradoxical turn of phrase, the *Telegram-Tribune* announced in March 1974 that the "Mothers for Peace are fighting another war."²⁰

The Mothers attempted to access the nuclear licensing process by listing their grievances with Diablo nuclear plant and the nuclear industry in general. Rather than rally against damage to coastal wilderness, the Mothers focused upon the threat to human life posed by Diablo plant, and their rights as local citizens to challenge an atomic neighbour.²¹ In November 1973, a request sent to the AEC argued that the Mothers' status as "residents, property owners, and taxpayers of San Luis Obispo, dwelling within a 12 mile radius of Diablo Canyon... gives us the right to be concerned with the quality of the environment in the area which we live and work."²² With their focus upon immediate human surroundings, the Mothers articulated similar concerns to social justice environmentalists, who, in the 1990s, rallied behind the principle that "all Americans have a basic right to live, work, and play in a healthy

²⁰ "Mothers Plan Verbal Siege of Diablo," *Telegram-Tribune*, 23 March 1974.

²¹ Despite differences of intent, in practice during 1973, both the Scenic Shoreline and Mothers for Peace focused upon issues of nuclear waste storage, sabotage, radiation damage and the inadequacies of the government's Price Anderson Act in providing accident insurance.

²² Elizabeth Apfelberg & Sandra Silver to Office of the Secretary of the Commission, US Atomic Energy Commission (AEC), Washington D.C., 15 November 1973, Liz Apfelberg Personal Papers (LAPP), Arroyo Grande.

environment.”²³ The social justice movement primarily focused on the exploitation of ‘people of color’ and working class communities. Despite differences in race and class, the Obispan Mothers viewed the environment in a similar way to social justice advocates by interpreting pollution as an infringement on human rights. The work of the Mothers also resembled that of Lois Gibbs, who rallied against toxic dumping at Love Canal, New York, in the late 1970s. Like Apfelberg and Silver, Gibbs was a housewife turned community leader, committed to justice and a clean home environment.²⁴

As outsiders confronting the nuclear establishment, it took time for the Mothers to discover how the licensing process operated. PG&E denied that the Mothers’ list of problems qualified as “proper items for consideration by an Atomic Safety and Licensing Board,” many being “matters not relevant to an operating license hearing.”²⁵ The AEC was prepared to consider issues that applied purely to the plant under discussion, rather than to the whole atomic industry, and accepted only the evacuation issue as a valid contention. The rejection of other serious concerns made

²³ Robert D. Bullard, *Dumping in Dixie: Race, Class, and Environmental Quality* (Boulder: Westview Press, 1994, 2nd edn), xiii. Advocates of social justice are responsible for introducing a sense of human equity into the environmental movement by highlighting the racially discriminating actions of major polluters across the poorer parts of the United States, not least in their choice of location for chemical dumps.

²⁴ The work of Lois Gibbs is briefly discussed in Robert Gottlieb, *Forcing the Spring: The Transformation of the American Environmental Movement* (Washington: Island Press, 1993), 167, 186-7, 232.

²⁵ In the Matter of Pacific Gas & Electric Company Units 1 & 2 Diablo Canyon Site, US AEC, Dockets 50-275 & 50-323, “Answer of Pacific Gas & Electric Company to petition for lease to intervene filed by Elizabeth E. Apfelberg & Sandra Silver,” LAPP.

little sense to the Mothers. Silver confessed that “we didn’t understand the rules.”²⁶ However, a crack in the earth provided them with a real opportunity to test that system. Despite the abundance of earthquake zones across California, the discovery of a fault line less than three miles from Diablo Canyon represented a highly significant feature of that nuclear terrain. The AEC had little choice but to listen to seismic nature as a new voice in licensing hearings.

[3] Discovering the Hosgri Fault

In view of the established rationale of placing energy-providing industries close to areas of need, it always appeared likely that nuclear power plants would be built close to population zones. In the seismic state of California, the unpredictable natural environment itself represented a key dilemma for nuclear planners, complicating siting and construction decisions. Diablo plant was not the first nuclear project to be located close to a fault line. With similar discoveries at the Humboldt plant, during planning for Bodega Head, and later at Point Arena, one critic noted “PG&E’s uncanny ability to pick earthquake zones as sites for nuclear power plants.”²⁷ With the Bodega Head project cancelled primarily due to the proximity of the San Andreas Fault, Pacific Gas hoped to avoid a similar setback at Diablo Canyon. Corporate-employed officials duly carried out seismic surveys of the Pecho region, and PG&E

²⁶ Sandy Silver quoted in Mark Evanoff, “The 18-Year War Against Truth,” article featured in “Boondoggle at Diablo,” *Not Man Apart* [Friends of the Earth journal], 11 (September 1981).

²⁷ Alan Chen, “PG&E’s Nuclear Plants: A History of Faults,” in “Boondoggle at Diablo.” David Brower later commented that “a nuclear reactor is a sophisticated device that enables utilities to locate earthquake faults”: David Brower, *For Earth’s Sake: The Life and Times of David Brower* (Salt Lake City: Gibbs Smith, 1990), 210.

seemed keen to be sure that the Diablo site was earthquake proof. However, seismologists failed to extend their study offshore for signs of faulting. PG&E had resisted pressure for additional seismic study in the late 1960s emanating from both Scenic Shoreline and the United States Geological Survey (USGS). A local California Polytechnic (CalPoly) geologist, Ralph Vrana, explored the likelihood of faulting off Diablo, but Pacific Gas ignored his concerns.²⁸

In 1969, two Shell Oil geologists, Ernest Hoskins and John R. Griffiths, discovered a fault line less than three miles from Diablo. They published the results in the *American Association of Petroleum Geologists Bulletin* (1971). The fault line was named Hosgri, after Hoskins and Griffiths. For several years, the Hosgri Fault nevertheless remained undiscovered in pro- and anti-nuclear circles. The AEC ignored Hoskins and Griffiths' findings.²⁹ Pacific Gas should have noticed the discovery, but somehow failed to read of the work.³⁰ A CalPoly student, having been on a USGS field trip in late 1973, was the first person to inform the Mothers for Peace and Scenic

²⁸ During the 1970s and 1980s, critics frequently suggested that the company's desire to downplay the issue of faulting had translated into a conscious neglect of its public duties. With questions over PG&E's seismic survey of the region prior to construction, and accusations of evidence being buried by the corporation, the earthquake issue became something of a conspiracy theory amongst anti-nuclear activists. They pointed to the lack of any offshore seismic investigations as proof of guilt, and questioned why preliminary studies by Pacific Gas had ignored the one area where a fault line was later discovered. For an elaboration of anti-nuclear accusations, see Evanoff, "The 18-Year War Against Truth," and Evanoff, "Memorirs [sic] of a Movement," 32-41.

²⁹ Evanoff, "The 18-Year War Against Truth."

³⁰ Vrana later commented that the *Bulletin* itself represented a "prestigious geological journal which if PG&E geologists don't read, they ought to go back to grade school." Ralph Vrana, "Political facts concerning Diablo Canyon and the Hosgri Fault," 1, included in Jason Schmitt, "Concerns of the opposition to the Diablo Canyon nuclear power plant," Senior Project (History - 1993) focusing on documents and interviews with Ralph Vrana, held at California Polytechnic State University library, San Luis Obispo.

Shoreline of the fault line's existence.³¹ Both groups felt they had the right to be notified of any findings relevant to Diablo Canyon at the same time that the AEC and PG&E were informed. Hearing about Hosgri four years after its discovery, and at least one year later than Pacific Gas, riled the opponents of Diablo plant.³² If the fault, capable of registering 7.5 on the Richter scale, had first been discussed in 1969 rather than in 1974, activists felt there might have been a realistic chance of stopping the nuclear project.³³

The Mothers for Peace attempted to use the discovery of faulting as a weapon against Pacific Gas, but motions to halt construction at Diablo were refused.³⁴ For the next couple of years, PG&E, the newly formed Nuclear Regulatory Commission (successor to the AEC), and the USGS debated fault line characteristics.³⁵ The dispute focused upon the gap between an estimate of the Hosgri Fault's seismic potential as projected by the USGS and the existing design specifications of PG&E's project. Diablo plant was meant to withstand a maximum tremor of 6.75, but geologists predicted an earthquake from the Hosgri Fault might measure 7.5 on the Richter scale, significantly

³¹ Interview with Sandy Silver, Santa Cruz, 23 July 1997.

³² Despite PG&E testimony that October 1972 was the first time the company heard of the fault (see PG&E's Executive Summary in CPUC Rate Case, Application Nos. 84-06-014 & 85-08-025), to this day critics remain unconvinced.

³³ However, "by the time the Hosgri fault was raised as an issue of contention, it was weighed against the economic investment in the plant," commented Abalone member Mark Evanoff. Evanoff, "The 18-Year War Against Truth."

³⁴ Ibid.

³⁵ The Nuclear Regulatory Commission (NRC) took on the regulatory functions of the AEC in 1974. Doubts had grown over the former institution's capacity to effectively enforce guidelines whilst simultaneously promoting nuclear energy. The AEC had become tainted by its own propagandist activities. For contrasting viewpoints on the issue, see Jim Garrison, *From Hiroshima to Harrisburg: The Unholy Alliance* (London: SCM Press, 1980), 150, and Weart, *Nuclear Fear*, 346.

greater than PG&E had planned for.³⁶ The economic implications of retrofitting two nuclear reactors encouraged the company to resist the 7.5 figure. The utility responded with alternative methods of measuring the Hosgri Fault that downgraded its significance. The NRC also questioned USGS figures. Consultant geologist Richard Meehan, recognised “two kinds of geology: pronuclear geology and antinuclear geology” at work in NRC seismic hearings.³⁷ The 7.5 Richter estimate nevertheless remained.

The Mothers for Peace informed the *Los Angeles Times* of Hosgri’s existence. The newspaper sold well in San Luis Obispo, and chose to headline the story the following day. Up to 1973, articles published in the *Telegram-Tribune* frequently promoted nuclear power for the county, replicating PG&E’s own enthusiastic publicity campaign. Following the public discovery of Hosgri, the local newspaper withdrew its unconditional support for the nuclear plant.

The earthquake issue renewed public interest in Diablo Canyon. The Hosgri story, with its attendant image of two nuclear reactors built in an earthquake zone, led many people to question Diablo plant for the first time. A natural danger had awakened San Luis Obispo County to its nuclear fears. Suddenly, the place of Diablo plant in the local community seemed far from assured. The Hosgri Fault encouraged citizens to reconsider their trust in engineering. Concerns over earthquakes and atomic power

³⁶ Earthquakes are traditionally measured using a logarithmic scale devised by US geophysicist Charles Richter in 1935. For each whole number increase on the scale (eg. 6.0 to 7.0), recorded ground motion increases by a scale of x10, with an estimated rise in energy release of x31.

³⁷ Richard L. Meehan, *The Atom and the Fault: Experts, Earthquakes, and Nuclear Power* (Cambridge, Mass.: The MIT Press, 1984), xi.

gradually intertwined. Meehan noted how a geologist at Bodega Head “visualised the San Andreas fault as a kind of terrestrial reptile, lying deceptively still in the Californian sun, ready to strike a nuclear reactor.”³⁸ From 1973, a similar serpent had been found lurking close to Diablo Canyon.

[4] Campaigning Against the ‘Peaceful Atom’

When the Mothers for Peace intervened in Diablo’s nuclear licensing hearings, they faced not only scientific and technological boundaries, but also deeper prejudices hiding behind the atom. The format of the licensing hearings protected the nuclear world from outsiders. Lacking an attorney, the Mothers themselves attended the hearings, and brought along their children. The group often requested an end to the day’s business on the grounds that “we need to go home, we have families.” Their presence was considered “a joke” by some. As Liz Apfelberg explained: “at the beginning they didn’t take us seriously - they thought we were just a bunch of housewives with nothing better to do.” Replicating the experiences of Scenic Shoreline, the Mothers for Peace found themselves up against a stacked system, one that existed to bring about Diablo Canyon nuclear plant rather than prevent it. Silver noted how “the whole proceeding was a farce. It didn’t take us long to learn that.”³⁹

Considering issues that related solely to Diablo plant, rather than to nuclear power in general, appeared a convenient way of bypassing the majority of attendee concerns.

³⁸ Ibid., 151.

³⁹ Sandy Silver quoted in Evanoff, “The 18-Year War Against Truth.”

Although NRC officials conscientiously dealt with industry-wide problems, nuclear critics were left with the impression of a biased forum at Diablo. The Mothers were also forced to challenge the right of 'experts' alone to decide whether or not a nuclear plant should be built. The group's anti-nuclear position was itself partially based upon the work of experts such as John Gofman, but the Mothers felt the public as a whole deserved recognition in the atomic process. Granting 'ordinary' people a role in nuclear issues was uncharacteristic of American nuclear history. As a legacy of the Manhattan Project, the nuclear industry remained a closed system surrounded by military-style secrecy, with an 'atomic priesthood' insulated from outside criticism. Open democracy was deemed inconsistent with national security.⁴⁰ Yet, by the early 1970s, the increasing presence of the peaceful atom close to human environments, dissident scientists publicly voicing their concerns and a growing distrust of government bred of Vietnam and Watergate, indicated a changing climate hospitable to the Mothers' challenge. By 1977, the local women's group had become something of a nuisance to PG&E.

That the Mothers intended to delay the licensing process aggravated local citizens keen to see Diablo nuclear plant go on-line. In his testimony at NRC hearings, James Jones, an engineer from Santa Maria, vehemently attacked the local group.⁴¹ Jones portrayed the "bunch of frustrated housewives" as traitors to the nation, accusing them

⁴⁰ See Ralph Nader and John Abbotts, *The Menace of Atomic Energy* (New York: Norton, 1977), 12-13, and, Alexander Wilson, *The Culture of Nature: North American Landscape from Disney to the Exxon Valdez* (Cambridge, Mass.: Blackwell, 1992), 269. Wilson lambasted nuclear fission as "through and through a technology that inhibits human freedom."

⁴¹ Testimony of James (Jimmie) Jones before the US Nuclear Regulatory Commission (NRC), dockets 50-275 & 50-323, 25 February 1976 & July 22 1976, LAPP.

of jeopardising the country's economic strength and employment figures. According to him, the group had manipulated 'Lady Justice', a strange choice of phrase given his obvious qualms over female power. For Jones, nuclear power at Diablo symbolised a strong America. The engineer, "proud of country...our flag...and what it stands for," interpreted any opposition to the Diablo plant as anti-American. Jones had faith in the nuclear dream, and believed lunching on steak to be more dangerous (in case of choking) than atomic energy.

Whilst the views of Jones were no doubt extreme, a fair number of people associated nuclear power with themes of American pride and economic strength in the mid-1970s. In 1973, the United States suddenly faced not only an oil embargo implemented by the Organisation of Petroleum Exporting Countries (OPEC) due to American support for Israel in the Yom Kippur War, but the further repercussions of a 400% rise in OPEC's prices. PG&E used the energy crisis to smooth over cracks in support for Diablo Canyon. *PG&E Progress* magazine predicted that "a crisis is on the horizon...and will be upon us if our efforts to provide for future supplies are unsuccessful."⁴² "We do not expect blackouts or brownouts in the immediate future. But we cannot avoid them in the years beyond unless we are permitted to begin construction well in advance of need," it warned. OPEC's raising of oil prices temporarily waived nuclear concerns in the light of a nation-wide 'energy crisis.' In an August 1975 poll of 1046 San Luis County residents, 75% 'strongly' or

⁴² "Do We Face an Energy Crisis?," *PG&E Progress*, L/4 (April 1973), 7, AAC file: PG&E.

‘somewhat’ favoured Diablo plant. Of the total number interviewed, 57% were ‘very seriously’ or ‘somewhat’ concerned over the ‘energy crisis.’⁴³

Linking PG&E’s project with American energy sufficiency had revived its popularity at a critical point, when nuclear optimism in the county as well as nation-wide had begun to flag. Juanita Knapps of Cayucos wrote to the *Telegram-Tribune* in support of PG&E’s project. Claiming that “for every development that has ever benefited mankind, there have been risks and undesirable effects,” Knapps preferred nuclear dangers to a return to the “old days” implied by the absence of Diablo plant.⁴⁴ Whilst a nuclear landscape in the 1960s had epitomised future American progress, in the mid-1970s it was viewed as a defence of the American way of life.

The Mothers for Peace recognised the need to offer Obispans an alternative viewpoint. In late 1974 they approached the County Board of Supervisors to sponsor a ‘nuclear forum,’ whereby locals could hear both ‘sides’ of the atom. However, the Board itself was split over PG&E’s project. Three members advocated nuclear power, whilst the other two recommended a more cautious approach. The forum idea was thrown out by three votes to two.⁴⁵ The Mothers re-applied in April 1975. The *Telegram-Tribune* quoted Apfelberg over the responsibility of the Board to provide public information when San Luis Obispo County “has the potential of becoming the nuclear center of

⁴³ “PG&E News Bureau Release,” 7 October 1975, SSPP; “SLO County residents’ attitudes toward the energy situation and the Diablo Canyon nuclear power plant conducted for PG&E by Field Res. Corp,” August 1975, SSPP.

⁴⁴ Juanita Knapps, of Cayucos, to editor, *Telegram-Tribune*, 8 April 1974.

⁴⁵ Supervisor Richard Kresja proved to be the most outspoken critic of nuclear power. Throughout the 1970s, Kresja combined his official duties with environmental work, and became an essential ally of local green groups. Interview with Richard Kresja, San Luis Obispo, 9 July 1997.

America.”⁴⁶ A group of 95 doctors gave their public backing to the meeting. To the editor of the local paper, the appearance of medical professionals demonstrated that “the people who made such a request are neither ranters or crazies.”⁴⁷ Criticising the nuclear dream had started to become a legitimate and rational action for citizens. The physicians themselves subsequently sponsored the forum.

The *Central Coast Times* described the October 1975 event as “the day the experts came to town,” providing citizens with “a chance to separate emotional appeals from fact” over nuclear power.⁴⁸ This proved more difficult in practice. Locals were instead offered a choice between two groups, both contributing their share of hard facts and emotional appeals. Edward Teller, ‘father of the H-bomb,’ was criticised by Jane Swanson, member of the Mothers for Peace, for his emotional and non-factual delivery.⁴⁹ As with technical issues concerning the Hosgri Fault, experts were split over the safety of atomic power at Diablo Canyon. The forum showed the fallacy of interpreting the contest as a battle between (pro-nuclear) logic and (anti-nuclear) emotion.⁵⁰ Without common ground between the two parties, it was a question of which side to trust. Those citizens who expected a clear result were disappointed. Apparently, few people were converted to either side. However, at least the public

⁴⁶ “Board to Consider Nuclear Plant Forum,” *Telegram-Tribune*, 29 April 1975.

⁴⁷ “There Won’t Be a Nuclear Forum,” editorial, *Telegram-Tribune*, 21 May 1975.

⁴⁸ “The Day the Experts Came to Town,” *Central Coast Times*, 23 October 1975.

⁴⁹ Jane Swanson quoted in Evanoff, “The 18-Year War Against Truth.”

⁵⁰ During the post-1945 period, the rational countenance of nuclear science traditionally won the industry many supporters. Academics have yet to challenge the dichotomised view of reasoned atomic scientists versus irrational anti-nuclear activists. In fact, Spencer Weart provided justification for such a polarisation in his exhaustive study of atomic images, *Nuclear Fear* (1988).

had been offered two different visions of Diablo Canyon. The forum had also provided what Sandy Silver called “the coming out party for the anti-nuclear movement” in San Luis Obispo County.⁵¹

By 1976, an anti-nuclear storm was gathering across the state. Citizens had begun to campaign for a California Nuclear Safeguards Initiative to be introduced into state legislation that would limit, if not stop, nuclear projects. It indicated growing public antipathy towards the atom, along with the desire of Californians to take matters into their own hands.⁵² Meanwhile, in San Luis Obispo, the Mothers visited schools and held a 400-strong rally attended by anti-nuclear celebrity Jane Fonda. Fonda noted that “just 2 or 3 years ago, a locally initiated antinuclear movement, such as this, could not have been possible,” and welcomed the mushrooming of local groups.⁵³ The Mothers also organised a ‘No More Hiroshimas’ event, reinforcing the links between atomic bombs and nuclear power.

[5] Changing Perceptions of Diablo Canyon and Nuclear Power

In San Luis Obispo County, the bond between nuclear power and Diablo Canyon strengthened during the 1970s. Despite the presence of oak woodland and western

⁵¹ Sandy Silver quoted in Evanoff, “The 18-Year War Against Truth.”

⁵² Whilst the Initiative (also known as Proposition 15) failed, three bills with anti-nuclear measures were passed by the state legislature as an act of compromise. The Nuclear Safeguards Initiative demonstrated that well-organised anti-nuclear activists could have an impact on atomic developments in California. For a more detailed discussion of the Safeguards Initiative, see Thomas Raymond Wellock, *Critical Masses: Opposition to Nuclear Power in California, 1958-1978* (Madison: The University of Wisconsin Press, 1998), 147-172.

⁵³ “Jane Fonda Urges Diablo Plant Closure,” *Telegram-Tribune*, 9 February 1976.

rattlesnakes, Diablo was overridingly a nuclear landscape. The dangers of nuclear power encouraged anti-nuclear activists to imagine Diablo as a derelict and despoiled environment. Atomic optimists hailed Diablo Canyon as part of America's energy future. Any lingering memories of a pre-nuclear landscape were overwhelmed by far stronger images of atomic energy. The coastal wilderness had seemingly disappeared.

For Pacific Gas, the disappearance of natural features was something of a disappointment. The nuclear industry favoured the promotion of atomic plants in keeping with their natural settings, with trees and water serving to offset the artificial and alien qualities of nuclear plants. In its keenness to boost public acceptability of the peaceful atom, the AEC had once used an advertisement recommending that Americans "Go play in the nuclear power park."⁵⁴ The AEC advertisement showed a landscaped garden next to an atomic information centre, with a nuclear plant hidden behind abundant flora. The information centre's garden, complete with a pond and fountain, was a manufactured paradise, whilst the building itself resembled a wooden bathing lodge.⁵⁵ The invitation to 'play' in the nuclear park was not altogether misleading. The aim of the AEC was not to invite American youth into its control rooms, but the advertisement explained that, "it is possible, you know. The grounds adjacent to nuclear power plants are safe and clean enough for children's playgrounds." In advertising Diablo nuclear plant, PG&E deployed a similarly inviting photograph of the Vallecitos reactor "nestled among the hills of the

⁵⁴ Advertisement can be found in Gofman & Tamplin, *Poisoned Power*, 182-3.

⁵⁵ PG&E had similarly paid attention to aesthetics in the design of its own visitor centre, albeit on a smaller scale.

Livermore Valley,” with four ducks casually swimming in the lake next to the plant.⁵⁶

At Diablo, two reactors were meant to be ‘nestled’ in the canyon setting, part of, rather than at odds with, the fine coastal view. To Pacific Gas, which later encouraged school trips to the operating plant, Diablo Canyon was as safe as any other place for children to frequent. The corporation’s declaration that “atomic power best serves man and his environment” not only envisaged a nuclear park ably controlled by men, but also betrayed a belief in nature as man’s own playground.⁵⁷

Images of nuclear-nature parks failed to win over anti-nuclear activists. In their view, a nuclear landscape constituted a place of danger for nature and humanity. A vision of children on swings close to Diablo plant represented a nightmare scenario. Meanwhile, Diablo’s location served to amplify nuclear fears. Out of sight to all but passing mariners, Diablo’s secluded position encouraged some residents to ignore construction, but others were unhappy at being unable to keep an eye on PG&E’s activities. Critics took the choice of such a sheltered location as proof that Pacific Gas had something to hide. The atomic project also appeared dangerously near to San Luis Obispo. Realising the range that radiation could quickly cover, the Pecho Coast seemed far too close for comfort. The Mothers feared a cloud of radiation would some day rise from Diablo Canyon and drift inland from the coast, engulfing towns in a deadly invisible mist. The lack of a workable county evacuation plan worried them even more.

⁵⁶ “Special Report on Diablo Canyon,” *PG&E Life* (June 1967), 12.

⁵⁷ *Ibid.*

For Californians who had harboured their nuclear fears for some time, Diablo Canyon was a convenient place to vent their growing concerns. The prospect of global nuclear war had lacked the immediate danger posed by individual nuclear power plants. Test sites and missile silos were frequently far from population zones. Speaking on behalf of the Mothers, Sandy Silver explained how, “all of us have been against nuclear weapons, but for most people nuclear weapons are an abstract issue. Fighting a nuclear power plant...all of a sudden it became tangible for people.”⁵⁸ Diablo was close to people’s lives. Only the Irish Hills separated the atomic plant from residential gardens and groomed backyards.

[6] Ecofeminism and Parenting the Atom

The Mothers for Peace challenged the nuclear malefactor on their doorsteps, and, in so doing, discovered the gendered nature of atomic development. The Mothers faced a predominantly male agenda on the Pecho Coast. Though ‘Diablo Canyon’ was a gender-neutral name, the design, construction, and future operation of the plant, not forgetting its licensing hearings, were all processes controlled by men. Diablo nuclear plant was part of a broad atomic patriarchy. The ‘limitless’ quality of atomic energy referred not only to dreams of endless electrical supplies, but to breaking free of limits formerly imposed by nature in granting women the exclusive right of reproduction. One of the earliest nuclear bombs was named ‘Little Boy,’ and Edward Teller took the accolade of ‘father of the H-bomb,’ whilst AEC chairman David Lilienthal’s sobriquet

⁵⁸ John Raymond, “It’s not Their Fault,” *Santa Barbara News & Review*, 22 November 1984.

was 'Mr. Atom.'⁵⁹ Nuclear images were often couched in sexualised violence. Whilst not as obvious as nuclear weapons being compared with the male sex organ, and Hollywood starlets being described as 'anatomic bombs,' nuclear power plants were endowed with sexual connotations, from the 'breeder' reactor to the analogy between a nuclear meltdown and a sexual climax.⁶⁰ Diablo Canyon's reactors even resembled "breastlike domes."⁶¹ Meanwhile, promotions of the peaceful atom reinforced the image of American women as domestic servants. The idea of futuristic kitchens with 'nuclear powered toasters' tempted housewives to welcome the atom into their homes.⁶² Aimed at middle-class suburban homes, Disney's *Our Friend the Atom* and PG&E's description of Diablo plant as a 'good neighbor' suggested that a 'nuclear family' was more than just a socio-cultural ideal. Behind the stereotyping lay a belief that women could not, or need not, understand the actual science of the atom, but if nuclear power was packaged as a sleek and attractive electrical good, they could just about manage to plug it in and reap the benefits of man's work.

With their suburban lives and well-appointed homes, many of the women who joined the Mothers for Peace had been the targets of such propaganda. The tempting prospect

⁵⁹ The codename of the atomic bomb dropped on Hiroshima on 6 August 1945 was 'Little Boy.' Lilienthal reference taken from Paul Boyer, *By the Bomb's Early Light: American Thought and Culture at the Dawn of the Atomic Age* (New York: Pantheon Books, 1985), 294.

⁶⁰ See Jane Caputi, "Nuclear Power and the Sacred: Or Why a Beautiful Woman is Like a Nuclear Power Plant," *Ecofeminism and the Sacred*, ed. Carol J. Adams (New York: Continuum, 1993), 230-33.

⁶¹ Steven Marx, "Priesthoods and Power: Some Thoughts on Diablo Canyon," *Mapping American Culture*, ed. Wayne Franklin & Michael Steiner (Iowa City: University of Iowa Press, 1992), 293. The 'feminine' concrete domes arguably complemented the womanly shape of the natural 'Pecho' coast noticed by early mariners.

⁶² A reprint of PG&E's "The nuclear powered toaster" advertisement can be found in Evanoff, "The 18-Year War Against Truth." With a picture of a stainless steel, unplugged toaster, the utility commented that "nuclear power has been helping you make your morning toast for the past ten years."

of a gleaming nuclear kitchen nevertheless proved insufficient to win over a middle-California 'bunch of housewives.' The Mothers interpreted the nuclear-powered invasion of their homes as a radioactive threat rather than an atomic boon. PG&E's project signified a test of parental responsibility through its potential to violate the family environment. The Mothers focused not upon the promises of new schools or cheaper electricity, but their own role as protector of children. The group's motif of a white motherly dove holding a protective wing over her baby symbolised parental duty. A 1976 poster of a mother and toddler read "What do you do in case of a nuclear accident? Kiss your children goodbye."⁶³

The Mothers were not the only women's group to challenge the atom. At Greenham Common, Berkshire, England, in the early 1980s, feminists gathered in camps along the fences of an American airbase designated to receive Cruise Missiles.⁶⁴ The anti-nuclear movement across the western world attracted a strong contingent of women. However, in the early 1970s, the Mothers were one of the first groups to openly challenge the nuclear hegemony. Yet they neither saw themselves as feminists or environmentalists. As Silver explained, "you have to remember that this was kind of a very beginning scene. We had just come out of the 1960s. The Mothers for Peace were an anti-war group. We were no environmentalists as such, the feminist

⁶³ Lori McKay designed the poster in June 1975. See "A Partial, Chronological Listing of Projects, Events, and Achievements of the San Luis Obispo Mothers for Peace."

⁶⁴ For studies of protest at Greenham Common, see: Alice Cook and Gwyn Kirk, *Greenham Women Everywhere: Dreams, Ideas and Actions from the Women's Peace Movement* (London: Pluto Press, 1983); Barbara Harford and Sarah Hopkins, eds., *Greenham Common: Women at the Wire* (London: The Women's Press, 1984); and Jill Liddington, *The Long Road to Greenham* (London: Virago, 1989). Meredith Veldman's *Fantasy, the Bomb, and the Greening of Britain: Romantic Protest, 1945-1980* (Cambridge: Cambridge University Press, 1994) is also useful.

movement hadn't really started yet."⁶⁵ Despite their title and largely, if not exclusively, female membership, the Mothers failed to see themselves as leaders of feminist thought and action. For Apfelberg "it was sort of like a group of friends."⁶⁶ Looking back on the early 1970s, Silver remembered how it "definitely was not a feminist group then." She felt more concerned with civil rights at the time of joining the Mothers: "I felt very strongly for ethnic minorities, but women? I thought, we don't have any problems - how can you talk about women's problems when blacks can't vote, blacks can't drink water from the same fountain as a white." Although members such as Pat Noah raised feminist consciousness within the group, female issues did not dictate its path. The environmental tag equally seemed inappropriate. "It wasn't our tag. Our tag was there's radiation, radiation hurts children, in particular the foetus and young children, and that was our concern," explained Silver.⁶⁷ The Mothers came from a background of civil rights and anti-war experiences, not from the Sierra Club. They were human preservationists not land preservationists.

Nonetheless, ecofeminist impulses drifted through the Mothers' meets.⁶⁸ Concerned women responded to the nuclear threat by coming together, and sharing experiences and responsibilities. This almost unconscious, *de facto* female empowerment made

⁶⁵ Interview with Sandy Silver.

⁶⁶ Interview with Liz Apfelberg.

⁶⁷ Interview with Sandy Silver.

⁶⁸ Greta Gaard posits that modern ecofeminism heralded from "peace movements, labor movements, women's health care, and the anti-nuclear, environmental, and animal liberation movements." At Diablo Canyon, the Mothers for Peace pioneered an ecofeminist challenge to nuclear power, based on a heartfelt defence of nature, motherhood, and earthcare. Greta Gaard, "Living Interconnections with Animals and Nature," *Ecofeminism: Women, Animals and Nature*, ed. Greta Gaard (Philadelphia: Temple University Press, 1993), 1. Ecofeminism is also an expression of the age-

them a “women’s movement without knowing it” during the early 1970s.⁶⁹ The Mothers also felt concerned for Mother Nature. Their arguments were permeated with notions of technological dangers, artificial poisons, and human fallibility.⁷⁰ “Radiation Blues” by local woman Jean Beauvais articulated proto-ecofeminist concerns. The song began: “Tell me mama, why the grass won’t grow, at least it looks like its pretty slow, ma please tell me why the grass won’t grow, it worries me to death.”⁷¹ Beauvais’ melancholic story introduced a strong nature theme into the relationship between a mother and her child facing a slow death by radiation, presumably the result of an accident at Diablo nuclear plant. In questioning why “the bird won’t fly” as well as “why it’s hard to talk,” the child in the story witnessed a place that was quietly dying by radiation, very similar to the one Rachel Carson described in ‘A Fable for Tomorrow,’ the opening chapter of *Silent Spring* (1962). Both Carson’s and Beauvais’ imaginary places carried a sense of foreboding, “a strange stillness,” caused by an invisible poison that had killed not only bird song, but would soon engulf life

old relationship between women and the natural world. See Carolyn Merchant, *The Death of Nature: Women, Ecology and the Scientific Revolution* (San Francisco: Harper & Row, 1980), xix.

⁶⁹ Interview with Sandy Silver.

⁷⁰ Environmental historians have taken modern U.S. environmentalism to be an expansion, or outgrowth, of earlier preservation and conservation movements. In order to take account of anti-nuclear groups like the Mothers for Peace, the time has come to recognise modern environmentalism as a diverse movement with equally diverse roots. Whilst acknowledging other inputs, such as the roles of the civil rights, women’s, and peace movements, authors such as Stephen Fox (*The American Conservation Movement: John Muir and His Legacy* (Wisconsin: The University of Wisconsin Press, 1981, ch.9) have assumed conservation to be the true ancestral home of environmentalism. As conservation groups such as the Sierra Club are challenged for being out of touch with social justice issues, and for perceiving their task to be purely that of defenders of wilderness, environmental historians have similarly found themselves under attack for narrow-mindedness. “Given the diverse nature of contemporary environmentalism,” exclaims Robert Gottlieb, “it is striking how narrowly the movement has been historically described.” Gottlieb, “Reconstructing Environmentalism: Complex Movements, Diverse Roots,” *Environmental History Review*, 17/4 (winter 1993), 3. His own interpretation of American environmentalism can be found in *Forcing the Spring: The Transformation of the American Environmental Movement* (Washington D.C.: Island Press, 1993).

⁷¹ Jean Beauvais, “Radiation Blues,” 20 May 1976, LAPP.

itself. “This town does not actually exist, but it might easily have a thousand counterparts in America,” warned Carson at the end of her ‘Fable.’⁷² Beauvais indicated that San Luis Obispo might soon become one of them. “Radiation Blues” forecast the atom’s role in both the death of nature and the death of children. The child, on behalf of nature, asked “well if you could do it again, would you really TRY to save this earth before I DIE??”

The indication of a link between ecological responsibility and parental responsibility suggested that the Mothers for Peace were well suited to environmental protest. Meanwhile, the Mothers no doubt respected and empathised with Rachel Carson, who herself had been patronised, condemned, and smeared by a male scientific community.⁷³ The Mothers printed an extract from *Silent Spring* in their handbooks: “By acquiescing in an act that can bring suffering to any living thing; who among us is not diminished as a human being?”⁷⁴ The two strands of feminism and environmentalism gradually came together within the Mothers for Peace during the 1970s.

⁷² Rachel Carson, *Silent Spring* (Boston: Houghton Mifflin, 1962), 2, 3.

⁷³ See Linda Lear, *Rachel Carson: Witness for Nature* (New York: Henry Holt and Company, 1997), 429-35, 462, and, for a broader look at the scientific backlash, Frank Graham, Jr., *Since Silent Spring* (Greenwich, Conn.: Fawcett Crest, 1970), 59-76.

⁷⁴ “San Luis Obispo Mothers for Peace,” pamphlet, LAPP; Carson, *Silent Spring*, 100.

[7] Local Fallout

Over a ten-year period the local opposition to Diablo Canyon nuclear plant changed significantly. At the beginning of 1967, Pacific Gas faced a challenge from conservationists concerned by landscape despoilation. By the mid-1970s, a group of women worried about radiation had become PG&E's foremost enemy. Local attitudes had also changed. Citizens faced up to the realities of having a nuclear neighbour for the first time in the 1970s and began to consider the dangers it posed to the region. The work by the Mothers for Peace, the discovery of the Hosgri Fault, and growing nation-wide doubts over nuclear safety caused citizens to gradually re-consider a nuclear plant in their 'backyard.' As a useful barometer (and stimulant) of changing public sentiment, the local *Telegram-Tribune* went from enthusiastically supporting nuclear power in San Luis County in 1967 to openly criticising it by 1977. Whilst relaying the industry-held view that "We have a pretty good handle on all of this," Jim Hayes had also compared the running of a nuclear plant at Diablo Canyon to "the very serious business of holding a king cobra by its hood while milking its venom."⁷⁵ The golden optimism that had accompanied plans for PG&E's project in the 1960s ebbed during the 1970s. Whilst many locals still accepted Diablo plant, they did so with notable reservations.

A wary public was just one of the problems PG&E encountered at Diablo Canyon. The corporation had hoped for its nuclear plant to begin commercial operation in 1972. The construction process took much longer than expected. Dilemmas arose in

⁷⁵ Hayes, "Our Nuclear Neighbor - III: A patient enters the nuclear 'hospital'."

quality control and design schematics. During 1974, an estimated one million ‘man’-hours were lost in labour disputes.⁷⁶ The cost of the project continued to rise. Whilst plant systems were tested in early 1976, an operating license was delayed by disagreements concerning the Hosgri Fault.

PG&E also became involved in a legal battle concerning the Diablo property. Rancher-developer Robert Marre originally leased 585 acres for the plant site to Pacific Gas (as well as land for a transmission corridor and access road) in return for “a possible \$20 million line of credit.”⁷⁷ In 1974, Marre declared his holdings bankrupt. PG&E contended that it was owed \$11 million. In 1977, the federal court awarded the utility a 99-year lease not only on Diablo Canyon itself, but also on the Marre land surrounding it, amounting to an extra 3,875 acres.⁷⁸ PG&E’s assets stretched from Point San Luis to Diablo Rock, representing over half of the Pecho Coast. The additional acres provided the utility with its own nuclear buffer zone. The area immediately at risk from a plant accident now came under the company’s control.

Another challenge concerned the impact of plant operation upon local marine life. The power plant’s cooling systems had been designed to take in millions of gallons of ocean water, which, after passing through the nuclear edifice, would return to the Pacific around 11 degrees Centigrade (20 degrees Fahrenheit) warmer. Predictions varied over the effects of thermal warming on the chosen discharge area of Diablo

⁷⁶ Deberry, “Diablo Canyon Project History,” vol.1, 12-3.

⁷⁷ *Telegram-Tribune*, 13 December 1972.

⁷⁸ *Telegram-Tribune*, 1 October 1977.

Cove. Based on AEC testimony that “much of the marine plant and animal life would benefit from the discharge of heated water,” the local newspaper had claimed: “Diablo to benefit ecology” in 1973.⁷⁹ However, some feared the immediate region would be significantly harmed by the change in temperature. In 1974, a local abalone diver, William Cornwell, intervened in the licensing hearings due to his concerns for marine life along the Pecho Coast. Cornwell claimed that Pacific Gas had already destroyed the cove immediately to the south of Diablo Canyon. By installing the plant’s intake systems, PG&E had created a “silt laden grave yard” there.⁸⁰ Whilst PG&E attempted to minimise disturbance of Chumash burial sites at Diablo during construction activities, the company had created offshore cemeteries of its own.

Pacific Gas tested the plant’s cooling system for the first time during the summer of 1974. State Fish and Game staff, along with PG&E’s own biologists, later discovered 200 dead abalone in Diablo Cove. By January 1975, estimates of the death toll ranged from 2,000 to 10,000 black abalone and 2,000 to 3,000 red abalone.⁸¹ Officials blamed the use of copper in the cooling pipes for contaminating the discharged water. Fish and Game staff were further concerned by the high level of toxicity rendering local abalone unfit for human consumption, a reminder that Pacific Gas was not alone in killing sea life - a whole industry depended on it. PG&E then received a citation

⁷⁹ Bruce Kyse, “Diablo to benefit ecology,” *Telegram-Tribune*, 18 September 1973.

⁸⁰ “Abalone diver asks AEC for voice,” *Telegram-Tribune*, 1 May 1974. In December 1976, the *Telegram-Tribune* detailed the concerns of the California Department of Fish and Game’s Director, E.C. Fullerton, over a lack of adequate research into the project’s potential environmental effects. See Bob Anderson, “Fish and Game: Diablo threatens marine life,” *Telegram-Tribune*, 18 December 1976.

⁸¹ Warren Groshong, “Big abalone kill at Diablo, test shows,” *Telegram-Tribune*, 22 January 1975.

from the Environmental Protection Agency (EPA) threatening action if the company further violated its permit to construct and test Diablo plant.⁸² At a cost of over \$5 million, copper pipes were replaced with titanium ones.⁸³ The state attorney general's office negotiated a \$375,000 contribution by Pacific Gas to the California Department of Fish and Game, although a figure exceeding \$1 million had been rumoured.⁸⁴ A biologist on contract to PG&E had monitored an increase in sea otter numbers along the Pecho Coast during the time of abalone loss. Otters displayed a voracious appetite for abalone shellfish. The discovery that local fauna as well as nuclear construction had contributed to a decline in abalone numbers may have saved the utility a few dollars.⁸⁵ Nonetheless it was PG&E's role in the kill that the forthcoming anti-nuclear direct-action movement highlighted by choosing Abalone Alliance as its name.

⁸² "Diablo cited for pollution," *Telegram-Tribune*, 10 April 1975.

⁸³ "Diablo to test new tubing," *Telegram-Tribune*, 7 November 1975.

⁸⁴ Bob Anderson, "Abalone: PG&E gives funds for program," *Telegram-Tribune*, 9 December 1976; Bob Anderson, "Abalone Kill: Behind-the-scenes actions in Diablo case," *Telegram-Tribune*, 27 December 1976.

⁸⁵ *Ibid.*; Conversations with Sue Benech, biologist, Diablo Canyon, 21 August 1997.

Chapter Five

The Showdown (1977-1984)

[1] Clams and Abalone

In the summer of 1976 a new style of anti-nuclear protest surfaced on the East Coast of the United States. A collection of citizen groups and local environmental organisations formed the Clamshell Alliance in response to plans for a nuclear plant at Seabrook, New Hampshire. Legal opposition had failed to dampen the enthusiasm of the Public Services Company for two 1150-megawatt reactors on the coast, and with construction about to begin, the Alliance chose non-violent direct action as the most suitable means to halt Seabrook plant. Within the anti-nuclear coalition, members developed a consensus-based decision-making process to enable each group to participate fully. The motif of the Clamshell meanwhile reflected a desire to protect marine ecology as well as “to honor Seabrook clamdiggers who were the first to reject the nuclear project, and the Native People who for three thousand years clammed there and cared for the estuary.”¹ The Alliance embarked upon a series of protests. During April 1977, Clamshell activists staged their first mass occupation of Seabrook construction site, reclaiming the land under the title of ‘Freebrook.’²

¹ Clamshell Alliance, *Handbook for the Land and Sea Blockade of the Seabrook Reactor Pressure Vessel* (Portsmouth, New Hampshire: Clamshell Alliance, undated), 2, Abalone Alliance Collection (AAC), Abalone Alliance Safe Energy Clearinghouse, San Francisco.

² Sheryl Crown, *Hell No, We Won't Grow: Seabrook, April 1977 - Nonviolent Occupation of a Nuclear Power Site* (London: Housmans, 1979), 23.

In February 1976, a Continental Walk for Disarmament and Social Justice passed through San Luis Obispo en route to Washington D.C. from San Francisco. Several walkers visited Diablo Canyon and held a silent vigil within PG&E property. Their act of civil disobedience was rewarded with a stint at the county jail. The protest impressed Raye Fleming, a resident of San Luis County and member of the Mothers for Peace. Disillusioned with the constraints of legal intervention, Fleming welcomed the idea of direct action at Diablo Canyon. The Continental Walk highlighted the possibility of a network of activists working together to protest against the plant. The Santa Cruz Resource Center for Non-violence and the San Francisco office of the American Friends Service Committee (AFSC) offered support for an anti-nuclear alliance. AFSC co-workers David Hartsough and Liz Walker helped set up People Against Nuclear Power (PANP), later renamed People Generating Energy (PGE), in the San Luis locality. By February 1977, approximately fifty people had joined.³

PGE, along with six other anti-nuclear groups from across the state, formed the Abalone Alliance at a conference at Rancho El Chorro, close to Camp San Luis, in June 1977. The California coalition bore more than a passing resemblance to the Clamshell Alliance, replicating the grassroots organising, consensus process, and non-violent civil disobedience practised at Seabrook. Californians at Camp San Luis also chose a similar name to activists in New Hampshire. Diablo Canyon started out as

³ People Generating Energy, "People Generating Energy" timeline (undated, approx. July 1977), AAC file: Abalone Alliance Flyers on Diablo; David Hartsough, "Shalan Grant Proposal" (undated, approx. 1978), American Friends Service Committee (AFSC), San Francisco office, file: Abalone Alliance; San Luis Obispo County *Telegram-Tribune*, 25 February 1977. AFSC co-workers David Hartsough and Liz Walker committed themselves to a grassroots campaign against nuclear power, taking their inspiration from the Service's 'Simple Living Program' and its commitment to economic decentralisation, empowerment and social change.

'Seabrook West,' an extension of the campaign against the peaceful atom in the East.⁴ Grassroots opposition to atomic power emerged across the state during the late 1970s, and the Abalone Alliance grew from its initial 7 member groups to 24 by 1979, reaching a peak of more than 60 by 1981. Anti-nuclear groups scattered across the state managed their own campaigns, but came together at a sunny crag on the California mid-coast for mass protest actions. Conveniently located just off Highways 1 and 101, the Pecho Coast was accessible to activists travelling from San Francisco and Los Angeles. The Alliance established offices in San Francisco and San Luis Obispo, where opposition to the plant proved strongest.⁵ Newspapers described a white middle-class movement, a mixture of students taking part in their first protest and seasoned veterans of earlier peace and civil rights crusades. The image stuck, backed up by photographs of twenty-something protesters arm-in-arm singing pacifist songs at the gates of Diablo. The open structure and wide geographical spread of the Abalone Alliance nevertheless attracted a fair cross-section of Californians. Former Abalone William Miller remembered how he "was just amazed...at the variety of people who were involved, extreme differences from teenage anarchists to ageing hippies to straight conservative people."⁶ In contrast to press stories of a horde of

⁴ The phrase 'Seabrook West' can be found in Harvey Wasserman, "Nuclear Showdown at Diablo Canyon," *Chicago News & Review*, 1 February 1979. Both Clamshell and Abalone Alliances also took inspiration from 'across the pond,' fully aware of a 28,000 strong protest against a nuclear plant in Wyl, West Germany, during 1976. For the influence of Wyl, see, Abalone Alliance, *Direct Action Handbook: Blockade Diablo Canyon 1979-1980* (San Francisco: American Friends Service Committee, 1979), 2; People Against Nuclear Power, "People Against Nuclear Power" handout, AFSC file: green, anti-nuclear campaigns; Interview with David Hartsough, San Francisco, 18 July 1997.

⁵ Seven groups: Mark Evanoff, "Memorirs [sic] of a Movement: PG&E's Nuclear Power Play" (unpublished manuscript, 1984), ch.7, 48; Twenty-four groups: *Direct Action Handbook: Blockade Diablo Canyon 1979-80*, 6; Over sixty groups: *Telegram-Tribune*, 12 September 1981, and, *It's About Times* (September 1980), 2. The two offices were located at 452 Higuera Street, San Luis Obispo, and Room 307, 944 Market Street, San Francisco.

⁶ Interview with William Miller, San Luis Obispo, 3 September 1997.

unwelcome anti-nuclear ‘outsiders’ invading a quiet rural county, many local citizens lent their support to civil disobedience events. The ‘Alliance’ represented both visitors and residents alike. By 1979, the state as a whole seemed swept up in an anti-nuclear magnetic storm, with Diablo Canyon the conductor. Californians interested in grassroots organising and non-violent action relished the opportunity to attend the first large-scale anti-nuclear protest on the West Coast. Attendees voiced concerns over nuclear power, the environment, consumerism, authority and government. After a brief respite in the mid-1970s, a time when social and environmental issues took second stage to the energy crisis, “people were ready to get involved” in popular crusades again and even resurrect the protest culture of the 1960s.⁷ For socially progressive and politically radical Californians, visiting Diablo resembled an act of civic duty, protesting simply “because that’s the kind of people we are here.”⁸

The Abalone Alliance held its first civil disobedience action at Diablo Canyon on August 6, 1977. The county sheriff’s department arrested 46 protesters for trespass on private property and failure to disperse.⁹ On arrest, demonstrators “left abalone shells on the road in their places.”¹⁰ Those who illegally walked the Pecho Coast included local conservationist Ian McMillan (at 71 years of age) and a member of the Mothers for Peace, Mary Gail Black. Their presence served as a reminder that the Abalone Alliance, whilst bringing new tactics to Diablo, also continued a tradition of protest

⁷ Interview with David Hartsough.

⁸ Interview with Barbara Levy, San Francisco, 29 July 1997.

⁹ George S. Whiting, “Decision at Diablo Canyon,” Sheriff’s Report (1978), AAC file: 8/6/78 Diablo Blockade Sheriffs Report.

¹⁰ Dorothy Houston, “Nuclear foes stage a protest,” *The Daily Californian*, 11-12 August 1977.

against the plant. Meg Symond, one of the 1,414 protesters arrested at Seabrook earlier in the year, also joined the Abalone action. The Alliance hosted a rally at nearby Avila Beach. Between 1,000 and 1,500 individuals took to the sand to hear the likes of ecologist Barry Commoner and nuclear critic Daniel Ellsberg highlight the dangers of Diablo plant. The *Santa Barbara News and Review* predicted “a major escalation in the battle over the nuclear reactor” would follow the event.¹¹

The Abalone Alliance organised a similar gathering a year later, attended by upwards of 3,000 people.¹² The *San Francisco Bay Guardian* renamed the event “the Diablo Canyon Anti-Nuke Beach Party Bonanza and Energy Fair.”¹³ David Brower returned to Diablo, addressing a crowd far more receptive to anti-nuclear principles than his Sierra Club colleagues in the late 1960s. Ian McMillan and County Supervisor Richard Krejsa spoke out against PG&E’s atomic project, whilst former Atomic Energy Commission scientist John Gofman explained the scientific dangers of radiation.¹⁴ A giant plastic blue whale floated above protesters. Waves washed away a sandcastle version of Diablo plant on Avila Beach, whilst Abalone members hoped for a greater tide a few miles to the north. During the action, protesters chanted “wave, wave, wave, wave of abalones, wave, wave, wave, wave, washing over Diablo Canyon, washing over Diablo Canyon nuclear sandcastle,” as the first occupiers

¹¹ Barbara Evans, “Rally ‘Round - Stop the Nukes,” *Santa Barbara News & Review*, 5 August 1977.

¹² Estimates of rally numbers vary widely. In a timeline of Diablo Canyon, the *Telegram-Tribune* put the number at 3,000 (*Telegram-Tribune*, 11 August 1984), whilst Evanoff in “Memorirs [sic] of a Movement” placed the figure at 6,000 (ch.7, 51).

¹³ Paul Krassner, “No Nukes is Good Nukes,” *San Francisco Bay Guardian*, 10 August 1978, 6.

¹⁴ Kresja supported anti-nuclear activity in whatever role he could, from public speaking to playing banjo at fund-raisers.

prepared to block the entrance gates.¹⁵ Officials arrested 487 Abalone activists in total. Upon arraignment, many used their courtroom appearances to argue an anti-nuclear case. "I am not on trial - nuclear fission is," declared county resident Bill Denneen.¹⁶ One protester charged with trespass responded, "I plead for the beauty that surrounds us." The judge, struggling to fit that answer within his legal parameters, suggested, "May I enter that as a not-guilty plea?" The protester replied, "Yes, you may."¹⁷

As well as organising protests in San Luis County, the Abalone Alliance regularly picketed PG&E offices across the state during the late 1970s. Local members leafleted workers on their way into Diablo Canyon. Public education, or 'outreach,' included an American Friends slide-show entitled 'We've got the power', along with a variety of anti-nuclear films and documentaries. The Alliance published a newspaper, *It's About Times*, that covered a wide range of nuclear issues whilst offering a forum for debate amongst activists. Separate groups within the Abalone coalition developed their own foci, protest style and inventive schemes in the common quest to prevent Diablo nuclear plant from going on-line.

In March 1979, cinema audiences followed the intrigues of corporate power, atomic danger and press manipulation in *The China Syndrome* (1979), a Hollywood thriller focusing upon unsafe practices at a fictitious American nuclear plant. During the

¹⁵ Susan Stern, "Diablo," *In These Times* (20-26 September 1978), Mary Moore Personal Papers (MMPP), Occidental, file: 1981 pre-Diablo.

¹⁶ Bill Denneen, "Statement on Diablo," AAC file: Diablo defense '78.

same month, a partial meltdown at Three Mile Island (TMI) atomic power plant in Pennsylvania caught the whole nation's attention. For several days of the crisis nobody appeared to understand what had gone wrong at Metropolitan Edison's Unit 2 reactor on the Susquehanna River. Rumours of a follow-up accident persisted, and thousands of families evacuated the region. Public confidence in the American nuclear industry plummeted.¹⁸ The Abalone Alliance had planned a rally in San Francisco for April 7th, long before problems in Pennsylvania. The combined impact of *The China Syndrome* and Three Mile Island spurred 25,000 people to attend the 'Stop Diablo Canyon' protest outside San Francisco's City Hall. Anti-nuclear activity reached a crescendo on the East Coast when 200,000 participated in a rally at New York City's Battery Park. "Suddenly everyone wanted to join the anti-nuclear movement," Abalone Mark Evanoff remembered.¹⁹

[2] Expecting the Follow-up: *The China Syndrome*, 'TMI2' and Diablo Canyon

Although a number of books and films had touched upon the dangers of atomic power, the most notable being John G. Fuller's *We Almost Lost Detroit* (1975), mainstream

¹⁷ "Report from Devil's Canyon," *Radioactive Times* (Fall 1978).

¹⁸ For analysis of the Three Mile Island accident and its social repercussions, see: Peter S. Houts, Paul D. Cleary and Teh-wei Hu, *The Three Mile Island Crisis: Psychological, Social, and Economic Impacts on the Surrounding Population* (University Park, Penn.: Pennsylvania State University Press, 1988); Daniel Martin, *Three Mile Island: Prologue or Epilogue?* (Cambridge, Mass.: Ballinger, 1980); Thomas H. Moss & David L. Sills, eds., *The Three Mile Island Nuclear Accident: Lessons and Implications*, Annals of the New York Academy of Sciences, vol. 365 (New York: New York Academy of Sciences, 1981); Mark Stephens, *Three Mile Island* (London: Junction Books, 1980).

¹⁹ Evanoff, "Memorirs [sic] of a Movement," ch.7, 57. Pam Metcalf noted: "Three Mile Island confirmed our worst fears, which was tragic," but "also gave us what was needed to try to stop that from happening in California." Interview with Pam Metcalf, San Luis Obispo, 3 September 1997.

success had eluded works of anti-nuclear fiction in the 1970s.²⁰ Coinciding with Three Mile Island, and sporting a capable script and cast, *The China Syndrome* proved the exception. *The China Syndrome* was a quality Hollywood thriller with atomic trimmings. The story related dangerous cover-ups at a fictional 'Ventana' nuclear plant "set in California" 'near' the San Fernando Valley.²¹ Whilst filming a promotional segment on nuclear power at Ventana, TV news reporter Kimberly Wells (Jane Fonda) and her cavalier cameraman, Richard Adams (Michael Douglas) witnessed scenes of panic following an unplanned reactor 'scram.' Unbeknown to officials, Adams captured the event on tape, but broadcasting moguls refused to air the story. Undaunted, Wells and Adams convinced one of the plant's shift supervisors, Jack Godell (Jack Lemmon), to look into the matter. Godell discovered that X-rays of faulty welds had been deliberately doctored by plant officials. Following a failed plan to show the X-rays at nuclear hearings, Godell, in desperation, locked himself inside the control room, promising to stay there until somebody took notice of his story.²² *The China Syndrome's* unusual mixture of Hollywood-style accessibility, gritty realism (Michael Gray's film script drew on an accident at Dresden II nuclear plant

²⁰ Other (less popular) films and novels of the 1970s that served to highlight the dangers of nuclear power include: *The Big Bus* (comedy-disaster movie concerning a nuclear-powered bus) (Paramount Pictures, 1976); John G. Fuller, *We Almost Lost Detroit* (novel, based on a true story) (New York: Reader's Digest Press, 1975); Alistair MacLean, *Goodbye California* (novel) (London: Book Club Associates, 1978); Gordon Pape & Tony Aspler, *Chain Reaction* (novel) (London: Barrie & Jenkins, 1979); *Red Alert* (TV movie) (Paramount Pictures, 1977); Thomas N. Scortia & Frank M. Robinson, *The Prometheus Crisis* (novel) (London: Hodder & Stoughton, 1975).

²¹ This section is based upon *The China Syndrome* (Columbia Pictures, 1979) and the film's companion novel, Burton Wohl, *The China Syndrome* (London: Severn House, 1979).

²² Hector, a friend of Godell, volunteered to bring the doctored X-rays to nuclear hearings, but his car was forced off the road (and the X-rays vanished). The scene resembled the real-life circumstances surrounding Karen Silkwood's death in November 1974 (Silkwood was on her way to hand over evidence of nuclear industry corruption in Oklahoma to a sympathetic reporter for *The New York Times*). For a detailed discussion of the mystery concerning the death of Karen Silkwood, see Richard Rashke, *The Killing of Karen Silkwood* (Boston: Houghton Mifflin Company, 1981).

near Chicago in 1970), and sense of foreboding made it a minor '*Silent Spring*' for the anti-nuclear cause. Similar to the victimisation of Rachel Carson by pesticide conglomerates, *The China Syndrome* faced a barrage of criticism by nuclear industry officials, even prior to release. Nine days before opening, an executive of Southern California Edison, without seeing the movie, charged that *The China Syndrome* had "no scientific credibility and is, in fact, ridiculous."²³

For anti-nuclear activists, it was easy to link *The China Syndrome* with Diablo Canyon. The Ventana plant, amongst "surrounding sand and chaparral," windy roads and rolling hills, partially resembled Diablo Canyon and the Pecho Coast. The corporation owning Ventana, 'California Gas and Electric' (CG&E), served as a fictitious twin to Pacific Gas and Electric. *The Village Voice* associated the spate of welding problems at Diablo with similar problems at Ventana.²⁴ The New York City newspaper's description of nervous PG&E workers, keen to avoid the attention of the press, resembled *The China Syndrome*'s portrayal of CG&E employees and their own guilt-ridden silence in response to the investigative advances of Kimberly Wells. Violent tremors at Ventana due to the near-failure of pump supports (that threatened to "blow Southern California sky high") no doubt conjured images of a Hosgri-inspired earthquake at Diablo Canyon amongst Obispan cinema-goers. Richard Adams even shouted "Earthquake" in response to the shudders at Ventana. The film's companion novel described Adams as "a regular organizer of civil rights marches, Vietnam protest

²³ William K. Knoedelseder Jr. & Ellen Farley, "When Fate Follows Fiction - The 'Syndrome' Fallout," *The Washington Post*, 30 March 1979.

²⁴ Richard Asinof, "Quake' n' Bake: The Fight To Stop a Nuclear Reactor Built on a Fault Line," *The Village Voice*, 16 April 1979.

marches, free speech movements, campus disturbances, Greenpeace demonstrations, liberation movements of every kind and of every persuasion.”²⁵ The Abalone Alliance would have fitted nicely amongst that list. Members of the film crew also supported anti-nuclear activity in the region. Michael Gray notably attended a press conference in San Luis Obispo and “charged that Diablo is a real-life example of the corporate irresponsibility dramatised in the film.”²⁶ Jack Lemmon endorsed requests for donations to the Center for Law in the Public Interest, a legal group working with the Mothers for Peace against Diablo plant. Pacific Gas employees who queried construction standards at Diablo reminded Lemmon of the role he played in *The China Syndrome*. He declared that, “Diablo Canyon threatens every Californian - my family as well as yours.”²⁷ Meanwhile, grassroots groups belonging to the Abalone Alliance took advantage of the anti-nuclear tone of the Hollywood thriller. Activists leafleted Californians exiting cinemas, hoping to tie the still-fresh image of the fictional plant with popular perceptions of Diablo Canyon.

The nuclear accident at Three Mile Island boosted movie theatre attendance figures across the country. *The China Syndrome* offered the American public an insight into the real-life drama in Pennsylvania. The movie explained the basic workings of an atomic reactor, translated a few key phrases of nuclear jargon into common English, and provided a virtual tour of a nuclear plant. Cinema-goers searching for answers

²⁵ Wohl, *The China Syndrome*, 14, inside cover, 38, 11.

²⁶ Abalone Alliance, “Anti-Nuclear Forces Mobilizing to Stop Diablo Canyon Plant from Opening, Major Legal Rally Scheduled for June 30 in San Luis Obispo,” press release, AAC file: SLO Rally June 30 1979.

²⁷ Center for Law in the Public Interest, “Diablo Canyon threatens every Californian - my family as well as yours,” letter requesting donations, Los Angeles, AAC file: leaflets collection.

behind the accident at Three Mile Island found the film's portrayal of a corrupt and inefficient atomic industry, ineffectual government regulation, and all-consuming profit motive highly palatable. In San Luis Obispo, protesters carried a coffin from the local cinema to the regional office of Pacific Gas. Images of *The China Syndrome*, Three Mile Island and Diablo Canyon temporarily merged.

Californians anticipated a follow-up to Three Mile Island on the West Coast. Many feared Diablo Canyon would become 'TMI2.' One Abalone placard imitated a movie trailer billboard, promoting events on the Pecho Coast as the next instalment in a Hollywood-style disaster trilogy: "If you liked Hiroshima...were thrilled by Harrisburg - you're gonna love Diablo Canyon!"²⁸ "Three Mile Island: An Accident Without End - Diablo Canyon: An Accident Waiting to Happen..." warned an Abalone flyer.²⁹ Ralph Nader declared "We all live in Pennsylvania," at an Abalone rally in San Francisco in April 1979.³⁰ Similar phrases associating Diablo with Harrisburg adorned anti-nuclear T-shirts. Two distant landscapes had been momentarily joined by their atomic associations. Newspapers deliberated the connections between West Coast and East Coast nuclear plants. Given that "the Diablo Canyon plant is a product of the same technology which failed at Three Mile Island," *The Sun-Bulletin* advised the Golden State to do without nuclear power.³¹ "If the system didn't work in Pennsylvania or if it tried to work and was thwarted by human error," the San Luis Obispo County *Telegram-Tribune* feared that "the same pattern could be repeated at

²⁸ *It's About Times* (May 1979), 6.

²⁹ Abalone Alliance, "Do You Remember March 28, 1979?," flyer, AAC.

³⁰ Charles Burgess, "Massive S.F. anti-nuclear protest," *The Daily Californian*, 9 April 1979.

Diablo.” For the local paper, the “questionable system and the possibility of human error,” allied with the Hosgri Fault, suggested “reason enough for the NRC to deny the Diablo plant a permit to operate.”³²

The East Coast accident compelled westerners to reconsider the nuclear landscape close to their own homes. Having watched events unfold at Harrisburg, Californians had a sense of what to expect from a nuclear accident on the Pecho Coast. Familiarity with the Pennsylvanian accident encouraged the conception of Diablo as a nuclear landscape rife with danger. Despite the two plants having little in common other than their power source, Diablo emerged as the proverbial TMI2.³³ Unsettled by notions of a West Coast follow-up, Californians lambasted PG&E for taking on such a project. Meanwhile, support for the Abalone Alliance mushroomed.

In his staff report to the American Friends Service Committee, David Hartsough described how, “[T]he Three Mile Island accident... has awakened people as nothing before has, to the dangers and problems of nuclear power...the anti-nuclear movement is now much larger than we ever dreamed of two years ago.”³⁴ Although the Abalone Alliance had grown significantly between its inception and March 1979, Three Mile

³¹ Editorial, “The nuclear question and distorted values,” *The Sun-Bulletin*, 12 April 1979.

³² Editorial, “Three Mile Island and Diablo Canyon,” *Telegram-Tribune*, 30 March 1979.

³³ The traditional water cooling towers at TMI, often mistaken for nuclear reactors, gave the project a traditional design appearance, somewhat akin to a coal plant without the black smog. With adequate sea-water on tap, PG&E had no need for towers at its futuristically styled plant.

³⁴ David Hartsough, “Staff Report for March-April 1979,” AFSC file: (705) Power Literature outside American Friends Service Committee.

Island proved a “huge catalyst” for anti-nuclear protest on the West Coast.³⁵ TMI legitimised the concerns voiced by many activists over Diablo. Membership of the Alliance soared. On the local scene, folksinger Ede Morris chose the appropriate analogy that “Three Mile Island set off a chain reaction of opposition in San Luis Obispo.”³⁶ The American nuclear industry struggled to come to terms with the sudden shift in public opinion. To industry stewards, Three Mile Island was a minor incident with no fatalities. In an advertisement paid for by Dresser Industries (manufacturers of the faulty valve blamed for causing the accident), pro-nuclear scientist Edward Teller explained how he had suffered a heart attack due to arguing against Jane Fonda and other anti-nuclear activists in the aftermath of the accident. “I was the only victim of Three Mile Island,” claimed Teller.³⁷ Diablo Canyon seemed another casualty of the social fallout drifting from Harrisburg.

[3] The Nuclear Threat

The popularity of *The China Syndrome* and the furore over Three Mile Island, along with massive anti-nuclear protests across the country, signalled the end of America’s love affair with nuclear energy. Tired of the empty promises offered by the post-1945 ‘nuclear dream,’ Americans turned away from ‘our friend the atom.’ Nuclear energy had turned out to be too expensive to build rather than too cheap to meter. Notions of nuclear kitchens reeked of 1950’s consumer idealism, whilst most reactors resembled

³⁵ Interview with Jackie Cabasso, Oakland, 31 July 1997.

³⁶ Abalone Alliance, “Anti-Nuclear Forces Mobilizing to Stop Diablo Canyon...”

³⁷ *The Wall Street Journal*, 31 July 1979.

ugly concrete tombs. The US government had failed to convince its people of the harmless intentions behind nuclear energy production. Childhood memories of 'duck and cover' classroom exercises and the destruction of Hiroshima and Nagasaki lingered in the popular consciousness. Nuclear energy was no longer the saviour of society, rather an environmental curse.

Diablo Canyon served as a focal point for those Californians eager to show their disaffection with atomic energy. Abalone William Miller explained, "I think there was a pretty strong resentment to nuclear material in our generations. I think it was a very fertile ground for an issue like this."³⁸ Diablo provided an opportunity for resistance. Where once PG&E officials had presented a place of optimism and promise, Alliance members speedily fashioned Diablo Canyon into an icon of environmental destructiveness.³⁹ Cartoon images of cracked reactors and radiation clouds at Diablo Canyon imparted themes of slow-death, ecological decay, and a fragile and contaminated planet. Activists doctored images of the grey, stolid industrial site to pass on a sense of impending doom. On posters and placards, protesters created visual danger by showing nuclear missiles exiting the plant or jagged fault lines running underneath it. An Abalone poem entitled "Clear Beginnings" compared the 'nuclear core' of Diablo with the apple picked from the tree

³⁸ Interview with William Miller.

³⁹ The threat at Diablo appeared so irrevocably *atomic* that making comparisons with other non-nuclear doomsdays of the time might seem inappropriate. Even in the late 1990s, the notion that nuclear images were somehow unconnected to other environmental concerns lingered, as if atomic-powered trains travelled a parallel rail-track that never joined the main line. However, images of nuclear disaster were part of an expansive list of eco-catastrophe scenarios that gained notoriety in the post-1945 era. Modern environmentalism reflected the discovery of, and response to, doomsday situations, varying from global warming to acid rain, species extinctions to human over-population. Nuclear disaster represented one such eco-catastrophe, with Abalone activities at Diablo Canyon a notable example of modern environmentalist response.

of knowledge by Adam, a dangerous and forbidden fruit.⁴⁰ The most effective cartoons conveyed the notion of Diablo as a man-made volcano, temporarily dormant, but with the potential to spurt radioactive lava without warning. In the March-April 1979 issue of *It's About Times*, PG&E's project was presented as an ignited bomb with the message 'Stop Diablo' on its casing.⁴¹ The Alliance held rallies on Hiroshima Day (August 6th) to remind citizens of the links between nuclear power and atomic weapons. On a 33rd anniversary rally on Avila Beach, a liaison between Japanese and American activists declared that "[I]t will be a great treasure if we can defeat the nuclear monster."⁴² Activists launched balloons from Avila to simulate the path of radiation from Diablo plant. The balloons carried "the message of possible nuclear death from Diablo as far as 200 miles."⁴³ *Affinities*, a direct-action newsletter, applauded the idea, noting that "there are few substitutes for finding the threat of the nuclear menace deposited on one's own doorstep."⁴⁴ Protesters campaigned on behalf of a vulnerable earth, pleading "Let the Earth Live" on their banners.⁴⁵

⁴⁰ Lea Steinberg, "Clear Beginnings," *It's About Times* (September 1979), 2.

⁴¹ Advertisement for April 7, 1979 Rally in *It's About Times* (March-April 1979), 12.

⁴² Judy Hurley, *Telegram-Tribune*, 7 August 1978. Diablo was also cast as an environmental devil. Martin Russell, a protester from Marin, referred to PG&E's project as "that demonic plant": Martin Russell, "After the Blockade," *Abalone Alliance of Marin* newsletter (November 1981), AFSC. The grim reaper also appeared in cartoon images. With the continuing survival of the project despite significant cost overruns, delays and controversies, Jack Lemmon noted how Diablo plant "almost seems otherworldly as it has repeatedly risen from the dead," Center for Law In the Public Interest, "Diablo Canyon threatens every Californian..."

⁴³ Alliance for Survival, *Affinities: A Direct Action Forum* newsletter vol.1, no.1 (undated), 10, AAC file: Abalone Alliance flyers on Diablo. Balloons have been employed elsewhere by environmentalists to show the dangers of pollutants visible only with specialised equipment, from atomic fallout to acid rain.

⁴⁴ *Ibid.*, 10.

⁴⁵ *San Francisco Chronicle*, 16 September 1981.

Whilst atomic advocates heralded the creation of a chain reaction as the discovery of one of nature's last secrets, anti-nuclear protesters projected a clear divide between nature and the atom.⁴⁶ Behind the cardboard placards and anti-nuclear aphorisms was a common belief that Diablo plant (and nuclear power in general) posed a danger to ecological vitality. Abalone Elizabeth Whitney saw a "nuclear threat... to the common source: our land, our water and our air."⁴⁷ At Diablo itself, thick concrete walls separated energy production from the great outdoors. The "multiweather, earthquake 'proof' construction that is Diablo," theoretically enabled PG&E staff to ignore the natural forces around them.⁴⁸ "Diablo is...a statement: We don't care about the weather, we don't care about the sun or the moon," claimed one Abalone protest handbook. The atomic crack at artificial living epitomised the loss of contact with the natural world endemic to twentieth-century industrialised civilisation, and illustrated how technical progress could encourage a divide between humans and nature. The Alliance theorised that, "[A]t the heart of the matter, the matter of nuclear energy, is the distance between nature and us humans. It's a distance we're trying to bridge."⁴⁹

⁴⁶ Winston Churchill referred to the first atomic bombs as "a revelation of the secrets of nature, long mercifully withdrawn from man." As quoted in Spencer R. Weart, *Nuclear Fear: A History of Images* (Cambridge, Mass.: Harvard University Press, 1988), 104. Atomic energy has frequently been described in terms of a long-hidden special gift or secret of nature.

⁴⁷ Elizabeth Whitney, "Diablo Pageant," in *1981 Diablo Canyon Blockade: An Illustrated Anthology of Articles, Essays, Poems & Personal Experiences*, edited by the Diablo Writing Project (Santa Cruz: Diablo Writing Project, 1983), 13-14.

⁴⁸ Abalone Alliance, *Diablo Canyon Blockade-Encampment Handbook* (San Luis Obispo: Abalone Alliance, 1981), 1. The supposed irrelevance of climatic conditions for Diablo plant reflected the desire for a life free from natural limitations, an aspiration common to the American nuclear dream. The "genie" of the 'peaceful atom,' by promising an end to finite energy resources, had raised the spectre of an age no longer inhibited by organic design.

⁴⁹ *Diablo Canyon Blockade-Encampment Handbook*, 1.

Without that bridge, Abalone members feared that the nuclear enterprise would take over. The proliferation of projects such as Diablo would ultimately lead to “mountains of radioactive waste,” which, in turn, would “destroy the beauty and safety of our world for generations to come.”⁵⁰ Don Eichelberger interpreted anti-nuclear protest as “a response to the increasing technicalness of environmental degradation that you’re seeing. Its easy to quantify a clear-cut... an open pit coal mine... the effects of building a dam on a beautiful pristine area, but its really not easy to quantify the effects of radiation which is odourless, colorless, tasteless, invisible.” Eichelberger had read Rachel Carson’s *Silent Spring* (1962) at an early age.⁵¹ Carson had used images of atomic fallout to dramatise the long-term effects of pesticides on a rural American community.⁵² As *Silent Spring* became a hallmark of the modern environmental era, so too did the modern environmental threat appear quintessentially invisible, hard to contain, and all-encompassing. Nuclear energy fitted the picture perfectly. Abalone activists quickly drew attention to the significant danger that Diablo plant posed to southern and central California. Concern grew for agriculture downwind of the plant. Citizens feared that an atomic meltdown “would contaminate the state’s Central Valley whereon is grown nearly half of America’s fruit and vegetables.”⁵³ Despite

⁵⁰ Irla Massicotte, Reason for Blockading, in Richard Frishman, Attorney of Record, “Defense of Necessity: 1981 Blockade of the Diablo Canyon Nuclear Power Plant,” 15 May 1982, AAC file: Defense of Necessity.

⁵¹ Interview with Don Eichelberger, San Francisco, 24 & 26 June 1997.

⁵² Rachel Carson, *Silent Spring* (Boston: Houghton Mifflin, 1962), 1-3. On the impact of *Silent Spring*, see Ralph H. Lutts, “Chemical Fallout: Rachel Carson’s *Silent Spring*, Radioactive Fallout, and the Environmental Movement,” *Environmental Review*, 9 (Fall 1985), 211-25; Thomas R. Dunlap, *DDT: Scientists, Citizens, and Public Policy* (Princeton: Princeton University Press, 1981), 98-128; and Linda Lear, *Rachel Carson: Witness of Nature* (New York: Henry Holt & Company, 1997), 450-2.

⁵³ SONOMore Atomics, “History of Diablo Canyon,” MMPP file: Diablo fact sheets. Concern over agricultural contamination was also noted in People Against Nuclear Power, “An Open Letter to the Atomic Safety and Licensing Board, Governor Jerry Brown, and the people of California,” 15 January 1979, AFSC file: Power literature outside AFSC.

their failure to recognise a land area already heavily contaminated by pesticides, radiation was, metaphorically speaking, covering similar ground.

Members also feared for coastal ecology, pointing out that “[M]uch is yet to be discovered if the plant goes into operation.”⁵⁴ An anti-nuclear pamphlet urged readers to look beyond the superficial, warning that “PG&E intends to treat wildlife and sea life around Diablo in a manner far different from that depicted in the beautiful displays of plants and animals in the PG&E ‘nuclear information center.’”⁵⁵ Sonoma group SONOMore Atomics predicted the “eco-rape” of the coastal estuary.⁵⁶ In a poem entitled ‘The Pelicans,’ Lily Carin Silkwood Green related her concerns for local nature, pondering the loss of clean rivers, Montana de Oro Park, fresh air and seabirds.⁵⁷ Local Abalone activists felt that Pacific Gas had no right to build a plant near to them. To the tune of ‘Don’t throw your Trash in My Backyard,’ the protest song “Round” welcomed animals, trees and birds, but had no room for atoms. PG&E appeared an irresponsible resident, not trusted with the task of sweeping the yard clean of radioactive dust (and preventing it from spreading over the fence).⁵⁸ For many Abalone protesters, the Diablo plant represented an immediate threat to the environment where they lived and worked. Mary Moore felt that, “[T]he message

⁵⁴ Abalone Alliance, “What You Should Know About The Diablo Canyon Nuclear Power Plant,” booklet (undated, approx. 1978), AAC file: AA Flyers on Diablo.

⁵⁵ Ibid.

⁵⁶ SONOMore Atomics, “History of Diablo Canyon.”

⁵⁷ Lily Carin Silkwood Green, “The Pelicans,” in *1981 Diablo Canyon Blockade: An Illustrated Anthology*, 21-2.

⁵⁸ *Diablo Canyon Blockade-Encampment Handbook*, 56. Plainly, ‘Not-in-my-backyard’ (NIMBY) sentiments infused the ‘Don’t Throw Your Trash in My Backyard’ protest ditty.

we're trying to get across is that if you live at Love Canal it's related to Diablo Canyon."⁵⁹

Abalone protest also reflected unease over the direction of modern technology. The San Francisco Society Against Blatantly Obnoxious Technology (SABOT) protested alongside Abalone activists in 1981. The group's acronym conjured images of angry French workers sabotaging factory machinery with their wooden shoes in the early nineteenth century.⁶⁰ Developing nuclear projects represented a dangerous addiction for electrical utilities. *It's About Times* recast atomic industry advertising icon 'Reddy Kilowatt' as a crazed character with a plutonium habit by the name of 'Unreddy Killerwatt.'⁶¹ An Abalone poster portrayed 'Nukes' as a cigarette brand, "[A] choice blend of berserk technology, radioactive crud, and 100% American bureaucracy." And yes, those cigarettes did carry a health warning.⁶² Cartoons depicted Diablo

⁵⁹ *The Stockton Record*, 23 January 1984. 'Love Canal' has become a symbol of grassroots activism in response to modern environmental dangers. In the late 1970s, citizens of Love Canal, in New York State, discovered that Hooker Chemical, an industrial corporation, had dumped toxic materials in the vicinity of their houses and school. Lois Gibbs and other residents highlighted the toxic threat lurking beneath their homes. By the end of 1979, over two hundred families had been evacuated from Love Canal. See Adeline Gordon Levine, *Love Canal: Science, Politics, and People* (Lexington, Mass.: Lexington Books, 1982) and Lois Marie Gibbs, as told to Murray Levine, *Love Canal: My Story* (Albany: State University of New York Press, 1982).

⁶⁰ Whilst the origin of the term 'sabotage' is customarily related to the activities of clog-wielding French workers who jammed machines in the 1800s, the historical basis for such a judgement remains questionable. In tracing the etymology of the word sabotage, Geoff Brown notes that the term derived from *sabot*, meaning to work slowly or clumsily. Brown declares the popular fable of clogs in machines to be "a hoary old myth" (xii). See Geoff Brown, *Sabotage: A Study in Industrial Conflict* (Nottingham: Spokesman Books, 1977).

⁶¹ 'Unreddy' can be found in most issues of *It's About Times*, next to the subscription coupon. Reddy Communications objected to the re-interpretation of their trademark, letter reprinted in: Redwood Alliance, *Nuclear Free Times* Quarterly Newsletter, 3/2 (June 1981), 4, AAC file: Redwood Alliance.

⁶² Citizen's Right to Know & Abalone Alliance, "Everything You Want to Know About Nuclear Power," poster, AFSC.

Canyon plant as a giant industrial lemon, with atomic fuel as juice.⁶³ Protesters even compared the confidence of American nuclear engineers at Diablo plant to the false boasts made by early twentieth-century British shipbuilders of an “unsinkable Titanic.”⁶⁴ Abalone images of atomic power further clashed with PG&E’s presentation of nuclear plants as ‘good neighbours.’ The picture of ducks swimming in the water beside Vallecitos reactor once used to promote the Diablo project now faced a direct competitor. An AFSC-sponsored poster showed a radiation cloud rather than a clear sky above its nuclear plant, with young children wading in the water as the unknowing victims rather than beneficiaries of local atomic energy.⁶⁵ Abalone Rick Esbenshade explained that “[T]he nuclear power and weapons system is the ultimate in what is tamely labelled ‘technological achievement.’ It is highly specialized, antagonistic to nature, controlled by and for the benefit of the elite, and built for power and profits - not need - in mind.”⁶⁶ According to Don Eichelberger, people were “concerned about the promises made by science to end all our problems,” and realising “the need to be critical of all new technology that comes and holds itself as the panacea” took a stand against nuclear power.⁶⁷ Anxiety over the path of modern industrial society situated the anti-nuclear movement within a broader environmental movement keen to tackle existing economic priorities and adverse technology.

⁶³ For example, *Nuke Notes*, SONOMore Atomics newsletter, 4/1 (July-August 1983), 13.

⁶⁴ Protester, amateur video of the “Passion Play - Crucifixion Ceremony,” Diablo Canyon, 20 April 1984, Don Eichelberger Personal Papers (DEPP), San Francisco.

⁶⁵ “Special Report on Diablo Canyon,” *PG&E Life* (June 1967), 12; People Against Nuclear Power, “People Against Nuclear Power,” poster-flyer, AFSC file: green, anti nuke local.

⁶⁶ Rick Esbenshade, “Feminism and The Consensus Process,” *1981 Diablo Canyon Blockade: An Illustrated Anthology*, 33.

⁶⁷ Interview with Don Eichelberger.

In response to the environmental dangers posed by Diablo plant, Alliance members promoted themselves as nature's defenders. The Abalone coalition acted on behalf of "not only countless humans, but all forms of life on earth."⁶⁸ Tita Caldwell's poem, "My Mother the Earth," reflected on the ties between human and natural families in the light of a common nuclear danger. Caldwell suggested she had been "summoned" to Diablo by "the pelicans, butterflies/and tiniest ants/" along with her "human family/at Nagasaki and Hiroshima."⁶⁹ In "Gone to Diablo San Luis Obispo," El Clavo suggested "a gentle rainbow by the sea" had been "softly calling to the human family."⁷⁰ Another poem pleaded: "let children grow up in nuclear free light,/saving the environment, that's what's right/ecology should be sought/let's let the fish swim in the waters,/without the reactors turning."⁷¹ Members of the Abalone Alliance took seriously their "responsibility to the earth."⁷² The affinity group Friends of the Fish (with a motif of a fish holding a sign saying 'Nofission') argued, "[T]his is our life, our responsibility, keep it clean."⁷³ Other affinity groups included the Earth Residents,

⁶⁸ Peter Oppenheimer, Reason for Blockading, in Frishman, "Defense of Necessity."

⁶⁹ Tita Caldwell, "My Mother the Earth," *1981 Diablo Canyon Blockade: An Illustrated Anthology*, 15.

⁷⁰ El Clavo, "Gone to Diablo, San Luis Obispo," *Peace Times*, San Jose Peace Center newsletter (October 1981), 1, AFSC file: 805.

⁷¹ Greg Gabby, "Poem for Abalone Alliance (Or Nuclear Power Plants Shutdown Poem)," 15 December 1982, AAC file: Interesting Letters. For those searching for a non-poetic rebuttal to the atom, Hartsough explained that "[P]rotesting citizens at Diablo Canyon have examined the facts and answered 'NO!', with deep conviction, to the question, 'Are you willing to allow risking the existence of the human species and the many creatures we share interdependence with for the implementation of nuclear technology?'" David Hartsough, "Statement...prepared by Redwood Forest Meeting of the Religious Society of Friends in support of a Friend intending to participate in the Blockade...," AFSC.

⁷² Jean Peterson, "Civil Obedience," *1981 Diablo Canyon Blockade: An Illustrated Anthology*, 20.

⁷³ Friends of the Fish, "Dismantle Diablo," poster, AAC.

Sequoia Alliance, Friends of the Sun, Red Abalones, Coast Oak, Blue Heron, Spiderwort (a flower sensitive to radiation) and even the Radioactive Rock-Cods from Mendocino.

Such naturalistic namesakes denoted a basic environmental consciousness within the anti-nuclear movement. Alliance members believed they were on nature's side, and, that nature, in fact, protested with them and on their behalf. A giant whale balloon carrying the message "Save the Humans" appeared at one gathering.⁷⁴ The protest song "High Hopes" presented the Abalone Alliance as ants, mice and crustaceans attempting to stop nuclear power, the latter pleading to outsiders to "Just join up with us crabs."⁷⁵ The song "Acres of Abalone," meanwhile, reflected a desire to protect the regional status quo in the face of an unwelcome nuclear intrusion. The lyrics "I've lived all my life in this country/I love every flower and tree/I expect to live here 'til I'm ninety/Its the nukes that must go not me" imparted a local feel to Abalone protest. An atomic newcomer threatened to break up an established relationship between San Luis Obispans and 'their' land.⁷⁶

[4] The Social Threat

Along with radioactive particles in the atmosphere and potential nuclear disasters, the Abalone Alliance also feared the social dynamics of Diablo plant. The spread of

⁷⁴ *San Francisco Chronicle*, 16 January 1984.

⁷⁵ *Diablo Canyon Blockade-Encampment Handbook*, 59.

⁷⁶ *Ibid.*, 58.

nuclear facilities reflected the decay of civil society. Members associated Diablo with themes of authoritarianism, militarism and abuses of power. Anti-nuclear activists accused both the nuclear industry and the federal government of frequently operating outside the realms of democracy and accountability, pushing through atomic schemes with scant regard to public opinion. *It's About Times* highlighted how the US government had misled army veterans concerning their exposure to danger during atomic tests in Nevada.⁷⁷ The anti-nuclear newspaper 'exposed' a potential redesign of the White House along atomic lines, indicating the pro-nuclear bias of leading American politicians. Three Mile Island-style cooling towers were added to the presidential abode, whilst a new central dome was seemingly inspired by the reactor units of the Pecho Coast.⁷⁸ Abalone activists claimed that the government's Nuclear Regulatory Commission cared more about atomic development than citizen safety. Leaked private minutes demonstrated the reluctance of NRC commissioners to deny PG&E an operating license "because of the large financial loss involved and the severe impact such action would have on the nuclear industry."⁷⁹ Protesters discovered that companies working for PG&E provided the NRC with 'independent' plant audits. Rumours of doctored blueprints persisted. *Nuke Notes* highlighted the collusion between Pacific Gas and Bechtel in the cartoon "Passing the Hot Potato," with Diablo plant depicted as an earthy vegetable.⁸⁰ In common with remote military sites, the

⁷⁷ For details of the nuclear tests in Nevada, see Howard Ball, *Justice Downwind: America's Atomic Testing Program in the 1950s* (New York: Oxford University Press, 1986), and Robert A. Divine, *Blowing on the Wind: The Nuclear Test Ban Debate, 1954-1960* (New York: Oxford University Press, 1978).

⁷⁸ *It's About Times* (June-July 1979), 6.

⁷⁹ John Rosenthal, "Article on the Diablo Canyon Nuclear Power Plant and the campaign to prevent it from operating," March 1983, AAC file: PERP docs.

⁸⁰ *Nuke Notes* (April 1982), 8.

Pecho Coast represented a part of the United States off-limits to the public. Conspiracy theories concerning Diablo nuclear plant abounded.

Whilst the Alliance monitored PG&E activities, Abalone members found themselves under investigation. The local sheriff's department infiltrated the organisation in 1977. Two undercover deputies, Richard Lee and Charles Douglas, were accidentally arrested during the August 1977 protest.⁸¹ *It's About Times* claimed the Diablo Project Office suffered police phone-tapping. Pacific Gas employed the services of a private-eye group, Research West, to supply information upon Alliance activities. One Abalone poster, "Just Doing Our Job Here at PG&E, Investigating the problems at Diablo," showed a plant employee at his desk, with a recording machine on hand. His office contained a photographic collection of anti-nuclear suspects, a filing cabinet with documents on the Abalone Alliance, and a pair of binoculars. Rather than dealing with on-site construction problems, Pacific Gas appeared more concerned with tracking the movements of key Abalone staff.⁸² The spy theme continued in another poster, this time of PG&E being handed an (operating) "License to Kill, no. 007 -666" for Diablo plant by the head of the NRC, the supposed counterpart of James Bond's 'M' (and sporting a fancy line in 'atomic energy' cufflinks).⁸³ With a nod to American televisual espionage, an anti-nuclear group in Santa Cruz named itself 'Emissions Impossible.' On a more serious note, *It's About Times* detailed "a group of right wing

⁸¹ Following the news of police informants being amongst those arrested, charges against genuine Abalone protesters were (eventually) dropped due to civil rights violations based on the 6th Amendment.

⁸² Community Energy Action Network, San Diego, *Contaminated Times* newsletter, 2/7 (8 December 1981 - January 1982), AFSC file: 805.

⁸³ "A License for Diablo Canyon is a License to Kill," flyer, AAC file: AA flyers on Diablo.

conspiracy buffs,” the Fusion Energy Foundation (FEF), and their efforts to pressure California city councils into declarations of support for Diablo plant. FEF members also organised campaign stands at airports, their messages including, “More Nukes less Kooks,” “Warning - I don’t Brake for Liberals,” and “Nuclear Plants are built better than Jane Fonda” - a swipe at the super-fit actress committed to the anti-nuclear cause.⁸⁴ “Corporate nostalgia for the McCarthy era seems on the rise,” noted *It’s About Times* whilst documenting the growing ‘persecution’ of the anti-nuclear movement.⁸⁵

Abalone campaigners felt uneasy over large corporations shaping public opinion. In a regular feature entitled ‘Corporate Lies Department,’ *It’s About Times* refuted the propaganda of various pro-nuclear companies. In its February 1979 edition, the Abalone newsletter analysed a Westinghouse nuclear advertisement claiming that “[T]hrough every energy shortage nuclear plants have kept the electricity flowing,” and the American flag flying, by maintaining a degree of energy independence. *It’s About Times* instead highlighted the unreliability of nuclear energy. Based on the actual performance of US commercial plants, the American flag would only reach about half-mast.⁸⁶ A Christmas Play organised by Bechtel wives received the attention of the January 1980 issue. The fanciful play concerned “the plight of a christmas tree”

⁸⁴ Mark Evanoff, “Pronukes target local governments,” *It’s About Times* (June-July 1981), 1, 5.

⁸⁵ Bob Van Scoy, “Are You a Subversive,” *It’s About Times* (March 1980), 3. In its June-July 1981 issue, “PG&E buys a ‘grassroots’ group,” the Abalone newsletter detailed the financial support given by Pacific Gas to the ‘Citizens for Adequate Energy’ (CAE), a supposedly community-based pro-nuclear coalition. CAE nevertheless paled alongside the Alliance in terms of size and impact. Mark Evanoff, “PG&E buys a ‘grassroots’ group,” *It’s About Times* (June-July 1981), 7.

⁸⁶ *It’s About Times* (February 1979), 5.

in 'Powersville,' USA. The story documented the struggle of town residents to light their community tree during a power failure. Even 'Father Fossil Fuel' proved unable to help out so 'Reggie the Real Great Reactor' stepped in to save the day. *It's About Times* proved that nuclear fairy tales still survived in the late 1970s and early 1980s despite the setbacks encountered by pro-nuclear corporations in actual Powersville, USA.⁸⁷

In recognising an association between nuclear power and corporate power, Alliance members articulated broader concerns over American capitalism. Protest songs bore nuances of an anti-dollar culture. To the rhythm of 'Dry Bones,' protesters recounted "The Connection" between "power," a "nuke plant," a "utility," and "money."⁸⁸ In cartoons of Diablo Canyon, dollar bills travelled by conveyor belt or construction truck, feeding the growth of PG&E's plant.⁸⁹ A sketch entitled, "Members of the board of a utility considering all aspects of building a nuclear power plant," showed an executive pointing to one huge dollar sign on his otherwise bare blackboard.⁹⁰ Calling for a broad alliance against corporate capitalism, the March-April 1979 edition of *It's About Times* declared "[E]verybody who fights against corporate profit fights against

⁸⁷ *It's About Times* (Mid-December - January 1980), 9.

⁸⁸ *Diablo Canyon Blockade-Encampment Handbook*, 56.

⁸⁹ For example, *Nuke Notes* (July-August 1983), 13. Meanwhile, a 1979 poster "We Don't Buy Nuclear Power" focused on two money-grabbing hands coming directly out of Diablo plant, one pick-pocketing, the other with a fistful of dollars. See People for a Nuclear Free Future, Santa Cruz, "We Don't Buy Nuclear Power" poster, 25 May 1979, AAC file: PG&E Actions May 25 1979.

⁹⁰ Abalone Alliance, "Did You Know," flyer, AAC file: AA flyers on Diablo.

the same thing we do in our anti-nuclear movement.”⁹¹ A ‘Smash capitalism, not atoms’ banner adorned the side of a van at the Abalone July 1979 rally.⁹²

However, for most Abalone activists, the nuclear issue superseded the traditional politics of the far left.⁹³ Environmental protest had moved beyond the confines of class-based struggle. *Nuke Notes* lamented the ‘Commie’ label frequently attached to anti-nuclear activism.⁹⁴ Members reacted with very mixed opinions to offers of support from California Governor Jerry Brown, a politician renowned for his liberal leanings. Abalone protesters chose direct action at Diablo as their primary means of political struggle to indicate their distaste for traditional channels of involvement in the nuclear process. Roger Herried felt that “the government lied to the public,” over the dangers of atomic energy, that “[N]uclear power along with Watergate created an

⁹¹ *It's About Times* (March-April 1979), 10. The same issue included a section on Karl Marx.

⁹² The Berkeley-based ‘Ad-Hoc Committee for Socialist Ecosystems,’ (and attendee of Abalone rallies) claimed: “Although fission power is clearly insane from any ‘ecological’ or ‘humanistic’ perspective, it is perfectly rational from the point of view of capitalist economics.” The ‘advanced’ industry of atomic energy pointed towards the impending “obsolescence” of capitalism, and subsequent revolution. See The Ad Hoc Committee for Socialist Ecosystems, Berkeley, “I’d Rather Be Smashing Capitalism (than atoms)” leaflet, AFSC.

⁹³ As with most environmental organisations, the Abalone Alliance maintained independence from official political parties.

⁹⁴ “Seeing Red: A Forum on Communists in the Peace Movement,” *Nuke Notes* (January 1984), 20-28. Alabama Senator Jeremiah Denton included the Abalone Alliance on his list of ‘communist organizations’ operational within the United States. See *It's About Times* (December 1982 - January 1983), 4. Despite accusations by the senator, the Abalone Alliance proved far from communist. At the 1981 blockade camp, Alliance representatives threw out San Francisco’s Revolutionary Communist Party for their incitements to violence and dogmatic recital of Marxist rhetoric. Abalone activists often displayed patriotic sentiments. The stars-and-stripes appeared at rallies, symbolising the timeless ideals of the country rather than the contemporary malaise induced by strong corporations and a corrupt state. Protester William Carnell felt that “to oppose nuclear power anywhere and everywhere is an American’s patriotic duty.” See William Carnell, Arcata, to Abalone Alliance, 22 September 1981, AAC file: Interesting letters.

environment where you couldn't trust the government because the government does what it wants."⁹⁵ Conventional politics had little to offer.

Abalone distrust of established political channels had a lot to do with Watergate, Vietnam, and the behaviour of local police departments towards civil rights campaigners. Many Abalone campaigners associated their anti-nuclear crusade with the social struggles of the 1960s. According to the *Washington Post*, the Abalone blockades provided a "measure" of "the strength of an antinuclear movement that has appeared to replace civil rights and opposition to the Vietnam War as a magnet for college youth and older political activists."⁹⁶ Veterans of civil rights protests such as David Hartsough and Mary Moore proved early converts to the anti-nuclear cause. The Abalone anthem, "No Diablo, No Diablo, No Diablo over me/And before I'll be oppressed/I'm gonna stand up and protest/For the love of the human family," epitomised the inclusive sense of civil rights within the Alliance.⁹⁷ To anti-nuclear protesters, a "nuclear-based society" founded on "full-scale social order [plutonium] 239" implied "centralised and authoritarian" rule highly restrictive of personal freedoms.⁹⁸ The language of protest frequently relied upon references to the civil rights struggle. During one Abalone play, Chuck Knerr revised Martin Luther King's "I have a dream" into a nuclear "nightmare."⁹⁹ *Radioactive Times* quoted King in its call for people to attend Diablo protest, to the effect that "[W]e are now faced with the

⁹⁵ Interview with Roger Herried, San Francisco, 24 & 25 June 1997.

⁹⁶ "California A-Plant Targeted for Mass Protests," *Washington Post*, 11 September 1981.

⁹⁷ *Diablo Canyon Blockade-Encampment Handbook*, 57.

⁹⁸ American Friends Service Committee, *Simple Living* newsletter, 1/5 (Spring 1976).

⁹⁹ Carl Neiburger, "1,000 protest Diablo, 52 arrested," *Telegram-Tribune*, 13 February 1984.

fact that tomorrow is today. We are confronted with the urgency of now.”¹⁰⁰ However, anti-nuclear marches attracted mostly white Americans, rather than a multi-racial crowd. In a letter to *It's About Times*, black protester Sylvanus DeVoe regretted the marginalised status of ‘people of color’ in the movement as a common factor of greed appeared to encourage racism and atomic development alike.¹⁰¹ Abalone activists struggled to understand why the anti-nuclear cause, which many considered a civil rights and survival issue, failed to attract ‘people of color.’ Attendance partially reflected the demographic character of San Luis Obispo and its middle-class white suburban majority, but the lack of non-whites in the anti-nuclear movement ran deeper. Diablo Canyon ultimately signified a remote danger compared to the every day experiences of African-Americans, Native Americans and Hispanics in a racially divided nation.

The Vietnam War instilled notions of an untrustworthy government and the dangers of militarism in Californians who went on to protest against Diablo nuclear plant. At the April 1979 rally, consumer rights advocate Ralph Nader proclaimed nuclear power to be the “technological Vietnam.”¹⁰² *It's About Times* compared how the Three Mile Island accident and Tet Offensive (1968) both precipitated times of reflection and doubt in American life.¹⁰³ Protesters used ‘Vietnam’ as a metaphor for self-inflicted

¹⁰⁰ *Radioactive Times* (Summer 1981), AFSC file: Abalone Alliance.

¹⁰¹ *It's About Times* (September 1979), 2.

¹⁰² Charles Burgess, “Massive S.F. anti-nuclear protest,” *The Daily Californian*, 9 April 1979.

¹⁰³ Susan Mesner, “Which Anti-Nuclear Movement?,” *It's About Times* (March 1980), 6. The Tet Offensive, launched by the Viet Cong and North Vietnamese on January 31, 1968, surprised American forces in Vietnam, and bred doubts amongst the US press and public over the possibility of winning the war.

failure. "The Diablo Canyon nuclear plant is the Vietnam of the nuclear power industry and PG&E in particular," claimed Barbara Levy.¹⁰⁴ That civil disobedience (by demonstrations, draft dodging and public education) helped end the Vietnam War inspired hopes of similar success at Diablo Canyon. Nevertheless, for the majority of Americans the issue of nuclear power lacked the sense of urgency and potency common to wartime conditions. The dormant appearance of Diablo plant hardly matched footage of military action in Vietnam. As Abalone Louise Billotte pointed out: "what we are responding to is still to a large degree potential, while the war in Vietnam was sickeningly actual."¹⁰⁵ The potential dangers of home-grown atomic plants paled alongside both the threat of communism and the body-bags arriving back on US soil.

The anti-nuclear movement also learnt from the errors of past protest movements, particularly in terms of gender relations.¹⁰⁶ Eichelberger explained how in "the sixties and the anti-war thing... there was mostly a machismo thing going on - a lot of men jumping off on things, talking a lot and throwing molotov cocktails with sorts of values... In the anti-nuclear movement, it was a lot more decentralised, a lot less male-

¹⁰⁴ Barbara Levy to Editor, *San Francisco Chronicle*, 11 January 1984, Barbara Levy Personal Papers (BLPP), San Francisco.

¹⁰⁵ Louise Billotte, "Coalitions Reconsidered," *It's About Times* (June-July 1979), 8.

¹⁰⁶ Radical groups of the 1960s frequently upheld traditional gender stereotypes. Male leaders of civil rights, black power, student and anti-war movements typically resisted the rise of women to positions of influence or authority within 'their' organisations. See Blanche Linden-Ward and Carol Hurd Green, *American Women in the 1960s: Changing the Future* (New York: Twayne, 1993), 29, 64, 155, 159. Alice Echols has noted the failure of many historical accounts to consider the significant role of women in protest movements. See Alice Echols, "Nothing Distant about it: Women's Liberation and Sixties Radicalism," in *The Sixties: From Memory to History*, ed. David Farber (Chapel Hill: The University of North Carolina Press, 1994), 168-9. One notable exception is Vicki L. Crawford, Jacqueline Anne Rouse, and Barbara Woods, eds., *Women in the Civil Rights Movement: Trailblazers and Torchbearers, 1941-1965* (Brooklyn, New York: Carlson, 1990).

dominated, there were men and women working closer than I'd ever seen before."¹⁰⁷ Anti-nuclear meetings allowed time for all male and female members to contribute. Mary Moore considered the Alliance "a real attempt...to level the playing field."¹⁰⁸ Women often led affinity groups and arranged protests. "What I remember about the movement was that there was so many assertive women involved," commented Lauren Alden.¹⁰⁹

Like the Mothers for Peace, Abalone members interpreted nuclear power as a threat to women's rights and the responsibilities of motherhood. Both California groups honoured Karen Silkwood as a female anti-nuclear martyr. Abalone protesters arrested for nuclear misdemeanours frequently gave Silkwood as their surname. Alliance members nonetheless proved more vocal (and articulate) in their feminist associations than most Mothers. Abalone Elizabeth Whitney congratulated women speaking up for natural cycles in defiance of the "potential destruction machine" of Diablo plant.¹¹⁰ The 'Hall of Shame' feminist cluster declared that "[W]e, as women, put the quality of life as our foremost concern because we are the life giving force."¹¹¹ Protest handbooks claimed feminism as a "biophilic philosophy," and "a positive vision of the world in which we want to live." Handbooks also attributed the historic exploitation of women and nature alike as being a result of treating both groups as

¹⁰⁷ Interview with Don Eichelberger.

¹⁰⁸ Interview with Mary Moore, Sebastopol, Sonoma County, 24 July 1997.

¹⁰⁹ Interview with Lauren Alden, Berkeley, 13 August 1997.

¹¹⁰ Whitney, "Diablo Pageant," 13.

¹¹¹ Feminist Cluster, "Why the Hall of Shame Action?" handout, 22 March 1982, AAC file: Financial District Action 22 March 1982.

“alien, or *Other*.”¹¹² The nuclear landscape of Diablo Canyon signified a dangerous example of patriarchy at work. By undermining atomic machismo, feminists within the Alliance symbolically reclaimed the lands surrounding the plant. Jane Miller related how, “[F]or me, Diablo was a place to be to develop new forms and attitudes of political expression that were congruent with myself as a woman.”¹¹³ In protest scenes around Diablo, the landscape appeared warmer, friendlier, even empowered by female presence, in contrast to the harsh, cold-looking reactor domes. Abalone history appropriately became ‘herstory’ in a *Blockade Anthology* handbook.¹¹⁴

[5] Lingering Seismic Perils

In addition to the environmental and social dangers posed by Diablo plant, protesters also drew attention to natural hazards lurking close to the headland. In an Abalone poem entitled “Kayaking by Diablo, a nuclear power plant,” Clark Mitchell compared the hidden dangers of ocean waves with the masked threat of atomic power on a journey along the California coast. In a moment of contemplation off the Pecho Coast, Mitchell presented the vulnerability of his kayak to a sudden freak wave as a metaphor of the broader risks of atomic development for humankind. The appearance of “[T]he satin-sleak summer sea, safe and tranquil,” and Diablo nuclear plant under control, belied the grave threat posed by both natural and nuclear forces to “man’s frail life line.” With that thought in mind, Mitchell quickly decided to continue his voyage,

¹¹² *Diablo Canyon Blockade-Encampment Handbook*, 42-3, 46.

¹¹³ Jane Miller, “Diablo as a Feminist Experience,” in *1981 Diablo Canyon Blockade: An Illustrated Anthology*, 37.

“[G]liding precariously on, down the craggy coast,” in search of a safe harbour.¹¹⁵ However, it was the Hosgri Fault that most often featured in Abalone portrayals of nuclear menace on the Pecho Coast.¹¹⁶ Cartoons frequently depicted a jagged fault line emerging from the sea, running directly beneath Diablo plant, cutting the two reactors apart. Alliance advertisements played on the natural and nuclear threats on the headland. People Generating Energy paid for billboards in the San Luis area carrying the simple message “Diablo Canyon. On Shaky Ground.”¹¹⁷ Social, environmental and safety conventions dictated that “Nuclear Plants and Earthquakes Don’t Mix.”¹¹⁸ For many protesters, the Hosgri Fault made a nuclear accident inevitable. One Abalone ‘fact sheet’ suggested that “[T]he Hosgri Fault makes Diablo Canyon a virtual time bomb.”¹¹⁹ Given that atomic bomb tests at the Nevada Test Site “felt like earthquakes” to local citizens, the comment had some truth to it.¹²⁰

In addition, the Hosgri Fault provided the Abalone Alliance with a natural tool to fight nuclear proliferation on the Pecho Coast. A multiplicity of fault lines had successfully thwarted a number of other atomic schemes. PG&E’s Humboldt Bay nuclear plant on the northern coast, near Eureka, had been shut down in July 1976 for refuelling, but

¹¹⁴ *1981 Diablo Canyon Blockade: An Illustrated Anthology*, 32.

¹¹⁵ Clark Mitchell, “Kayaking By Diablo, A Nuclear Power Plant,” AFSC.

¹¹⁶ For examples, see Abalone Alliance, “A Gathering to Stop Diablo Canyon” poster, 30 June 1979, AAC file: SLO Rally June 30 1979, and most issues of *Nuke Notes*.

¹¹⁷ *It’s About Times* (February 1981), 2.

¹¹⁸ Abalone Alliance, “Stop Diablo” petition, AAC file: AA flyers on Diablo.

¹¹⁹ Abalone Alliance, “Diablo Canyon Fact Sheet” leaflet, AAC file: AA Flyers on Diablo.

¹²⁰ Rebecca Solnit, *Savage Dreams: A Journey into the Landscape Wars of the American West* (New York: Vintage, 1995), 5.

never restarted due to the discovery of three fault lines close to the site.¹²¹ Abalone Don Eichelberger remembered fishing as a boy at Bodega Bay during the time of the corporation's failed attempt to construct an atomic plant on the headland.¹²² Bob Wolf interpreted the earthquake controversy as "the one real clear thing that showed not just that PG&E but also that the NRC were dishonest [and] didn't care much about safety."¹²³ Abalone John Rosenthal even claimed that, "[B]ecause of the fault, Diablo Canyon is the Achilles heel of the nuclear industry."¹²⁴ Protesters looked to the Hosgri Fault to protest alongside them and prevent Diablo plant going on-line. Abalone images of Diablo plant cracked in two by an earthquake reflected fears of a nuclear accident but also desires for the end of PG&E's project by natural intervention.

The Hosgri Fault elevated the Diablo project above its contemporary atomic peers in terms of press coverage. Events at Diablo were considered unique due to the scale of anti-nuclear protest and the curious amalgamation of natural and nuclear hazards. The earthquake angle encouraged news reporters to fashion stories of imminent disaster in middle California.¹²⁵ An article in the *Village Voice*, entitled 'Quake 'n' Bake,' described San Luis County as an active landscape moulded by human and natural

¹²¹ Evanoff, "Memorirs [sic] of a Movement," ch.4, 16-20.

¹²² Interview with Don Eichelberger.

¹²³ Interview with Bob Wolf, San Luis Obispo, 21 July 1997.

¹²⁴ *San Francisco Examiner*, 29 June 1979.

¹²⁵ A particularly outrageous example of disaster-writing could be found in the Marvel-style comic *Slow Death*. "Close Encounters with a blurred mind" recounted the story of a man driving through middle California struggling with the pull of conscience concerning whether or not to protest against Diablo plant. The announcement on his car radio of an earthquake on the Pecho Coast pre-empted his decision. 'Close Encounters' ended with "rupture...radiation spill...bingo." See Tim Boxell, "Close Encounters with a Blurred Mind," Last Gasp comic *Slow Death* No.9 (Berkeley: Last Gasp, August 1978).

design, featuring “[A]t the foot of San Luis Obispo’s lava-sculpted hills on the jagged Californian coastline...a 2100-megawatt twin nuclear reactor.” The Hosgri Fault, “whose sudden slippage could send a shock wave” rupturing PG&E’s plant, represented a starting gun for a spiralling race towards oblivion.¹²⁶ Jack Anderson of the *San Francisco Chronicle* compared Diablo plant to the Teton Dam. Ignorant of geological warning signs, “the government built a monster called Teton,” that on June 5, 1976, killed fourteen people and left “thousands” homeless. The accident began “in the quiet darkness before dawn. Two small leaks trickled down the canyon wall,” then, “three minutes before noon...the 30-story dam split open, and a massive wall of water roared over the peaceful Idaho countryside.” “Now a worse disaster may be in the making on the Californian Coast,” cautioned Anderson. His images of cracks and concrete splitting open, of a huge man-made industrial ‘monster’ wreaking havoc, and of a rural area ruined, mirrored Abalone visions of a Hosgri-inspired accident at Diablo nuclear plant.¹²⁷ One newspaper article declared “[T]he second fear [after radiation] - earthquakes,” as “the special curse of ‘Devil’s Canyon.’”¹²⁸ Another pondered: “Diablo Canyon reactor: If it withstands environmentalists, can it survive an earthquake?”¹²⁹

¹²⁶ Asinof, “Quake ‘n’ Bake.”

¹²⁷ Jack Anderson, “The Hosgri Fault,” *San Francisco Chronicle*, 27 January 1977. For descriptions of the Teton Dam accident, see F. Ross Peterson, *The Teton Dam disaster: Tragedy or Triumph?* (Logan: Utah State University Press, 1982) and Janet Thomas et. al., eds., *That Day in June: Reflections on the Teton Dam disaster* (Rexburg, Idaho: Ricks College Press, 1977).

¹²⁸ Southern California Alliance for Survival, *Radioactive Times* newsletter (Fall 1978).

¹²⁹ Todd Darling, “Showdown at Diablo Canyon,” *Seven Days* (28 March 1977), 7.

The coalescence of natural and nuclear hazards continued to worry local citizens during the late 1970s. Questions remained over the ability of the plant to survive a sizeable earthquake, and whether or not the citizens of San Luis Obispo County could be evacuated in the event of an accident.¹³⁰ A ‘worst-case scenario’ predicted thousands trapped in highway queues, their points of exit blocked by collapsed structures following seismic shocks. The *Telegram-Tribune* recounted the testimony given by a Dr. Kaku at NRC hearings that an accident could make the county uninhabitable.¹³¹ Lumped together with other ‘faults’ in the nuclear landscape, the Hosgri appeared one more mistake to add to PG&E’s long list of construction errors. One protest placard claimed “Diablo Canyon has too Many FAULTS.”¹³² Others accepted the fault line as part of the local scenery. Similar to the article in the *Village Voice*, the *Telegram-Tribune* described how “[T]he movement of the earth has created the landscape here, raised the seafloor and created mountains and valleys. It has made San Luis County a dramatically beautiful - and potentially dangerous - place in which to live.” Whilst the newspaper considered earthquakes “a part of the nature of this place,” nuclear power appeared alien not just to Diablo Canyon, but to the whole County.¹³³

¹³⁰ In film footage shot inside Diablo plant, the anti-nuclear documentary *Dark Circle* (1982) showed an entangled mass of industrial machinery. It seemed pure science fiction to claim that the intricate network of pipes could handle a huge natural shock wave. County evacuation plans arguably needed to consider the possibility of an earthquake precipitating a nuclear accident on the Pecho Coast. Much to the horror of the Mothers for Peace, the Nuclear Regulatory Commission elected to largely ignore that scenario.

¹³¹ *Telegram-Tribune*, 2 August 1982. According to the report, many locals subscribed to Dr. Kaku’s concerns.

¹³² *1981 Diablo Canyon Blockade: An Illustrated Anthology*, 24.

¹³³ *Telegram-Tribune*, 30 November 1983.

Living in a seismic state no doubt heightened the concern of many Californians over the idea of operating a nuclear plant next to an active fault line. Earthquake stories in state newspapers reminded Californians of the danger lurking at Diablo. “Because there are earthquakes here, and you experience an earthquake, you take them more seriously,” explained Jackie Cabasso.¹³⁴ Protester Lauren Alden nevertheless detected a sense of denial in the broader California malaise.¹³⁵ Earthquakes had become almost an accepted part of life in California. Roger Herried noted the lack of first-hand experience of tremors as a problem, that “when it got down to it, there was not the reality in place. Say, if there had been a 7.1 in San Francisco in 1980, I think most people would have gone down to San Luis Obispo and came back with a piece of the reactor.”¹³⁶

[6] Building up to Blockade

1979 proved a good year for the Abalone Alliance. A rally at Camp San Luis, just north of Diablo, on June 30, attracted between 35,000 and 40,000 Californians, including Governor Jerry Brown. Brown referred to the Alliance as “a growing force to protect the earth” in his speech to the crowd.¹³⁷ Other speakers included David Hartsough, Sandy Silver, Daniel Ellsberg, John Gofman, Richard Kresja, David Brower, Sarah Nelson (representing the National Organisation for Women and Supporters of Silkwood), and Bill Wahpehpah from the American Indian Movement.

¹³⁴ Interview with Jackie Cabasso.

¹³⁵ Interview with Lauren Alden.

¹³⁶ Interview with Roger Herried.

A group of musicians including Bonnie Raitt, Jackson Browne and Graham Nash merged popular hit singles with anti-nuclear song. Momentum was firmly on the side of anti-nuclear protest. Abalone staff-person Pam Metcalf remembered the buzz surrounding the June gathering: "It was our rally. It was incredible to feel that kind of power about peoples' concerns about a single environmental issue."¹³⁸

San Luis Obispo felt the repercussions of Diablo Canyon's evolving nuclear image. With anti-nuclear rallies and press stories of problems at the plant, Diablo cast a shadow across the region. Like a radiation cloud drifting from a potential accident on the Pecho Coast, the influence of Diablo Canyon spread across the county. Local towns faced explosions of visitors during protests. The fate of Diablo Canyon appeared a crucial issue on peoples' doorsteps. The *Press Democrat* simply called San Luis Obispo "Diablo Country."¹³⁹ Locals joined the Alliance to defend the county. A recent arrival to the San Luis region, William Miller called his protests "a defence of a new home."¹⁴⁰ Pam Metcalf left congested Orange County because she "wanted to go to a beautiful pristine place where there were less people and less pollutants." Metcalf chose San Luis Obispo, but the ugly PG&E power lines erected across Obispan hills led her to join the Abalone Alliance.¹⁴¹

¹³⁷ Evanoff, "Memorirs [sic] of a Movement," ch.7, 58.

¹³⁸ Interview with Pam Metcalf.

¹³⁹ *Press Democrat*, 13 October 1981.

¹⁴⁰ Interview with William Miller.

¹⁴¹ Interview with Pam Metcalf.

The NRC temporarily suspended all licensing of nuclear plants in response to Three Mile Island and the subsequent rise in public concern.¹⁴² Abalone activists welcomed the delay imposed on PG&E's plant, but faced a difficult choice in deciding how to take advantage of a nuclear project in limbo. Peter Lumsdaine recognised an opportunity to build on the successes of 1979 by escalating protest activity. However, a more cautious approach took precedence within the group. Alliance members preferred to wait until PG&E's project appeared close to operation before amassing forces outside the gates of Diablo. They waited for the nuclear industry to make the next move.¹⁴³

Almost two years later, the NRC proceeded to approve low-power testing at Diablo plant. In response, the Abalone Alliance announced a full-scale blockade of the site. Activists prepared camp in Los Osos Valley, eight miles north-east of Diablo Canyon.¹⁴⁴ State officials anticipated vast numbers of protesters arriving in the region. 500 National Guardsmen and 270 officers from the California Highway Patrol bolstered the forces of the County Sheriff's department. During the 1960s, few locals had heard of the Pecho Coast, let alone visited it. Yet for two weeks in 1981, few Californians could escape the name 'Diablo Canyon.' 2,000 members of the press descended on the area. Reflecting upon the "hundreds of thousands of dollars" spent

¹⁴² Bob Van Scoy, "NRC halts licensing," *It's About Times* (November-mid-December 1979), 1.

¹⁴³ Interview with Peter Lumsdaine, Santa Cruz, 7 July 1997. Also see the *Telegram-Tribune*, 12 September 1981.

¹⁴⁴ Richard Robbins, a local landowner/rancher, donated eight acres for Abalone use. The Alliance filled in the official land use permit, answering the required 'days of operation,' with the open-ended reply, "until the Diablo Canyon nuclear power plant is abandoned as a nuclear reactor." In actuality, the camp lasted two weeks. See San Luis Obispo County Planning Department, "Land Use Permit Application," by Abalone Alliance, 21 September 1981, AAC file: legal suit 1981.

on live broadcast coverage, Evanoff remarked how “no news story since the Mount St. Helens eruptions had required such elaborate set-up.”¹⁴⁵ The congregation of reporters outside the plant gates waited impatiently for protesters to arrive. On Tuesday 15th of September, the first group of Abalone campaigners approached PG&E’s entrance to Diablo Canyon. Other protesters hiked across backcountry hills to reach the plant. A few landed at Diablo Cove by sailing boat. Diablo Canyon resembled a battleground between two armies. *The Daily Californian* headlined “Diablo siege: 300 arrested. Protesters invade by land and sea,” and backed up the military metaphors by quoting the contentions of Berkeley activist ‘Ellen M.’ that the development of the ‘peaceful atom’ “directly related to how they’re getting ready for World War III.”¹⁴⁶ Newspapers noted the war-like determination of County Sheriff George Whiting to circumscribe protest activities. *Newsweek* declared “Showdown at Diablo Canyon,” relating the mixed fortunes of protesters “[B]lockading it from all contact by land with the outside world.”¹⁴⁷

Those Abalone activists that reached Diablo plant undiscovered showed that the nuclear project was vulnerable to saboteurs even during times of extensive guard activity. *It’s About Times* celebrated the 1981 blockade with the visual capture of PG&E’s plant as backcountry hikers unfurled their anti-nuclear flag to celebrate “Mendocino County Against Diablo” next to the reactors.¹⁴⁸ In lulls between protest

¹⁴⁵ Evanoff, “Memorirs [sic] of a Movement,” ch.8, 1. Mount St Helens in the Northern Cascades erupted on May 18th, 1980, killing 100 people and destroying 276 homes.

¹⁴⁶ *The Daily Californian*, 16 September 1981.

¹⁴⁷ “Showdown at Diablo Canyon,” *Newsweek* (10 August 1981), 51.

¹⁴⁸ *It’s About Times* (October-November 1981), 1.

waves, reporters turned their gaze towards the Los Osos Abalone gathering and the rudiments of anti-nuclear protest. *The Daily Californian* described the 1981 blockade as “like an intriguing soap opera,” criticising the Alliance for spending too much time on symbolic acts and gesture politics.¹⁴⁹ Street theatre and bizarre protest stunts were actively encouraged. Jackie Cabasso remembered “[A] big model of Diablo Canyon, made of dry ice with black smoke coming out of it,” being placed at the plant’s gates. The police “then smashed this model of Diablo Canyon” to the cheer of the Abalone crowd.¹⁵⁰ Strict codes of conduct, along with anti-nuclear chants and role-play, prompted the *Telegram-Tribune* to describe a “fervor bordering on religious fanaticism” inside the Abalone camp.¹⁵¹ In a derogatory fashion, the *San Francisco Chronicle* described “[T]he anti-nuclear faith” as “one of the fastest-growing cults in this cult-ridden country.”¹⁵² The Abalone fixation with planned non-violent, peaceful protest nevertheless assured the blockade passed smoothly. Anti-nuclear activists befriended officers of the California Highway Patrol, and only the local Sheriff’s department faced accusations of bad behaviour for occasional bouts of rough justice. The 1981 blockade lasted a fortnight. Over 1,900 went to jail, a record for arrests outside an American nuclear plant. Diablo Canyon had become a statistical landmark in anti-nuclear protest.

¹⁴⁹ David Lazarus, “Diablo Canyon protesters failed to achieve substantive victories,” *The Daily Californian*, 21 September 1981.

¹⁵⁰ Interview with Jackie Cabasso.

¹⁵¹ *Telegram-Tribune*, 12 September 1981.

¹⁵² Noted in *It’s About Times* (March-April 1979), 9.

[7] Backcountry Protest

Protest activities at Diablo provided Californians with a taste of both the natural and nuclear sides of the Pecho Coast. Unlike courtroom battles or congressional lobbying, direct action as an environmental tactic assumed some level of physical interaction between people and place. Successful actions entailed climbing security fences, travelling to hilltop viewpoints of Diablo plant, and occupying PG&E property. Eluding security forces across several miles of rugged backcountry trails in the quest to reach Diablo Canyon carried a sense of personal, as well as physical, achievement. The Pecho Coast represented a protest landscape, offering hidden paths, places to congregate, and natural shelters for rest, food and song.

Backcountry hikers often utilised old Chumash trails through Diablo country. Scouts guided protest groups across the Irish Hills. Routes through Wild Cherry Canyon, Montana De Oro State Park, and Fee Canyon proved popular. Press reporters again applied battlefield analogies. The *Oakland Tribune* described “squadrons of law enforcement helicopters” and “troops” at the disposal of Plant Manager E. C. Thornberry, the appropriately-titled “commander under siege” during the 1981 blockade. Despite the “hostile landscape,” the newspaper offered some solace to protesters in its claim that “PG&E’s stronghold is not impregnable.”¹⁵³ Descriptions of the ‘hostile landscape’ often focused upon natural dangers as well as security

¹⁵³ Paul Engstrom, “Protesters play cat and mouse with law in thick canyon brush,” *Oakland Tribune*, 16 September 1981. The resort to war analogies was far from unique to the 1981 blockade. During the 1978 backcountry protest, a reporter for *Grassroots* felt like “Che Guevara in the jungle,” and noted that “[T]he police helicopter and spotter plane dogged us throughout, giving the protest a Vietnam War aura,” - an intriguing paradox given the number of pacifists involved: Bill Murphy, “Our reporter battles the NUKES at Diablo Canyon,” *Grassroots* (14 August-5 September 1978).

measures. In an article entitled “The Ring of Security around Diablo,” high hills combined with barbed wire fencing, and rattlesnakes allied themselves with patrol dobermans, in a synchronised defence of the nuclear plant.¹⁵⁴ The *Los Angeles Times* predicted that the 1981 “drama” would “feature thousands of highly principled demonstrators braving rattlesnakes, poison oak, blister-popping walks, danger of drowning.”¹⁵⁵ The threat posed by armed guards seemed relatively minor compared to the plethora of natural obstacles. PG&E released press statements warning “of rattlesnakes slithering through the hills and danger of hiking in the rough terrain.”¹⁵⁶ The *Los Angeles Times*, *Pacific Sun* and *The Berkeley Gazette* followed suit by all drawing attention to the “rattle-snake infested wilderness” of the Pecho Coast.¹⁵⁷ It seemed history had been temporarily rewound in San Luis, back to the times that Americans feared the evil, dangerous and untamed wilderness.

Hiding from helicopters and infrared scanners, Abalone protesters often felt as though they were evading the US military. Brook remembered how “running around in the back of woods with green fatigues on was probably the most fun I’ve ever had in my life continuously,” although he also stressed the group’s resistance to the “mentality of war.”¹⁵⁸ ‘Jackrabbit’ described the backcountry protesters as “ecowarriors going into

¹⁵⁴ “The Ring of Security Around Diablo,” *San Francisco Chronicle*, 12 September 1981.

¹⁵⁵ John Hurst & Bob Sector, “Stage Set at Diablo Canyon for Dramatic A-Plant Siege,” *Los Angeles Times*, 24 August 1981.

¹⁵⁶ Evanoff, “Memorirs [sic] of a Movement,” ch.8, 2.

¹⁵⁷ Hurst & Sector, “Stage Set at Diablo Canyon”; Marcelo Rodriguez, “Diablo Canyon,” *Marin County Pacific Sun* (18-24 September 1981); “500 Arrested in First Nuclear Protest,” *The Berkeley Gazette*, 16 September 1981.

¹⁵⁸ Interview with Brook, Berkeley, 12 August 1997.

the woods.”¹⁵⁹ Contrary to press reports, the Pecho wilds regularly offered protesters a way to avoid capture on PG&E property. Security officers encountered far fewer natural barriers in arresting Abalone campaigners at the front gate. The *Oakland Tribune* described how “[T]he wooded, scrub bush hills around Diablo Canyon nuclear power plant offer dense cover for more than just the racoon, mountain lion and occasional bear that make the steep terrain their home. Also relying on that no-man’s jungle...are scores of nuclear protesters.”¹⁶⁰ Abalone knowledge of a largely unknown landscape gave them a distinct advantage over Pacific Gas. To keep their excursions secret, Abalone activists used urban street references when talking on walkie-talkies to identify locations in the “middle of nowhere.”¹⁶¹ An affinity group from UC Berkeley named themselves ‘the untouchables.’ The *Oakland Tribune* referred to Abalone backcountry hikers as “encamped mountain people.”¹⁶² Apart from poison oak and the occasional rattler, the microcosm of ‘wilderness’ at Diablo seemed a comfortable place for the Abalone Alliance.

Backcountry trips proved essential for reaching beyond nuclear conceptions of the Pecho Coast, and discovering a region of natural beauty. Abalone Crystal enthused: “[T]he country around Diablo is so...Californian...is there a better word? A hundred

¹⁵⁹ Jackrabbit interviewed in Barbara Epstein, *Political Protest & Cultural Revolution: Nonviolent Direct Action in the 1970s and 1980s* (Berkeley: University of California Press, 1991), 110.

¹⁶⁰ Engstrom, “Protesters play cat and mouse...” In his keenness to portray the Pecho Coast as wilderness, Engstrom failed to note that the last sighting of a grizzly in California was in 1925, whilst black bears rarely roamed outside the mountains of the Sierra Nevada. The only ‘bears’ found at Diablo during 1981 were the feminist ‘Mother Bear Brigade’ Abalone cluster.

¹⁶¹ Interview with Jackie Cabasso.

¹⁶² Engstrom, “Protesters play cat and mouse...”

hues of gold, a handful of greens, the blues of sky and ocean.”¹⁶³ Reminiscent of Sierra Club prose by Litton and Eissler, Alliance leaflets described the region as a “beautiful stretch of coastline.”¹⁶⁴ “The central coast of California is one of the most beautiful and least despoiled parts of North America,” claimed the 1981 blockade handbook.¹⁶⁵ In contrast to conservation purists only willing to defend ‘untouched’ landscapes, Alliance members accepted the natural world at Diablo as valuable for what it was, instead of lamenting its lack of wilderness credentials. “Many who joined the Diablo blockade were able to develop a bond with the land itself,” noted Barbara Epstein in her study of Abalone direct-action.¹⁶⁶ For the pagan affinity group ‘Matrix,’ communion with nature took on a conscious spiritual form.¹⁶⁷ The knowledge that Chumash bones rested at Diablo “helped to reinforce the idea that pagans had of it being sacred” explained Abalone Phoebe.¹⁶⁸ Matrix rituals in the backcountry willed a change in human consciousness towards ecological responsibility, and, specifically, an end to Diablo nuclear plant. Brook remembered some success in pagan (as compared

¹⁶³ Crystal, “Crystal’s Story,” *1981 Diablo Canyon Blockade: An Illustrated Anthology*, 62.

¹⁶⁴ Abalone Alliance, “The Diablo Canyon Nuclear Power Plant Fact Sheet,” Fall 1982, AAC file: AA flyers on Diablo.

¹⁶⁵ *Diablo Canyon Blockade-Encampment Handbook*, 22.

¹⁶⁶ Epstein, *Political Protest & Cultural Revolution*, 110.

¹⁶⁷ During the summer 1981 blockade, several pagans formed an affinity group, ‘Matrix’, based on “ritual, and magic, and political action.” Matrix responded to the nuclear threat with an organic blend of magic, protest and place. They enlivened Abalone demonstrations by encouraging creative expressions of anti-nuclear opposition in the form of dance and song. Telephone Interview with Starhawk, Sonoma County, 28 July 1997.

¹⁶⁸ Interview with Phoebe, Berkeley, 12 August 1997. Another affinity group called itself ‘Friends of the Chumash,’ and protested to honour the “bodies buried on this property.” Mentioned in Krassner, “No Nukes is Good Nukes.”

to PG&E) 'energy work' at Diablo with the appearance of electrical problems at the plant following full moon rituals in the surrounding hills.¹⁶⁹

The backcountry route to Diablo also provided an education in the environmental costs of building a nuclear plant. Starhawk recounted how,

With every step into the power of these woods I am beginning to care about them in a way I didn't before. Even sitting in front of the main gate, even riding past the twin domes in the police bus, the danger the plant represented was still somehow unreal to me... But now, as I feel the power of this earth, these trees, this *place*, and envision it contaminated, off-limits, ruined forever, I begin to get unspeakably angry.¹⁷⁰

Many protesters witnessed first-hand the damage inflicted on nature prior to an atomic chain reaction – the pylon clearings, the private road, the nuclear carbuncle. Nature-writer (and anti-nuclear protester) John McKinney remembered encountering the atomic landscape during his descent of Green Peak: “[N]o conception whatever of the plant’s size can be had from photos, and as we plunge down the south wall of Diablo Canyon we are silenced by the sheer enormity of the Nuke. We walk in the shadow of the twin reactor buildings, feeling ever smaller as we descend.”¹⁷¹ Starhawk noted how the visual appearance of PG&E’s project matched its incompatibility with nature, that “[B]elow us lies the plant, square, hard-edged, and out-of-place, like a bad

¹⁶⁹ Interview with Brook.

¹⁷⁰ Starhawk, *Dreaming the Dark: Magic, Sex and Politics* (Boston: Beacon Press, 1988, new edn), 176.

¹⁷¹ John McKinney, *A Walk Along Land's End: Discovering California's Unknown Coast* (New York: Harper Collins, 1995), 144.

science-fiction fantasy cartoon imposed on the landscape. In this place where the earth stretches out her arms and rears her soft breasts, this plant is the emblem of our estrangement, our attempts to control, to impose a cold order with concrete and chain links.”¹⁷² Witnessing the enormous plant signified the end of the trail (and usually point of arrest) for anti-nuclear protesters.

[8] The Thin Blue Line and Ocean Vessels

A thin blue line painted across the entrance road to Diablo, dividing private property from a public beach, was another focal point of the 1981 blockade. Security officials and protesters met each other for the first time at this location. Large numbers gathered either side of the line, a mixture of sheriff’s deputies and PG&E staff facing off against blockaders and press reporters. An aura of power pervaded the entrance. One protester compared the security patrols at the gates of Diablo to “a horrible Dachau nightmare.”¹⁷³ “The infamous blue line” came to represent the nuclear landscape it circumscribed. For many protesters, the painted boundary served as their point of contact with Diablo nuclear plant, before a ‘blue line’ of cops took them away. Crossing the boundary signified a baptism into protest for Abalone converts, by risking arrest they proved their dedication to the anti-nuclear cause. Miki Sanders sensed that “[B]ecause we clasped hands and stepped over the blue line, we now have a chance to save the future.”¹⁷⁴ Some Abalone members passed flowers across the

¹⁷² Starhawk, *Dreaming the Dark*, 178.

¹⁷³ Don Eichelberger, “The Diablo Canyon Blockade: A Personal Account,” DEPP.

¹⁷⁴ Miki Sanders, “The First of Autumn,” *1981 Diablo Canyon Blockade: An Illustrated Anthology*, 45.

'divide' to receptive California Highway Patrolmen, seeking to dissolve the barrier between law officers and protesters. "The beauty of that throw-back to the flower power movement of the sixties was moving," commented Don Eichelberger.¹⁷⁵ Recognising Chumash as the original inhabitants of the Pecho Coast, the Alliance also pondered who were the real trespassers on the Diablo lands.¹⁷⁶

Those arrested were frequently taken by PG&E bus to temporary holding facilities adjacent to Diablo plant. As with the backcountry hikers, road protesters had a chance to encounter their nuclear nemesis first-hand. Although the reactors had yet to go on-line, it was often hard for protesters to dispel images of seeping radioactivity. Barbara Levy remembered her journey to the plant at night, and the how the area "was lit very strangely." "It felt very spooky to me, and I was feeling nervous about radiation," she recounted.¹⁷⁷ Steve Smith, another protester who visited the canyon during the evening, had similar thoughts: "'Spooky' is the word people use to describe the building in the dark: its big reactor domes, the concrete lifeless surroundings, nothing growing."¹⁷⁸ With waits of up to several hours before departing for jail, restroom visits became an additional factor. Levy recollected one protester needing the bathroom, and another crying: "There's the first leak at Diablo."¹⁷⁹

¹⁷⁵ Eichelberger, "The Diablo Canyon Blockade."

¹⁷⁶ The Mothers for Peace meanwhile initiated a legal claim against PG&E alleging that radiation emitted during plant operation would circulate in the region and thus constitute an act of trespass upon the property of local residents.

¹⁷⁷ Interview with Barbara Levy.

¹⁷⁸ Steve Smith, "Place of the Devil," *1981 Diablo Canyon Blockade: An Illustrated Anthology*, 54.

¹⁷⁹ Interview with Barbara Levy.

Abalone activists also blocked the public road along Avila Beach in an attempt to stop workers arriving at Diablo. Press footage of the September 1981 action showed lines of people across the tarmac, with PG&E employees confined to stalled buses. “I ran the Diablo blockade,” read the bumper sticker on staff cars which reached the plant (or at least claimed to get there).¹⁸⁰ Itara Katherine O’Connell sat down in front of a PG&E convoy that only just managed to stop before hitting her. O’Connell alone forced the buses to turn around. The act of blocking the road symbolised a physical rejection of nuclear power. Protester Terry Lamphier announced his “crime” would be “to stand literally in the path of so-called progress - to stand in the roadway leading to the plant.”¹⁸¹ The road appeared an appropriate venue for protest against the nuclear fuel cycle, a system frequently dependent upon tarmac and asphalt for transport and connection. Anti-nuclear literature documented the “Rush Hour Threat” posed by nuclear waste transporters travelling on congested highways, whilst Kaplan’s *Nuclear California* plotted the “Hottest Roads” in the state.¹⁸² Meanwhile, one newspaper highlighted the unwelcome ‘clogging’ of Avila town by the Abalone Alliance during protest events.¹⁸³

¹⁸⁰ Eichelberger, “The Diablo Canyon Blockade.”

¹⁸¹ Terry Lamphier, “Diablo Canyon: a matter of conscience,” *The Independent & Gazette*, 26 July 1981.

¹⁸² Southern California Alliance for Survival, *Survival* newsletter (September-October 1982), 5; David E. Kaplan, ed., *Nuclear California: An Investigative Report* (San Francisco, Greenpeace/Center for Investigative Reporting, 1982), 37.

¹⁸³ “Port Gears Up For Protest,” *Five Cities Times-Press-Recorder*, 9 November 1983.

Abalone also clogged Diablo Cove. Following on from a number of earlier coastal gatherings, the largest sea blockade of Diablo Canyon occurred at the 1981 protest.¹⁸⁴ The *San Francisco Chronicle* reported “a ragtag flotilla of motor boats, rubber craft and sailboats, including Greenpeace’s rented schooner *Stone Witch*” amassed in the waters off Diablo.¹⁸⁵ After delays caused by rough seas and fog, the “unusual armada” entered a sixteen square mile ‘safety zone’ declared off limits to all craft.¹⁸⁶ Protesters attempted to evade officials and land at Diablo Cove. One anonymous activist simply felt “compelled to step off the boat to face those monstrous outtake tunnels which spew low level radioactivity, PCBs and a variety of other poisons into the clear Pacific Ocean.”¹⁸⁷ Abalone policed the coastal waters on behalf of a natural law (marine ecology) apparently unrecognised by the US coast guard, or Pacific Gas.

[9] Fecund Protest Seeds

By the time of the blockade, the Abalone Alliance had established a flexible environment where protesters from across California channelled their actions towards

¹⁸⁴ During the 1977 Abalone protest, three representatives of ‘Friends of the Fish’ took to the sea to protest Diablo plant. In 1979, Greenpeace participated in a sea blockade. After five years spent intervening in Russian waters on behalf of whales, the environmental organisation returned to face the dangers of the atom (Greenpeace was formed in 1971, with its first campaign being an attempt to halt atomic tests on the Aleutian Island of Amchitka in the North Pacific Ocean). Greenpeace Vice President Dennis Delaney suggested the need to consider “not just if the whales and seals are going to survive, but whether the whole world is going to die”: *San Francisco Examiner*, 29 June 1979. See Robert Hunter, *Warriors of the Rainbow: A Chronicle of the Greenpeace Movement* (New York: Holt, Rinehart and Winston, 1979) for the early history of Greenpeace.

¹⁸⁵ *San Francisco Chronicle*, 16 September 1981.

¹⁸⁶ Carl Irving, “Protesters of PG&E’s facility may deploy an unusual armada,” *San Francisco Examiner*, 2 August 1981.

¹⁸⁷ Anonymous, “Only Through Our Actions,” *1981 Diablo Canyon Blockade: An Illustrated Anthology*, 20.

a common anti-nuclear goal. Using a consensus process, spoke councils, and affinity groups, the anti-nuclear coalition had spread out across the Golden State. That anti-nuclear groups could work locally and join together in focused actions offered protesters both a regional and state identity. "The centralized nature of nuclear power takes control of energy away from local communities," noted the Abalone "Declaration of Nuclear Resistance."¹⁸⁸ By granting communities a role in energy decisions, the Alliance featured a firm grassroots base. The system proved immensely successful. Despite enrolling people from diverse regions, ages, and religions, the coalition suffered few disputes. Although consensus involved a lot of time and effort, the Abalone Alliance managed to attain a high degree of unanimity amongst its sixty-plus groups.¹⁸⁹ The 1981 blockade, as with prior protests, attracted protesters from across northern and southern California.

The Clamshell Alliance on the East Coast traced the roots of such a system to Native American and Quaker thought. San Franciscan radicalism and counterculture was also a strong influence. As Roger Herried pointed out, the Alliance was part of a broader protest culture, fitting in with the "environment of anti-war, peace movement, alternative leftist community" that flourished in that region.¹⁹⁰ Abalone protesters held

¹⁸⁸ "Declaration of Nuclear Resistance," *Diablo Canyon Blockade-Encampment Handbook*, 2. Such dedication to a participatory democratic process harked back to the early 1960s, when Students for a Democratic Society (SDS) forged the Port Huron Statement (June 1962).

¹⁸⁹ At worst, the time-intensive nature of the consensus process, allowing each participant to speak their mind, led to the 'loss' of Diablo Canyon amidst seemingly endless group discussion. Highly critical of the process, the *San Francisco Chronicle* suggested that "[T]o most of the members, the proliferation of 'consensusing' - and, more important, the philosophy of collective decision-making that the word has come to stand for - is as important as stopping Diablo Canyon's giant generator." See "New Language of Protest," *San Francisco Examiner and Chronicle*, 13 September 1981.

¹⁹⁰ Interview with Roger Herried.

an office in San Francisco's Mission District in addition to the one in rural San Luis Obispo. In its contemporary setting, the Abalone structure offered an alternative means of democracy for those disenchanted with traditional politics. Uninspired by the elitist and conformist tendencies of mainstream environmental groups, activists such as Herried, a former Greenpeace campaigner, adjusted to a fresh way of organising.¹⁹¹ The inclusive structure of the Alliance attracted people with little experience of protest work, who soon developed their own environmental consciousness through anti-nuclear activism.

The Abalone process drew inspiration from a variety of past social movements, from struggles against slavery to peace activists objecting to America's war in Vietnam. A letter by Bob Wolf in 1977 likened anti-nuclear activists at Diablo to the protagonists of the Boston Tea Party and those who participated in anti-segregation sit-ins during the 1960s, all "small groups who broke the law to make moral statements." Wolf argued that "our non-violent statement should be considered not destructive, but restorative of democracy."¹⁹² The Abalone Alliance listed Henry David Thoreau's "Civil Disobedience" as 'suggested reading' in its protest handbooks.¹⁹³ Thoreau even made it inside a Sheriff's report on the threat posed by the Abalone Alliance to law

¹⁹¹ Interview with Roger Herried.

¹⁹² Bob Wolf, for People Generating Energy, to editor, *Telegram-Tribune*, 22 September 1977.

¹⁹³ In 1846, Thoreau spent a night in Concord Jail for his refusal to pay poll tax, an act of protest against the country's war with Mexico (which he, and fellow New England abolitionists, perceived as a bid by the slaveocracy to territorially expand servitude) and the compliance of the State of Massachusetts with the Fugitive Slave Act. In 1849 he published an article recounting that night and expounding his philosophy of non-compliance with evil, entitled "Resistance to Civil Government" (later called "Civil Disobedience").

and order.¹⁹⁴ Abalone members appreciated Thoreau's insistence on the duty to act by a higher moral law in "Civil Disobedience."¹⁹⁵ In a letter to the *Telegram-Tribune*, Leah Ireland defended arrested Abalone activists, paraphrasing Thoreau by declaring "[W]hen the law is unjust, justice is outside the law."¹⁹⁶ Keith Boudin referred to Thoreau's writings in a letter to *It's About Times*. Using the declaration that "all men recognize the right of revolution; that is, the right to refuse allegiance to, and resist, the government when its tyranny or its inefficiency are great and unendurable," Boudin paralleled Abalone distrust of the current US system with Thoreau's own distaste for government. Boudin also recognised Thoreau's dictum, "Let your life be a counter friction to stop the machine," as a highly appropriate phrase for Abalone protest against Diablo nuclear plant.¹⁹⁷

¹⁹⁴ People Generating Energy, "The Theory and Some Implications of Nonviolence," in George S. Whiting's Sheriff's Report (1978).

¹⁹⁵ That the Abalone Alliance presented Thoreau's thoughts on civil disobedience as his lasting legacy rather than his appreciation for the American wild indicated their own protest priorities. During their active opposition to nuclear power, Alliance members frequently emphasised the danger Diablo plant posed to human life rather than nature in general. However, that Thoreau chose his one act of civil disobedience as a statement on behalf of humans (black slaves), not his beloved Concord scenery, did not detract from his empathy for nature. Similarly, Alliance members with a social conscience invariably displayed concern for the natural landscape. The ideas of Thoreau and the Alliance differed on social, rather than environmental, goals. Thoreau, who coveted time for individualism and solitude, would never have been comfortable amongst the Abalone groups amassed at camps. Living alone at Walden Pond for two years represented his idea of a 'utopian experiment,' rather than choosing to join Brook Farm and other radical communities that flourished in New England during the 1840s. In addition, Thoreau never disavowed violence or armed struggle, and supported John Brown's armed raid on Harper's Ferry federal arsenal in October 1859.

¹⁹⁶ Leah Ireland (Cambria), to editor, *Telegram-Tribune*, 6 October 1977. Ireland's comments most likely refer to Thoreau's passage in "Civil Disobedience": "If the injustice has a spring, or a pulley, or a rope, or a crank, exclusively for itself, then perhaps you may consider whether the remedy will not be worse than the evil; but if it is of such a nature that it requires you to be the agent of injustice to another, then, I say, break the law." See Henry David Thoreau, *Civil Disobedience and Other Essays* (New York: Dover, 1993 ["Civil Disobedience": 1849]), 8.

¹⁹⁷ *It's About Times* (March-April 1979), 2; *Ibid.* 3, 8.

The non-violent tenets of Abalone civil disobedience attracted many Californians to the Alliance. Charlotte Davis was won over by the “transformative experience” of non-violent action.¹⁹⁸ The choice of peaceful civil disobedience denoted a response to an increasingly brutal society. Nuclear energy appeared the culmination of humans violating the earth rather than fostering a positive relationship with biotic systems. The affinity group People Generating Energy considered aggression towards the natural world “rampant through the work in chemicalized agriculture, strip-mining, and industrial pollution. Nuclear power is the most violent form of violence against Nature because it threatens to destroy all forms of life.”¹⁹⁹ As a collision between atoms with escalating force, the nuclear chain reaction was declared intrinsically destructive. When protesters declared “there is no such thing as a ‘peaceful atom’,” they usually referred to atomic energy’s wartime connections, yet there remained an underlying notion that any chain reaction involved fierce bombardment.

To many protesters, non-violence offered a way of life at peace with nature, “hope for our species to remain here with the planet earth.”²⁰⁰ Alliance members pointed to nature’s own ‘non-violent protests’ as indicating their right choice of path. The June 1981 edition of *Nuke Notes* welcomed the notion that “[C]onscious non-violent action is perhaps not limited to our species,” on discovering that, “[I]n early 1980 thousands of dolphins gathered to resist their own slaughter by Japanese fisherfolk and forced the

¹⁹⁸ Interview with Charlotte Davis, San Francisco, 5 August 1997.

¹⁹⁹ PGE, “The Theory and Some Implications of Nonviolence.”

²⁰⁰ Anonymous, “Only Through Our Actions.”

fishing boats to port.”²⁰¹ Closer to home, Judith Given from San Luis Obispo interpreted the “suicide-like deaths” of 170 beached pothead whales as a sign of nature’s unease at Diablo plant and likely contamination of the Pacific Ocean. “Whales may be warning us,” read the *Telegram-Tribune* headline.²⁰² Whilst Greenpeace protesters dressed in 25-foot-long whale costumes landed at Diablo with a petition against toxic dumping in coastal waters, two real whales apparently swam past the Pecho Coast, as if in support.²⁰³ However, Abalone campaigners neglected to consider the implications of non-violence as an environmental dictate beyond the banning of atomic energy.²⁰⁴ Activists failed to acknowledge nature’s own propensity for violence (in terms of killing or use of physical force) implicit in any predator-prey relationship.²⁰⁵ Nature similarly appeared capable of ‘violent protest’ in the form of the Hosgri Fault. That the Alliance never grappled with such issues denoted their overwhelming perception of a natural world based on co-operation rather than chaos and competition. Sierran conservationist John Muir viewed nature as a wonderful community to the extent that he downplayed the realities of chases and kills within it.

²⁰¹ *Nuke Notes* (15 June 1981), 4. The article failed to expand on the exact form of dolphin-led civil disobedience.

²⁰² Judith Given (San Luis Obispo), to editor, *Telegram-Tribune*, 4 August 1979.

²⁰³ *It’s About Times* (April-May 1984), 8.

²⁰⁴ Whilst activists recognised nuclear power as a violent act against nature, they ignored other examples of humans aggressively asserting rights of dominion. One vegetarian’s plea for suitable food in jails was deemed a middle class “luxury” by an Abalone staff-person. Feminism and gay rights appeared legitimate issues in prison, yet the violent exploitation of animals seemed far less significant: Letters between Bill Ray Boyd, officer manager, San Francisco Vegetarian Society, and Susan Swift, Abalone Alliance, San Francisco Office, during August 1981, AAC file: Interesting Letters.

²⁰⁵ Philosophical questions remained over anti-nuclear activists coherently accepting ‘nature red in tooth and claw’ whilst alluding to human non-violence as a guarantor of a balanced, harmonious natural world. Was there not the danger of moral judgements over ‘barbarous acts’ in nature, reminiscent of humanitarian antipathy towards predators in the nineteenth century which ‘justified’ the ‘cleansing’ of ‘guilty’ species?

In the Abalone idealisation of both nature and non-violence, they too ignored fierce struggles in the natural world.

[10] Social-Environmental Change

The fondness displayed by Abalone members for non-violence and consensus reflected their belief that such processes would bring social change in American life. Abalone 'Jayne' hoped for "[N]othing short of changing the system, non-violent revolution."²⁰⁶ Whilst activists primarily struggled *against* nuclear power at Diablo Canyon, those who experienced the Alliance also recognised its optimistic drive *for* a better society.²⁰⁷ Barbara Epstein suggested that this latter dynamic of the Abalone Alliance provided the measure of its true agenda: "The threat that Diablo posed to the environment was the occasion, rather than the impetus, for a movement that was fundamentally about social, communal, and personal transformation." By portraying its work, in essence, to be more concerned with social revolution, Epstein de-prioritised environmental impulses within the Alliance.²⁰⁸ Diablo Canyon was denigrated to the extent of providing merely "an arena in which a particular political vision could be played out."²⁰⁹ Social scientist Robert Gottlieb similarly claimed that the Alliance never progressed beyond "articulating a politics about the natural

²⁰⁶ Carl Irving, "Stout-hearted S.F. group at Diablo gears up for blockade," *San Francisco Examiner*, 15 September 1981.

²⁰⁷ Environmental groups have frequently been chastised for over-reliance on negative, reactive campaigns. The Abalone Alliance provides a good example of how to mix positive and negative campaigning.

²⁰⁸ Indeed, their status as environmentalists might also be questioned by this line of thought.

²⁰⁹ Epstein, *Political Protest & Cultural Revolution*, 116, 108.

environment except as it tied into the symbolism of a technology perceived out of control.”²¹⁰ In line with Epstein’s and Gottlieb’s contentions, many activists dwelt mostly on ideas of social change rather than environmental philosophy. The Alliance provided members with an alternate form of society (and utopian experiment) that members wanted to take further. It might also be considered significant that the crucial form and ideals of the Abalone Alliance, of non-violence and consensus, could be found in other social struggles, and were brought *to* protest at Diablo Canyon rather than emerging *from* it.

However, Epstein and Gottlieb underestimated the social-environmental dynamic that infused Abalone thought. The “Declaration of Nuclear Resistance” issued by the Alliance articulated a desire “[T]o build a more loving and responsible world for ourselves, our children, and future generations of all living things on this planet.”²¹¹ According to David Hartsough, the act of rejecting PG&E’s project, simply saying “‘No’ to Diablo,” indicated that people were “saying ‘YES’ to building a beloved community, to caring for one another, to caring for the earth and future generations.”²¹² The nuclear landscape at Diablo Canyon was looked on as the grim manifestation of the divide between nature and society. The scale of the atomic threat indicated a need for people to start acting on behalf of the *total* environment, where society and nature co-existed. Abalone David Martinez explained that, “those who oppose Nuclearism work in the interests of poor and rich, women and men, all ages, all races, all nations,

²¹⁰ Robert Gottlieb, *Forcing the Spring: The Transformation of the American Environmental Movement* (Washington DC: Island Press, 1993), 182.

²¹¹ “Declaration of Nuclear Resistance,” 3.

²¹² David Hartsough, “Reflections on the Diablo Blockade,” AFSC.

all religious groups, all species endangered or otherwise.”²¹³ Abalone Bill Evans, referring to nuclear industry employees, noted how “it is important that we help those people change their relationship with the earth.”²¹⁴ Modern environmentalism, fear of nuclear energy, and the landscape of Diablo Canyon, all indelibly shaped Abalone consciousness. Given the desire of activists for human society and nature in mutual balance, the Abalone conception of a social utopia inevitably included an environmental vision as well.

In handbooks and on posters, the Alliance envisaged a social-environmental utopia based on a rural-solar system of independent communities and grassroots democracy. Members of the AFSC’s San Francisco office associated the Alliance campaign with ideas posited in the American Friends’ ‘Simple Living’ programme. The *Simple Living* newsletter used extracts from E.F. Schumacher’s environmental treatise *Small is Beautiful* (1974), and explored a “vision of an alternative, solar-based society” offering “possibilities for community-level building and social change that fit hand in hand with simple living.” In “A Solar Society,” the newsletter pondered a future of co-operatives based on “work places within walking/biking distance,” along with radical ideas proposing common property, “regional consciousness,” grassroots democracy and “the re-establishment of rural culture.” This future required reduced consumption complemented by careful conservation.²¹⁵ An artistic sketch of the ‘ideal

²¹³ David Martinez, *Reflections of an Anti-Nuclear Activist* (San Anselmo: San Anselmo Printing, 1981), 55.

²¹⁴ Bill Evans, Reason for Blockading, in Frishman, “Defense of Necessity.”

²¹⁵ *Simple Living* (spring 1976). The spring 1976 edition similarly highlighted nuclear energy as the antithesis of an ecologically and socially responsible lifestyle.

future' in the 1981 Abalone blockade handbook showed a patchwork of buildings, small-scale energy collectors and crops intermingled with wild trees and plants, giving the impression of a random yet harmonious landscape crafted by an anarchic, organic civilisation. The lack of hard lines in the picture symbolised citizen commitment to living as part of a natural and free-flowing landscape, of choosing a soft-energy path over the harsh and obtrusive designs associated with nuclear and coal plants.²¹⁶ In the mingling of human and natural features, the Abalone picture contrasted with images of 'static,' untouched wilderness savoured by traditional conservationists. Nature was something to interact with and shape, rather than isolated and protected from everyday living. A rural utopia suited the Abalone desire to balance the needs of nature alongside the requirements of human society. Ultimately, the Abalone vision represented a sort of middle ground between wilderness and urbanity.²¹⁷

Given the anti-nuclear focus of the Alliance, it seemed fitting that alternative energy was a key feature of the social-environmental utopia. A solar future was an enticing vision throughout the global anti-nuclear movement. A beaming sun saying 'Nuclear Power? No Thanks' became a popular motif of protesters world-wide. A solar badge became a fashionable environmental tag during the 1970s and early 1980s. "Give me the warm power of the sun...but take all your atomic poison power away," was the deal offered in John Hall's anti-nuclear anthem of the time.²¹⁸ The sun, by offering its own

²¹⁶ *Diablo Canyon Blockade/Encampment Handbook*, 54.

²¹⁷ For a more extensive exploration of American pastoralism and its continuing influence "upon the lives men lead in an intricately organized, urban, industrial, nuclear-armed society" (5), see Leo Marx, *The Machine in the Garden: Technology and the Pastoral Ideal in America* (New York: Oxford University Press, 1964).

²¹⁸ American Friends song-sheet, "Songs," AFSC; *No Nukes* (Castle Hill Productions, 1980) movie.

services, appeared not just a reason to reject nuclear power, but a natural ally for the future. Solar power seemed particularly suited to the Golden State, which frequently basked in sunshine. Solar and wind energy providers appearing in Abalone visions of utopia indicated a post-industrial age of advanced technology under local control, and thus responsibly managed. An Abalone rewrite of the song “You are my sunshine” to the lyrics “With conservation and solar heating/and growing plants in a greenhouse dome/we could establish new ways of living/and truly make the earth our good home,” presented an alternative energy landscape.²¹⁹ Keen to embark on this path, Abalone activists published detailed studies of how to construct efficient solar schemes.

The Alliance vision drew on the fears and ideals of the nascent environmental era. As Abalone concerns over nuclear power were influenced by *Silent Spring* and *The Population Bomb*, so too were their hopes for a utopia coinciding with the eco-friendly ideals of new green politics. Articles such as William Moyer’s “De-developing the United States through Nonviolence” tied environmental change with social progress in response to strains on the eco-sphere.²²⁰ The Abalone utopia gained legitimacy (as well as inspiration) from the work of soft energy advocate Amory Lovins.²²¹ The AFSC ‘Energy Slideshow’ of 1980 called for the end to the old American Dream

²¹⁹ Rose E & Johnathon Betz-Hall, “You Are My Sunshine,” AFSC file: loose misc.

²²⁰ William Moyer, “De-Developing the United States through Nonviolence,” 1973, AFSC file: green, campaign building nonviolent action.

²²¹ With the support of David Brower and Friends of the Earth, Lovins emerged in the late 1970s with a holistic plan for using renewable and environmentally benign energy sources (solar, wind, conservation techniques) rather than ‘wasteful’ oil, coal, and nuclear power plants. He argued his case in Congress, and published numerous books, including *Soft Energy Paths: Towards a Durable Peace* (San Francisco: Friends of the Earth, 1977), *Is Nuclear Power Necessary?* (London: Friends of the Earth, 1979) and *The Energy Controversy: Soft Path Questions and Answers*, ed. Hugh Nash (San Francisco: Friends of the Earth, 1979).

dependent on 'hard' energy, and the beginning of "a new vision based on values of: local self-reliance, democratic control of resources, harmony with the environment, strong sense of community," in short, the "New American Dream (Soft Path)."²²² The New American Dream of soft energy appealed to most environmentalists, not just the anti-nuclear die-hards.

By idealising pastoral life, anti-nuclear activists also unconsciously aligned themselves with past visions. The Abalone 'rural community' resembled a suitable home for Jean-Jacques Rousseau's virtuous 'natural man.' Rousseau and intellectuals from the Romantic Movement envisaged rural living as Arcadia, a rhapsodic mix of decent people, nature and emotion in contrast to the cold reason and alienation found in cities and industry.²²³ The Alliance presentation of a rural future of honourable people also resembled the Jeffersonian pastoral ideal. Jefferson had idealised agriculture in the West as marking the true 'Republic of Liberty,' whilst promising an end to the dirty workshops of the Old World.²²⁴ The nuclear-free utopia similarly suggested a fresh start, freedom, and an escape from polluting industry.

²²² American Friends Service Committee, "Energy Slideshow Outline," 11 March 1980, AFSC file: 805.

²²³ George L. Mosse, *The Culture of Western Europe: The Nineteenth and Twentieth Centuries* (Boulder: Westview Press, 1988, 3rd edn), 30-1.

²²⁴ See: Thomas Jefferson, "The Importance of Agriculture" (1784) in *Great Issues in American History: From the Revolution to the Civil War, 1765-1865*, ed. Richard Hofstadter (New York: Vintage, 1958), 169-70; James P. Rhonda, ed., *Thomas Jefferson and the Changing West: From Conquest to Conservation* (Albuquerque: University of New Mexico Press, 1997), 19, 52.

“We must remember that this is a fight of the whole planet’s and not just a small vanguard. The true victory will come only after we’ve transformed the systems which brought us to this in the first place,” declared Eric Noble in *It’s About Times*.²²⁵ The fate of Diablo became entwined with the Abalone quest for fundamental social-environmental change. At anti-nuclear protests, activists set about transforming Diablo into an alternative-energy landscape. In 1978, protesters assembled small windmills and solar collectors on PG&E property. As part of a re-naturing process, Abalone members brought their own plants to the Pecho Coast, whilst placards advised citizens: “Don’t grow nuclear plants.”²²⁶ In 1977, two occupiers placed a small oak tree inside nuclear territory. In 1978, protesters planted vegetables and flowers, as well as scattering birdseed. Abalone Jan Hunter felt such actions showed “what was happening to make the land ‘beyond the fences’ more human, to transform it into an area of life and vitality instead of death.”²²⁷ Renee Edgington shared those sentiments. Her small tree in a milk carton formed part of the Abalone “restoration project,” of “trying to restore this into a living place instead of a death place.”²²⁸ Their actions signified both the reclaiming of the Pecho Coast and its transformation back, or perhaps forward, to a natural, living state. Symbolism and naturalistic imagery played important roles in this ‘transformation.’ A 1978 ‘Transform Diablo’ flyer featured a smiling abalone and sun. The affinity group ‘LA Butterflies’ hoped to “fly

²²⁵ *It’s About Times* (February 1979), 2.

²²⁶ Houston, “Nuclear foes stage a protest.”

²²⁷ Jan Hunter to Abalone Alliance, 3 November 1978, AFSC.

over the fence” representing the “symbolic nature of the caterpillar’s metamorphosis.”²²⁹ *It’s About Times* discussed (but ultimately rejected) the idea of physically occupying the site, in an action similar to the ‘retaking’ of Seabrook by the Clamshell Alliance.²³⁰ Nevertheless, the Clamshell’s vegetable garden at Seabrook proved a fleeting gesture of eco-sentiment, with property and trespass laws preventing anything more than token re-greening.

In terms of the infrastructure already built on the canyon site, most Alliance members pushed for an energy conversion project that promised to turn the nuclear plant into a conventional or green facility. However, a few outrageous schemes also gained prominence. A 1977 protest song jokingly suggested, “[A] restaurant in Diablo, a beautiful spot by the sea, fusion salad and megawatt tea.”²³¹ In 1978, the Spider Warp affinity group intended to “transform Diablo into a playground, with kites, jugglers and general mayhem.”²³² The image of anarchist festivity contrasted with past AEC promotions of nuclear plants as safe for children’s play. Not just protesters considered alternative uses of Diablo Canyon. KABC-TV apparently had, “[T]he ideal solution: A Giant Aquarium! If Sea World’s doing so well, why not Diablo World? It’s the perfect use for the perfect setting, and it’s already built. Just move in the fish.” The fish were already fairly close, given the project’s location on the edge of the Pacific

²²⁸ *Telegram-Tribune*, 7 August 1978.

²²⁹ Krassner, “No Nukes is Good Nukes.” The butterfly, along with the dove, frequently appeared as Abalone anti-nuclear motifs.

²³⁰ See *It’s About Times* (September 1979), 8, and *It’s About Times* (November - Mid-December 1979), 7.

²³¹ *The Daily Californian*, 11-12 August 1977.

²³² Krassner, “No Nukes is Good Nukes.”

Ocean.²³³ KABC-TV remained adamant: “For fifteen years, that beautiful site on the coast’s been marked for nuclear death. Time to rededicate it to marine life.”²³⁴ An architecture student from California Polytechnic considered the conversion of existing buildings into an “institute for international studies, a place where researchers from around the world could meet to resolve problems like war and hunger.”²³⁵ PG&E’s reactor domes had the potential to become auditoriums, museums, or even planetariums.

During the 1981 blockade, Abalone activists transformed their campsite in Los Osos Valley into a testament of anti-nuclear ideals and eco-philosophy. The ’81 camp was the product of years spent organising, and fast became the apogee of Abalone activity. Protester Mike Sanders recounted meeting his mother Bea at the camp, and how “[Y]ears of work, civil rights, anti-war and anti-nuke were culminating at Diablo for both of us and this seemed a time to rejoice, to revel in our commitment that spanned decades.”²³⁶ Abalone campaigners met in circles to discuss protest activities, anti-nuclear ideals, non-violence, and social-environmental change. It was the Abalone utopia in microcosm. “One could not help but be enchanted by the encampment where thousands were living harmoniously, sharing provisions and tasks,” commented Marin

²³³ With plans for the monitoring of species in Diablo Cove during plant operation, a ‘nuclear aquarium’ had debatably *already* been set up by PG&E.

²³⁴ News Transcript, KABC-TV News, 27 March 1984, MMPP file: Diablo 1984.

²³⁵ *Telegram-Tribune*, 18 March 1983.

²³⁶ Sanders, “The First of Autumn,” 45.

Abalone Peter Oppenheimer.²³⁷ Jackie Cabasso remembered how, “[A]t the time I thought it was like utopia, because it was this huge self-governing community where everybody had a role, and it was completely peaceful and safe. It was really wonderful.”²³⁸ The *San Francisco Examiner* described the camp as “a sort-of eco-activist Hooverville” whilst its sister paper, the *San Francisco Chronicle*, opted to call it “a little Woodstock West.”²³⁹

With theatre, flags, balloons, and frequent song, the camp bore a festive and countercultural atmosphere. To Starhawk, the camp “seemed magical - like a medieval fair from the past or a premonition of a better future. When you were in it, the space had the kind of order found in a messy room...an order like that of an Arabian bazaar, a gypsy camp, or an Indian village.”²⁴⁰ The Paloma affinity group agreed: “[I]t’s like a medieval joust encampment, but not so orderly.”²⁴¹ The array of colourful tents amongst the rolling hills of middle California seemed highly appropriate to the Abalone patchwork ideal of a pastoral future. Miki Sanders noted how “the multi-colored mounds of tents appeared as part of a natural quilt in the folds

²³⁷ Peter Oppenheimer, “Diablo Blockade - Phase 1: Disappointing Fizzle Out or Promising Success?,” *Abalone Alliance of Marin* newsletter (November 1981).

²³⁸ Interview with Jackie Cabasso.

²³⁹ *San Francisco Examiner*, 13 September 1981; *San Francisco Chronicle*, 17 September 1981. Meanwhile, *The New York Times* plumbed for more conventional military analogies, portraying the campsite as part of a grandiose landscape, with anti-nuclear “troops” about to arrive “in a valley with a view of long-dead volcanic peaks,” before waging “the next battle against atomic power.” See *The New York Times*, 16 August 1981.

²⁴⁰ Starhawk, *Dreaming the Dark*, 173.

²⁴¹ Paloma Affinity Group, “Camp,” *1981 Diablo Canyon Blockade: An Illustrated Anthology*, 44.

of the earth in the arms of the golden hills.”²⁴² The Abalone ‘tent village’ encouraged a sense of simple living and closeness to the earth. A ‘litter patrol collective’ ensured that the camp remained clean. Solar generators supplied power for the sound-system, hot water, and lighting. In contrast to the imposing buildings found at Diablo Canyon, the Abalone camp appeared compatible with its surroundings, resting upon the natural landscape rather than forcing it into shape. In Elizabeth Whitney’s description of the “Diablo Pageant,” the setting of the camp, “[S]urrounded by the serenity of the ongoing natural world,” appeared a suitable place for Abalone protesters to make their “stand to shape and change human activities, not only here, in California, in America, but in the whole world.”²⁴³ Although destined to last only for a few weeks, the camp hinted at the possibility of small-scale communities surviving much longer by adopting a progressive social-environmental code.

By contrast, the county jail also emerged as a refuge of Abalone ideals during the 1981 blockade. Alliance members took their community processes with them to the temporary holdings of Cuesta College and an old gym once part of the Californian Men’s Colony Prison. Instead of jail isolating and demoralising members, Abalone protesters comforted each other, held meetings, participated in theatre, and even organised talent shows. Musician Jackson Browne and Woodstock’s Wavy Gravy helped lift spirits. Protesters read aloud Martin Luther King’s ‘Letter from Birmingham Jail,’ and recited passages from Shakespeare, apparently finding anti-nuclear references embedded in the bard’s elaborate prose. “Going to jail was never

²⁴² Sanders, “The First of Autumn,” 45.

²⁴³ Whitney, “Diablo Pageant,” 13.

considered ‘fun’ until the Abalone Alliance landed nearly 2,000 jailbirds in San Luis Obispo,” recounted a Pelican Alliance ‘jailbird.’²⁴⁴ Californians renamed Cuesta College ‘Hotel Diablo.’ Activists transformed their prison surroundings. During their stay, women sung “This gym is my gym,” to the tune of ‘This land is my Land.’²⁴⁵ Despite imprisonment signifying a loss of freedom, and inevitably restricting contact with the natural world, Abalone members minimised the effects of cold concrete walls and artificial strip-lights. One protester, Cynthia, recounted awakening “to an internal clock, wondering if it’s morning; no windows to check the lightness of the sky,” but was comforted by a “gym-floor...strewn with the free-form lumps of hundreds of women’s bodies under green army blankets; cozy, organic shapes; bodies that women have put on the line to protect the life of their planet.”²⁴⁶ Abalone Jane Peterson enthused: “While I was in jail I had a realization that our group of women could be a model for what the outside world could be like.” Peterson declared the Abalone Alliance “Keepers of the Earth.”²⁴⁷

[12] The Interim Period

The September 1981 blockade ended on a high point with the announcement of a blueprint error at Diablo plant. A twenty-five year old engineer, John Horn, found that

²⁴⁴ Mara Koeppel, “Reflections on the Blockade,” Pelican Alliance, Point Reyes, *Pelican Papers* newsletter (November 1981), AAC file: Pelican Alliance.

²⁴⁵ Leslie Layton, “A Week in Jail for Two Local Protesters,” *The Berkeley Gazette*, 22 September 1981.

²⁴⁶ Comment by Cynthia can be found in the *1981 Diablo Canyon Blockade: An Illustrated Anthology*, 40.

²⁴⁷ Jean Peterson, “Keepers of the Earth,” *1981 Diablo Canyon Blockade: An Illustrated Anthology*, 81.

safety supports in Unit 1 reactor had been installed backwards. Pacific Gas employees had mistakenly used design schematics for Unit 2 whilst working inside Unit 1. The timing of the discovery led the Abalone Alliance to declare a short-term victory, despite its failure to prevent PG&E workers from reaching the plant. The blueprint error provided consolation for those detained in jail, and vindicated anti-nuclear concerns. The following month, eighty California Indians held a day long prayer vigil at Diablo Canyon to mark their disapproval of the nuclear project. In recognition of having built on sacred Indian ground, Pacific Gas accepted the “sincere objection” by Native Americans as a legitimate protest act, in contrast to efforts of the Abalone Alliance.²⁴⁸ On November 19th, the NRC suspended PG&E’s low-power testing license for Diablo plant in response to the blueprint issue.

Other construction problems surfaced in the months that followed. The activities of the Abalone Alliance only added to a list of errors, costs, and delays that *The New York Times* declared “a paradigm of nuclear power troubles.”²⁴⁹ The plant gradually underwent earthquake retrofitting so that it could handle 7.5 rather than 6.5 on the Richter scale. “U.S. Lists 111 Problems at Coast Reactor,” headlined *The New York Times* in March 1982, whilst *It’s About Times* printed a photograph of Diablo plant and asked readers to “[F]ind the 125 mistakes in this picture.”²⁵⁰ Cracks appeared in building structures and the reoccurring Hosgri controversy continued to lurk in the background. During early 1981, a seasonal storm destroyed over 100 feet of

²⁴⁸ “Indians Hold Vigil at Diablo Protest,” *Los Angeles Times*, 5 October 1981.

²⁴⁹ *The New York Times*, 22 November 1981.

²⁵⁰ *The New York Times*, 5 March 1982; *It’s About Times* (April 1982), 1.

breakwater protecting the plant.²⁵¹ In the reconstruction of the breakwater, one of two repair barges accidentally sank. In 1982, a blaze in the Irish Hills reached the fences of Diablo plant. Winter storms in 1983 again chipped away at PG&E structures. The *Telegram-Tribune* reported how “[C]onstruction crews” repairing the breakwater “inadvertently paved half an acre of the ocean floor with concrete.”²⁵² *It's About Times* claimed that disillusioned PG&E workers sported ‘We Can’t do Shit’ stickers.²⁵³

Through all the errors, Pacific Gas remained confident (at least in public) that its nuclear project was still an impressive engineering feat. “The Diablo Canyon plant has been compared in strength and stability to the strongest manmade structures in the world, even to non-manmade structures like the Rock of Gibraltar,” claimed one promotional leaflet.²⁵⁴ Officials explained that extra time was constantly allotted to safety features. Because of enforced delays, Diablo Canyon far surpassed the standards of facilities such as Three Mile Island. The Diablo project would go on-line, despite an anticipated delay of two to three years.

[13] The Wider Landscape

Affinity groups of the Abalone Alliance had always maintained an interest in issues other than Diablo Canyon. The interim period granted coalition members the chance

²⁵¹ *It's About Times* (March-April 1981), 3.

²⁵² *Telegram-Tribune*, 6 October 1983.

²⁵³ *It's About Times* (April-May 1983), 3.

²⁵⁴ PG&E Energy Information Center, “Diablo Canyon Nuclear Power Plant,” leaflet, May 1984, AAC file: PG&E.

to develop campaigns in places outside San Luis County. Individual affinity groups demonstrated concern for other ecological issues. The Pelican Alliance campaigned against oil leasing near Point Reyes. SONOMore Atomics protested Rancho Secho nuclear plant, near Sacramento, and highlighted the conspiratorial activities of the Bohemian Club. The all-male Bohemian Club represented an elite selection of American politicians, industrialists, financiers, and military muscle. Dating back to 1872, 'Bohos' annually met at a retreat on the Russian River, just north of San Francisco. Only Americans considered 'important' to the country made it to what 'Boho' Herbert Hoover described as "the greatest men's party on earth."²⁵⁵ Psychology professor William G. Domhoff described the 2,700-acre retreat as "a summer camp for overgrown Boy Scouts."²⁵⁶ At a ceremony entitled the "Cremation of Care," Bohos were asked to leave their worldly pursuits outside the camp. However, SONOMore Atomics suspected that most club members discussed shady "[P]olitics among the Redwoods," whilst the burning of 'care' actually denoted 'responsibilities' for the majority of attendees.²⁵⁷ Protesters claimed the decision to manufacture an atomic bomb heralded from discussions on the Russian River. SONOMore Atomics ventured that other nuclear issues would similarly come up at mealtime, even as themed courses. "At Bohemian Grove they'll be having a new dish

²⁵⁵ As quoted in D'Arcy Fallon, "Bohemian Club's 'cremation' draws fire," *San Francisco Examiner*, 9 July 1987. For academic commentary on the Bohemian Grove, see John Van der Zee, *The Greatest Men's Party on Earth: Inside the Bohemian Grove* (New York: Harcourt Brace Jovanovich, 1974), and, William G. Domhoff, *The Bohemian Grove and Other Retreats: A Study in Ruling-Class Cohesiveness* (New York: Harper & Row, 1974).

²⁵⁶ William Domhoff, "Politics Among The Redwoods," article, reprinted in Bohemian Grove Action Network, *Bohemian Digest* (Occidental: Bohemian Grove Action Network, 1982), AAC file: Bohemian Grove.

²⁵⁷ Ibid.

this year called Diablo ala Hosgri. Terrible tasting stuff, and they even want us to eat it. For dessert, how about some pentagon pie, a real Bonzo delight with MX topping and neutron filling,” declared *Nuke Notes* in 1981. A companion sketch showed two Bohos carving up the planet for consumption, precariously resting on a table shaped like a fault line and connected to Diablo Canyon.²⁵⁸ In its March 1983 edition, *Nuke Notes* cartooned a ‘Boho’ strain of VD, the ‘sickness of the atom,’ with a mixture of radiation sickness images and the sexist machismo of male-only camps. They prescribed a VD - CD formula, hoping that civil disobedience could halt the spread of the disease.²⁵⁹

Abalone activists also protested on the streets of San Francisco. During 1982, a number of protesters led a ‘Hall of Shame’ rally through the city business district. Participants toured “corponuclearmilitary businesses that operate downtown,” and with nuances of Diablo, ended “in a deep canyon between the headquarters of PG&E and the Bechtel Corp.” *It’s About Times* commented how “[T]he action...proved the antinuclear movement can effectively act in the heart of the city as well as in the depths of the woods of Diablo Canyon.”²⁶⁰ One protester recounted how, “[W]e took to the streets and danced and sang and held circles whilst the people in the tall buildings looked down on us behind nervous windows...At one point, I felt as though I could pull back the concrete and find not only dirt, but flowers growing underneath,

²⁵⁸ *Nuke Notes* (15 June 1981), 1.

²⁵⁹ *Nuke Notes* (March 1983), 2.

²⁶⁰ Jack Wood & Bill Simpich, “Dropping in on the nuclear corporadoes,” *It’s About Times* (April 1982), 9.

waiting to be set free...I felt empowered in the struggle to tear down these towers of Babylon.”²⁶¹

City-based activists uncovered a myriad of nuclear threats on their doorsteps. The Abalone’s Mutant Sponges named themselves after marine sponges found growing on radioactive waste barrels dumped near the Farrallon Islands, eighteen miles west of San Francisco. The Sponges appeared at many anti-nuclear functions dressed in foam rubber outfits. During February 1981, they played volleyball (the earth represented as the ball) with the ‘Plutonium Players’ anti-nuclear theatre group on a court on top of UC Berkeley’s reactor. Musician Graham Nash, who played at ‘No Nukes’ concerts, described his despair at living in a city with nuclear waste dumped in surrounding waters.²⁶² A Marvel-style comic entitled ‘Slow Death’ presented San Francisco as “Mr. Atom’s Turf.” In an idyllic Bay area scene, complete with butterflies, spaceships and a hillside reactor bearing a striking resemblance to Diablo plant, the comic depicted “the dawn of a new era,” “the true atomic age.” However, lurking beneath the calm waters of the bay lurked hidden dangers of the nuclear “ecotopia,” with a mother whale and her calf sharing murky depths with a collection of toxic barrels.²⁶³ In a letter to *It’s About Times*, Tori Woodward appealed for opposition to the USS Enterprise warship stationed at Alameda, “a floating Diablo Canyon bristling with nuclear weapons” that “dares to call the San Francisco Bay its home!”²⁶⁴ Alliance members organised a ‘plutonium tour’ to increase public knowledge of the area’s

²⁶¹ *Nuke Notes*, 2/8 (April 1982), 12.

²⁶² *No Nukes* (1980) movie.

²⁶³ Greg Irons, “Our Friend Mr. Atom,” *Slow Death* no.9.

nuclear connections. The tour poster asked, “[D]id you know? There is plutonium at 8 sites in the bay area on earthquake faults.”²⁶⁵ Placing a nuclear project close to a fault line at Diablo appeared not a chance mistake, but a common error made by nuclear industries across California.

In the meantime, Pacific Gas received the major blame for destroying public power in the city, dating back to its private purchase of Hetch Hetchy dam. Along with concerns over the spoilation of a sacred valley by flooding, John Muir had also attacked the entrepreneurial ethos that converted nature into monetary value in his protests against the dam.²⁶⁶ Abalone protesters interpreted Hetch Hetchy as the starting point of a corporate campaign to dominate regional energy resources, as well as marking the beginning of “the power-drunk, anti-nature sub-culture that controls our society.” They labelled Pacific Gas the worst of a “handful of gigantic corporations and government agencies” that “have conspired to bring us all to the brink of apocalypse.”²⁶⁷

During the early 1980s, *It's About Times* extended its coverage of political, social and environmental topics beyond the confines of nuclear activism, covering stories of revolution in Nicaragua, European youth movements, and green protests against industrial expansion. The newspaper frequently targeted President Ronald Reagan. In

²⁶⁴ *It's About Times* (June-July 1983), 12.

²⁶⁵ People Against Nuclear Power, “Did You Know,” plutonium tour poster, AFSC file: green, anti-nuke local.

²⁶⁶ Michael P. Cohen, *The History of the Sierra Club, 1892-1970* (San Francisco: Sierra Club Books, 1988), 28.

²⁶⁷ “Hall of Shame: Nuclear Tour Guide,” AAC.

spring 1981, Abalone writers cast a critical eye over Reagan's planned economic reforms in an article entitled "So long, New Deal - Howdy, raw deal." *It's About Times* read '[S]ubsidized mass transit' as the manufacture of more American tanks, '[E]asing of environmental rules' inferring lots of dead birds, and atomic explosions offering a quick way for the President to succeed in policies of '[S]lum Clearance.'²⁶⁸ Reagan's pro-corporate, anti-welfare policies and armaments spending spree, not forgetting his blasé and seemingly limitless enthusiasm for anything atomic, utterly repulsed a largely liberal and progressive anti-nuclear movement.²⁶⁹ Starhawk held a 'political despair ritual' at Diablo Canyon in response to the advent of Reaganism, and considered involvement in the Abalone Alliance a way to escape the incoming gloom.²⁷⁰ Caricatures of the President were commonplace in anti-nuclear articles. The SONOMore Atomics monthly newsletter, *Nuke Notes*, referred to Reagan as "Pres. Raygun."²⁷¹ In the May-June 1982 edition of *It's About Times*, the President appeared in full cowboy gear riding a nuclear missile as his pony.²⁷²

²⁶⁸ Steve Stallone, "So long, New Deal - Howdy, raw deal," *It's About Times* (March-April 1981), 5.

²⁶⁹ For insights into the Reagan presidency, see Michael Schaller, *Reckoning with Reagan: American and Its President in the 1980s* (New York: Oxford University Press, 1992), and, Michael Paul Rogin, *Ronald Reagan, the Movie, and Other Episodes in Political Demonology* (Berkeley: University of California Press, 1987). In terms of Reagan's anti-environmental policies, see: Friends of the Earth, *Ronald Reagan and the American Environment: An Indictment* (San Francisco: Friends of the Earth, 1982); Samuel P. Hays, *Beauty, Health, and Permanence: Environmental Politics in the United States, 1955-1985* (Cambridge: Cambridge University Press, 1987), 491-526; Jonathon Lash, *A Season of Spoils: The Reagan Administration's Attack on the Environment* (New York: Pantheon, 1984); and C. Brant Short, *Ronald Reagan and the Public Lands: America's Conservation Debate, 1979-1984* (College Station: Texas A&M University Press, 1989).

²⁷⁰ Interview with Starhawk.

²⁷¹ *Nuke Notes* (15 June 1981), 23.

²⁷² *It's About Times* (May-June 1982), 1.

Anti-nuclear activists deplored Reagan's enthusiastic support of new military hardware and his flagrant proclivity for Cold War rhetoric. With the advent of Reaganism, the Abalone newspaper increased its coverage of weapons issues. The December-January 1983 edition contained a humorous revision of the nativity scene. A baby nuclear weapon 'slept' in a manger, whilst the American press gathered as sheep outside the barn. The tune of "Oh Come Let Us Deploy Them" meanwhile echoed in the dark sky.²⁷³ *It's About Times* detailed the emergence of the Nuclear Weapons Freeze movement in California during the early 1980s. In August 1981, Steve Ladd from the War Resisters League invited Abalone members to support the campaign calling for a halt to the nuclear arms race. However, in later editions of *It's About Times*, activists criticised the Freeze movement for its over-reliance on conventional politics, bilateral rather than unilateral rhetoric, and its refusal to take a stand on nuclear power. Staff writers nonetheless applauded Freeze for at least putting "nuclear war in the headlines."²⁷⁴

Attitudes towards the Pecho Coast began to reflect the resurgent interest in the nuclear arms race and the anxieties borne of such policies as 'Mutually Assured Destruction.' A picture of MX, Pershing and Cruise missiles exiting Diablo plant, entitled "Nuclear power plants are Bomb Factories," proved a less than subtle attempt by one Abalone cartoonist to increase Californian suspicions over atomic power.²⁷⁵ Increasingly,

²⁷³ *It's About Times* (December-January 1983), 1.

²⁷⁴ Steve Ladd, "The Nuclear Weapons Freeze," in "Ground Zero Gazette", 4, a supplement to *It's About Times* (August 1981); Marcy Darnovsky, "Smile and say 'Freeze'," *It's About Times* (May-June 1982), 5. The Nuclear Weapons Freeze campaign officially began in 1979, although 'California Freeze' emerged in early 1981.

²⁷⁵ SONOMore Atomics, "Nuclear Power Plants are Bomb Factories," flyer (1983), MMPP file: Diablo 1984.

Alliance members recognised that Diablo Canyon was just one link in a much longer chain. In the documentary film *Dark Circle* (1982), filmmakers Judy Irving and Chris Beaver traced the nuclear fuel cycle, or 'dark circle,' to Hiroshima and Nagasaki, Rocky Flats, Colorado, and Diablo Canyon. By showing Black Brant geese passing radioactive sites on their migration route and concerned mothers threatened by the nuclear landscape of Diablo, *Dark Circle* imparted the sense of the nuclear fuel cycle as a danger to both nature and humanity. The vulnerable flight path of the Brants symbolised a natural cycle of life threatened by the 'dark circle' of plutonium.²⁷⁶ Abalone thoughts on Diablo Canyon relayed a similar notion of an endangered chain of life. To maintain ecological stability, or the health of this life system, protesters needed to halt the spread of the nuclear fuel cycle at its various locations.

In tracing the routes of the nuclear fuel cycle, anti-nuclear activists forged a unique map of the American landscape. Cartographers marked the locations of uranium mines, reactors, research centres and test sites. Missile silos replaced mountains, whilst remote testing grounds, deliberately chosen to avoid public attention, suddenly became landmarks. Highways were only noted if identified as transport routes for the nuclear fuel cycle, whilst Hanford and Los Alamos signified the 'big (atomic) cities.' Nuclear cartography proved popular in the late 1970s and early 1980s as activists discovered a previously hidden country of dangers. The War Resister's League regularly updated a poster of 'Nuclear America' with new discoveries of atomic

²⁷⁶ *Dark Circle* (The Independent Documentary Group, 1982 & revised edition 1991) movie; Telephone interview with Judy Irving, San Francisco, 6 August 1997.

facilities.²⁷⁷ A photograph in *The Berkeley Barb* highlighted a protester carrying two maps of the United States, one indicating the number of reactors circa 1975, the other, proposed reactors by the year 2000. The protester's use of black dots to denote nuclear plants gave the impression of a disease spreading across America. The latter map showed an East Coast destined for atomic suffocation given the smothering effect of so many new nuclear facilities. The West Coast looked to be the next infestation zone, with little chance of escape.²⁷⁸ Jointly published by Greenpeace and the Center for Investigative Reporting, *Nuclear California* (1982) provided the definitive "nuclear atlas" of the Golden State. "For the first time, a team of investigative reporters details the secret story behind Nuclear California - the accidents, cover-ups, scandals, terrorist threats and more," claimed an ambitious jacket sleeve. The book revealed a network of nuclear installations concentrated in San Francisco, Los Angeles and San Diego. Contrary to popular images of an atomic industry confined to remote wastelands, *Nuclear California* documented the atomic infiltration of major US cities.²⁷⁹

"Abalone Alliance vs. Nuclear California," declared one protest leaflet.²⁸⁰ During the early 1980s, Abalone affinity groups challenged atomic and military installations at a number of locations on the nuclear map. Only thirty miles south of Diablo,

²⁷⁷ *It's About Times* (June-July 1981), 11.

²⁷⁸ Marcy Darnovsky, "Showdown at Diablo Canyon," *The Berkeley Barb* (21 June-4 July 1979), 4.

²⁷⁹ *Nuclear California* also featured a map of California's "Major Radioactive Material Sites and Earthquake Faults," disclosing some dangerous alignments between geology and atomic planning (including Diablo Canyon). See Kaplan, *Nuclear California*, 78, jacket sleeve, 79.

²⁸⁰ Abalone Alliance, "Abalone Alliance vs. Nuclear California," San Francisco leaflet, AFSC.

Vandenberg Air Force Base signified an obvious target for Alliance members. In 1982 and 1983, activists protested the deployment of mobile MX (Missile Experimental) missiles at the base. Alliance members made little work of the short distance, both conceptually and geographically, between the ‘peaceful atom’ at Diablo and the atoms for war stored at Vandenberg. The ‘Space and Missile Country’ sign above “the Flash Gordon-style” entrance to Vandenberg suggested an alien landscape cordoned off from surrounding habitat, but in a practical sense the military base appeared similar to ‘Diablo Country.’²⁸¹ As they had on backcountry trips along the Pecho Coast, protesters encountered a wild landscape on their secret journeys through Vandenberg military base, hoping to disrupt military activities. Fog drifted in from the Pacific and Abalone activists again sought to avoid poison oak and security forces. Protesters symbolically reclaimed territory with the song, “This land is my land,” also sung at Diablo, only this time with the lyrics “from the Minuteman silos, to the MX launch pad.”²⁸² A mixture of Abalone veterans and other peace activists gathered at the entrance gates to protest. A ‘tent city’ erected just outside Vandenberg and mass detainments in jail provided further opportunities for a “Diablo reunion” of sorts.²⁸³

A few hundred miles to the north, Abalone activists joined the Livermore Action Group (LAG) in opposition to research at the Lawrence Livermore National Weapons Laboratory, east of Oakland. Livermore, like Diablo, was a controversial facility, with a number of fault lines in its midst. In February 1980, *It's About Times* had reported

²⁸¹ *It's About Times* (February-March 1983), 1.

²⁸² *Ibid.*

²⁸³ *Nuke Notes*, 3/6 (April-May 1983), 1-4.

an earthquake registering 5.5 on the Richter scale that had “stopped the arms race,” albeit only for “one day,” by shaking Lawrence Livermore Laboratory the previous month. Despite the existence of more than thirteen known faults in Livermore Valley, weapons research nevertheless resumed the following morning.²⁸⁴ LAG protesters blockaded the entrance to the research facility, forging a human chain to prevent the nuclear fuel cycle from operating. In *Risking Peace: Why We Sat in the Road* (1985), Jackie Cabasso and Susan Moon described the formation of a natural barrier at Livermore: “[O]ne group erected a windmill in the middle of the road, and a small forest of tree people came in dressed in branches. Blockaders joined hands and stretched out across the roadways to block incoming cars.”²⁸⁵ Park developers had once cut holes in Yosemite Valley’s giant sequoias for cars to travel through. Now, at nuclear sites, the new image was one of nature herself closing down routes. LAG offered a similar form of anti-nuclear direct action to that of the Abalone Alliance, and many Abalone veterans helped organise the Livermore actions. However, due to the proximity of Livermore to San Francisco, protest reflected a purer form of urbanised and politicised radical activism than that found at Diablo Canyon. The rural feel of anti-nuclear action in middle California, for some activists the sensation of being “way out there in nowhere,” filtered the impact of San Francisco’s protest culture on the Alliance.²⁸⁶ A number of Abalone veterans found the Livermore Action Group’s penchant for militant feminism over-restrictive given that a more relaxed gender

²⁸⁴ Marcy Darnovsky, “Quake Shuts Down Livermore,” *It’s About Times* (February 1980), 1.

²⁸⁵ Jackie Cabasso & Susan Moon, *Risking Peace: Why We Sat in the Road* (Berkeley: Open Books, 1985), 3.

²⁸⁶ Interview with Charlotte Davis.

dynamic had worked well at Diablo Canyon. Nevertheless, LAG successfully drew attention to the insidious research being conducted east of San Francisco Bay.²⁸⁷

In studying the nuclear landscape, activists discovered that atomic industrialists frequently targeted Native American terrain for their sinister projects. Uranium mines often resided on or close to Indian reservations. *It's About Times* detailed a corporation's plans for Redwind reserve, just forty miles north-east of San Luis Obispo. The Abalone newsletter also covered the problems of atomic pollution on distant Navajo homelands.²⁸⁸ The Alliance blamed PG&E and other major US companies not just for their nuclear schemes, but for "threatening the land, lifestyle and lives of Native Americans."²⁸⁹ The nuclear fuel cycle meanwhile provided a practical link between Diablo Canyon nuclear plant and atomic schemes in Indian territory. To Abalone members, a Euro-American campaign against nuclear power and protests against uranium mines on Indian reservations were associated struggles. Abalone demonstrators considered themselves on the side of the Indians in the battle against the cowboys of the nuclear industry. The 1981 blockade handbook proclaimed that "Indians are our 'natural allies' politically and spiritually."²⁹⁰ Don Eichelberger

²⁸⁷ For further insight into the machinations of Livermore Action Group, see Cabasso & Moon, *Risking Peace*, and Epstein, *Political Protest & Cultural Revolution*, 125-56. On the background of Livermore Laboratory, see Hugh Gusterson, *Nuclear Rites: A Weapons Laboratory at the End of the Cold War* (Berkeley: University of California Press, 1996).

²⁸⁸ *It's About Times* (March-April 1979), 3; *It's About Times* (February 1979), 5. The intriguing relationship between Native Americans and nuclear issues has yet to be fully explored, although a variety of recent academic works have raised the topic. See Matthew Glass, "Air Force, Western Shoshone, and Mormon Rhetoric of Place and the MX Conflict," *The Atomic West*, ed. Bruce Hevly and John M. Findlay (Seattle: University of Washington Press, 1998), 255-75; Valerie L. Kuletz, *The Tainted Desert: Environmental and Social Ruin in the American West* (New York: Routledge, 1998); Rebecca Solnit, *Savage Dreams*.

²⁸⁹ *Diablo Canyon Blockade-Encampment Handbook*, 22.

²⁹⁰ *Ibid.*, 51.

believed in a “natural alliance that exists between the environmental movement and Native Americans” and that the Abalone Alliance “had that” kind of unspoken relationship with California Indians.²⁹¹ Native Americans attended Abalone rallies, although never in any sizeable numbers. Dennis Banks, a leader of the American Indian Movement, spoke at the ‘No More Nukes’ gathering held in April 1979. Banks chronicled the damage inflicted by uranium mining on reservations. He also called for an end to atomic power: “I want to warn you, Mr President, we will tolerate no more abuse. The environment will be on our side. Mother Earth will be on our side. We will win this war.”²⁹² Native American John Trudell, arrested during the 1981 blockade, explained at court: “What you are doing to my people’s land, and maybe you all do not understand because you have only been here for less than 500 years, that this nuclear thing that you are creating for the land, it goes against every way of natural life, it goes against the whole natural world.”²⁹³ For modern Chumash living in Central California, building an atomic plant on their sacred burial grounds signified yet another act of disrespect by a nefarious white American culture.

²⁹¹ Interview with Don Eichelberger. *It's About Times* also revealed the difficulties involved in forging a mutual alliance between a body of largely white middle class Americans and a coalition of Native American nations. Jaffery Ryder felt that the “spiritual guidance and leadership” offered by the American Indian Movement restricted “the anti-nuke and anti-capitalist movement” to an overly rigid structure and anti-technological stance. See *It's About Times* (March 1980), 2. Meanwhile, Marcy Darnovsky criticised Russell Means’s keynote speech at the 1980 Black Hills Survival Gathering for unfairly painting all of European culture as the ‘enemy’ of Native Americans. “To call everything you don’t like ‘white’ is nothing less than racism; to hail the Indians as the ‘correct peoples’ is reverse cultural imperialism,” Darnovsky retorted in *It's About Times* (September 1980), 6-7.

²⁹² Burgess, “Massive S.F. anti-nuclear protest.”

²⁹³ “No On Diablo Canyon,” video recording of 1981 blockade, DEPP.

[14] Returning to Diablo

The authorisation of fuel loading at Diablo Canyon Unit 1 reactor during November 1983 prompted renewed interest in mass protest on the Pecho Coast. With the looming prospect of an operational plant, Abalone affinity groups reconnected with each other, and planned another sizeable action at the gates of Diablo. On January 13 1984, the Alliance launched the 'Peoples Emergency Response Plan' (PERP). PERP sought "[T]o provide a vehicle for everyone opposed to Diablo Canyon to make the strongest statement possible."²⁹⁴ Leaflets for the 1984 action promoted an endearing mixture of nature appreciation and protest activity, that being "[O]n the move at Diablo," involved "[B]lending into the wilderness surrounding Diablo, Tour[ing] the hills around the site, Visit[ing] the shore at Avila Beach," as well as making "your presence known in downtown SLO." Combining elements of a travel brochure with a serious protest call, the Alliance enjoined, "[C]ome join the crowds in lovely San Luis Obispo, well known for its lush rolling hills, sparkling ocean waters and devastating nuclear power plant. An exciting time will be had by all, as you participate in the People's Emergency Response Plan."²⁹⁵ Attempting to arouse media attention, Mary Moore identified the 1984 deliberations over Diablo as "a very crucial time for a very beautiful area of our state."²⁹⁶ In a spring edition of *It's About Times*, Forest Service

²⁹⁴ Abalone Alliance, "Stop Diablo Canyon: Join the People's Emergency Response Plan" pamphlet, AFSC file: loose misc.

²⁹⁵ Abalone Alliance, "On the Move at Diablo," PERP leaflet, AAC file: PERP Leaflet & Info.

²⁹⁶ Mary Moore to Lee, *Los Angeles Times*, 19 January 1984, MMPP file: Diablo 1984.

fire prevention mascot Smokey the Bear – sporting countercultural attire rather than his usual ranger uniform - declared “Only you can prevent Diablo.”²⁹⁷

The Abalone Travel Agency Collective promoted backcountry trips along the Pecho Coast. “Consider spending St. Patrick’s Day in the Irish Hills of SLO!” invited one leaflet.²⁹⁸ Seventy-five people did indeed dance in the hills behind Diablo Canyon over the appropriate weekend. Backcountry pamphlets recounted regional topography as well as suggesting appropriate items to bring on the protest trail. Abalone ‘Backcountry Guidelines’ informed would-be hikers that “[M]ost of the land that we will be crossing is now owned by PG&E...In deference to the environment, as well as to the property owners who are supporting us in their own way, please do not deface any property or forage their land.” In response to concerns over fires breaking out during summer months, the Alliance requested protesters not to bring lighters, matches or cigarettes. Recognising the “need to be extremely sensitive to the environment,” Abalone activists generated their own backcountry code. Phrases found in anti-nuclear handbooks, such as “[L]itter is an eyesore, as well as a detriment to the wildlife,” and “[T]ry to leave the area in better shape than when you found it,” resembled exhortations in national park guidebooks and on campground notice boards.²⁹⁹ A trail culture developed similar to the 1981 protest. Walking the anti-nuclear path, like any other good nature stroll, encouraged camaraderie, conversation and first-hand appreciation for the wild. One press release announced a ‘Back Country

²⁹⁷ *It's About Times* (April-May 1984), 7.

²⁹⁸ Abalone Alliance, letter by Raye Fleming, 2 March 1984, AAC.

²⁹⁹ Abalone Alliance, “On the Move at Diablo.”

Bash,' commenting that "[T]he hills are green, the moon will be full, and many a good story may be uncovered in the hills behind Diablo."³⁰⁰ The Pecho Coast seemed like wilderness again.

At the gates of Diablo, protesters constructed a huge model of PG&E's nuclear plant and placed it across the blue line. *It's About Times* covered the action. Alongside a photograph of the miniature reactors, the caption read "[T]he Highway Patrol contemplates arresting Diablo Canyon."³⁰¹ Three protesters disguised as the President, Nancy Reagan and Henry Kissinger also visited Diablo plant. *Nuke Notes* showed Ronald Reagan, complete with wig and dress, as a modernised Marie-Antoinette, watching protesters (not those with the facemasks!) being arrested, cheering "[L]et them eat Jelly Beans."³⁰² On Good Friday, a group of Abalone protesters re-enacted the Crucifixion in the form of a modern anti-nuclear parable, calling 'Diablo Canyon: The Cross that Ratepayers will Bear.' During the anti-nuclear "Passion Play," an Abalone Jesus pleaded that, "[I]f Diablo Canyon is allowed to operate, all the good thoughts we hold on this earth, the Cathedral of the Great Mystery, will be as so many drops of rain on a dead tree." However, the Sanhedrin High Priest, representing the interests of Pacific Gas, if not the whole 'nuclear priesthood,' replied: "He opposes the law of the land. He threatens our financial investment. He must be put to death." Pontius Pilate, as the Nuclear Regulatory Commission, ultimately agreed. The Abalone Jesus then carried his cross to the plant's gates, on the journey receiving

³⁰⁰ Abalone Alliance, press release, 6 March 1984, AAC file: Diablo Project Office.

³⁰¹ Mark Evanoff, "Last minute testimony delays Diablo license," *It's About Times* (April-May 1984), 9.

³⁰² *Nuke Notes* (15 October 1981), 2.

unplanned but biblically appropriate abuse from real PG&E employees. After the play's Centurion mounted the saviour on the cross, pitched just across the blue line, the 'real' police arrested 'Jesus' in one of the more bizarre (and metaphorical) events in Diablo history.³⁰³ "We believe if he [Jesus] was on earth with us today he would be joined in our opposition to the devil at Diablo Canyon," surmised the gathered Abalone crowd.³⁰⁴

On a local level, the PERP attracted a healthy number of supporters from nearby towns. Sympathisers opened their homes to activists travelling to the region. The Abalone Travel Agency Collective arranged friendly accommodation for outside visitors. Defending the urban environment entailed the symbolic protection of local landmarks as well as family houses. Jackie Cabasso fondly remembered the 1984 action where she and others formed, "the 'Save the Madonna Inn from Diablo Canyon' fan club and affinity group, which was really very funny. We performed at rallies. We went there for breakfasts."³⁰⁵ Cabasso acted on behalf of a visually extravagant "World-Renowned, World-Class Inn" within San Luis Obispo, famous for its unusual bedrooms (including a 'Caveman Room' carved from rock) and men's restroom replete with 'waterfall urinal.'³⁰⁶ If the artificial sublime of Madonna's architectural excesses deserved protection, so too did the region's natural qualities.

³⁰³ Script for "Passion Play," April 20, 1984, MMPP file: Diablo 1984; Amateur video recording of Passion Play, DEPP.

³⁰⁴ Ibid.

³⁰⁵ Interview with Jackie Cabasso.

³⁰⁶ "Pictures Worth a Thousand Words," advertisement for Madonna Inn, San Luis Obispo Chamber of Commerce, *Visitors Guide* (San Luis Obispo: San Luis Obispo Chamber of Commerce Services, 1994 edn), 5.

Over four months of sustained protest, 537 protesters were arrested. A smaller turnout than during the 1981 blockade reflected a measured loss of interest in both the dangers of nuclear power and Diablo Canyon. In contrast to the mass protests on the Pecho Coast during 1979 and 1981, Diablo no longer appeared the obvious focal point for state-wide dissidence. By the mid-1980s, a variety of environmental and social struggles, from Livermore to Nicaragua, vied for the attention of Californian activists. Nuclear energy no longer seemed the 'big issue' that it had been. In order to promote their cause, anti-nuclear activists had projected 'the peaceful atom' as a priority among social and environmental problems. Whilst such grandiose claims suited the climate immediately following Three Mile Island, the argument was less convincing a few years on. Questions remained over the ties of the anti-nuclear movement to other protest groups. By shaping the atomic threat into a unique danger, anti-nuclear activists had unconsciously alienated people concerned with issues of racism, gay rights, inefficient welfare systems, and the exploitation of Native American communities. *It's About Times* rightly noted how "the biggest shortcoming" of the concert film *No Nukes* (1980) "reflected that of the US anti-nuclear movement in general - a certain cultural and racial isolation."³⁰⁷ With its San Franciscan ties and bohemian sentiments, the Abalone Alliance was less isolated than most anti-nuclear organisations. However, Alliance members recognised (and regretted) their failure to reach out to a broader audience. The anti-nuclear movement was similarly at odds with traditional environmental campaigners. The perception of the atom as "an ultimate threat to the existence of life on this planet," as one protester put it, falsely

³⁰⁷ *It's About Times* (September 1980), 9.

separated the atomic threat from other ecological dangers.³⁰⁸ More significantly, the Abalone Alliance (and other anti-nuclear groups) offered radical forms of protest and demanded societal and economic changes that conservation groups such as the Wilderness Society and Sierra Club were far from comfortable with.

In 1981, *The New York Times* had commented how “the no-nuke movement” was being “seen as the potential heir to the anti-war, civil rights and environmental conservation movements.”³⁰⁹ Anti-nuclear activism, with its pacifist stance, civil disobedience actions and ‘save the planet’ motifs drew on all three movements for its organisational form. With a healthy emphasis on grassroots organising and equality between the sexes, the anti-nuclear movement also solved some of the problems of its forebears. At its best, the Abalone Alliance offered a glimpse of what could happen if social and environmental activism did merge. Although Abalone protesters failed in a practical sense to bridge the gap between white wilderness conservationists and African-American activists, they did show that social and ecological ideas (and protest) could be part of the same rainbow. For a haphazard coalition, that few members saw as permanent, and with only one focus, stopping Diablo plant, the broader social-environmental ideals that came out of the Alliance were something of an achievement. Abalone veterans also popularised ways of organising, such as consensus process and feminist structure, that were taken up by later California movements. Abalone veterans took pleasure in expounding on the Alliance’s protest

³⁰⁸ Lawrence Ross, Reason for Blockading, in Frishman, “Defense of Necessity.”

³⁰⁹ *The New York Times*, 21 September 1981. The newspaper also noted that, by late 1981, “the nature of the movement and the mood of the nation seem to be operating against it,” suggesting a transitory element to anti-nuclearism as the “crucible” of protest.

legacy in California, and fondly remembered their visits to Diablo Canyon. “I think there was a spirit at Diablo that I’ve never quite seen replicated at any other time,” recounted Lauren Alden.³¹⁰ Miki Sanders felt that “[S]omething very special happened in San Luis Obispo...It makes me feel that perhaps the very soil of that coastal town must reverberate with the positive energy and the goodness of people.”³¹¹

³¹⁰ Interview with Lauren Alden.

³¹¹ Sanders, “The First of Autumn,” 45.

Chapter Six

Living with Diablo Canyon (1984-1999)

[1] Going On-line

“She’s back...but only to face...disaster at Diablo reactor,” read the front cover of the 1988 Marvel comic. A menacing combination of a nuclear plant waiting to go on-line, a pile of uranium, and an evil masked man known as ‘The Negator,’ heralded the return of Marvel superheroine She Hulk. The Negator planned to “destroy LA in atomic holocaust” by sabotaging the nuclear plant on the Pecho Coast. “Diablo reactor shall encounter - the China Syndrome,” the masked man threatened. Atomic issues were hardly new to the pages of Marvel comics. The Fantastic Four, with their special powers forged by cosmic radiation, started off the comic franchise in 1961. Atomic rays spawned a veritable nuclear family of cartoon heroes in subsequent years, from Spiderman and the Incredible Hulk to the X-Men, self-proclaimed ‘children of the Atom.’ Diablo Canyon joined the coveted comic-book pages of atomic-bred folklore as a dangerous nuclear landscape. As if to acknowledge the years of confrontation between Abalone protesters and PG&E officials, Marvel cartoonists created their own kind of showdown at Diablo. She Hulk, joined by The Thing, a suitably aberrant cohort, travelled to the Canyon to face the maniacal Negator. With the nuclear plant about to go on-line, and disaster imminent, the two superheroes

despatched the Negator and jet-packed the uranium into space. California was saved from atomic abomination by two Marvel mutants.¹

Superhuman acts nevertheless fell short of preventing the real Diablo plant from going on-line. The NRC granted PG&E a low-power testing license for Unit 1 reactor on April 13, 1984. PG&E officials started a nuclear reaction at Unit 1 for the first time on April 29. The Abalone Alliance ended its People's Emergency Response Plan (PERP). Activists from northern California returned home, despondent over losing such a long struggle. Roger Herried, residing in San Francisco, witnessed "a big let down" in anti-nuclear morale, that "people had put their hearts and souls into this, and to see it go on-line was the last crushing blow."² Leader Raye Fleming recalled that "when the license finally came down, I went out of town for the weekend. I went to Big Sur - I did not want to be here, I just could not be here."³ Local activists feared for the future ahead. Expecting a nuclear accident to strike at any moment, Pam Metcalf lived in a state of heightened anxiety. Recounting her preparations for a swift evacuation, Metcalf explained that "I started taking my dog with me everywhere I went, keeping my cat carrier by the door at night when I slept."⁴ Six months on, with a full-power operating license granted by the NRC, the Diablo nuclear project seemed unstoppable. "Diablo Gets to Glow" read the *San Francisco Examiner* on November

¹ *The Thing and the Savage She Hulk (Marvel 2 in 1)* (Marvel Comics, June 1988), Sandy Silver Personal Papers (SSPP), Santa Cruz.

² Interview with Roger Herried, San Francisco, 25 June 1997.

³ Interview with Raye Fleming, San Luis Obispo, 3 September 1997.

⁴ Interview with Pam Metcalf, San Luis Obispo, 3 September 1997.

2, 1984, whilst the December issue of *Nuke Notes* simply titled its coverage of events on the Pecho Coast “The Last Diablo article.”⁵

As Unit 1 began its gradual climb towards commercial operation, reaching full capacity in May 1985, anti-nuclear activism on the Pecho Coast dwindled. By the time Unit 2 started up in August 1985, most Alliance members had turned away from Diablo Canyon. Protests over US intervention against left-wing regimes in Central America and the stepped-up nuclear arms race captured the attentions of seasoned activists. The nascent green political movement in California similarly attracted a number of ex-Abalone campaigners. Californians no longer entertained notions of shutting down Diablo plant, and only a few ardent individuals continued to work against Pacific Gas. Don Eichelberger and Roger Herried kept the San Francisco Alliance office open. Raye Fleming and Marilyn Apuzzo revisited Diablo in August 1985, courtesy of a PG&E tour. The *Telegram-Tribune* reported that, on reaching the simulator building, “the two apparently took their shirts off to reveal T-shirts with anti-nuclear slogans and started handing out anti-nuclear literature.”⁶ Fleming and Apuzzo were subsequently arrested.

The Mothers for Peace desperately searched for legal precedents to halt the production of nuclear electricity at Diablo. In August 1984, the Mothers gained an injunction against the NRC from the US Circuit Court of Appeals, based upon the failure of the

⁵ “Diablo Gets to Glow,” *San Francisco Examiner*, 2 November 1984; “The Last Diablo article,” *Nuke Notes* (December 1984), 10.

⁶ “2 arrested at Diablo on Hiroshima anniversary,” *San Luis Obispo County Telegram-Tribune*, 7 August 1985. Fleming and Apuzzo were arrested for refusing to return to the tour bus.

Commission to consider a seismic event in evacuation planning.⁷ The injunction lasted until the end of October. Then, in January 1985, Kron-TV revealed secret NRC transcripts concerning the Hosgri Fault.⁸ The transcripts revealed the willingness of NRC commissioners to sideline earthquake dangers in their eagerness to license Diablo plant. At a closed meeting held in July 1984, Chairman Nunzio J. Palladino had pondered the possibility of granting a license while leaving the seismic quandary over evacuation to a later date: "What if we do nothing? Suppose we don't put -- I think it's been asked before, but I don't remember the answer --suppose we don't issue an order [to fully consider earthquakes in evacuation planning] now and just go ahead."⁹ Commissioner James Asseltine, who argued against Palladino throughout the session, gave a harsh indictment of NRC policy, admitting that "the Commission's decision was motivated solely by the objective of avoiding delay in issuing a full-power license for the Diablo Canyon plant."¹⁰ The Mothers re-contacted the US Court

⁷ *It's About Times* welcomed the "last minute injunction" with the headline "Diablo stopped at eleventh hour." A picture of Diablo plant foreshadowed by a giant ticking clock indicated time running out, and impending doom. *The Bulletin of the Atomic Scientists* relied on a similar timepiece approach on its front cover to denote the nearing of midnight and a coming nuclear Armageddon. See *It's About Times* (August-September 1984), 1, and, for an overview of the *Bulletin's* clock movements, "44 Years of the Bulletin's Clock: A History of the Cold War," *The Bulletin of the Atomic Scientists*, 47/10 (December 1991), 50.

⁸ "Kron-TV Exclusive: Investigative Unit to Reveal Contents of Confidential Nuclear Regulatory Commission Transcripts," Kron-TV News Release, 10 January 1985, Abalone Alliance Collection (AAC), Abalone Alliance Safe Energy Clearinghouse, San Francisco, file: NRC Hearings (leaked).

⁹ "Discussion of Earthquakes and Emergency Planning for Diablo Canyon and Discussion of Stay Motion," NRC Closed Meeting excerpt, 30 July 1984, 50, AAC file: NRC Hearings (leaked).

¹⁰ Letter from Nunzio J. Palladino, Chairman (NRC) to Edward Markey, Chairman, Subcommittee on Oversight and Investigations (US House of Representatives), including comment by Commissioner Asseltine, 29 October 1984, 4, AAC file: NRC Hearings (leaked).

of Appeals in the hope of a favourable investigation, but were ultimately disappointed.¹¹ Plant operation continued unabated.

Firmly rooted in the local community, the Mothers for Peace were afforded few avenues to escape the spectre of Diablo Canyon. Many Abalone activists had returned to homes several hundred miles from the Pecho Coast following the 1984 PERP. The immediacy of the Diablo issue receded for those living far from San Luis, and the Alliance disbanded shortly thereafter. For the Mothers, tied into lengthy legal proceedings, and with nowhere to go, it seemed only natural to continue working against their atomic foe. With the onset of commercial operation, the nuclear threat became more tangible than ever before. The local landscape seemed tainted by the atomic reaction, as though Diablo plant had already leaked radiation across the county. “We are all having to learn to live with its presence...Life will never be quite the same in this very special place we have chosen to be our home,” wrote Nancy Culver.¹² San Luis Obispo had lost a little of its charm and innocence.

The reality of an operational plant fuelled elaborate fictions of impending disaster. The Central Coast of California resembled the doomed Australian shores in Nevil Shute’s *On The Beach* (1957), where locals lived out superficially ‘normal’ lives prior

¹¹ The Appeals Court reached its verdict in April 1986, ruling 5-4 against a full investigation into the Diablo licensing process as requested by the Mothers for Peace. The Court notably refused to consider the NRC ‘secret transcript’ as an “extraordinary intrusion” into nuclear regulation. Dissenting Judge Patricia Wald related: “After more than 10 years of public alarm, only a divided commission and this divided court persist in pretending that earthquakes are not material to emergency planning for a nuclear plant located three miles from an active geological fault. If that judgement is at fault, history will allow no rehearing.” See “Court allows Diablo to skip Quake plan,” *San Francisco Chronicle*, 26 April 1986.

¹² Letter to supporters from Nancy Culver, San Luis Obispo, 24 September 1985, SSPP file: Mothers for Peace.

to radioactive clouds from the northern hemisphere reaching them following World War Three.¹³ The nuclear threat from Diablo merely replaced the death sentence wrought by sparring superpowers. Having identified flaws in state evacuation plans, the Mothers remained pessimistic over the possibility of escaping a toxic plume emanating from the Pecho Coast. Neither could private property offer an adequate refuge from atomic contamination. The nearby nuclear landscape threatened to violate the sanctity and safety of the American household, atomic presence intimating a loss of 'home.' Fears of radiation and the distance it could invisibly travel challenged traditional conceptions of local geography. Diablo Canyon appeared to move ever closer to the suburbs of San Luis. Anti-nuclear Obispans believed that their day-to-day lives could be disrupted at any time. Such a loss of control and never-resting existence paralleled the experience of Winston Smith, unlikely hero of George Orwell's *Nineteen Eighty-Four* (1949).¹⁴ Orwell foresaw a harsh, militaristic state with mechanistic, dehumanising traits in *Nineteen Eighty-Four*, with 'Big Brother' watching over the citizens of Oceania. 1984 in San Luis Obispo brought with it an unwelcome nuclear overseer, an atomic project exercising subtle controls over residential life. PG&E manifested a far less coherent threat than 'The Party' which governed the province of Oceania. Yet, for anti-nuclear activists, the presence of Diablo plant could be equally insidious. Found in unexpected, everyday places such as California Polytechnic library restrooms, 'Radiation Alert' signs imparted similar notions of insecurity and intrusion to posters declaring 'Big Brother is Watching You' that littered the literary landscape of *Nineteen Eighty-Four*.

¹³ Nevil Shute [Nevil Shute Norway], *On the Beach* (New York: William Morrow, 1957).

¹⁴ George Orwell [Eric Blair], *Nineteen Eighty-Four* (London: Secker & Warburg, 1949).

Residents of San Luis Obispo reacted to Diablo plant going on-line with a mixture of emotions. Undoubtedly, many citizens heaved a huge sigh of relief when PG&E started up the reactors without incurring catastrophe. Public fears were allayed as months passed without any significant calamities. Aesthetically, the nuclear landscape seemed little different from before, with no obvious signs of a dangerous chain reaction at work. Others continued to view the atomic project with apprehension. Mindful of the difficulties PG&E encountered in constructing the nuclear plant, locals remained sceptical of the ability of the corporation to continually operate its two reactors without incident. In an article entitled 'Living in the Shadow of the Domes,' the *San Francisco Chronicle* related local concerns over Diablo plant during early 1986. Reporter Michael Robertson interviewed "the closest human residents to the power plant," Gordon and Virginia Bruno, on their ranch just north of Diablo (traditionally known as the Field Ranch). Gordon relished his rural setting and ranching enterprise. Stopping his jeep for a "stalled cow", the rancher noted that "[S]ince we've been here, I've learned to respect cows...They shelter their young." However, the Bruno family appeared wary of their nuclear neighbour, the 'domesticated' atom, and distrusted the ability of the human species to protect its own. Angered at the deceptive dialogue of the nuclear industry, Gordon exclaimed "PG&E lies. I said *lies*...I'm sick of people getting up in public hearings and saying, 'In case there's an earthquake in San Luis Obispo County, where I want to be is in the reactor.'" Virginia expressed a desire to leave the ranch.¹⁵

¹⁵ Michael Robertson, "Living in the Shadow of the Domes," *San Francisco Chronicle*, 2 May 1986.

[2] The Chernobyl Syndrome

PG&E's hopes of winning county-wide acceptance of Diablo plant were thwarted in April 1986 by news of an accident at Chernobyl nuclear plant in Ukraine. The Soviet atomic disaster confirmed suspicions of nuclear power as a hazardous form of energy production. Citizens of San Luis Obispo County re-focused their attentions upon the two reactors nestled in the Pecho hills. In a survey immediately following the Chernobyl accident, 49% of 277 local residents voiced their opposition to Diablo plant.¹⁶ Doubts resurfaced over the ability of Pacific Gas to operate its nuclear project safely. Cambrian rancher Joann Warren compared the situation at Diablo plant to "turning 5-year-olds loose in a barn with a bunch of matches."¹⁷ Californians living far from San Luis Obispo similarly pondered the reckless pursuit of atomic energy. William Loran of San Rafael, a town 250 miles north of Diablo, wrote a letter to David Hartsough. Loran expected an earthquake to arrive in the San Luis region shortly, and warned "[S]hould Diablo crack, the Chernobyl accident will seem exceedingly minor."¹⁸ He predicted that a nuclear catastrophe would render a third of California uninhabitable and kill half the population of the state. Loran's doomsday prophecy seemed a little premature, yet few could refute the vulnerable front-line position of Obispans if a nuclear accident did indeed strike. The settlement of

¹⁶ B. Zuanich, "Diablo Canyon in the wake of the Chernobyl disaster," Senior Project (Political Science), 1989, California Polytechnic State University, San Luis Obispo. Zuanich used data collected by David George in 1986.

¹⁷ Robertson, "Living in the Shadow of the Domes."

¹⁸ Letter from William Loran, San Rafael, to David Hartsough, 6 December 1987, American Friends Service Committee, San Francisco Office, file: Diablo Outside Literature.

Chernobyl, described by Russian Iurii Shcherbak as “a pleasant little provincial Ukrainian town, swathed in green, full of cherry and apple trees,” had been contaminated by radiation from its nuclear neighbour, cordoned off from civilisation by military barriers and Geiger counter readings.¹⁹ The town of Pypriat had also been evacuated. A week after the accident, its children’s park lay deserted, the swings and Ferris wheel ominously silent. Pypriat developed in the 1970s and early 1980s as a service-town to the nuclear station, whilst the rural village of Chernobyl dated back to the twelfth century. The Diablo project similarly threatened the very existence of San Luis Obispo, a historic Spanish settlement. Those Obispanians who soaked up television and press images of the Chernobyl accident invariably reapplied scenes of Pypriat to their own locality. The radioactive village could easily have been an American ghost town if something had gone wrong at a stateside nuclear plant.

For a few San Luis Obispanians, patriotic faith in superior American engineering assuaged fears of a nuclear accident happening at Diablo Canyon. Contractor Don Ritter interpreted Chernobyl as endemic proof of poor quality Soviet technology: “It’s typical of the Russians. They steal our ideas and can’t make them work. Their tractors fall apart. Their plants leak.”²⁰ Local businessman Bill Burriss proudly noted that “[W]e’ve got the dome.”²¹ Whilst Russian plants lacked containment domes, the majority of American reactors featured thick concrete walls, serving to insulate atomic reaction. The dome issue comforted those worried over a Chernobyl-style accident

¹⁹ Iurii Shcherbak, *Chernobyl: A Documentary Story* (Edmonton: Canadian Institute of Ukrainian Studies, 1989), 9.

²⁰ Robertson, “Living in the Shadow of the Domes.”

²¹ *Ibid.*

occurring at home. Nuclear reactors served as emblems of the duelling Communist and Capitalist economic systems. The failure of Chernobyl substantiated the nationalistic reflections of an American public already convinced of the inadequacy of the Soviet experiment vis-à-vis US enterprise. True to the competitive spirit of the Cold War, Uncle Sam's reactor claimed victory over a shoddy Marxist design.

In contrast, the Mothers for Peace drew on notions of Soviet inefficiency to instil fear of Pacific Gas practices. In an August 1986 letter alert, the Mothers noted that "PG&E plans to store spent fuel (high level radioactive waste) at Diablo Canyon in the same way that it was stored at Chernobyl."²² By emphasising the similarities of American and Russian reactor design, anti-nuclear activists raised the spectre of a Chernobyl-style accident on US soil. As with Three Mile Island, the Ukrainian accident offered the Mothers a frightening image to superimpose upon Diablo Canyon. The group wore badges declaring 'Remember Chernobyl: It can happen here.'²³ Chernobyl highlighted the fallibility of the nuclear industry, proving that Murphy's Law applied to atomic reactors despite multiple back-up systems and prodigious safety claims. After only a short period of operation, Diablo plant had yet to establish itself as an appropriate paragon of superior US technology. The Mothers for Peace dutifully highlighted PG&E blunders. William Bennett, a long-time critic of the Diablo project, despaired at the complacency of the nuclear industry in the light of the Chernobyl incident. The prevalent in-house attitude of 'it couldn't happen here' dismissed events in the Ukraine all too easily. To Bennett, the congruities

²² Mothers for Peace, Letter Alert, August 1986, SSPP file: Mothers for Peace.

²³ Mothers for Peace badge, June von Ruden Personal Papers, San Luis Obispo.

between Russian and American reactors were far more obvious than the differences, “[S]teel, nuclear energy, the housing, the personnel, the engineering, the mentality: they’re all the same. They don’t fail because of political ideology.” He also posited that a comparable accident at Diablo would ruin much of Central California.²⁴

Chernobyl briefly rekindled anti-nuclear fervour across the state. Roger Herried at the San Francisco office remembered being inundated with phone-calls from concerned citizens. “Diablo Canyon, the devil’s reactor gets licensed, there’s no further opposition available, and then Wormwood,” recounted Herried, referring to the American translation of Chernobyl.²⁵ The description found in Revelation 8 whereby “A great star, blazing like a torch, fell from the sky on a third of the rivers and on the springs of water - the name of the star is Wormwood. A third of the waters turned bitter, and many people died from the waters that had become bitter,” presented a doomsday scenario appropriate to contamination in the nuclear age.²⁶ Suddenly, the Soviet accident carried nuances of religious wrath, as if atomic engineers threatened biblical Armageddon. However, Chernobyl failed to ignite the protest zeal of previous years when agitated individuals assembled at the gates of Diablo en masse. Ex-Abalone campaigners expressed anxieties over a repeat accident on California shores, and many felt that past anti-nuclear activities had been explosively vindicated, but few considered reforming the Alliance.

²⁴ William Bennett interviewed in *Who Will Be A Witness?: Rancho Seco and the Nuclear Threat to Health and Life* (directed by Jacques Levy, produced by Mary Moore, Jacques Levy, and Al Finn, SONOMore Atomics, 1986), AAC video collection.

²⁵ Interview with Roger Herried.

²⁶ Revelation 8:10-11, *The Holy Bible: New International Version* (London: Hodder & Stoughton, 1973), 1253.

[3] The local watchdog

The Mothers for Peace eased into the role of a nuclear Cassandra or atomic “watchdog group” during the late 1980s, independently monitoring events at Diablo Canyon on behalf of the local community.²⁷ The sisterhood of activists remained eminently distrustful of the nuclear industry. Fearing that a corporate desire for profit would inevitably gnaw away at safety procedures and eventually lead to an accident, the Mothers appeared wary of leaving PG&E to its own devices. However, the isolated Pecho shoreline, the restricted nature of plant documents, together with PG&E’s understandable wariness towards anti-nuclear campaigners, all served to compromise motherly supervision. The remote coastal stretch almost emerged as a co-conspirator in the nuclear coterie, offering PG&E a convenient shroud for underhand atomic acts. Acting on rumours of safety violations, the Mothers for Peace nonetheless succeeded in bringing problems to the attention of the Nuclear Regulatory Commission. Telephone calls to the NRC resembled that of a knowing mother reminding her child of responsibilities - except that the atom was clearly an unwanted bastard, the product of a less than immaculate conception by a male nuclear priesthood. The Mothers further liaised with Consumers Organized for Defense of Environmental Safety (CODES), a whistleblower support network set up by local resident Laurie McDermott. CODES offered disenchanted PG&E employees a confidential refuge where they could air grievances concerning the plant. Laurie’s ex-husband, Jim McDermott, encountered problems working for PG&E in the 1980s. A pro-nuclear

mindset, labelled by McDermott as “Gung-ho Diablo,” created a “false sense of security” in the workplace. Paranoia over criticising the nuclear machine led to pressure on supervisors not to tag (“speeding ticket”) poor quality work.²⁸ By encouraging employees to register their disaffection with plant protocols, CODES and the Mothers evoked the memory of Karen Silkwood, the nuclear industry’s most famous whistleblower.

The Mothers enlisted the help of the Sierra Club in their 1986 campaign to prevent PG&E storing sizeable quantities of nuclear waste at Diablo. In contrast to its position on Diablo in the mid-1960s, the conservation group steadfastly opposed PG&E’s plans for development two decades on. Sierrans and Mothers castigated the proposal by Pacific Gas to extend its storage system, warning against a “high-level radioactive waste dump” being added to Diablo Canyon.²⁹ The vivid imagery of an atomic garbage heap on the picturesque San Luis shoreline offended citizens who prided themselves in a well-kept county. The lack of public consultation further angered the local community. An editorial piece in the *Telegram-Tribune* read “Hats off to Sierra Club, Mothers for Diablo action.” The newspaper noted the dangers implicit in allowing nuclear projects to go unchecked, and suggested that the same ‘ball-rolling’ motion had led America into its drawn-out war in Vietnam.³⁰ Despite the cooling pond storage system resembling a clean and sparkling swimming pool, the

²⁷ Interview with Liz Apfelberg, Arroyo Grande, 9 July 1997.

²⁸ Interview with Jim McDermott, San Luis Obispo, 21 July 1997.

²⁹ Letter from Nancy Culver, Mothers for Peace, to supporters, 28 May 1986, SSPP file: Mothers for Peace.

³⁰ Editorial, “Hats off to Sierra Club, Mothers for Peace for Diablo action,” *Telegram-Tribune*, 9 July 1986.

Mothers for Peace and Sierra Club had successfully drawn attention to the dirty pool lining.

The Mothers initially resisted involvement in the rate case over Diablo Canyon, held by the California Public Utilities Commission (CPUC) in the late 1980s. The local group primarily saw their role as defenders of public safety rather than financial prosecutors. Rochelle Becker attended the hearings of her own accord, until she convinced fellow Mothers to support her actions.³¹ Becker, along with Laurie McDermott, consumer advocacy group Towards Utility Rate Normalization (TURN) and the anti-nuclear Redwood Alliance, challenged the idea of ratepayers meeting the \$5.6 billion construction cost of Diablo plant. The California Public Utilities Commission appeared keen to pass the majority of the bill onto Pacific Gas. However, in a pro-nuclear coup d'etat, Attorney General John Van de Kamp, PG&E Chairman Dick Clarke and CPUC director William Ahern, reached a private settlement in June 1988. The behind-doors deal shifted \$3.4 billion of the plant's cost onto ratepayers, whilst pre-empting a public inquiry into the embarrassing construction record of Pacific Gas. In typically angry mood, *The San Francisco Bay Guardian* noted that "the deal effectively censors the entire history of the plant, and wipes it off the public record as if it never happened." The *Guardian* also lamented the meagre interest shown in the financial affair, suggesting that "the citizens of every city, county and district ought to look at their representatives and ask: Where were you when PG&E walked away with all the marbles?" An accompanying cartoon portrayed Diablo plant as a dilapidated motor vehicle-cum-tractor, with an atomic

energy symbol as its official bonnet badge. “Test Drive the 1989 PG&E Diablo! No Warranty, Pay Now, Pay Later,” read the sale sign, with a ‘fat pig’ salesman muttering “...Financing? Sure - You got a blank cheque on ya?” With four different sizes of wheel and a leaking engine, the PG&E Diablo lacked the build quality or Italian finesse of Lamborghini’s Diablo sports-car, despite its similarly high price tag.³²

Once again, the anti-nuclear broadside had been scuppered. Ex-Abalone activists encouraged citizens to participate in a rate-strike against PG&E, inciting electrical consumers to deduct a portion of their utility bill representative of the Diablo debt. The heartfelt gesture nonetheless betrayed a degree of tokenism, as PG&E retained the upper hand in electrical matters. From September 1985 onwards, Gerald Dickerson of Davis withheld payment on 15% of his monthly electricity bill, in line with Abalone rate-boycott suggestions. After fifty-two months of protest, with his kitchen walls pasted with PG&E reminders, Dickerson had his electricity supply cut off in early December 1989. The *Davis Enterprise* reported the ‘chilly Christmas’ ahead for the seasoned striker. As temperatures dropped in the Dickerson home aquarium, radiant tropical fish became unconscious martyrs to the anti-nuclear cause.³³

³¹ Interview with Rochelle Becker, Grover Beach, 24 August 1997.

³² Editorials, “PG&E and Diablo: A scandal without end,” *The San Francisco Bay Guardian*, 19 October 1988.

³³ “The Power of Protest,” *Davis Enterprise*, 24 December 1989.

In May 1989, an FBI SWAT team chased three members of Earth First! across the Arizona desert. The radical environmental group had earned a reputation for subversive activities, its members famed for stealing into the woods and spiking redwoods to dissuade loggers.³⁴ Activists Mark Davis, Marc Baker and Peggy Millett had instead decided to trim the man-made electrical forest. Davis, Baker and Millett, along with FBI informant 'Mike Tait' (real name Mike Fain), attempted to cut down a power line near Salome, one of many entrails of the Central Arizona Project (CAP), a canal system redirecting water from the Colorado River to the cities of Tucson and Phoenix. Impeded by thick goggles and wooden boards worn on their feet to disguise prints, Davis and Baker were swiftly apprehended by federal officials. Millett eluded agents in the bush, turning herself in the following morning. The FBI also arrested Dave Foreman, prominent co-founder of Earth First!, at his Tucson home. During a three-month trial in Prescott, Arizona (1991), federal agents insisted that the CAP sabotage prefigured a larger plan to disable the electricity cables of three atomic projects: the Palo Verde plant (Arizona), Rocky Flats weapon processing facility (Colorado) and PG&E's Diablo Canyon project. Earth First! sympathiser Susan Zakin colourfully recalled that paralysing the nuclear triumvirate represented the "bigger enchilada."³⁵

³⁴ Spiking trees offered radical environmentalists a practical, effective means to discourage loggers from felling old-growth forests. By driving metal or ceramic spikes into the bark of redwoods, Earth First!ers compromised the commercial value of the timber. Chainsaw-wielding lumberers faced possible injury if they dislodged the embedded spikes during tree-cutting.

³⁵ Susan Zakin, *Coyotes and Town Dogs: Earth First! and the Environmental Movement* (New York: Penguin Books, 1993), 4.

In the 1970s and early 1980s, opponents of atomic energy rarely considered eco-sabotage as a justifiable course of action for stopping nuclear power. Typical protest scenarios involved plants yet to go on-line, with direct action by activists designed to impede construction, garner press attention, and, on occasion, demonstrate the vulnerability of nuclear projects to 'real' saboteurs. Sam Lovejoy, who, with a simple crowbar, toppled a utility weather tower at a proposed nuclear plant site near Montague, Massachusetts, during February 1974, represented an early hero of the direct action anti-nuclear movement. However, the majority of activists preferred less confrontational forms of protest. The Clamshell Alliance considered the occupation of Seabrook nuclear plant a valid activity, yet split between 'hard Clams' and 'soft Clams' over the issue of fence-cutting as a means of entering the site.³⁶ The contentious matter of property destruction remained unresolved. In the Abalone Alliance, a prevalent atmosphere of non-violence smothered those willing to consider dismantling parts of the nuclear machine. Sneaking through wild grasses, protest groups deliberately avoided security forces on backcountry routes to Diablo plant, but had no intention of physically damaging the two atomic reactors. Backcountry Abalone activists hoped only to illuminate weaknesses in PG&E security.

Pacific Gas and county officials interpreted symbolic acts on their literal or superficial merits, envisaging opponents of the nuclear project as inveterate law-breakers. In February 1990, the *Five Cities Times-Press Recorder* disclosed "secret files" kept by

³⁶ Barbara Epstein, *Political Protest and Cultural Revolution: Nonviolent Direct Action in the 1970s and 1980s* (Berkeley: University of California Press, 1991), 69.

the County Sheriff's Department on critics of Diablo plant over a span of 19 years.³⁷ The list of suspects included ex-county supervisors Richard Kresja and Kurt Kupper, who had both been the subject of police investigations. The Department finally admitted that undercover cops had infiltrated the Abalone Alliance and Mothers for Peace, confirming the suspicions of many former protesters. Nancy Culver considered police surveillance totally unjustified in the case of the Mothers for Peace, a group dedicated to democratic values and legal process.³⁸ Meanwhile, the only person close to sabotaging Diablo plant belonged to neither the Abalone Alliance nor the Mothers for Peace. John Junot, from Los Angeles, was arrested by FBI agents on Pismo Beach, just south of Avila, in December 1982. Officials charged him with intent to blow up Diablo plant. Junot related his desire to expose the full vulnerability of nuclear projects to terrorism, and, in the process, highlight the broader danger of developing atomic energy. Junot told the *Telegram-Tribune* that "[N]uclear power is the only thing that the more I studied, the more scared I was of it."³⁹ Officials, by contrast, studiously documented the anti-nuclear threat.

"Radical environmentalists held in plot against Diablo" read the headline of the San Luis Obispo County *Telegram-Tribune* in response to the Earth First! fracas in the summer of 1989.⁴⁰ The local newspaper noted that Earth First!er Mark Davis had

³⁷ "Secret files kept on citizens for 19 years," *Five Cities Times-Press Recorder*, 21 February 1990.

³⁸ "Intelligence operation concerned acting chief," *Five Cities Times-Press Recorder*, 28 February 1990; "Diablo opponents blast covert files," *Five Cities Times-Press Recorder*, 28 February 1990.

³⁹ *Telegram-Tribune*, 7 December 1982; "Innocent Plea in Diablo Bomb plot," *Telegram-Tribune*, 4 January 1983.

⁴⁰ "Radical environmentalists held in plot against Diablo," *Telegram-Tribune*, 1 June 1989.

inspected power lines connected to Diablo plant just six weeks prior to his capture. The ensuing Arizona court case nevertheless paid only incidental attention to Davis' wanderings in San Luis County. During the three-month trial, the nuclear landscape faded into the background, a hazy mirage in the heated disputes between desert saboteurs and government prosecutors. Diablo, Rocky Flats and Palo Verde simply provided the legal settings for entrapment, the atomic snares of 'tree huggers.' Press accounts of the case duly ignored the atomic landmarks, and for many readers Diablo Canyon merely represented an anonymous place on a list of targets. Newspaper coverage instead homed in on the colourful personalities in the dock.

Court proceedings revealed the determination of the FBI to shackle Dave Foreman, and, in so doing, send a warning out to the radical environmental movement. Roger Dokken, first assistant US attorney at Phoenix, heralded Foreman as the head boss of the eco-mafia, who "always send their little munchkins out to do the dirty work...A mind guru and a leader, and that's even more dangerous."⁴¹ The FBI case against Foreman rested on a small financial donation to Davis and a conversation with informant Fain, monitored by a low-flying federal plane. Discussing ideas for eco-sabotage, Foreman suggested to Fain that, "I think it's got to be real targeted and be directed at targets that will have some kind of impact...Like the nuclear thing, that might help prevent additional plants."⁴² The FBI took Foreman's vague commentary as a verbatim endorsement of the 1989 Davis plan. Accustomed to recording

⁴¹ Michael A. Lerner, "The FBI vs. the Monkeywrenchers," *Los Angeles Times Magazine*, 15 April 1990.

⁴² Zakin, *Coyotes and Town Dogs*, 337.

conversations during his investigation, Fain accidentally left the tape on during an impromptu chat with fellow federal agents at a local Burger King. Fain explained to his colleagues that “this [Dave Foreman] isn’t the guy we need to pop, I mean, in terms of actual perpetrator. This is the guy we need to pop to send a message. And that’s all we’re really doin.” Fain then remembered his concealed microphone, saying out loud, “[W]e don’t need that on tape. Hoo boy.”⁴³

The FBI became embroiled in a serious investigation of Earth First! in the mid-1980s, although surveillance dated back to 1981 when the radical environmental group entered its second year of activities. With two million dollars invested in covert monitoring, according to one source, the Bureau held out for substantial returns.⁴⁴

The serious implications of sabotaging three nuclear facilities helped the government flesh out a picture of radical environmentalists crossing the boundaries of acceptable behaviour. In a pre-trial hearing, US Attorney Steven Mitchell admonished Earth First!ers as lunatics, pointing out that by proposing to cut the transmission lines to Diablo Canyon plant, Davis, Baker and Millett endangered California with a nuclear meltdown. Mitchell used the testimony of NRC senior project manager Terrance Chan to support his argument.⁴⁵ In stark contrast to the assurances made by regulatory officials concerning the safety of Diablo plant in prior decades, NRC staff openly confessed the vulnerability of PG&E’s project to terrorism, even meltdown, and admitted the unreliability of its back-up generator. Diablo Canyon resembled a

⁴³ Lerner, “The FBI vs. the Monkeywrenchers”; Christopher Manes, *Green Rage: Radical Environmentalism and the Unmaking of Civilization* (Boston: Little, Brown and Company, 1990), 197.

⁴⁴ Manes, *Green Rage*, 195.

⁴⁵ Lerner, “The FBI vs. the Monkeywrenchers.”

dangerous landscape without the added threat of eco-sabotage. NRC testimony inadvertently revealed why the Mothers and the Abalone Alliance had wanted the plant shut down in the first place.

Attorney Gerry Spence represented the accused. Spence had successfully brought a lawsuit against the Kerr McGee Corporation on behalf of the Silkwood family in 1979. Twelve years on, Spence saw his role as a courtroom upholder of nature's rights. Refuting attempts by the FBI to tarnish Earth First!ers as "violent terrorists," Spence portrayed the likes of Foreman as "ordinary, decent human beings who are trying to call the attention of America to the fate that the Earth is dying."⁴⁶ The trial lawyer from Wyoming further noted that federal treatment of Earth First! in the 1980s appeared "very similar to the procedures the FBI used during the 1960s against dissident groups," invoking the Bureau's mistreatment of civil rights and anti-Vietnam War campaigners.⁴⁷ The Prescott judge eventually sentenced Davis, Millett and Baker to 6 years, 3 years, and six months respectively. However, Foreman eluded FBI censure by his peripheral role in sabotage planning. The indefatigable biocentrist agreed to end his passionate monkey-wrenching activities, but not his entire defence of wild nature.

⁴⁶ "Inside Earth First!," *Arizona Republic*, 6 August 1989.

⁴⁷ Lerner, "The FBI vs. the Monkeywrenchers." The reputation of the FBI was further damaged by Fain's admission of targeting Foreman, and informant Ron Frazier's display of affection for machine tools. Frazier, who helped Davis locate the best cutting torch for sabotaging pylons, chose his secret FBI codenames from tool brands, with the Victor label his favourite. See Zakin, *Coyotes and Town Dogs*, 436.

The appearance of Diablo Canyon in the Earth First! plot indicated that PG&E's project had retained a smidgen of its former notoriety. The nuclear plant scarcely provoked levels of rage comparable with the heady days of Abalone protest or Sierra discord, but environmentalists in the 1990s still regarded the Diablo project with disdain. The reputation of the atom as a harbinger of ecological catastrophe persisted, its destructive capabilities cemented by years of campaigning. The Pecho Coast clearly marked the dangerous excesses of human invention, and Earth First! hooked the power lines of Diablo into a broader assault on industrial society. Atomic projects embodied the worst in technological tomfoolery, not only failing to live up to their economic and social promise, but threatening the survival of whole ecosystems. Foreman hoisted monkey-wrenching as "our fundamental strategy for dealing with the mad machine."⁴⁸ Diablo plant seemed an appropriate target. The Earth First! episode further demonstrated the nuclearisation of the wild coastline, deemed environmentally significant due to its ugly human progeny rather than any impressive biotic features. Eco-activists, like many other Americans, recognised the reactor domes rather than the rolling hills of Diablo. The atomic-spiced 'bigger enchilada' thus invoked the side of Earth First! dedicated to sabotaging human industry, rather than a deliberative defence of American wilderness. The two approaches were related. A spanner in the machine resembled the spiking of a redwood to ward off loggers. Both tactics sought to wear down the industrial monolith and enable the survival, or recovery, of the natural world. Nevertheless, the Pecho wilds remained a mere backdrop to the contrivances of Mark Davis. The temporary disabling of Diablo plant seemed to fall a long way short of restoring the region to wilderness status. Ultimately, the

⁴⁸ Manes, *Green Rage*, 175.

reinstatement of wild nature on the Pecho Coast would have to come from other sources.

[5] Nature strikes back?

In October 1990, journalist David Helvarg, using a backcountry route, infiltrated the Diablo property unseen by security forces. “[C]limbing through dry grass and thistle toward the Diablo Canyon power plant,” Helvarg, reporting for *California* magazine, noted that “the drought-parched hillside hums with a low, insectlike sound from 2 million kilowatts of electric current coursing overhead.” Planting Silly Putty on a PG&E tower, the reporter nonchalantly boasted how “if this *were* C4 [an explosive compound] I could easily blow up the main power lines leaving Diablo.” Helvarg had surmounted PG&E defences with shocking ease, and claimed success where Earth First! had previously faltered.⁴⁹

Rather than an invincible coastal fortress, Diablo plant resembled a remote, automated outpost. Although the nuclear landscape reminded Helvarg of “Dr. No’s secret base in the first James Bond movie,” it lacked the elaborate defences and thousand-strong private army that 007 traditionally toyed with. The San Franciscan reporter instead discovered that “PG&E has just three people cruising its 11,000 acre-spread, and one of them is unarmed.” Security presence had relaxed following the withdrawal of Abalone protest in 1984. High technology had filled the gaps, cameras and underground sensors replacing watchtowers and hourly patrols. There was another

factor that the intrepid reporter noted during his visit. Helvarg related how TV security monitors had apparently begun “to blur out in heavy rain and the microwave detectors can also be set off by rainstorms as well as sea gulls, racoons, skunks, cats and other local residents.”⁵⁰ Natural forces seemed to be troubling the nuclear installation. Whilst nature’s self-proclaimed agents from Earth First! had failed to cut electricity cables, that did not mean the end to challenges faced by PG&E at Diablo. With the combined effects of stormy weather, busy fauna and seismic tremors, it seemed nature had launched its own sabotage job from the inside.

Whilst Helvarg merely set putty under Diablo pylons, natural forces physically tested PG&E resolve. In May 1989, hot and dry summer conditions were blamed for igniting a fire close to Diablo plant. The brush fire spread to sixty acres, blazing beneath transmission lines carrying 2,500,000 volts. With flames within a quarter of a mile of two nuclear reactors, PG&E notified the NRC of an ‘unusual event’ at Diablo Canyon. One hundred and fifty fire fighters, along with air tanker support, rushed to the scene. The *Telegram-Tribune* headlined “Blaze threatens Diablo plant,” ignoring reassurances by PG&E spokesman Ron Rutkowski that the fire posed little danger to the surrounding countryside. A few power-lines fell during the ‘blaze,’ although forty mile an hour winds may equally have caused their collapse.⁵¹

⁴⁹ David Helvarg, “Blowing up Diablo Canyon,” *California*, (October 1990), 74-77.

⁵⁰ Ibid.

⁵¹ “Blaze threatens Diablo plant,” *Telegram-Tribune*, 24 May 1989. Two years later, attempts by PG&E to manage a controlled burn of nearby dry brush led to a similar ‘unusual event’ - see “Fire near Diablo briefly out of control,” *Telegram-Tribune*, 13 November 1991. In November 1994, an unexpected rainstorm washed away 200 gallons of freshly applied petroleum-based primer, designed to prevent fires by suppressing foliage and dust. The primer then polluted Diablo Creek. Jerry Bunin, “Creek near Diablo site of a spill,” *Telegram-Tribune*, 17 November 1994. The spill figure may have

Other threats emerged from the sea. “Kelp attack at Diablo” read the *Telegram-Tribune* headline of September 27, 1995. The article reported that “[O]ne reactor at the Diablo Canyon nuclear power plant will remain shut down until tonight and power production at the other was reduced slightly in the wake of a recent ‘kelp attack’.”⁵² Drifting kelp inhibited the nuclear generation by blocking the flow of water through the plant’s cooling system. PG&E spokesman Jeff Lewis related that “unusually large swells of 7 to 9 feet” had “damaged screens used to keep the seaweed out of ocean water intake tunnels” in Diablo Cove.⁵³ “Diablo hobbled by heavy surf” provided the colourful headline for another *Telegram* story.⁵⁴ Similar to the effects of a tsunami (appropriate for the Hosgri Fault) or a watery tornado, eighteen-foot swells wrenched kelp from seabed moorings, and bombarded the intake cove with floating debris. Pacific storms and weather changes ushered seaweed into Diablo Cove. In a scene reminiscent of French artisans throwing their shoes into factory machines at the beginning of the industrial revolution, kelp clogs tampered with the workings of the nuclear machine. Mussels and algae also gathered at the nuclear gateway. The oceanic ecosystem had inadvertently challenged the atomic leviathan. To combat the build-up of organic forces, PG&E devoted extra time to cleaning the intake system during pre-planned reactor shutdowns, systematically clearing the entry point of unwitting marine eco-saboteurs.

been as high as 500 gallons, see PG&E’s Non-Radiological Report to the NRC (1994), 11, in the NRC Public Document Room, at Cal Poly.

⁵² “‘Kelp Attack’ at Diablo,” *Telegram-Tribune*, 27 September 1995.

⁵³ Ibid.

⁵⁴ David Sneed, “Diablo hobbled by heavy surf,” *Telegram-Tribune*, 2 December 1998.

The kelp 'attacks' formed part of a weather-system bombardment of the San Luis coastline, whereby winter storms unleashed high waves, strong winds, rain, fog and sea debris upon Diablo Canyon and nearby Avila Beach. In March 1995, the local town found itself flooded by storm waters. Torrential rain engulfed the front nine holes of Avila golf course and "put giant divots" on the finely sculpted grasses.⁵⁵ Flooding closed San Luis Bay Drive and Avila Beach Road, with no way in or out of the beach community, or, for that matter, Diablo plant. "Cut off from the world, Diablo was ready," declared the headline of the local paper. Journalist Jerry Bunin noted that "Diablo was even more isolated than Avila" with two mudslides having blocked PG&E's private road, along with the northern dirt track through Field Ranch "impassable because of the storm." Yet PG&E spokesman Shawn Cooper related few problems at the plant itself, with adequate staff to cope with any prolonged inconvenience. Whilst most PG&E workers, including plant manager Warren Fujimoto, slept on the floor, the nineteen control room operators received priority bedding and "became kings of the night." Cooper explained that even in 'a worst case scenario' military helicopters could fly staff in, or the reactors could be shut down 'in a few minutes.'⁵⁶

Just nine months later, in December 1995, an approaching storm system led PG&E to shut down both of its reactors as a precautionary measure. Spokeswoman Ariene Morris-Versaw explained that, "[I]t is better for us to go down for a couple of days

⁵⁵ Jerry Bunin, "Rains put giant divots on golf courses," *Telegram-Tribune*, 21 March 1995.

⁵⁶ Jerry Bunin, "Cut off from the world, Diablo was ready," *Telegram-Tribune*, 21 March 1995.

and see what Mother Nature does than to keep running and sustain some damage that could keep us down for several weeks.”⁵⁷ PG&E also monitored the progress of El Nino during late 1997 and early 1998. In November 1997, oceanographer John Lindsey reported 6 foot swells off Diablo. By January, the figure had risen to 18 feet, with 22-25 foot high waves crashing against nearby ocean buoys. On the third of February, the *Telegram-Tribune* anticipated 30 foot swells buffeting Avila and Diablo. Debris collected in Diablo Cove and compromised water intake, reducing the performance of Unit 1 by half. At close-by Avila Port, El Nino forced ships into temporary submission before huge waves and rocky seas.⁵⁸

Pacific storms served as reminders of a time when nature exercised the greatest control over the California coastline. At Diablo Canyon, volatile weather conditions upset the established routine of thousands of PG&E employees. Landslides blocked access roads, cordoning off the Diablo nuclear community from safe and civilised townships closer inland. The Pecho Coast temporarily regained its semblance of wildness and remoteness. With natural agency in ascendance, the human-engineered landscape appeared vulnerable and transitory. Pacific storms crashing against the headland conjured images of unruly Mother Earth battering the machine into submission. Cracks appeared in the nuclear project. As the point of interface between a self-enclosed nuclear system and the natural world, the water intake system experienced the most setbacks, emerging as the Achilles heel of PG&E design.

⁵⁷ “Storms force shutdown of both Diablo reactors,” *Telegram-Tribune*, 14 December 1995.

⁵⁸ Lore Lawrence, “El Nino is still warming up,” *Telegram-Tribune*, 14 November 1997; Matt Lazier, “Ocean swells poised to strike again,” *Telegram-Tribune*, 20 January 1998; David Sneed, “Avila preparations help minimize storm damage,” *Telegram-Tribune*, 3 February 1998.

However, whilst fences blew down and boats capsized at nearby Avila, Diablo plant always remained steadfast. The huge dark brown turbine building conveyed a sense of sturdy permanence as though physically stamped into the coastal shelf. Concrete reactor domes, designed to confine atomic chain reactions, seemed equally capable of keeping out nature's stormy intrusions.

Neither did seismic tremors unsettle the plant. In February 1990, an earthquake measuring 4.1 on the Richter scale transpired 33 miles south-west of San Luis Obispo. An accelerometer at Diablo Canyon noted the movement, but according to the local paper, only one PG&E employee "reported feeling the quake." The headline "Quake at sea triggers Diablo alert" exploited all the excitement it could muster from such a minor event.⁵⁹ In January 1992, an unidentified fault line just two miles east of Point Buchon produced an earthquake rated at 2.6 Richter. PG&E workers and electronic detection systems registered the movement, although both reactors continued to generate electricity at full capacity.⁶⁰ In 1995, ten years on from Diablo plant's inception, PG&E seismic expert Lloyd Cluff gave a ninety minute presentation to the Independent Safety Committee set up to monitor the nuclear project. Cluff buoyantly declared that earthquakes posed "absolutely no threat" to Diablo, describing the power plant as "the most conservative structure in the world." Even if a sizeable tremor struck the region, Cluff remarked that "there's no place I'd rather be than inside the plant." The lack of activity on the Hosgri fault had buttressed PG&E confidence in the invincibility of the nuclear project. Cluff claimed that the atomic plant could

⁵⁹ Jan Greene, "Quake at sea triggers Diablo alert," *Telegram-Tribune*, 7 February 1990.

⁶⁰ "Quake felt at Diablo, Los Osos," *Telegram-Tribune*, 17 January 1992.

withstand “shockwaves far above 7.5 magnitude.”⁶¹ The seismic threat fostered in the early 1980s suddenly seemed in danger of slipping into a meaningless social construct of anti-nuclear alarmism. The earthquake that followed Cluff’s presentation a fortnight later hardly suggested otherwise, rating merely 2.4 to 2.7 on the Richter scale.⁶²

The United States Geological Survey adopted a far less optimistic stance on the relationship between Diablo Canyon and seismic activity. In October 1989, an earthquake measuring 7.1 on the Richter scale struck Loma Prieta, causing extensive damage to San Francisco. Six months later, aftershocks were felt at Diablo Canyon, 230 miles south of the earthquake epicentre. The *Fresno Bee* interpreted the unexpected knock-on effects as a warning sign for Diablo. USGS official Robert Brown described the Loma Prieta event as a “living example” of the hazardous geology found off the Pecho Coast.⁶³ The USGS remained cautious over the true potential of the Hosgri Fault, despite PG&E’s claims that Diablo nuclear plant was earthquake-proof.

Alongside preferences to avoid upgrading its nuclear systems in the light of seismic data, PG&E’s refutation of a natural threat at Diablo Canyon embodied a steadfast belief in human control over the physical environment. With the exception of the occasional storm, the Pecho Coast had, after much-hyped doubts, been shaped into a

⁶¹ *Telegram-Tribune*, 6 February 1995.

⁶² *Telegram-Tribune*, 15 February 1995.

⁶³ “Post Quake rumblings at Nuclear plant,” *Fresno Bee*, 1 April 1990.

fine atomic setting. PG&E took this as proof of superb engineering design rather than the fortuitous absence of seismic activity. Such an alluring mirage of total control was neither confined to the nuclear industry nor the Pecho Coast. South of Diablo, the Los Angeles megalopolis appeared another example of engineering prowess. A thriving, sprawling city had been built on arid land thanks to gigantic water projects. However, control of the environment remained a dangerous illusion. “Once or twice each decade, Hawaii sends Los Angeles a big, wet kiss,” noted historian Mike Davis, describing the Kona storm system, also known as the ‘Pineapple Express.’ Davis commented on the sizeable risks posed by Kona floods and storms, which, along with regional earthquakes and fires, threatened to turn the “former Land of Sunshine” into “a Book of the Apocalypse theme-park.”⁶⁴ The same elemental forces of storms, fire, and quakes that threatened LA had all appeared at one time or another at Diablo Canyon.

The ‘undoing’ of the human landscape was not to be welcomed at Los Angeles, Diablo Canyon, or anywhere else. Humans preferred to have control, or the illusion of it, rather than work within ecological limits. By defying accurate prediction and absolute understanding, earthquakes, fires and storms highlighted the finite boundaries of scientific knowledge, assuring nature a degree of mystery and self-determination. Natural agents emerged as unexpected vandals, eminently capable of upsetting industrial schemes. At the Idaho National Engineering Laboratory, scientists in the early 1990s searched for ways to prevent harvester ants disrupting nuclear waste storage. The *High Country News* described how “low-tech ants give a

⁶⁴ Mike Davis, “Chaos and California,” *Green Versus Gold: Sources in California's*

high-tech Idaho lab fits,” the small insects jeopardising the long-term containment of radioactive waste at the site by their earth-moving skills. The paper deemed the contest between the invertebrates and the Department of Energy as “nature’s equivalent of David versus Goliath.”⁶⁵ By interpreting the actions of harvester ants in terms of ‘batling’ insects, nature emerged as a surreptitious enemy of the nuclear industry. Abalone activists had once hoped for an earthquake to sabotage PG&E’s plans for the Pecho Coast, to force a seismic monkey-wrench into the workings of the atomic machine. Whilst ground-shaking fissures and soil-moving ants conveyed a notion of natural agency at work, the sense of nature as an exemplary eco-saboteur remained hazy. Despite the comments by Abalone activists and Department of Energy officials, earthquakes and ants hardly presented unmistakably anti-nuclear forces.

However, the phenomenon of nature fighting back had its historical precedents. Euro-American pioneers taming the American West faced a constant barrage of ecological rebuffs and challenges, their attempts to break the land tempered by droughts, floods, dust clouds and grasshoppers. Many species vigorously defended their home ranges by calling on biological and behavioural responses, with eco-defence an instinctive part of normal ecological process. Edward Abbey wrote in *Desert Solitaire* (1968) of a rattlesnake resting under the doorstep of his trailer in Arches National Monument, Utah. The seasoned nature lover realised that “[I]n his sluggish condition he’s not

Environmental History, ed. Carolyn Merchant (Washington DC: Island Press, 1998), 449-50.

⁶⁵ Stephen Lyons, “Low-tech ants give a high-tech Idaho lab fits,” *High Country News*, 26/11 (13 June 1994).

likely to strike unless I rouse him by some careless move of my own.”⁶⁶ Inappropriate human activities invariably received some kind of reply from the rest of the natural world. Rather than PG&E exercising total control over the Pecho landscape, the relationship between humanity and nature remained dialectic.

[6] Fallible Diablo?

During the 1990s, a number of incidents at Diablo plant served to highlight the dangers of human and technological fallibility. In October 1995, worker error caused a transformer to explode on site. Pre-occupied with the resultant fire, staff neglected to restore power to a cooling pond for spent fuel. Over eight hours, the pond temperature rose by 20 degrees Fahrenheit. NRC officials subsequently discovered that PG&E had authorised a number of employees to work for more than 72 hours that week, with worker fatigue contributing to the accident. The *San Francisco Bay Guardian*, by now famous for its anti-PG&E rhetoric, drew attention to the “list of safety violations worthy of Homer Simpson,” resulting in a \$50,000 fine.⁶⁷ Even the most casual of television watchers knew of Homer Simpson, hapless star of *The Simpsons* cartoon series. Homer’s accident-prone antics at Springfield nuclear power plant beggared belief. From doughnut feasts and sleeping spates in the Control Room, to bringing nuclear fuel rods home from work, Simpson regularly flaunted nuclear safety procedures. The owner of Springfield nuclear plant, Mr. Montgomery Burns, similarly ignored protocol, but in the pursuit of endless profit rather than idle

⁶⁶ Edward Abbey, *Desert Solitaire: A Season in the Wilderness* (New York: Ballantine Books, 1968), 19.

⁶⁷ Daniel Zoll, “Public Power,” *San Francisco Bay Guardian*, 14 February 1996.

relaxation time. During civic events, Burns, with a sardonic smile, addressed the amassed crowds of Springfield as his 'nuclear family', yet willingly risked their lives in haphazard money-spinning schemes. By comparing Homer with PG&E employees, the *Bay Guardian* invited its readers to superimpose the cartoon world of Springfield upon San Luis Obispo and Diablo Canyon. The Springfield caricature of a middle-class white American town with its own nuclear plant seemed vaguely reminiscent of real-life Obispo. Whether or not the cartoon series actually bred nuclear fear appeared more questionable. Even Mr. Burns had a likeable side, whilst Homer always recovered from his dangerous atomic exploits. The nuclear industry had little to fear from clever cartoonery, although the American Nuclear Society saw things differently, organising an 'educational tour' of a California atomic plant for the creators of *The Simpsons* in an attempt to change the programme's slant.⁶⁸

Charges of poor conduct at Diablo plant by shift foreman Neil Aiken suggested all was not well with the San Luis Obispo nuclear family. Aiken, reporting to the Diablo Canyon Independent Safety Committee in February 1997, alleged that PG&E violated safety procedures during his time working at the plant.⁶⁹ Anti-nuclear activist June von Ruden welcomed Aiken's openness: "This kind of testimony reaffirms what the Mothers for Peace has been saying for many years."⁷⁰ In June 1998, PG&E dismissed

⁶⁸ In an article entitled "Yellow Fever," *The Guardian* (29 March 1997) mentioned the American Nuclear Society (ANS) tour offered to *The Simpsons* crew in 1991. The plant was most probably San Onofre, south of Los Angeles.

⁶⁹ Neil J. Aiken, "Report of the Diablo Canyon Independent Safety Committee," 5 February 1997, author's personal copy.

⁷⁰ David Sneed, "Veteran plant operator alleges unsafe practices at Diablo," *Telegram-Tribune*, 15 February 1997.

Aiken, claiming he suffered mental imbalance, a “paranoid condition” in the atomic workplace.⁷¹ The apparent keenness of the corporation to sideline Aiken implied a certain level of corporate anxiety over explicit criticism. For San Luis citizens, reading of the dispute in local papers, neither PG&E’s claim of a disturbed man working at Diablo plant nor Aiken’s list of corporate malpractice made for comfortable reading.

Alongside questions of human fallibility at Diablo plant lay the spectre of unexpected technological failure. In July 1997, the *Telegram-Tribune* described “a mysterious accident” that “forced operators to shut it [one reactor] down.” The problem involved a steam-generation loop, but employees failed to identify the root-cause. Hardly reassuring for local technophobes, PG&E spokesperson Jeff Lewis related that “[I]t’s not unheard of to have something like this happen.”⁷² A nuclear plant seemed the most inappropriate place for mystery. The issue of machine failure re-emerged two years later. In an article entitled “PG&E readies for Y2K woes at Diablo,” the *Telegram-Tribune* noted that dozens of technicians had begun “working to debug Diablo Canyon nuclear power plant,” in preparation for the year 2000.⁷³ The failure

⁷¹ David Sneed, “Suspended Diablo worker files complaint,” *Telegram-Tribune*, 18 November 1998. In October 1999, the NRC upheld the decision of PG&E to relieve Aiken. A month later, the US Department of Labor sided against Pacific Gas, ordering the corporation to pay Aiken \$116,000 in ‘lost wages and damages.’ See David Sneed, “PG&E upheld on Diablo firing,” *The Tribune*, 23 October 1999, and, David Sneed, “Diablo whistle-blower wins \$116,000 settlement,” *The Tribune*, 24 November 1999. The San Luis Obispo *Telegram-Tribune* changed its title to *The Tribune* during the summer of 1999.

⁷² “‘So far, everything is OK’ as Diablo reactor powers back up,” *Telegram-Tribune*, 8 July 1997.

⁷³ David Sneed, “PG&E readies for Y2K woes at Diablo,” *Telegram-Tribune*, 22 March 1999. The ‘woes’ failed to materialise. With the arrival of a new millennium, PG&E spokesperson Diana Gapuz explained to the local paper: “The rollover for Y2K has gone very well...We did not have any outages in the San Luis Obispo area.” See Patrick Pemberton, “Y2K arrives not like a lion, but a pussycat,” *The Tribune*, 2 January 2000.

of computers to accept dates past 31/12/1999, a simple error in original programming code, threatened to unleash havoc upon the world. Hoping to avoid computers crashing in the control room on the eve of a new millennium, Pacific Gas expended significant time and money on checking its hi-tech systems. Few citizens, however, expected the century to end with an atomic bang, even though computer mainframes controlled not just Diablo plant, but the entire global nuclear arsenal. Instead, pre-millennial tension focused on the excessive costs of celebratory gatherings and date-driven financial crashes. Whilst panic over the computer wiping out bank accounts appeared justified to millions of habitual credit card users, few anticipated a digitally organised Armageddon.

The apparent lack of concern over computer malfunction at Diablo (along with other nuclear installations) reflected a nation already dulled to the threat of machines rising against their masters. Hollywood movies had explored the drama of the sentient machine at length. Celluloid provided a visual critique of technological 'progress,' portraying riotous robots and defiant computers as the inevitable results of unchecked experimentation. *Colossus: The Forbin Project* (1970) saw the nuclear defence computer systems of the USA and the Soviet Union joining forces to hold the human race to ransom whilst they took over the globe. The immensely popular *Wargames* (1983) similarly expounded on the bewildering power of the machine. The movie plot detailed a computer (NORAD), used for simulating nuclear hostilities by the US military, threatening to foist its warring projections on the real world by unleashing missiles by digital consent. The virtual innocence of the NORAD computer asking

'Do you want to play a game?' translated into deadly implications for the public domain. The much later home computer/console version of *Wargames* (1998) featured NORAD posing the same question, although the seriousness of the gaming experience was blunted without an on-line link-up to Pentagon mainframes. The Cold War rhetoric that pervaded films such as *Colossus* and *Wargames* nevertheless seemed inappropriate to the depolarised climate of the 1990s. That Hollywood-styled computers typically spoke in English rather than binary form meanwhile distinguished them from the silent Personal Computers with Y2K 'bugs.' At Diablo Canyon, the primary issue involved poor programming rather than lurking artificial intelligence. Thus the scheming HAL 9000 system in *2001: A Space Odyssey* (1968), responsible for murdering its space crew, and the devious SKYNET computer in *The Terminator* (1984), that pitted machines against humans (following a digitally-inspired nuclear judgement day), had little in common with their seemingly antiquated counterparts at Diablo. Compared with James Cameron's morphing, liquid-metal cyborg in *Terminator Two* (1991), the concrete atomic machine on the Pecho Coast appeared positively archaic and primitive. The control room of Diablo plant, with its 1970s architectural design and simple switches, hardly bespoke mechanised sentience. Rather than the dangers of over-advanced machines posed by *Wargames*, the gamble at Diablo revolved around too few state-of-the-art computer chips. Technicians worked against the clock to prepare 'outdated' computers for the year 2000. Danger apparently resided in limiting the progress of the machine, as well as in the computer outgrowing its own programme.⁷⁴

⁷⁴ Movie citations: *2001: A Space Odyssey* (1968); *Colossus: The Forbin Project* (1970); *The Terminator* (Pacific Western, 1984); *Terminator Two: Judgment Day* (Pacific Western/Lightstorm Entertainment, 1991); *Wargames* (Metro-Goldwyn Mayer/United Artists, 1983). The videogame version of *Wargames* (1998) was published in Personal Computer and Sony Playstation formats.

[7] Growing Confidence in the Machine

That few Obispans concerned themselves with the Y2K compliance of the Diablo plant suggested residual confidence in the ability of PG&E to correct machine problems. Given the huge cost overruns, construction errors and blueprint mistakes that plagued Diablo in the 1970s and 1980s, such acquiescence seemed remarkable. Yet, by the late 1990s, Pacific Gas had proved itself capable of operating two nuclear reactors. Employee Tim Robasciotti felt that “after 15 years of safe operation, some people have overcome their initial fear of the plant.”⁷⁵ Only the occasional minor incident or controversy blighted PG&E’s record. Diablo plant garnered a high reputation amongst nuclear industry commentators, with its day-to-day running regularly yielding impressive results. In 1994, officials refuelled Unit 2 reactor in a record thirty-three days. In September 1998, Unit 1 reactor broke the industry record for a continuous period of operation, with 484 days of electricity production. PG&E spokesperson Jeff Lewis declared the sixteen-month feat a “significant milestone” in the history of Diablo Canyon.⁷⁶ The NRC typically rewarded Diablo operators with ‘good’ or ‘superior’ ratings in Systematic Assessment of Licensee Performance (SALP) reports. “Everyone is very competent here,” Morris Branch of the NRC told local reporters in Autumn 1997, following an eight-week long design inspection of

⁷⁵ Interview with Tim Robasciotti (email), Arroyo Grande, 4 June 1999.

⁷⁶ Jerry Bunin, “Diablo reactor sets 16-month milestone,” *Telegram-Tribune*, 29 September 1998.

Diablo plant.⁷⁷ The *San Francisco Chronicle* noted that PG&E could have easily lost money by operating an inefficient plant, but the corporation had “instead turned Diablo Canyon, which cost \$5.5 billion to build after years of planning mishaps and regulatory delays, into one of the world’s most reliable nuclear plants.”⁷⁸

In an article entitled “Diablo experts radiate confidence in nuclear power,” Joel White, a senior health physicist at the plant, nonetheless complained that “a small, vocal minority” of anti-nuclear protagonists received “a lot of press attention,” in comparison with few positive stories on Diablo’s proud history. That neither the local press nor public openly enthused over Diablo plant puzzled White. PG&E’s project was a boon to the region. Having “given up trying to convince anti-nuclear activists that Diablo is safe,” White still longed “to see the community take more pride in Diablo’s safety record and staff.” Whilst his own three kids “frequently wear Diablo Canyon T-shirts,” the atomic father hoped more people would take a positive interest in the nuclear landscape.⁷⁹ Perhaps nuclear energy could become fashionable once again. White’s lament reflected the dis-empowered status of nuclear enthusiasts in the 1990s. With the American public sceptical of atomic-powered schemes, the nuclear industry was forced to defend its existing projects from criticism. The beleaguered pro-nuclear community, or atomic faithful, was metaphorically, if not literally, holed up in nuclear bunkers and domes across the country. The remoteness of these locations, along with electric fences and concrete walls, insulated them from a

⁷⁷ David Sneed, “Diablo Canyon passes inspection,” *Telegram-Tribune*, 12 September 1997.

⁷⁸ Jonathan Marshall, “PG&E to Cut Price of Power from Diablo,” *San Francisco Chronicle*, 7 December 1994.

⁷⁹ “Diablo experts radiate confidence in nuclear power,” *Telegram-Tribune*, 20 May 1995.

prevalent atmosphere of social distrust. Diablo Canyon had become one such island of atomic confidence, with Lawrence Livermore, Vandenburg and other stations marking the 1990s American nuclear archipelago.

Seeking to explain their confidence in the nuclear machine to the outside world, PG&E workers personified the inanimate workings of an atomic reactor. During the promotional film *Inside Diablo Canyon* (1989), PG&E Control Operator Dave Williams confided that “the plant talks to you...if it has a problem, it’ll tell you.”⁸⁰ Through his intimate knowledge of plant systems, Williams had become one with the machine. The control room represented the voice box of Diablo. Fiction writers Thomas Scortia and Frank Robinson had explored a similar theme in *The Prometheus Crisis* (1975), a disaster novel detailing an accident at a fictional atomic plant on the California coast, owned by Western Gas and Electric (WG&E). The hero of the story, Gregg Parks, knew the Prometheus reactor (where he worked) better than anyone else. When questioned about his love for the plant, Parks replied: “I think every engineer should...Otherwise he shouldn’t be an engineer...I’m not about to claim a machine has a soul but I’m not so sure it doesn’t have feelings - in a manner of speaking.” Parks compared Prometheus to his wife Marjorie.⁸¹

⁸⁰ *Inside Diablo* (date unknown), PG&E promotional film, held at the Diablo Canyon Community Center (formerly Diablo Canyon Nuclear Information Center), 6588 Ontario Road, San Luis Obispo.

⁸¹ Parks felt that “Marjorie and Prometheus were just alike...With each of them, it was a case of unrequited love.” Thomas N. Scortia & Frank M. Robinson, *The Prometheus Crisis* (London: Hodder & Stoughton, 1975), 27-8, 58.

Taken to extremes, confidence in the machine seemed at best misjudged, at worst, reminiscent of the nuclear fantasies that proliferated during the 1950s and 1960s. Few desired a return to the reckless early years of the atomic age, when the nuclear priesthood presided over their sacrosanct creations. Having faith in the machine as efficient, and practically running itself, needed to be the limit, rather than the starting point, of worker rationale. Fortunately, PG&E workers usually treated the domes of Diablo Canyon as places of work rather than godly worship. Images of a sacred nuclear landscape hardly befitted the everyday routine of an operational plant in the 1990s. Atomic faith took on the guise of confidence in engineering systems and reliance upon Geiger counters for accurate radiation readings, rather than outlandish pro-nuclear sermons on the Pecho Coast. NRC regulations encouraged employees to monitor systems for degeneration, to prepare for unexpected accidents and technological failure. Both human and machine fallibility had to be kept in mind. The 'control room' denoted humans exercising careful command over atomic proceedings, with an air of professional self-discipline rather than the haphazard antics of Homer Simpson. Control technician Robasciotti recounted his attendance at Radiation Worker Training, remembering that "the class was not sugar-coated in anyway...I was expecting a lot of pro-nuke propaganda, 'don't worry, radiation is good for you' stuff, but this was not the case."⁸² Attitudes towards atomic energy had evidently shifted over the late twentieth century. However, behind the safety protocols and work ethics, PG&E workers retained a level of confidence in the atomic machine incomprehensible to nuclear critics. The idea of Diablo plant being able to almost run itself frightened atomic sceptics. With reference to the Hosgri Fault and

⁸² Interview with Tim Robasciotti (email), Arroyo Grande, 11 June 1999.

earthquake damage, Pacific Gas seemed unreasonably confident that the machine would protect itself as well as others. Nuclear enthusiasts verged on portraying Diablo as a mechanised *deus ex machina*, literally a 'god from the machine' capable of inexplicably resolving calamitous situations. Aesthetically, the nuclear domes of Diablo were more akin to over-sized Trojan helmets than ethereal Greek deities. Or were the Greeks wearing the helmets of their enemies, as in the story of the giant Trojan horse, left on the beach by the Greek army, and sporting a hidden belly of fury?

[8] Local Relations

Local anxiety over the operation of Diablo plant had mostly dissipated by the early 1990s. Visions of atomic doomsday on the Pecho Coast receded in the light of several years of safe electricity generation. A nuclear accident became a distant prospect, scarcely considered by the local populace. Reflecting a lack of interest in nuclear issues, California newspapers rarely carried stories on Diablo plant. The region no longer seemed exciting or newsworthy. The possibility arose of the Pecho headland regaining its pre-nuclear anonymity.

PG&E interpreted a quiet community as proof of a successful plant. Critics had been silenced by corporate efficiency and friendly outreach. Robasciotti suggested that Pacific Gas workers resident in the area had provided neighbourly education, helping

a fair number of locals to overcome “their simple fear of the new and unknown.”⁸³ Living with the plant nearby had become everyday routine for PG&E employees and San Luis citizens alike. Speaking to the *Telegram-Tribune* in May 1995, Joel White related that the “[C]hildren and students he meets now seem more comfortable with nuclear energy because they have grown up with it.”⁸⁴ The nuclear landscape was just another local industry, and citizens accepted Diablo plant as part of the county scene.

When Native Americans first established residency on the Central Coast, they acclimated to living in the shadow of a series of dormant volcanoes (the Nine Sisters). The modern-day county treated two reactor domes on the Pecho Coast as similarly quiet volcanoes. Californians assimilated, or naturalised, nuclear fear itself. Concern over Diablo plant resembled sentiments towards underlying dangers native to the far-western landscape. Obispanians treated the two nuclear reactors like thousands of Californians treated fault lines - as unavoidable risks. They acknowledged the existence of danger, but also recognised that, on a day-to-day level, the nuclear neighbour posed little practical nuisance. Locals adjusted their images of a nuclear disaster to that of a natural disaster, akin to an ‘act of god’ out of their hands.

Former anti-nuclear activists had little choice but to reluctantly accept their atomic nemesis. That state-wide protest failed to stop the plant in the early 1980s implied little chance of shutting the operation down in the 1990s. Wary residents were forced

⁸³ Interview with Robasciotti, 11 June 1999. In a realistic assessment of local feelings, Robasciotti estimated that “about 40% of local residents are in favor of Diablo, 40% opposed, 10% have no opinion and 10% don’t know what Diablo Canyon is” (email interview dated 4 June 1999).

⁸⁴ “Diablo experts radiate confidence...,” *Telegram-Tribune*, 20 May 1995.

to simply 'grin and bear it.' The passing of time helped ease their fears. Ex-Abalone Bob Wolf explained: "Its strange, I have to admit I hardly think about it anymore. Other times I try to decide either to move away, stay here and be pissed off all the time, or stay here and kind of put it out of my mind. I've kind of put it out of my mind - which I think a lot of people did."⁸⁵ A 1991 survey of 188 California Polytechnic students found that 50% of them "rarely" considered the nuclear danger, whilst 19% had not even heard of Diablo Canyon.⁸⁶ The lack of concern partially reflected the 'cocooned' life at the university, yet the same California campus had produced a number of anti-nuclear activists during the 1970s. The remote geographical position of Diablo plant meanwhile enabled locals to put to one side any lingering nuclear concerns whilst casually shopping in peaceful downtown Obispo, replete with its restored Spanish Mission and middle-class niceties. "Diablo is crouched in low profile, hidden down an unmarked road, deferential by design to the local sensitivities. Speeding by on Route 101, you'd never know that nuclear reactors are back there throbbing," related writer Jeff Wheelwright.⁸⁷ The county landscape bore few reminders of its nuclear lineage. Electricity cables crossed Highway 101, but hardly betrayed their atomic source. The Irish Hills (San Luis Range) comfortably blanketed San Luis residents from their nuclear neighbour. Events at Diablo plant

⁸⁵ Interview with Bob Wolf, San Luis Obispo, 21 July 1997.

⁸⁶ Stephanie A Penner, "Diablo Canyon: Determining Student Awareness and Attitudes Toward Nuclear Power," Senior Project (Journalism), 1991, California Polytechnic State University.

⁸⁷ Jeff Wheelwright, "Hiroshima and Diablo," August 1995 (courtesy of author). Published as "Diablo is ultimate casualty of Hiroshima bombing 50 years ago," in the *Telegram-Tribune*, 22 August 1995.

mostly remained in the backdrop to contemporary county life. Dick Kresja noted that PG&E's project remained "out of sight, out of mind" for the majority of Obispanos.⁸⁸

Local apathy further reflected the passé status of the atom in US popular culture. The appropriately titled movie, *Blast from the Past* (1998), showed a boy, Adam, enter the 'modern world' for the first time after growing up inside a nuclear bunker.⁸⁹ The atomic shelter had shielded him from social changes rather than radioactive fallout. In readjusting to the 1990s, Adam was forced to leave his old-fashioned and outdated ideas where they belonged - in the concrete atomic coffin. The atom, identified as a quintessential relic of post-1945 society and Cold War fervency, seemed out of touch with American culture fifty years on. Burying plutonium, dismantling weapons, and shutting down reactors in the 1990s related a corresponding desire to leave behind an ugly period in global relations. In a local context, controversies over Diablo Canyon belonged to a former era of county history - the turbulent late 1970s and early 1980s - rather than the less impassioned 1990s.

Nuclear nomenclature, meanwhile, lost meaning and social impact during its assimilation into mainstream American discourse. The US government traditionally mitigated the dangers of the atom by using a range of phrases, or 'Nukespeak,' that disguised accidents as 'events' and lost weapons as 'broken arrows.'⁹⁰ Official

⁸⁸ Interview with Richard Kresja, San Luis Obispo, 9 July 1997.

⁸⁹ *Blast from the Past* (directed by Hugh Wilson, New Line Productions, 1998).

⁹⁰ See Paul Chilton, "Nukespeak: nuclear language, culture and propaganda," *Nukespeak: The Media and the Bomb*, ed. Crispin Aubrey (London: Comedia Publishing Group, 1982), 94-112, for a clear introduction to the origins of 'nukespeak.' *Nukespeak: The Media and the Bomb* focuses on the 'wartime' atom, and dates its origins to World War Two. It may, however, be worth expanding the

dialogue resembled the government of Oceania's 'newspeak' in the grim world of Orwell's *Nineteen Eighty-Four*. By the 1990s, nuclear language had proliferated into public life, losing its tinge of secrecy and surreptitiousness in the process. Meltdown related political, financial or personal collapse, but rarely atomic catastrophe. Chain reaction morphed into a musical hit for Diana Ross. The American public had co-opted atomic phrases in prior decades, but, by the 1990s, most words had forfeited their radioactive dynamism or ability to shock. Environmental doomsdays similarly lost their salience in US society, and this, too, influenced local attitudes towards Diablo Canyon. The 'population bomb,' 'limited' earth and nuclear apocalypse all seemed distant ruminations of 1960s and 1970s culture. The immediacy of a number of ecological issues receded, whilst environmentalists turned to face fresh, but long-term, challenges such as global warming, the invasion of genetically modified organisms, and corporate malpractice. Atomic catastrophe accordingly dropped on the ecological danger list from Defcon 1 to Defcon 3, perhaps even 4. Diablo plant no longer represented the potent threat that had once inspired thousands of environmentalists to act.

Yet the subtitle of Stanley Kubrick's black comedy *Dr Strangelove: Or, How I Stopped Worrying and Learned to Love the Bomb* (1964) only proved half right for citizens of San Luis County.⁹¹ Many locals learned to 'stop worrying' about Diablo, but few harboured passionate feelings towards their closest nuclear production site.

label to encompass the nuclear age itself, including nuclear energy, and notice the increasing dependence on 'nukespeak' phraseology.

⁹¹ *Dr. Strangelove: Or, How I Stopped Worrying and Learned to Love the Bomb* (directed by Stanley Kubrick, Columbia, 1964).

The hazy days of 1960s atomic romanticism had long passed, but anti-nuclear sentiments from the late 1970s and early 1980s still lurked in the popular consciousness. Latent wariness continued to impinge upon the county's love affair with the atom. Karen Andrews, estate agent for nearby Pismo Beach, noted that she had never lost a sale due to Diablo, but at the same time, many purchasers felt uncomfortable over a nuclear plant for a neighbour.⁹² Californians remained sceptical of performance claims made by PG&E. Christopher Weir, reporting for the *Metro Santa Cruz*, described Diablo plant as "a Ferrari amid the nuclear industry's Pintos. That's not to say it runs better than promised, just that it outshines a dismal industry average."⁹³ In June 1989, an uncustomary article in the *Telegram-Tribune* hypothesised a 'Chernobyl-style' accident on the Pecho Coast, highlighting disastrous effects upon agriculture and cattle raising. A county report noted the need to ensure safety at Diablo plant in order to protect California's breadbasket image.⁹⁴ Citizens pondered long term health effects brought on by their own proximity to the Diablo Canyon. In July 1993, the *Telegram-Tribune* reported that PG&E employee Donald Tilley, who had lost most of his tongue to cancer, planned to sue the corporation. In 1989, a 'hot valve' had sprayed his mouth with radiation.⁹⁵ The association between radiation and cancer probably hit a chord with those residing close to Diablo. Jeff Wheelwright, living in Morro Bay, related the popular local perception of radiation as "the beast we sense lurking behind the mountains."⁹⁶ The radiation 'beast' seemed

⁹² *Santa Barbara News Press*, 1 August 1993.

⁹³ Christopher Weir, "Devil in a New Dress," *Metro Santa Cruz*, 11-17 July 1996.

⁹⁴ "Major Diablo accident would force destruction of crops," *Telegram-Tribune*, 9 June 1989.

⁹⁵ "PG&E denies responsibility for tumors," *Telegram-Tribune*, 29 July 1993.

⁹⁶ Wheelwright, "Hiroshima and Diablo."

unlikely to go away. Americans recognised the vast amounts of time atomic processes worked by, with nuclear waste remaining lethal for thousands of years. The decommissioning of Diablo plant would inevitably entail lengthy, drawn out procedures. The nuclear plant appeared a permanent fixture of the county landscape, with little chance of an early or easy foreclosure, and, as such, an enduring threat to local life.

Mock-accidents served as salient reminders of atomic danger. “Systems fail at Diablo Canyon Nuclear Power Plant. The governor declares a state of emergency. Radioactive material escapes the plant, and emergency crews must react quickly under pressure to evacuate residents and re-route traffic,” the *Telegram-Tribune* reported in September 1996. Media questions included “How does this accident compare with Chernobyl?” and “Do you really expect this community to let you operate after this?” PG&E had staged a ‘mock-emergency’ in preparation for a Federal Emergency Management Agency (FEMA) test, expected in the following month.⁹⁷ A few weeks later, the testing of emergency sirens inadvertently resurrected images of the Holocaust. PG&E planned to switch on local sirens during Rosh Hashanah, a Jewish festival. Robin Heaney complained to the *Telegram-Tribune* on behalf of her Jewish friends, exclaiming that “[T]he sound of these sirens cannot help but evoke in all of us memories of World War II and the Holocaust.” Nobody seemed to notice the appropriateness of a holocaust descriptive for a potential nuclear disaster. Pacific Gas

⁹⁷ The local paper described the activities as a “dress rehearsal.” Officials appeared calm and confident in the “imaginary Diablo disaster,” eminently comfortable with their own interpretation of a potential atomic accident. Glenn Roberts, “Diablo test is a drill for a drill,” *Telegram-Tribune*, 5 September 1996.

duly apologised for the mistake, explaining that the choice of test-dates had been severely limited because of the breeding season of the Morro Bay Kangaroo Rat, an endangered species easily disturbed by noise.⁹⁸ The corporation carried out the scheduled test, but unplugged three sirens close to Jewish synagogues. Two years later, PG&E employees faced (and overcame) the “discovery of a bomb in the plant” during a simulated terrorist attack on the Pecho Coast.⁹⁹ However, whilst PG&E staff performed admirably in the virtual world of the accident simulations, citizens remained unsure over what might happen during a real-life disaster.

The Hollywood movie *The Truman Show* (1998) demonstrated that nuclear plant meltdowns still had currency as disaster scenarios. Truman had been born into an artificial reality called Seahaven Island, a realm enclosed within a huge domed studio visible from space. Cameras recorded Truman’s every activity, from his very first steps to tentative first kiss. Gradually, the TV hero discovered tiny glitches in Seahaven Island, such as satellite cameras falling from the sky and unconvincing fake scenery. In an attempt to escape his sequestered existence, Truman overcame a number of obstacles and valiantly crossed the bridge to ‘mainland’ USA. There he met a final frontier. Despite the entrance sign claiming “Clean, safe, economical - more power to you,” Truman arrived at Seahaven nuclear plant in the midst of a

⁹⁸ Jerry Bunin, “Timing of siren test angers Jews,” *Telegram-Tribune*, 13 September 1996; “Sirens near services silenced,” *Telegram-Tribune*, 14 September 1996.

⁹⁹ Jerry Bunin, “Feds like Diablo’s reaction to nuclear terrorism drill,” *Telegram-Tribune*, 28 November 1998. Discovering a bomb on the Pecho Coast is not as far-fetched as it may seem. In 1995, the Army Corps of Engineers swept Montana de Oro State Park, a former artillery range, for unexploded devices left over from World War Two. Army Corps contractors found thirty unexploded bombs and more than fifty endangered shoulderband snails in Montana de Oro. See *Telegram-Tribune*, 16 June 1995 and 26 July 1995. They also checked maps of the Diablo lands, and consulted with local historian Dan Krieger on the matter. Despite the connection of the peaceful atom with wartime imperatives, the two Diablo reactors failed to qualify for army disposal.

calamitous accident. Momentarily fooled by the disaster scenario, Truman only recognised the atomic fallacy when an unfamiliar police officer called him by his first name. Radiation-suited pursuers (with cameras disguised as Geiger-counters) accosted the hero. Suffering no radiation poisoning from the experience, Truman later escaped the island by boat, despite the pleas of the programme's megalomaniac designer Christof that, "[T]here's no more truth out there" in the 'real' world, whilst Seahaven posed "nothing to fear."¹⁰⁰

Diablo nuclear plant fitted admirably within the dialogue between virtual and real dangers exposed in the Truman Show. Atomic energy had itself settled into a middle ground between the two dimensions. By the late 1990s, the absence of a real-life accident had diluted anxieties over nuclear power, and made a California Chernobyl appear more akin to an anti-nuclear fantasy than a likely scenario. The only person lost on the Pecho Coast had been a paraglider from Montana, whose "friends last saw him disappearing into a cloud above Diablo Canyon."¹⁰¹ The nuclear plant invariably appeared an 'unreal' danger, remote, hidden, and visually at odds with both its natural surroundings and every-day Obispan reality. Life on the Pecho Coast appeared a virtual world unto itself, a self-enclosed Truman Show without the global viewing figures. At the same time, sirens, local shelters and *Telegram-Tribune* reportage located Diablo plant clearly within the public domain. The concrete domes and huge turbine building suggested nothing temporary about the nuclear scene.

¹⁰⁰ *The Truman Show* (directed by Peter Weir, Paramount, 1998).

¹⁰¹ Marianne Danner, "Search for lost paraglider ends," *Telegram-Tribune*, 25 March 1997.

[9] The Atomic Cash-Cow

The financial aspects of Diablo plant had always remained of interest to residents of San Luis Obispo. Back in the 1960s, county officials had welcomed the atomic project primarily due to promises made by Pacific Gas of substantial cash returns. The nuclear plant symbolised a golden egg to be laid on the Central Coast. During the 1970s and 1980s, huge construction costs associated with Diablo plant placed doubts on anticipated financial gains. Citizens questioned whether the nuclear project could ever be cost-effective. Nonetheless, in the 1990s, PG&E established itself as an important patron of county life, with Diablo plant providing the region with significant tax revenue, employment opportunities, and even the occasional corporate gift. In 1997, the *Telegram-Tribune* calculated that “Diablo’s parent” contributed approximately \$225 million to the local economy every year.¹⁰² The tax returns generated by the operational nuclear plant provided essential funds for county schools. As a large employer in the area, the electrical utility assisted a plethora of local businesses. Diablo workers helped keep the ‘Fat Cats Cafe’ at Avila Beach open twenty-four hours a day. Pacific Gas made sizeable donations to local charities. Where once Abalone cartoons indicated trucks of dollar signs travelling into Diablo Canyon, the picture most appropriate to the 1990s portrayed ‘Diablo dollars’ fuelling the local economy. San Luis County had its own atomic cash-cow.

¹⁰² Silas Lyons, “Keeping Diablo cost-competitive,” *Telegram-Tribune*, 13 December 1997.

Anti-nuclear activists recognised that financial rewards dulled atomic wariness. “People look at Diablo now as money,” Raye Fleming observed in 1997.¹⁰³ Geoff Land, of the Environmental Center of San Luis Obispo (ECOSLO), lamented that Diablo plant “has sacred cow status now” in the broader community, with PG&E almost untouchable due to its financial contributions.¹⁰⁴ Laurie Wolf felt angry that the “almighty dollar” had won out.¹⁰⁵ In April 1994, the *Telegram-Tribune* printed a cartoon showing “PG&E distributing its ‘political influence’ in San Luis Obispo County” with the two Diablo reactors as giant octopuses. The nuclear plant represented two devilish sea monsters tightening their grip on the county.¹⁰⁶ Dick Kresja related the need to avoid over-dependency on atomic handouts in an article for the *Telegram-Tribune* in May 1996. During his term as county supervisor in the early 1970s, Kresja had recommended the creation of a special fund in order to avoid becoming reliant upon Pacific Gas contributions for the everyday running of the county. Angered by paying 11.589 cents per kilowatt hour to power his eco-friendly home, Kresja also drew attention to the significant contributions county residents made to the plant as electricity consumers, arguing that the “[H]igh cost of electricity from Diablo should be everyone’s business.” On the same page as Kresja’s admonitions ran a cartoon criticising the billions of dollars pumped by the United States Government into the Star Wars defence project. With a giant missile in the

¹⁰³ Interview with Raye Fleming.

¹⁰⁴ Conversation with Geoff Land, San Luis Obispo, 18 August 1997.

¹⁰⁵ Interview with Laurie Wolf, San Luis Obispo, 21 July 1997.

¹⁰⁶ *Telegram-Tribune*, 9 April 1994.

White House, the punch-line read “This thing won’t backfire on us, will it?”¹⁰⁷ Locals only partially recognised the dangers implicit in relying on an atomic plant for county funds.

During the late 1990s, the California Public Utility Commission introduced the deregulation of electricity provision across the Golden State, generating a wave of concern in San Luis Obispo over the continued survival of Diablo plant. PG&E faced the difficult prospect of downscaling its inefficient operations in order to provide competitively priced energy to California’s customers. The *Telegram-Tribune* responded to the climate of uncertainty with stories anticipating the early shutdown of Diablo nuclear plant. “Closure would send out ripples,” wrote Jerry Bunin and Silas Lyons, in a three-part series on the relationship between Diablo reactors and the local community. Retail commerce, the construction industry, fast-food joints all had “a stake in Diablo.” Lyons detailed the fate that befell Rancho Seco plant outside Sacramento following its shutdown in 1989. All that remained of Rancho Seco was “the gutted carcass of a nuclear reactor.”¹⁰⁸ In contrast to sentiments displayed in 1984, locals feared the shutdown of Diablo plant rather than its operation. The financial importance of PG&E’s project outweighed any lingering doubts over its nuclear threat. In order to gain regional competitiveness, Pacific Gas reassessed its energy projects, selling Morro Bay, Moss Landing and Oakland plants to Duke

¹⁰⁷ Richard Kresja, “High cost of electricity from Diablo should be everyone’s business,” *Telegram-Tribune*, 20 May 1996.

¹⁰⁸ Three part series entitled “Diablo Canyon: Economies of Power.” Local effects noted in Part Two: Jerry Bunin and Silas Lyons, “Closure would send out ripples,” *Telegram-Tribune*, 1 July 1996. Rancho Seco mentioned in Part Three: Silas Lyons, “It’s a lot more complicated than hitting a switch,” *Telegram-Tribune*, 2 July 1996.

Energy Power Services of North Carolina, in a \$501 million deal.¹⁰⁹ However, PG&E remained adamant in its intention to keep the Diablo project alive by using a number of cost-cutting manoeuvres. Under the headline “A Fiscal Meltdown,” the *San Francisco Chronicle* detailed PG&E’s plan to accelerate the depreciation of Diablo plant, thereby reducing its corporate tax bill.

However, a sudden decrease in revenue threatened to deal a “big blow” to the finances of San Luis Obispo County.¹¹⁰ Silas Lyons reported on PG&E’s aim to “squeeze more efficiency out of its staff,” by reducing numbers to 1300.¹¹¹ The nuclear department of Pacific Gas, spread between San Francisco and Diablo Canyon, at one time employed 3000. In April 1998, Jeff Lewis announced the closure of the on-site marine biology laboratory, although he noted a continuing desire “to work with all those who used it to find a way to give it a life outside Diablo.”¹¹² The corporation traditionally detailed emergency information concerning Diablo plant in the form of a glossy annual calendar featuring black and white photographs of picturesque county scenes, which was sent out free to energy users. In 1999, PG&E chose to provide the same information on an insert in the local Pacific Bell phone book, saving \$100,000 in publication costs. Carmen Girardi of Shell Beach lamented the loss of the calendar, “You would be seeing it all the time and know where it is.”¹¹³ Just as San Luis

¹⁰⁹ Silas Lyons, “PG&E sells Morro power plant,” *Telegram-Tribune*, 19 November 1997.

¹¹⁰ Jonathan Marshall, “A Fiscal Meltdown,” *San Francisco Chronicle*, 22 May 1996.

¹¹¹ Silas Lyons, “Keeping Diablo cost-competitive.”

¹¹² David Sneed, “Center would reveal sea’s mystery,” *Telegram-Tribune*, 18 April 1998.

¹¹³ Silas Lyons, “PG&E stopping calender,” *Telegram-Tribune*, 14 February 1998; Lore Lawrence, “Phone book insert replaces popular PG&E calender,” *Telegram-Tribune*, 18 September 1998.

residents had become accustomed to their nuclear neighbour and its annual mail, the position of Diablo plant within the local community seemed threatened.

[10] Mothers for Peace in the 1990s

The Mothers for Peace had few qualms over the unexpected closure of Diablo plant. The local group was more worried by the prospect of PG&E compromising safety procedures in the pursuit of cost-cutting and increased electrical output. In response to the refuelling of Diablo plant in record time during 1994, the Mothers highlighted the significant sacrifices made in the race to restore power. June von Ruden, in a letter to fellow members, noted that “during this hasty refuelling: the cooling system was shut off; radioactive water was spilled; defective fuel rods are leaking radiation; and power to monitor radioactivity in the control room was cut off...Let’s face it, money talks and PG&E loses \$3 million every day the plant is shut down.”¹¹⁴ Jeff Wheelwright expressed a similar point of view on the refuelling episode, comparing the ‘life’ of Diablo plant to “a shark that must never stop swimming.”¹¹⁵ Who fulfilled the role of the coast guard nevertheless remained hazy. The NRC officially held that responsibility, although had its resources spread thinly across the rest of the nuclear landscape. The CPUC formed a ‘Diablo Canyon Independent Safety Committee’ in 1988 to monitor plant procedures. However, the advisors, drawn from pro-nuclear circles, rarely met, and exercised little power. In 1997, the Committee was disbanded.

¹¹⁴ Letter from June von Ruden, Mothers for Peace, to supporters, December 1994, SSPP file: Mothers for Peace.

¹¹⁵ Jeff Wheelwright, “Of Man-Rems and Millirems,” (courtesy of author). Retitled “Diablo Canyon: A view from the inside,” in the *Telegram-Tribune*, 18 April 1996.

The *Telegram-Tribune* noted the rare agreement between PG&E and the Mothers for Peace to end the Independent Safety Committee, albeit for highly divergent reasons. “PG&E thinks the committee is unnecessary, while Mothers for Peace argues it is ineffectual,” the paper succinctly reported.¹¹⁶ Citizens sceptical of Pacific Gas looked to the Mothers for a critical assessment of plant operation. Rochelle Becker explained that “when there’s a problem at the plant, the community turns to the Mothers for Peace for a solution.”¹¹⁷ Those residents that expressed confidence in PG&E’s ability likely dismissed the Mothers’ complaints as anti-nuclear rantings.

That Diablo plant maintained some level of proficiency led to occasional calls for the Mothers for Peace to shift their gaze away from the Pecho Coast and towards other local landmarks. Walt Reil, from Atascadero, wrote to the *Telegram-Tribune* in March 1997, declaring “it is time for this group to get on with life and do something truly beneficial for San Luis Obispo County.” Reil suggested that the Mothers might consider county schooling as a worthwhile issue, or, if not, potentially “close up shop.”¹¹⁸ Reil failed to recognise that the Mothers for Peace had broadened their activities during the 1990s. The topic of looking beyond Diablo Canyon had been raised at a group retreat in March 1992.¹¹⁹ Members protested American involvement in the Gulf War during 1990-1991. The *Telegram-Tribune* described a move “[F]rom anti-Vietnam to anti-nuke to anti-war. Some people might say the Mothers for Peace

¹¹⁶ “Longtime Diablo safety committee to be disbanded,” *Telegram-Tribune*, 2 August 1997.

¹¹⁷ Interview with Rochelle Becker.

¹¹⁸ Letter from Walt Reil, Atascadero, to editor, *Telegram-Tribune*, (submitted) 1 March 1997.

¹¹⁹ “Highlights of the Mothers for Peace Retreat, 27-29 March 1992,” SSPP file: Mothers for Peace.

has come full circle.” June von Ruden admitted that “the group’s David-and-Goliath war with Pacific Gas and Electric Company” had “earned them the most publicity,” but stressed that the Mothers for Peace were always concerned with the “total environment.” Fellow activist Nancy Culver explained the symbolic relationship between the Gulf War and Diablo plant: “Diablo is a symptom of how we live with our environment. This war is also a symptom.”¹²⁰

In 1994, seven Mothers helped build houses on the Cheyenne River Sioux Indian reservation, as part of the Habitat for Humanity programme. “Mothers for Peace put down their placards and picked up hammers,” reported the *New Times*.¹²¹ The group annually organised an ‘eco-tour’ of environmentally friendly Obispan homes, and funded a scholarship for ecologically aware local students. A Mission Statement reflected broad, inclusive notions of environmental responsibility, noting that the Mothers focused “on the interconnected issues of the need for peace, social justice and a safe environment.” The group articulated a desire to educate its members and the San Luis community about the importance of protecting ecological systems, the evils of war, nuclear weapons and nuclear power, along with the need for a sustainable energy policy.¹²² Congratulating their efforts in 1991 (albeit by playing off a stale stereotype), *Earth Journal* simply declared: “The Mothers for Peace: Not your average ladies club.”¹²³

¹²⁰ “Mothers for Peace at war,” *Telegram-Tribune*, 11 January 1991.

¹²¹ “Building Mothers,” *New Times* magazine, 24-31 August 1994.

¹²² “Mothers for Peace Mission statement” (undated), Mothers for Peace Collection (MFPC), San Luis Obispo, file: 1984 through 1994.

¹²³ “A Profile: The San Luis Obispo Mothers for Peace,” *Earth Journal*, 2/9 (September 1991), 7.

The local group continued to protest against Diablo plant, organising walks, rallies, and anti-nuclear leafleting. In December 1989, the Mothers celebrated their twentieth anniversary with a 'Create Peace Week.' The week of activities ended with a walk to the gates of Diablo "to reaffirm our commitment to a safe environment."¹²⁴ On anniversaries of the bombing of Hiroshima, dedicated individuals held aloft lanterns at Avila Beach. Mothers reminded fellow locals of the dangers lurking on the Pecho Coast, and the work of their group for a better neighbourhood. "When there are anniversaries...we try to put an ad in the paper or something, so that they don't forget that the Mothers and Diablo are still around," explained Liz Apfelberg.¹²⁵ However, stimulating public enthusiasm for anti-nuclear issues proved hard-going in the 1990s, with opposition settling into a comfortable, but ultimately minority-based, routine.

In August 1986, an article in the San Jose *Mercury News* had portrayed Diablo Canyon and the Mothers for Peace as relics of the distant past. The newspaper drew an analogy between Diablo plant and a dragon living in a cave.¹²⁶ The Mothers for Peace, meanwhile, were personified as dragon fighters. The Diablo landscape had once played host to a battle of 'St. George and the Dragon' proportions, a grandiose scene of arcane myth and atomic magic. However, the operational plant indicated to the *Mercury News* that "the war of the dragon was over." Diablo Canyon passed into

¹²⁴ Letter from Rochelle Becker, Mothers for Peace, to supporters, December 1989, SSPP file: Mothers for Peace.

¹²⁵ Interview with Liz Apfelberg.

¹²⁶ The dragon presumably represented a greater danger than *Pete's Dragon*, filmed on the Pecho Coast several years earlier (Disney Corporation, 1977), although writers of the *Mercury News* article seemed more concerned by the activities of the Mothers for Peace.

the realms of modern folklore, an anti-nuclear old wives tale. Nancy Culver replied to the *Mercury* by way of the *Telegram-Tribune*, pointing out that the Mothers for Peace continued to work on nuclear waste and licensing issues, and that locals retained an interest in atomic issues. While the mechanised dragon still ‘breathed’ on the Pecho Coast, the fighters vowed to remain vigilant. The work of the Mothers for Peace during the 1990s refuted notions of the ‘war’ as over.¹²⁷

[11] Greening Diablo

A Chumash story, recorded by JP Harrington, told of a “man at La Purisma long ago” who bargained the latter portion of his life in return for “ten or twelve years” of riches. Failing to confess his sins, the man who “always had plenty of money” died beneath his “beautiful big horse” when the animal “stumbled and fell.” Harrington entitled the story “A Pact with the Devil.” It opened with a question: “Do some Americans also make friends with a devil?”¹²⁸ In a brief resume of San Luis Obispo circa 1995, Mike Steere, writing for *Outside* magazine, promoted “[A] town where you can have a real job, a real life, and still get to move in with the scenery.” However, Steere noted two “prices” of the Central Coast “paradise.” One drawback concerned the “grudging, inept college-age help in stores and restaurants,” the other a covert county deal, whereby “[T]he same city that works so hard to keep its liveable virtue has a quiet

¹²⁷ *San Jose Mercury News*, 3 August 1986; “Mothers for Peace: reports of death exaggerated,” *Telegram-Tribune*, 16 August 1986.

¹²⁸ Chumash narrative “A Pact with the Devil,” collected by J. P. Harrington. See Thomas C. Blackburn, ed., *December’s Child: A Book of Chumash Oral Narratives* (Berkeley: University of California Press, 1975), 277.

pact with an environmental devil, Diablo Canyon nuclear plant.”¹²⁹ Behind the lush grasses and green policies of San Luis supposedly lurked a malevolent, dirty force.

PG&E’s plant embodied the hidden, ugly side of county life. It appeared to make the paradise possible, but also represented its major flaw. Yet the deal with an atomic demon was not unprecedented. San Luis County officials had invited other questionable projects to the Central Coast that, in the 1990s, had become equally, if not more, disturbing than Diablo plant. One of the worst offenders resided just a few miles south of PG&E’s reactors, at nearby Avila Beach. If Diablo plant was an environmental devil, what of the Union Oil (later Unocal) company, which had used Avila Port for crude extraction activities since the early 1900s? Union had turned the southern hillside of Avila into an ugly ‘tank farm’ for oil storage. Whilst PG&E’s concrete domes remained hidden from public view, few could miss the oily blot on the landscape of Avila. In 1995, officials recognised for the first time the full scale of ecological damage. Spills of gasoline, diesel and crude oil had leaked into the ground water below the beach, roads, and buildings of the small coastal town. Much of the shoreline had been contaminated with petroleum hydrocarbons. Unocal responded with a public relations campaign and a clean-up operation, including the removal of Avila’s tank farm. Oil excavation work closed the Lighthouse Bar and Grill, local hangout of Diablo employees.

The future of Avila appeared uncertain. The *Telegram-Tribune* pondered the loss of the county’s “funky” beach town due to the disruptions of the decontamination

¹²⁹ Mike Steere, “San Luis Obispo, California,” *Outside* (July 1995), online version.

process, whilst locals feared that “an expensive condo resort” would rise up from the scrubbed and sterilised sands.¹³⁰ The *New Times* foresaw a \$327 million theme park, Oilworld USA, taking advantage of Avila’s ‘natural resources.’ “We’ve taken an environmental disaster and turned it into a one-of-a-kind theme park,” explained ‘Dennis Lamb.’ “Expected to rival Magic Mountain and the recently opened Legoland,” features of Oilworld included an oil-skating rink utilising the Exxon Valdez tanker deck, ‘oilwrassling’ (with adult-only shows past 7pm), and an interactive museum, whereby “an animatronic figure of oil well firefighter Red Adair will greet visitors and take them through an educational center designed to highlight the true glory of the Oil Age, unhindered by environmentalist historical revisionists.” Fortunately, the *New Times* article came out on the morning of April 1st.¹³¹

The geographical proximity of Diablo plant to Avila bore mixed implications for local perceptions of nuclear power. Kresja noted that with Avila “in the public eye now,” the oil problem had become the priority concern in the region.¹³² “Waking up to smell the oil” each morning led Avila residents to look on their nuclear neighbour as a far less tangible threat.¹³³ Yet the propinquity of the oil spill to Diablo plant also suggested an ecological hotspot, a tarnished and ill-fated stretch of California coast. By the time Unocal finished cleaning-up its mess, some more dirty work loomed on the horizon. Kresja foresaw the termination of Diablo plant as “our bomb for the

¹³⁰ *Telegram-Tribune*, 8 September 1998.

¹³¹ Newt Imes, “Avila Shoreline to Become Oilworld USA,” *New Times* magazine, 1 April 1999.

¹³² Interview with Richard Kresja.

¹³³ David Sneed, “Avila is waking up to smell the oil,” *Telegram-Tribune*, 27 March 1999.

future. That's going to be another hit on Avila Beach when they have to dismantle the plant."¹³⁴

The idea of the Central Coast as an industrial dumping ground gained currency among local environmentalists. Along with Avila and Diablo, numerous other examples of ecological despoliation could be found on the San Luis shoreline. On the Guadalupe Dunes, south of Avila, petroleum-coated dead animals were discovered suspiciously close to Unocal's Guadalupe oil field in 1988. Citizens complained of dune contamination, but Unocal denied responsibility. In 1992, following a raid at Unocal offices, state officials disclosed that the company had covered-up in excess of 200 leaks and 31 plumes at Guadalupe. An estimated 8.5 million gallons of oil had been spilled.¹³⁵ At Morro Bay, environmental malpractice dated back to the nineteenth century. Morro Rock, "the firm, grim guardian of the placid bay," as described in a poem by C. Elwoods during the 1800s, had "his head" unceremoniously decapitated for building materials in the 1890s. Elwoods' "bold sentry" was joined by a four-stack power plant, courtesy of PG&E, in 1954.¹³⁶ In 1998, environmentalists, local ranchers and Native Americans joined forces to protest plans by the Hearst corporation to build a golf resort and hotel at San Simeon Point, a scenic peninsula on the north coast of the county. "Many are calling it 'the coastal battle of the decade'" noted the *Telegram-Tribune*. The Hearst Ranch Resort represented "the biggest

¹³⁴ Interview with Richard Kresja.

¹³⁵ Leonard Nevarez, Harvey Molotch & William Freudenberg, eds., "San Luis Obispo County: A Major Switching - Final Report," prepared for the US Department of the Interior, Minerals Management Service (March 1997), 95.

¹³⁶ C. Elwoods, "An Ode to Morro Rock," (1800s - specific date unknown), featured in Sharon Lewis Dickerson, *Mountains of Fire: San Luis Obispo County's Nine Sisters - A Chain of Ancient Volcanic Peaks* (San Luis Obispo: EZ Nature Books, 1990), 61.

development controversy since Diablo Canyon.”¹³⁷ Rather than Diablo plant standing alone as a symbol of industrial despoliation, a number of other ‘controversial’ schemes marked a coastline under siege by corporate polluters.

Both Unocal and PG&E presented their respective enterprises as ecologically benign in the hope of mitigating public antipathy. Unocal attempted to re-shine its tarnished reputation with a handout entitled *Yesterday, Today, Tomorrow* (1996). A photograph accompanied each time period, with ‘tomorrow’ depicted as a pristine dune wilderness, untainted by years of oil development. Unocal presented modern approaches to oil refining as in keeping with the natural landscape. A picture of a “[P]umping unit in Santa Barbara County, 1980,” showed a single, clean pump amongst a bushy green field. The shot had been taken between two thick tree branches, with the impression of nature guarding the machine, as if fondly wrapped around it.¹³⁸ Pacific Gas and Electric had presented Diablo nuclear plant as a ‘green industry’ for several decades. In *Slow Reckoning: The Ecology of a Divided Planet* (1997), Tom Athanasiou (who protested at Diablo) dated “the age in which ecological crisis met public relations, the age of corporate ‘greenwashing’,” as beginning with PG&E’s “tacky move” of spraying the denuded Diablo hillside with green paint in the early 1970s.¹³⁹ In the 1980s and 1990s, PG&E promoted Diablo plant as an ecologically-friendly neighbour. The Pacific Gas Community Center (formerly

¹³⁷ David Sneed, “Hearst Ranch Resort: The Showdown,” *Telegram-Tribune*, 3 January 1998.

¹³⁸ Unocal Corporation, *Yesterday, Today, Tomorrow: A Commitment of the Community* (Santa Maria: Unocal Corporation, 1996), 5.

¹³⁹ Tom Athanasiou, *Slow Reckoning: The Ecology of a Divided Planet* (London: Secker and Warburg, 1997 [1996]), 227.

Nuclear Information Center) proudly declared that “Our universe is bathed in radiation,” hoping to assuage public fears over energy production at Diablo Canyon.¹⁴⁰ Optimistic portrayals of nuclear power in the 1990s bore some semblance to the exaggerated atomic claims of the 1950s and 1960s. Handouts available at the Community Center noted that Americans soaked-up far more radiation by watching television and eating food than living alongside a nuclear plant.¹⁴¹ The American public nevertheless remained wary of nuclear energy. Pacific Gas struggled to locate an effective ‘greenwashing’ primer for Diablo Canyon.

Perhaps in recognition of its failure to secure mainstream public support for atomic power, PG&E gradually played down its nuclear portfolio during the 1990s. In official brochures, the corporation justified Diablo plant as part of “a broad mix of energy sources, both ‘alternative’ and conventional.”¹⁴² The onus was placed on an entrenched defence of the Diablo project, rather than heralding it as the harbinger of a new electrical age for California. Employees wanted the local community to accept and support Diablo plant on its own merits rather than linking it with a nuclear-fuelled future. PG&E presented itself as a benevolent California corporation. In 1983, the marine biology unit at Diablo Canyon gave the Steinhart Aquarium at San Francisco

¹⁴⁰ Exhibit on radiation at PG&E Community Center, 6588 Ontario Road, San Luis Obispo, during 1997.

¹⁴¹ One booklet on Diablo Canyon used a graph to illustrate different radiation sources. Whilst ‘living near site boundary of a Nuclear Power Station,’ represented a dose of 1 millirem per year, ‘natural radiation in food’ weighed in at 17 to 22 millirem. Another pamphlet available at the Community Center, published by Westinghouse in 1990, equated the radiation of a nuclear plant with that of a television set.

¹⁴² PG&E, “Diablo Canyon Power Plant,” pamphlet (undated, approx. mid-1990s).

two hundred mature abalone shellfish.¹⁴³ In early 1987, Pacific Gas provided \$420,000 for Golden Gate lights on the fiftieth anniversary of the bridge, a fitting gesture for an electricity provider.¹⁴⁴ The corporation also published a pamphlet on “30 Simple Energy Things You Can Do to Save the Earth.”

Critics dismissed PG&E’s ecological compassion as a public relations masquerade. The Mothers for Peace pertinently replied to the ‘30 Simple Energy Things’ booklet with their own ‘revised’ edition entitled “What PG&E can do to save the Earth.” The ‘alternative’ green agenda included shutting down Diablo plant, restoring “the land to its nature state prior to construction,” and erecting “a modest plaque on the revegetated site honoring Mothers for Peace, the Abalone Alliance, People Generating Energy and the many others who spoke up and acted to protect their families, community and the earth.”¹⁴⁵ In 1991, PG&E set up a booth at the annual San Luis Earth Day fair. Organisers of the event initially asked the corporation to limit its brochures to energy conservation rather than atomic promotion, but later conceded on the issue. Booklets on Diablo duly appeared on the Pacific Gas stall. Company spokesman Brad Thomas explained: “PG&E is a utility and part of it is a nuclear plant in this area and that’s part of PG&E. We’re good corporate citizens and we’re a green corporation and we’re not ashamed of anything we’re doing.”¹⁴⁶ *Earth Journal* later

¹⁴³ PG&E, *Diablo Canyon Newsletter* (March 1983).

¹⁴⁴ Mireya Navarro, “PG&E rides out storm - Utility faces changed market, cutbacks,” *San Francisco Examiner*, 15 March 1987.

¹⁴⁵ Mothers for Peace, “Revised Special Edition: What PG&E can do to save the Earth - 30 Simple Energy Things You Can Do To Save The Earth” (undated), SSPP.

¹⁴⁶ “Earth Day Clan fumes over PG&E’s participation,” *Telegram-Tribune*, 13 April 1991.

responded with a cartoon of a vulture holding a pro-nuclear banner, along with a report entitled “Gag me with a green ad.”¹⁴⁷

Environmentalism cynicism towards PG&E reprised the sentiments of Thomas Turner in ‘Eco-Pornography or How to Spot an Ecological Phony,’ an article featured in *The Environmental Handbook* (1970), prepared for the original Earth Day in April 1970. In rebuttal to PG&E’s claim that “We keep a smile on Mother Nature’s Face,” Turner had argued that activities at Diablo Canyon instead suggested that “Mother is having a miscarriage.”¹⁴⁸ PG&E leafleting at the Earth Day Fair in 1991 represented an act of environmental blasphemy to the Mothers for Peace.¹⁴⁹ For many activists, corporate infiltration reflected the loss of Earth Day as a down-to-earth, spontaneous and genuine occasion. However, businesses had always attempted to buy into Earth Day, with Dow Chemical and Ford both providing contributions to event organisers in 1970.¹⁵⁰

PG&E tours of Diablo Canyon also remained controversial. Opponents of nuclear power had always been uncomfortable with Pacific Gas taking busloads of local citizens, children, even tourists, to the Pecho Coast and indoctrinating them with propaganda. The Abalone Alliance mimicked PG&E’s tour for school-kids in the

¹⁴⁷ Jack Yorida, “Gag Me With a Green Ad,” *Earth Journal*, 2/9 (September 1991), 8.

¹⁴⁸ Thomas Turner, “Eco Pornography or How to Spot an Ecological Phony,” *The Environmental Handbook*, ed. Garrett de Bell (New York: Ballantine/Friends of the Earth, 1970), 263.

¹⁴⁹ “Earth Day Clan fumes...”

¹⁵⁰ Dow Chemical and Ford Motors both proffered contributions to the Earth Day steering committee at the University of Michigan. See Robert Gottlieb, *Forcing the Spring: The Transformation of the American Environmental Movement* (Washington: Island Press, 1993), 110, 351-2.

early 1980s. The Alliance reprinted a page from the colouring book that corporate executives handed out free to youngsters, whereby a cartoon 'Eco-otter' showed students the location of Diablo Canyon on a map of California. The otter mouthed 'Get ready for some fun!,' whilst the other sites marked on the map - Lake Tahoe, Hollywood, Disneyland and Seaworld - indicated that Diablo plant, or perhaps Diablo atomic theme park, ranked alongside the best entertainment on offer. "It's propaganda, that's what, and its aimed at your children," wrote the Abalone protesters on their version, and implored local residents to "Call their school and say, Don't Send My Kids On A Radiation Vacation!"¹⁵¹

In June 1992, school-worker Kathy di Peri indeed refused to take her students on a pre-arranged trip to Diablo Canyon marine laboratory. Di Peri objected to a visit on the grounds that "[T]he children would see the sea life and the beautiful coastline and think PG&E were protecting the environment."¹⁵² The corporation was accused of surreptitiously buying off citizens at a vulnerable age. The question of safety also arose. Was it right for schoolchildren to spend significant time at an operational nuclear plant, and nestle up to atomic power? Di Peri, and the Mothers for Peace, thought not. Mother Jane Swanson noted that "PG&E is working hard to enhance this comfort by inviting school classes to come visit the plant site and by giving away coloring books... Comfortable children are not the same as safe children."¹⁵³ The

¹⁵¹ Abalone Alliance, "What's Wrong with this Picture?" flyer, AAC file: Abalone Alliance flyers on Diablo.

¹⁵² Kathy Di Peri, "The Powers that be," *Earth Journal* (August 1992).

¹⁵³ Letter from Jane Swanson to editor, *Telegram-Tribune* (undated, approx. May 1995), SSPP file: Cal Poly.

Mothers for Peace resented the idea of a nuclear plant as pseudo-summer camp for local children. Kathy di Peri was made redundant because of her protests.

PG&E had always searched for a convincing green label with which to tag Diablo plant. The corporation never needed to look very far. The Pecho Coast, after all, represented a clear aesthetic testament of corporate intent, with its green valleys and ocean vistas acting as spectacular adverts for the eco-friendly atom. Whilst pro-nuclear handouts filled with statistics indicated the harmlessness of radiation, the physical landscape surrounding Diablo plant offered the best material evidence of atomic power as ecologically benign. The visual juxtaposition of an orderly man-made plant alongside wild coastal scenery even intimated the compatibility between nuclear and natural creativity. After driving “up PG&E’s two-lane private road, past scrub oaks, truck farms and grazing cattle” in 1990, journalist David Helvarg found his “first view of the massive, double-domed nuclear reactors sitting on their rugged coastal bluff...awe-inspiring.”¹⁵⁴ George DeBord in the *Telegram-Tribune* related: “The drive into Diablo is one of the prettiest in the county. The road winds and twists up and over green hills, dips down and wanders along the Pacific. The land, the setting, is almost perfect representation of the beauty and delicacy of San Luis Obispo County. Were I to write about this county and its sensitivity, I would write about such a stretch of land.” The beauty of the coastline undoubtedly rubbed off on the concrete domes, rendering the two atomic knolls as man-made extensions of the Irish Hills. However, DeBord expressed unease at the scale of PG&E’s atomic enterprise,

¹⁵⁴ David Helvarg, “Blowing up Diablo Canyon.”

questioning whether “a man [can] build something that large and make it work?”¹⁵⁵ For others, the overbearing industrial project had spoiled a coastline that deserved more comprehensive protection. Wild remnants stood as stark reminders of the once glorious Pecho wilderness. Whilst PG&E brush-paintings of Diablo Canyon softened the harsh lines of the nuclear plant so that it almost blended in with surrounding lands, the seamlessness of nature and nuclear artifice remained suspect. Living in an age predominantly critical of atomic ‘progress,’ the combination of nuclear plant and coastal wilderness seemed too absurd to contemplate. Deer munching on the well-kept lawns adjacent to the two reactor domes, below a sign announcing “Welcome to Diablo Canyon nuclear power plant,” appeared a scene straight out of Yellowstone National Park. Yet, at Diablo, the instinctive reaction was to look for a rope tethering the resident fauna rather than reach for the camera. PG&E security officers, meanwhile, insisted that tourists refrained from photographing the local plant life.

During the 1990s, PG&E focused on the resident wildlife of the region to promote its nuclear project as environmentally friendly. *Sea Changes*, a promotional film made for PG&E by Patrick Mulvey, presented Diablo Canyon as an “ancient place” of natural wonder, with prehistoric survivors such as the bishop pine and horsehill fern still thriving on Pecho hills. Whales swam past the promontory on their 9,000-mile journey between Baja California and Arctic waters. Northern elephant seals hauled out on the rocky shoreline of Diablo Cove. The production failed to mention PG&E’s nuclear plant. By avoiding 600 acres of atomic industry, and instead concentrating on 10,000 acres of relatively undisturbed coastline, *Sea Changes* provided a visual retort

¹⁵⁵ George DeBord, “Massive Diablo plant hasn’t proven itself yet,” *Telegram-Tribune*, 18

to those conservationists who considered nature lost at Diablo Canyon. Mulvey had fashioned a natural history film, a celluloid celebration of the Pecho wilds.¹⁵⁶ On environmental tours of Diablo, PG&E guides highlighted the rich flora and fauna of the Pecho Coast. Pacific Gas representatives emphasised the healthy natural environment surrounding the two reactors. An advert in the *Telegram-Tribune* during May 1993 featured a picture of three sea otters, headlined by an invitation: “Diablo Canyon is open to groups of all kinds.” PG&E (and the sea otters) tempted citizens to “Join us for an Environmental Tour of Diablo Canyon. Come to a place where sea otters, deer, peregrine falcons and other wildlife roam free. A place where you can see marine life - sea urchins, spiny lobster, and sea cucumbers close up.”¹⁵⁷

People ventured to Diablo Canyon to marvel at organic rather than atomic attractions. The dangers of the nuclear landscape faded before a foreground of flourishing natural variety. Oft-touted criticisms of atomic energy seemed less salient in an environment resounding with ecological vitality. Meanwhile, the focus on local ecology suggested a certain degree of biocentric awareness within PG&E tour operations. Talk of sea otters and peregrine falcons pointed towards the possibility of seeing a nuclear reactor through non-human eyes. Nevertheless, the tour existed to win public support for Diablo plant rather than explore biophilic notions. As with national parks, the wildlife did not always appear on time for the watching audience. Sea otters often ate outside

February 1985.

¹⁵⁶ *Sea Changes: A Year at Diablo Canyon* (undated), PG&E promotional documentary, filmed by Patrick Mulvey. Held at Diablo Canyon Community Center.

¹⁵⁷ PG&E advertisement, “Diablo Canyon is open to Groups of All Kinds,” *Telegram-Tribune*, 12 May 1993.

Diablo Cove, whilst peregrine falcons alighted on distant rocks. When the wildlife failed to show up, PG&E relied on the facilities of the marine laboratory for entertainment. Guides encouraged every tourist to touch and hold a native resident of Diablo waters, albeit a craggy crab rather than a furry animal. In the thrill of prodding and poking marine locals, visitors felt inclined to interpret the radioactive reactors humming nearby as harmless, if not irrelevant additions to the natural environment. The proof of safe nuclear power lay in their hands.

[12] An Environmental Balance-Sheet

The deer eating on PG&E turf and the marine life housed in the laboratory ultimately failed to communicate the whole story of Diablo Canyon. Whilst resident crustaceans endured the over-eager fondling, local abalone populations suffered a drastic decline due to the operation of Diablo plant. From 1988 onwards, biologists noticed a substantial decrease in the numbers of red and black abalone surviving in Diablo Cove.¹⁵⁸ The artificially heated waters in the cove encouraged ‘withering foot syndrome,’ a natural pathogen triggered by high temperatures. Whilst no ‘three-eyed fish’ similar to the one found at Mr. Burns’ Springfield nuclear plant in *The Simpsons*, the mutated abalone nonetheless pointed to similarly unexpected side-effects of an operational atomic project.

As part of its obligations to state regulatory agencies, PG&E documented changes in the marine environment in and around Diablo Cove. The 1997 Thermal Effects

Monitoring Program report noted the establishment of a warmer, southern-style environment in the cove, caused by Pacific Gas constantly discharging heated coolant water into the sheltered bay. Fish endemic to warmer ocean ecosystems, typically found off Southern California, colonised the inlet, whilst native cold water species vacated their Diablo homes. An artificial warm water system supported an “unusual community” of fish, invertebrates and algae. Leopard shark, bat ray and white seabass swam in Diablo Cove, but proved rare elsewhere along the Central Coast. Black and yellow rockfish and painting greenlings did not venture into the bay, preferring to confine their activities to surrounding, cooler waters. The year-round operation of Diablo plant also created an artificially constant water temperature. Without the natural fluctuations in temperature caused by seasonal climatic changes, the reproductive processes of bull kelp were compromised. Bull kelp forests in contact with the thermal plume experienced premature ageing.¹⁵⁹

However, in comparison to the visible damage inflicted by oil spills at nearby Avila, the transformation of Diablo Cove from a cold to warm water environment seemed subtle and complex. Significant impacts of plant operation failed to emerge far beyond the cove itself. PG&E biologist Jim Blecha characterised Diablo Cove as “environmentally dynamic” by natural design, irrelevant of the nearby nuclear

¹⁵⁸ PG&E, “Ecological Monitoring Program: 1995 Status Report, Summer and Fall Surveys,” (February 1996), 1-3/4, held at the Morro Bay US Fish and Game offices.

¹⁵⁹ Pacific Gas and Electric Company, “Diablo Canyon Power Plant: Thermal Effects Monitoring Program Analysis Report, Chapter 1 - Changes in the Marine Environment Resulting from the Diablo Canyon Power Plant Discharge,” (December 1997) (author’s personal copy, courtesy of California Regional Water Quality Control Board, Central Coast Region). For details of the “unusual community”, see summary section, especially S-34; for kelp effects - see 4-36.

machinations.¹⁶⁰ El Nino, Pacific storms, together with the migrations of sea creatures, refuted the existence of a static marine equilibrium.¹⁶¹ The promotional film *Sea Changes* depicted a natural clash between the “tremendous energy of the Pacific Ocean and stubborn resistance of the land,” as though an ecological battle prefigured Diablo plant by several millennia. The celluloid production emphasised that “there is no typical year at Diablo Canyon...each year carves out its own calendar.”¹⁶² PG&E had nevertheless disturbed a complex set of ecological relationships, with unforeseen and consequential results.

In 1995, County Supervisor Bud Laurent informed the California Regional Water Quality Control Board (CRWQCB) of data amiss in PG&E environmental reports.¹⁶³ A subsequent investigation by the Attorney General and US Environmental Protection Agency (EPA) found that Pacific Gas had consistently failed to detail the negative effects of the water intake system on marine larvae over an eight-year period. The corporation was duly charged with violation of the Clean Water Act. In May 1997, the California Environmental Protection Agency announced “the settlement of one of the largest environmental cases in California history.”¹⁶⁴ PG&E agreed to pay a \$14 million fine for withholding information from the CRWQCB concerning its operation

¹⁶⁰ Conversations with Jim Blecha, Diablo Canyon, 21 August 1997.

¹⁶¹ PG&E, “Thermal Effects Monitoring Program: 1990 Annual Report” (March 1991), 1-5.

¹⁶² *Sea Changes: A Year at Diablo Canyon*.

¹⁶³ David Sneed, “PG&E to pay \$14 million fine in Diablo environmental case,” *Telegram-Tribune*, 24 May 1997.

¹⁶⁴ “PG&E to pay \$14 million to settle Diablo Canyon missing data case,” California Environmental Protection Agency press release, 27 May 1997 (author’s personal copy, courtesy of CRWQCB).

of Diablo plant. EPA employee Cheryl McGovern couched the deal as “one of the largest environmental settlements reached since the 1989 Exxon Valdez disaster.”¹⁶⁵ However, the actual scale of ecological damage remained a contested issue. On the day of the settlement, PG&E spokesman Jeff Lewis admitted “We are happy to get this to a conclusion,” but also underlined that “We don’t believe there has been any kind of impact to the environment.”¹⁶⁶ Lewis argued that the damage to “tiny larvae” hardly justified government press releases implying that “We’re taking up everything from sea otters to whales. That’s absolutely not true.”¹⁶⁷ Pacific Gas suggested that the exclusion of the data represented an administrative oversight. Officials had omitted information regarding fish larvae, deeming it “flawed” or “irrelevant.”¹⁶⁸

In contrast, Michael Thomas from the CRWQCB stated that “We consider the impact to be significant” in reference to the ecological changes at Diablo Cove.¹⁶⁹ Research indicated a reduction of up to 90% in marine life passing through the cooling system. Felicity Marcus, Regional Administrator for EPA’s Western region, saw the issue as one of trust, asserting that: “PG&E is paying a hefty price for taking the wrong course here. This settlement sends a loud and clear message...that such conduct is just plain wrong. California’s Central Coast is a national treasure.”¹⁷⁰ The \$14 million fine did

¹⁶⁵ Glenn Roberts Jr., “Estuary program in the right place at the right time,” *Telegram-Tribune*, 29 May 1997.

¹⁶⁶ Sneed, “PG&E to pay \$14 million...”

¹⁶⁷ Silas Lyons, “\$3.6 million for Morro estuary,” *Telegram-Tribune*, 28 May 1997.

¹⁶⁸ Chris Bowman, “Big PG&E settlement over nuclear plant,” *Sacramento Bee*, 28 May 1997.

¹⁶⁹ David Sneed, “State mulls Diablo impacts,” *Telegram-Tribune*, 12 December 1998.

¹⁷⁰ “PG&E to pay \$14 million,” California EPA press release.

have its ecological beneficiaries. Morro Bay enthusiasts received \$3.6 million for an estuary protection and improvement project. The *San Francisco Chronicle* welcomed the dollar windfall as “manna from heaven.” Marcus declared the settlement “a win for the coastal environment.”¹⁷¹

Acting on evidence of damage to the marine environment, the CRWQCB debated options for disciplining PG&E in late 1999. The Water Board considered modifications to the cooling system of Diablo plant in order to mitigate adverse environmental effects. Alternatively, state officials raised the possibility of a land deal protecting the coastline following the decommissioning of the two nuclear reactors. County Supervisors planned to measure public support for the preservation scheme by placing the issue on the electoral ballot in March 2000. The voting initiative was labelled the Diablo Resource Advisory Measure, or DREAM.¹⁷²

Significantly, the environmental charges against PG&E lacked any nuclear dynamics. Radiation remained in the background of the ecological dispute over fish larvae data. Problems at Diablo plant were not dissimilar to pollution incidents at other large-scale industrial complexes. In 1992, a chemical spill adjacent to the plant’s medical building led to workers being temporarily evacuated.¹⁷³ During 1995, the *Telegram-*

¹⁷¹ Alex Barnum, “\$14 Million Settlement by PG&E to Help Coast,” *San Francisco Chronicle*, 28 May 1997.

¹⁷² David Sneed, “Water board working to preserve PG&E land,” *The Tribune*, 17 August 1999; David Sneed, “PG&E supports Diablo preserve,” *The Tribune*, 3 October 1999; David Sneed, “Board sends land-saving measure to voters,” *The Tribune*, 20 October 1999; David Sneed, “PG&E in hot water over discharge,” *The Tribune*, 19 November 1999; David Sneed, “Water board delays sanctions,” *The Tribune*, 20 November 1999.

¹⁷³ “Diablo chemical spill prompts evacuation,” *Telegram-Tribune*, 22 June 1992.

Tribune reported another “two non-radioactive spills,” 600 gallons of mineral oil, and 3,700 gallons of a “bleach-like substance.” The 1995 incidents provoked little response from officials or locals. PG&E spokesperson Shawn Cooper suggested that hardly any spillage reached the shoreline, whilst Jerry Le Moine, Director of County Environmental Health, seemed optimistic that no long-term problems would result from the accident. Moine simply pointed out: “It’s a big ocean.”¹⁷⁴

Elements of the nuclear landscape meanwhile emerged as beneficial to local wildlife. In the December 1987 edition of *PG&E Progress* an article entitled “Protecting Wildlife near Diablo Canyon” described the creation of “one of the most productive man-made reefs in the world” off the Pecho Coast. Pacific Gas employees had used rubble from the storm-damaged breakwater in 1982 to construct an artificial reef in 1985. A kelp forest swiftly grew over the reef, whilst snails, crabs and starfish sheltered among the man-made rocks. In a case of green economics, PG&E saved half a million dollars by creating a haven for marine life rather than hauling the broken concrete and stone off-site. Biologist Dave Behrens explained that “[O]ur main mission is to help the company operate the Diablo Canyon plant safely and efficiently. But each and every one of us here is an environmentalist at heart, and we’re also here because PG&E cares about the California environment.”¹⁷⁵ In 1990, PG&E established a Land Stewardship Program, designed to identify rare wildlife species on the Pecho Coast, protect or restore crucial wild habitats (exempting the area used by Diablo plant) and promote better grazing practices on the two ranches.

¹⁷⁴ Jerry Bunin, “Diablo reports two non-radioactive spills,” *Telegram-Tribune*, 25 July 1995.

¹⁷⁵ “Protecting Wildlife Near Diablo Canyon,” *PG&E Progress* (December 1987), 4-5.

The plan declared PG&E the “caretaker of these irreplaceable natural and cultural resources.”¹⁷⁶ Proclamations of environmental stewardship in the 1990s bespoke a different relationship between PG&E and the Pecho Coast to that of the late 1960s, when corporate propaganda portrayed Diablo as a unremarkable and worthless stretch of typical California coastline, ideal for building on rather than protecting.

In 1981, fledgling peregrine falcons visited the rugged slopes of Diablo Rock. The young birds probably flew to Diablo Canyon from the peregrine eyrie on Morro Rock, ten miles to the north. Falcon numbers had been decimated by intense use of DDT in the post-1945 period. A build-up of pesticides in the fat reserves of the falcons manifested itself in eggshell thinning, leading to many broken clutches and increased embryo deaths. By 1970, the number of California peregrines had fallen from over two hundred pairs to just two known couples.¹⁷⁷ Falcons gradually recovered during the 1980s and 1990s, due to a comprehensive captive-breeding programme coupled with the sheer resilience of the species. Following the discovery of the Diablo Rock roost in 1981, the Santa Cruz Predatory Bird Research Group (SCPBRG) liased with PG&E to initiate a monitoring and egg incubation programme for the peregrines.¹⁷⁸

Alongside construction activity, Abalone protest, and watching officials, the falcons had chosen an unlikely setting for their recovery. In a 1982 report, the SCPBRG

¹⁷⁶ Pacific Gas and Electric Company, “Diablo Canyon Land Stewardship Program” (undated, approx. 1993), 1 (author’s personal copy, courtesy of PG&E).

¹⁷⁷ SCPBRG, “Peregrine Falcon Activity at Diablo Canyon, 1981-1994.” Report held at the Santa Cruz Predatory Bird Research Group (PBRG), Joseph M. Long Marine Laboratory, University of California, Santa Cruz.

¹⁷⁸ Letter from Brian Walton to Ed Coulson, Pacific Gas and Electric Company, 11 March 1981, PBRG.

described a far from placid scene: “Ever since their arrival at Diablo Canyon they [the peregrines] have been subjected to low flying aircraft, PG&E research boats, Fish and Game research boats, and recreational fishing boats going in and out of Diablo Cove.” The birds nevertheless responded with only “mild interest” or the occasional “Kakk.”¹⁷⁹ A SCPBRG summary report noted that the local peregrines were “remarkably tolerant of human activity close to the Diablo Rock nest site.”¹⁸⁰ The birds also flew between the two reactor domes on foraging flights. From 1982 onwards, falcons nested at Diablo Rock every season, except 1985, when they chose to raise their young on a coastal cliff at the southern end of the plant site. The 1985 nest was located at the base of a meteorological tower, just a quarter of a mile from the power plant building. The nuclear landscape had clearly become their permanent home. SCPBRG project leader Brian Walton noted that such an “unusual site” entailed few unexpected problems. Results for breeding at Diablo proved “typical” for the recovery programme, whilst PG&E’s generous financing helped the SCPBRG project survive.¹⁸¹

The security of the Diablo property, meanwhile, offered the peregrines a degree of protection from the hazards and intrusions of the ‘outside’ world. In 1987, a baby falcon accidentally flew into one of the plant’s electricity lines, but other Diablo peregrines prospered. Between 1984 and 1992, falcons successfully raised 15

¹⁷⁹ Dan Thompson, SCPBRG, “Diablo Canyon Peregrine Falcons 82 reproductive cycle,” (20 October 1982), PBRG.

¹⁸⁰ SCPBRG, “Peregrine Falcon Activity at Diablo Canyon, 1981-1994.”

¹⁸¹ Conversations with Brian Walton, Santa Cruz Predatory Bird Research Group, Santa Cruz, 15 August 1997.

fledglings on the Diablo site, whilst the SCPBRG hatched a further 34 eggs in captivity. Wildlife biologists released birds of Pecho origin at the Channel Islands, Muir Beach and El Capitan, in Yosemite National Park, as well as Diablo Canyon.¹⁸² DDT had nearly killed off California peregrines in the 1960s. The nuclear landscape, with similar post-war origins and insidious dangers, nonetheless helped secure the return of the species.

Other endangered birds found sanctuary on the Pecho Coast. In the early 1990s, PG&E staff spotted a golden eagle flying over Crowbar Rock, to the north of Diablo plant.¹⁸³ Brown pelicans also visited the rocky cliffs during their travels, using the coastal crags as resting sites. Back in 1983, the Abalone poem *The Pelicans* had predicted the loss of such a fine bird in the face of disaster at Diablo Canyon. Yet, in the 1990s, pelicans seemed to approve of PG&E property. Only electricity pylons served notice of the man-made dangers on site.

Similarly, sea mammals adjusted to changes brought to the Pecho Coast by Pacific Gas. Elephant seals and sea lions gradually gained confidence in the artificial structures added to the local shoreline. Sea lions had populated the region since at least 1928, and seemed determined to continue their historic use of Lion, Pup, Diablo and Pecho rocks as haul out sites.¹⁸⁴ The PG&E breakwater served as a new resting-

¹⁸² "Peregrine Falcon Activity..." report. Loss of baby peregrine noted in *Telegram-Tribune*, 16 May 1987.

¹⁸³ PG&E, "A Sensitive Plant and Wildlife Resource Inventory of Diablo Canyon Lands, Volume One," (1995), 3-8. Map of sensitive wildlife in volume two. PG&E's marine laboratory holdings (PGML), Diablo Canyon power plant.

¹⁸⁴ James R Chambers Jr., "Population Studies of California Sea Lions Near Diablo Canyon, California," MS Thesis (1979), Cal Poly collections.

place for resident elephant seals. A report on pinniped haul out sites in October 1987 noted that “seals appear to be tolerant of human activities at Diablo Canyon power plant and have found isolated areas between Point Buchon and Rattlesnake to have their young.”¹⁸⁵ The Pecho Coast aided the recovery of California sea otters, mammals close to extinction in the late nineteenth century, but engineering their own remarkable comeback in the latter part of the twentieth century. In monitoring local sea life, biologist Sue Benech discovered that sea otters had skilfully adapted to the atomic landscape. The predators relished the protection afforded them by the nuclear exclusion zone.¹⁸⁶ Diablo Cove furnished sea otters with shelter and food, and became a popular haul-out site along the coastline. The calm waters off the artificial breakwater also provided a fine environment for pupping. Faced with oil pollution along the coast and irate fisherman unwilling to share ‘their’ shellfish catches, sea otters found the protected waters and kelp forests at Diablo to be useful sanctuaries.

During the nineteenth century, sea vessels relentlessly hunted the California gray whale in waters off the Central Coast. In 1998, whales migrating past the Pecho Coast faced the incursions of the US Navy, testing the effects of its latest submarine sonar detector on the travelling schools. The sea mammals gave the naval vessel a disapproving wide berth. Experimenting with sonar technology posed a direct affront to their watery domain.¹⁸⁷ California gray whales journeying past Diablo Canyon

¹⁸⁵ Sally Krenn & Suzanne Benech, “Distribution of Pinniped Haul-Out Sites in the Vicinity of Diablo Canyon power plant, July 1973 through June 1986” (October 1987), PGML.

¹⁸⁶ Conversations with Sue Benech, consultant biologist, Diablo Canyon, 21 August 1997.

¹⁸⁷ David Sneed, “Sounds below the surface,” *Telegram-Tribune*, 23 January 1998.

were nonetheless untroubled by the giant nuclear plant on the cliffs. Individual animals travelled freely through the edges of the warm water plume leaking out from Diablo Cove. PG&E biologists noted that a few of the 2,600 annual travellers even fed on plankton near Diablo Canyon.¹⁸⁸ The leviathan of the sea accepted the atomic behemoth without recourse. During his voyage to Alaska in 1879, John Muir witnessed a comparable scene of coastal cordiality. Travelling along the northern shores of California, Muir referred to passing whales as “brave neighbors, fellow-citizens in the commonwealth of the world.” He likened the workings of the vessel on which he sailed to the processes of marine biology. Whilst impressed by the “truly noble spectacle” of the ship, with its “great iron heart,” Muir implored his readers to consider “the hearts of these whales beating warm against the sea, day and night, through dark and night, on and on for centuries.” The enduring presence of whales, porpoises and other marine creatures afforded Muir a “striking revelation of warm life in the so-called howling waste.” A century later, whales continued to migrate along the California coast, passing by the ‘iron heart’ of Diablo Canyon.¹⁸⁹

The presence of peregrines, pelicans, otters and whales off the Pecho Coast challenged traditional notions of a nuclear landscape as a dangerous, industrial wasteland. Visits by endangered species countered perceptions of an atomic tract as fundamentally devoid of natural life. That animals freely chose to live alongside two nuclear reactors intimated that humans had perhaps exaggerated the alien and

¹⁸⁸ PG&E, “Environmental Investigations at Diablo Canyon 1986 volume one - Marine Ecological Studies,” (December 1987), 9; *Endangered Species Monitoring at Diablo Canyon* (1990), PG&E documentary by Patrick Mulvey, available at Diablo Canyon Community Center.

¹⁸⁹ John Muir, *Travels in Alaska* (Boston: Houghton Mifflin, 1979 [1915]), 5.

uninviting qualities of atomic energy sites and production. Unlike many of their human brethren, faunal citizens of San Luis Obispo readily adjusted to a nuclear plant. Wildlife favoured the Pecho Coast because, at some level, they recognised a lack of immediate danger at Diablo plant. Compared to fields patrolled by gun-toting ranchers and sprawling cities devoid of natural habitat, PG&E's property harboured less apparent dangers. A safely-operated nuclear enterprise represented friendly territory for creatures seeking sanctuary.

That wildlife found refuge in a nuclear landscape nonetheless illustrated the desperate need of animal species for unpopulated and unkempt terrain. PG&E's nuclear buffer zone stamped the area as worthless land in terms of practical human use, opening it up to purchase by interested flora and fauna. The preservation of resident species further depended upon PG&E's adherence to nuclear safety protocol. An accident at Diablo plant, however unlikely, presented a significant risk to animals yet to fully recover from holocausts unleashed on them in prior decades by ruthless hunters and chemical industries. Rare falcons and pelicans had, without realising, chosen an endangered environment as their home. Questions remained over the ethics of celebrating the return of threatened species to such risky terrain. The failure of natural instincts to inform resident fauna of radiation danger demonstrated the vulnerability of wild species to the more clandestine forms of human technology. In June 1997, PG&E employees discovered a green sea turtle resting at the water intake structure. Officials checked the health of the marine traveller, then transported him by boat to a safer position, one mile offshore. He then swam strongly in a westerly direction, away

from Diablo Canyon. The green reptile proved unaware of the dangers of the atomic landscape.¹⁹⁰

Whether PG&E could fully distinguish between green public relations and genuine environmental stewardship, however, remained hotly disputed. Pacific Gas exploited their faunal guests for propaganda purposes, using photographs of local sea otters to supplant less favourable pictures of life at a nuclear plant site. Promotions of sea life at Diablo in the 1990s seemed little different from idyllic images of waterfowl swimming close to Vallecitos distributed by the corporation during the 1960s. PG&E offered no guarantee that the Pecho Coast would retain its wild character beyond plant decommissioning. One future vision for Diablo depicted a luxury housing development nestled between the Pacific Ocean and the Irish hills, the faunal refuge transformed into an suburban enclave for refugees escaping LA smog. Whilst Diablo Canyon in the 1990s resembled an unlikely Noah's Ark, an artificial haven for all kinds of wildlife, the future status of the Pecho Coast remained uncertain.

Making sense of animal attitudes towards Diablo plant challenged the cultural precepts of modern Americans. Native Americans on the Pecho Coast had communicated with the local fauna in prior centuries, respecting and relishing the antics of coyote and raven, bat and whale. In the 1990s, however, interpreting animal actions had become unnecessarily complex, framed by economic, political, and, ultimately, anthropocentric considerations. Intimate connections with faunal kin had been severed by Judeo-Christian religion, Enlightenment rationalism, capitalism and

¹⁹⁰ PG&E letter to NRC, 3 July 1997, detailing green sea turtle visit and treatment as part of a

city-based life. Human attitudes towards atomic power dominated assessments of the Pecho environment. Wildlife biology attempted to fill the void in human understanding, but refrained from wild speculation on the relationships between roaming animals and nuclear plants. Creatures had clearly adapted to the atomic landscape, but ascertaining faunal perspectives on nuclear power perhaps begged an elusive level of inter-species dialogue. Was there a struggle between human and natural agents at Diablo, with falcons, otters and coyotes actively engaged in a defiant eco-defence (and reclamation) of historic territories? Or was it a case of peaceful co-existence, Edward Hicks' famous painting *Peaceable Kingdom* (1834) eminently appropriate to the scene of deer munching next to the Diablo Canyon welcome sign, humans inviting their fellow species into a verdant, albeit human-designed paradise? Perhaps the animals were just taking advantage of a free lunch, irrespective of the nuclear domes and *sapien* psychology.

Conclusion

Coastal Trails

[1] Nuclear Park or Nature Park?

During the mid-1960s, the Pecho Coast had been divided into two distinct entities. PG&E established a nuclear plant and buffer zone on land south of Point Buchon. Meanwhile, state officials from the Department of Parks and Recreation purchased land to the north. The old Spooner house and Hazard Ranch, along with the Morro Bay sandspit, became Montana de Oro State Park. It seemed as though the northern and southern stretches of the Pecho Coast had parted company, that the headland had somehow been cracked apart at Point Buchon. The Coon Creek inlet immediately north of Buchon suggested just that, its meandering stream and sandy shore marking a geographical rift between the rugged cliffs either side. Two very different perceptions grew up around Montana de Oro and Diablo during the 1970s and 1980s. Obispans recognised the northern Pecho coastline as a place of recreation, natural wonder, and refuge. Diablo instead embodied an off-limits, industrial, and dangerous landscape. A high barbed wire fence marked the official dividing line between the two properties. By the 1990s, few citizens dared to cross it.

Enrico P. Bongio from San Luis Obispo declared Montana de Oro to be “a real jewel in the state park system” in a 1991 letter to park authorities. Montana Park had become a celebrated landscape of San Luis County, a bona-fide county treasure since its inception in 1965. The worth of the park was measured in its recreational potential

and rugged natural scenery. Bongio appropriately deemed Montana de Oro (or Mountain of Gold) a wonderful 'jewel' "due to the wide variety of still unspoiled flora and fauna" on offer there.¹ The wild coastal landscape imparted a sense of vibrant natural history, with humans as occasional visitors to a greater, flourishing scene. Montana was lauded for its 'primitiveness.' Vacationers adjusted to its sparse facilities, the wooden pit toilets and unpaved parking lots. As *PG&E Progress* magazine commented in 1973: "Relatively undeveloped, with primitive campsites, Montana de Oro has been little changed by time. The grizzlies are gone, but deer and other wildlife abound. On the remote and rugged coast, one can visualize the days when settlers smuggled hides to waiting Yankee ships in defiance of Mexican laws."²

Despite sharing a common natural and human heritage with Montana de Oro, the south Pecho shoreline received less favourable commentary. Whilst PG&E lauded Montana as a fine California park, the corporation interpreted Diablo lands as ripe for industrial development. During the late 1960s, Pacific Gas officials and Nipomo aficionados encouraged citizens to dismiss the region as 'worthless' in biological and recreational terms. Strewn with JCBs, building materials, and concrete mixers, Diablo quickly lost its natural identity. Attention focused on the nuclear pantheon as the centrepiece of the southern coast. A nuclear landscape engendered notions of progress for humankind and endless consumption rather than advising Americans to reconnect with the land and wild nature. A commercial advert for nuclear fusion presented a picture of hunter-gatherers in the wilderness as a deplorable life styled by

¹ Enrico P. Bongio, San Luis Obispo, to Kenneth Schwartz, 2 July 1991, Harold Miossi Collection (HMC), Cuesta College Environmental Archives, box 001, file 4.

² "Parks of California - Morro Bay State Park," *PG&E Progress*, L/5 (May 1973), 8.

the absence, rather than presence, of atomic power.³ Applying organic adjectives to a nuclear landscape ultimately seemed irrational or beside the point. Citizens rarely connected Diablo with Montana de Oro, the nuclear park with the state park.

However, the reactions of faunal residents to Montana and Diablo differed somewhat from those of their human brethren. On the ground itself, coyotes and kingsnakes failed to read the 'keep out' signs at Diablo or the 'visitors welcome' boards at Montana de Oro. The dividing fences carried no special messages, and creatures treated them similarly to natural barriers of dense shrubbery or rocky climbs. All kinds of wildlife crossed the border between north and south. Peregrine falcons, brown pelicans and bald eagles flew freely along the full extent of the Pecho headland. Lizards located basking rocks wherever their instincts took them. Sea otters failed to recognise any oceanic boundaries. Oaks and shrubbery adorned both lands, emphasising the common ecological ground of the California headland. The bluffs and crags of Montana de Oro and Diablo remained a single entity.

Wildlife biologists noted the animal reactions and came to a controversial conclusion. With the exception of the nuclear site itself, most of PG&E's property offered native flora and fauna a sanctuary on par with, if not better than, the Montana wilds. Biologist Sue Benech, who monitored sea otter movements in the area, referred to the Diablo project as "a blessing in disguise."⁴ 10,000 acres of natural habitat had been

³ Advertisement for the magazine of the Fusion Energy Foundation, *Fusion*. With the header, "Imagine a world without fusion," the advertisement outlined the dangers implicit in a 'world' lacking nuclear energy. Reprinted in *It's About Times* (June-July 1981), 6.

⁴ Conversations with Sue Benech, Consultant Biologist, Diablo Canyon, 21 August 1997.

preserved at a cost of just 500 or so acres. Brian Walton, of the Predatory Bird Research Group, interpreted the region as “like a ghost-town in terms of human impacts.”⁵ Human use revealed a great deal about both sides of the Pecho Coast. A nuclear plant had been automatically assumed to be detrimental to nature, whilst a state park correspondingly glorified as a model of wilderness preservation. However, taking a bird’s eye perspective, the two regions looked surprisingly similar. Both landscapes were marked by windy roads leading to concentrations of people. Cars congregated at the parking lots of Diablo and Spooner coves. Diablo and Montana appeared almost symmetrical along a mirror-line drawn at Point Buchon. From high in the air, human activity on the Pecho Coast resembled two distinct ant-hills, serviced by worker drones on prescribed routes to their mother hives. The ants of the bigger hill, on the south side, appeared more organised in their pursuits than their northern cousins. Southerners focused on the hive rather than wandering backcountry slopes. Hot and sunny weekends attracted insects to Montana de Oro in their droves.

By the 1990s, half a million people visited Montana de Oro every year.⁶ Whilst a state-commissioned survey indicated that the majority of visitors wanted to keep Montana as a “primitive park,” sheer recreational dynamics threatened to overload the natural carrying capacity of the northern Pecho Coast.⁷ Car parks overflowed in peak

⁵ Conversations with Brian Walton, Predatory Bird Research Group, Santa Cruz, 15 August 1997.

⁶ The annual attendance for 1986 was 421,743, noted in California State Park and Recreation Commission, “Montana de Oro State Park General Plan,” (June 1988), 14. In 1993, 653,347 citizens visited the park, see Warren Groshong, “The preservation of Montana de Oro,” *San Luis Obispo County Telegram-Tribune*, 7 March 1994.

⁷ Montana de Oro User Survey, 1986, featured in “Montana de Oro State Park General Plan,” 164. Asked, “What kind of place should this park be?,” notable visitor responses included, “Leave it

months, and citizens related their desires for additional space for Recreational Vehicles. Spooner Cove suffered from its own popularity. Visitors raided tide-pools for food and souvenirs. Alden Spooner held impressive picnics at the cove back in 1890, but even his entrepreneurial skills could not have catered for crowds a century on. The California Department of Parks and Recreation attempted the difficult task of balancing recreational needs with ecological protection. Development projects had to be set against their environmental costs. Educational programmes highlighted the natural worth of the region, and implored tourists to act with ecological responsibility. A puppet show starring 'bucket monster' warned kids of the danger in continually ravaging local sea creatures.⁸ In stark contrast, human activity on the Diablo lands was strictly curtailed. Most of the coastline remained off-limits, with only the small-time rancher and watchful biologist allowed to walk the bluffs. The absence of rowdy recreationists translated into unmolested wildlife and undisturbed coves (with the notable exception of Diablo Cove). Attractive blowholes and a coastal 'stone circle' of rocks remained hidden features of the landscape, retaining their pristine quality courtesy of infrequent obtrusions by Pacific Gas. Nature seemingly had a better chance of getting on with her business on PG&E property.

Awed at the grand scenery of the Pecho Coast, English literature professor Steven Marx remarked how "the feeling reminded me of my first view of Yosemite Valley at

as it is: primitive, quiet, unspoiled, undeveloped," and "Montana de Oro is special as a primitive park - we need these!"

⁸ Conversations with Diane McGrath, Department of Parks and Recreation, San Luis Obispo, 29 August 1997.

age twelve.”⁹ Marx experienced such wonderment on a PG&E tour-bus winding its way down to Diablo plant, rather than during a stroll in Montana de Oro State Park. The journey along PG&E’s isolated weaving road bred anticipation of a grandiose scene lying ahead. The sheer giganticism of a nuclear plant overlooking the Pacific Ocean resembled ‘monumental scenery’ found in Yosemite National Park. Marx could have compared his experience on the Diablo drive more directly with the gratification offered by California’s Highway One, or, closer still, the windy entrance road into Montana de Oro Park. Yet, the Yosemite analogy imparted both the scale of the Diablo picture, and the irony of situating it alongside one of California’s most treasured natural landscapes. Asked for his thoughts on the matter, PG&E employee Tim Robasciotti enthused that “the scenery at the plant is absolutely stunning! (Yosemite it’s not, but stunning it is). The drive to and from work is very serene and often you will see white-tail deer, coyotes, racoons, rabbits, hawks...and even an occasional roadrunner.”¹⁰

Diablo was not the only nuclear landscape to be discussed in park-like terms in the 1990s. In January 1996, the *High Country News* reported that environmentalists and park authorities hoped to turn Hanford Nuclear Reservation in Washington State into a national wildlife refuge.¹¹ During the 1940s, the tiny settlement of Hanford became

⁹ Steven Marx, “Priesthoods and Power: Some Thoughts on Diablo Canyon,” *Mapping American Culture*, ed. Wayne Franklin & Michael Steiner (Iowa City: University of Iowa Press, 1992), 293.

¹⁰ Interview with Tim Robasciotti (email), Arroyo Grande, 11 June 1999. However, critics might also compare the nuclear reactors to the ugly side of Yosemite National Park, onerous structures equivalent to the tacky gift shops dominating Yosemite village.

¹¹ Ken Olsen, “At Hanford, the real estate is hot,” *High Country News*, 28/1 (22 January 1996).

a top-secret nuclear research site, whilst nearby Richland was transformed into an atomic city, serving as a dormitory facility for the nuclear enterprise. Historian Richard White noted the fission-fuelled frontier imagery at work in Hanford, with Richland taking the atom and a covered wagon as its town symbol.¹² Nonetheless, military activity (and resultant contamination) was concentrated upon thirty square miles of the Hanford reservation. 530 square miles remained “as it was in 1942” when the US army first set aside the area for bomb-making. A valuable tract of land had been left to natural processes for fifty years. The *High Country News* duly claimed that the “last substantial stretch of sagebrush-steppe grassland - perhaps anywhere in the world” had been inadvertently protected by military ownership.¹³ Mule deer and bald eagles surveyed the landscape of cottonwoods and bunchgrass. With the disbandment of Hanford, the future of the region suddenly seemed more precarious than during military testing. Farmers and developers joined environmentalists in staking claims to post-nuclear terrain, hoping to re-settle the atomic domain with orchards and farms. Local Yakima Indians asserted their right to use ancestral lands within the Hanford site in accordance with an 1855 treaty.

The US Fish and Wildlife Service first considered reintroducing the Mexican Wolf to the White Sands Missile Range in New Mexico in the mid-1980s. White Sands represented a remote haven where wolves could wander freely without ranchers taking

¹² Richard White, “Hanford: Boomtown of the Atomic Frontier,” *High Country News*, 28/1 (22 January 1996). Hanford and Richland are discussed in chapters by Stanley Goldberg, “General Groves and the Atomic West: The Making and the Meaning of Hanford,” and Carl Abbott, “Building the Atomic Cities: Richland, Los Alamos, and the American Planning Language,” *The Atomic West*, ed. Bruce Hevly and John M. Findlay (Seattle: University of Washington Press, 1998), 39-89, 90-115.

¹³ Olsen, “At Hanford, the real estate is hot.”

pot-shots at them. The National Park Service meanwhile assumed responsibility for the preservation of the Trinity Test Site at White Sands and former-Minuteman silos in South Dakota.¹⁴ In 1995, the Rocky Mountain Arsenal (RMA), Colorado, a locale used since the 1940s for the manufacture of deadly chemicals, was dubbed ‘The Nation’s Most Ironic Nature Park.’¹⁵ Closed down since 1982, the Denver site was the object of an expensive clean-up operation. The Army Corps of Engineers described the ‘center’ of the RMA as “the most contaminated square mile on Earth.”¹⁶ However, the wider territory boasted a diverse array of wildlife species, including twenty bald eagles. Officials foisted the region as a place of nature tourism.

Traditional notions of atomic sites as despoiled and dangerous tempered desires to lavish praise upon the new nuclear ‘parklands.’ Newspaper articles typically cast Hanford and Rocky Mountain Arsenal as ironic landscapes. The oxymoron of a toxic refuge lingered in reportage. Such terrains were taken as exceptional, if not hard to accept. The combination of healthy natural wonder enveloping lethal human enterprise tested modern sensibilities. Americans had become accustomed to segregated landscapes with nature and culture residing side by side, yet rarely did the worst of humanity share space with the best of nature. Used to being the dominant party in every environment, Americans were forced to psychologically adjust to the idea of Mexican wolves freely wandering White Sands, a territory off-limits to almost

¹⁴ “Strangelove Park,” *High Country News*, 26/13 (25 July 1994), and Visitors Pamphlet by the National Atomic Museum, Albuquerque (circa 1995).

¹⁵ “The Nation’s Most Ironic Nature Park” (Urban Design Forum, Denver), reprinted in William Cronon, ed., *Uncommon Ground: Toward Reinventing Nature* (New York: WW Norton, 1995), 59.

¹⁶ Army Corps commentary noted in Alexander Wilson, *The Culture of Nature: North American Landscape from Disney to Exxon Valdez* (Cambridge, MA: Blackwell, 1992), 281.

every US citizen.¹⁷ In *Uncommon Ground* (1995), historian William Cronon offered the Rocky Mountain Arsenal as a pertinent illustration of the blurring ground between ‘natural’ and ‘unnatural’ environments. The relationship of toxicity with natural productivity proved eminently engaging, with the idea of a paradoxical landscape informing academic analysis. Cronon interpreted the toxicity of the RMA as “one of the most important things supporting the wild nature for which the place is now celebrated.” He also argued that “the familiar categories of environmentalist thinking don’t seem to work” at places such as the RMA, where ‘unnatural’ activities have enabled animals and plants to flourish.¹⁸

Along with other examples found across America, the Rocky Mountain Arsenal provided ammunition with which to shoot down traditional notions of nature and humanity as distinct enterprises rather than syncretic forces. Cronon targeted the American environmentalist’s holy grail of wilderness, highlighting the cultural roots of this supposedly non-human reality. The term ‘wilderness’ represented a social construction, implicitly ignorant of Native American land uses.¹⁹ Un-peopled landscapes had become idealised. Existing national parks, flooded with tourists and ecologically-managed by park officials, hardly constituted potent rejoinders to such criticism. In *Savage Dreams* (1994), journalist Rebecca Solnit articulated a

¹⁷ The US military resisted the wolf reintroduction scheme proposed for White Sands. “We do not want wolves on the White Sands Missile Range,” declared one Army leader in 1987. See Steve Grooms, *The Return of the Wolf* (Minocqua: Northword, 1993), 159. Military intransigence stalled the programme until 1990, when a court ruling stipulated that the US army was legally bound to comply with the recovery project under the terms of the Endangered Species Act of 1973.

¹⁸ Cronon, *Uncommon Ground*, 28.

¹⁹ For details of how Euro-American conservationists excluded Native Americans from national park ‘wilderness’ landscapes, see Mark D. Spence, *Dispossessing the Wilderness: Indian Removal and the Making of the National Parks* (New York: Oxford University Press, 1999).

preference for the raw landscape of the Nevada Test Site (NTS) and its community of anti-nuclear protesters and Western Shoshones over the contrived scenes and souvenir hunters of Yosemite Valley. Solnit “fled Yosemite” for desert solitude, noting the strangeness of discovering “this country’s national Eden so full of disturbing surprises and its Armageddon so comparatively pleasant, at least for its wide skies and gallant resistance community.”²⁰ Meanwhile, the contributors to *Uncommon Ground* expressed a desire to value more inclusive ‘cultural’ landscapes.²¹ A niche appeared to open up for the creation of nuclear parks.

Amongst the many paradoxes of atomic and military lands, a significant irony nonetheless passed unnoticed. Diablo, RMA, and White Sands showed the divide between nature and humanity, as well as the common ground. On a practical level, human absence proved the key factor in the vitality of nature at such places. The lingering presence of toxins went unnoticed by wildlife attracted to testing grounds - what mattered most for them was the lack of more obvious forms of human artifice. Instead of showing the fallacy of ‘wilderness’ as a human-free place, nuclear landscapes verged upon modern re-interpretations of the concept. The 1964 Wilderness Act defined wilderness as “an area where the earth and its community of life are untrammelled by man, where man himself is a visitor who does not remain...an area of undeveloped Federal land retaining its primeval character and influence

²⁰ Rebecca Solnit, *Savage Dreams: A Journey into the Landscape Wars of the American West* (New York: Vintage, 1994), 367.

²¹ Cronon, *Uncommon Ground*, 27-8.

without permanent improvements or human habitation.”²² Designated nuclear landscapes featured vast reserves off-limits to American settlers. Surveillance patrols guarded land perimeters, blocking civilian incursions into nuclear terrain. Nature flourished in such areas precisely due to forced separation from people and their works, resident flora and fauna insulated *from* rather than immersed *in* human life. The nuclear buffer zones of the twentieth century, originally set aside as ‘worthless lands’ but later recognised for their ecological significance, harked back to the national park experience a century earlier.²³ Although the plutonium ponds at the RMA hardly rivalled the Rocky Mountain splendour of Yellowstone’s geysers, a parallel denouement had taken place in America’s first national park. In 1872, Yellowstone National Park was established to preserve a core area of geothermal wonders. Only later did administrators recognise the wilderness value of surrounding lands protected ‘by accident’ in the hope of discovering further geological curiosities. Nuclear landscapes certainly challenged the conventional notion of ‘wilderness,’ but they did not shoot it down. Instead, the atomic parks, with their craters and coyotes, offered new and insightful ways to explore the term.

Because of the heady cultural symbolism attached to nuclear landscapes, from utopian white cities to apocalyptic deserts, few Americans had foreseen the biotic realities of RMA, Diablo, and White Sands. Americans had anticipated severely polluted

²² Wilderness Act of 1964, specific extract cited in Ian McTaggart Cowan, “Wilderness-Concept, Function, and Management,” in *Conservators of Hope: The Horace M. Albright Conservation Lectures* (Moscow, Idaho: University of Idaho Press, 1988), 176.

²³ See chapter three of Alfred Runte, *National Parks: The American Experience* (Lincoln: University of Nebraska Press, 1979) for an elaboration on the idea of national parks as “worthless lands.” Whilst extolled for their spectacular scenery, early national parks such as Yellowstone (1872) were deemed of little value for resource extraction purposes.

industrial sites, poisoned for literally thousands of years. Military and industrial culture had been universally interpreted as, at best, uninterested in the natural environment, at worst, highly destructive of it. In *The Tainted Desert* (1998), Valerie Kuletz detailed the differences between Native American and US military conceptions of Yucca Mountain adjoining Nevada Test Site. Whilst Native Americans considered the desert sacred and alive, modern “scientific discourses and representations” legitimated “the designation of areas ...as toxic and nuclear waste dumping grounds - a particularly brutal objectification of the non-human world.”²⁴ The mindset that led to Diablo plant and Yucca nuclear waste depository reflected the modern Western desire to denigrate the natural world as object, as intrinsically inferior, as a sacrifice zone. According to Carolyn Merchant, the separation of the human being from the rest of the natural world, the idealisation of science and the machine, and the turn against spiritualism within nature, all dated back to popular Enlightenment dogma. The motives behind the creation of atomic landscapes seemed more appropriate to the park in Francis Bacon’s *New Atlantis*, a place of scientific experiment, rather than John Muir’s conception of Yosemite.²⁵

Hence, the park-like description of nuclear terrain proved wholly unexpected, flora and fauna prospering despite the objectifying tendencies of military-industrial culture.

²⁴ Valerie L. Kuletz, *The Tainted Desert: Environmental and Social Ruin in the American West* (New York: Routledge, 1998), xvii. Also, Richard W. Stoffle & Michael J. Evans, “American Indians and Nuclear Waste Storage: The Debate at Yucca Mountain,” *Policy Studies Journal*, 16:4 (1988), 751-67.

²⁵ See Carolyn Merchant, *The Death of Nature: Women, Ecology, and the Scientific Revolution* (San Francisco: Harper and Row, 1980), 294-5, 86. Merchant viewed the deadly toxicity of the nuclear age, and specifically the accident at Three Mile Island, Pennsylvania, as symptomatic of the ‘death of nature,’ precipitated by the male-dominated scientific revolution and its motifs of rationality and technological control of the earth.

As scientists and army personnel focused their experiments on core land sites, distant reaches of the reservations were ignored or simply left alone. Nature recovered more quickly than expected at the testing grounds of the nuclear age, plants and coyotes reclaiming the bombed-out craters and polluted soils of Ground Zero. The military-industrial mindset governed discourse and activities inside the concrete domes and army warehouses, but failed to dominate the surrounding landscape. Despite the secretive human culture that articulated disrespect for the natural world, prairie dogs and eagles claimed the sacrifice zone as their own.

At Diablo Canyon, PG&E lacked the freedom or desire to experiment with the landscape on the scale that military officials exercised at Hanford or Trinity. Despite the broader anti-nature culture behind atomic development, Pacific Gas worked within a public domain, with legal constraints on its environmental activities. The California utility focused on the safe (and commercial) operation of its nuclear plant, and remained adamant that surrounding nature would remain undamaged. The company even moved to restore and protect wild flora and fauna on the southern Pecho Coast, instigating an environmental stewardship programme in 1990.²⁶ In the hope of 'naturally' limiting summer bush fires, PG&E annually hired a herd of goats.²⁷ In contrast to Park Service protocols, ranching and agriculture were allowed to continue on Diablo lands. Whilst in keeping with the cultural history of the Pecho Coast, ranching ultimately compromised the restoration of a 'pristine' ecosystem. Land use

²⁶ See Pacific Gas and Electric Company, "Diablo Canyon Land Stewardship Program: Toward Conserving Biological Diversity," booklet (undated, approx. 1993).

²⁷ Francesca Cline, "Caring for kids: Diablo Canyon employees nurse traumatized goats," *Telegram-Tribune*, 2 March 1996. The goats had been traumatised not by their work at Diablo plant, but after the trailer transporting them to the headland crashed near Los Angeles.

practices proved complex at Diablo nuclear park, just as they did at any state or national park. At Montana de Oro, officials grappled with an inherited legacy of former inhabitants, notably a giant eucalyptus grove in the Hazard region. The 1988 park plan detailed aims to replace the eucalyptus with native plant species. A number of citizens nevertheless articulated an appreciation for the grove, including the endangered monarch butterfly, which utilised the exotic tree as nest.²⁸ Restoring the native landscape, recreating 'wilderness,' necessitated difficult choices at both Pecho stretches. However, the Parks Department remained the more cogent and determined of the two parties. Restoring Diablo lands to a pristine state clearly stopped short of ripping out the two nuclear plants embedded in the coastal bluffs.

Conservation efforts in the 1990s revealed local aspirations to reconnect the two halves of the Pecho coastline. In 1993, a collection of government officials, corporate conservationists, and dedicated environmentalists officially opened the Pecho Coast Trail, a seven-mile loop through the Diablo lands. The outcome of a joint operation, or "path of cooperation," between the California Coastal Commission, PG&E, and the Nature Conservancy, the trail project had taken ten years to reach fruition. Built by the California Conservation Corps, it cost PG&E \$300,000.²⁹ "Never have I walked a more expensive trail," noted hiker John McKinney, who attended the opening ceremony. He also joked of the similar cost overruns at nearby Diablo plant. The route started at the entrance gates of PG&E property, keeping a close line with the

²⁸ "Montana de Oro State Park General Plan," 210, 48.

²⁹ Melvin Lane, speaker at trail opening, cited in John McKinney, *A Walk Along Land's End: Discovering California's Unknown Coast* (New York: Harper Collins, 1995), 145. Cost noted by McKinney, 133.

southern arch of the headland overlooking Avila Port. The restored Pecho Coast lighthouse provided a stopping point and attractive feature of the trail. The journey offered Californians the chance to discover for themselves the natural riches of the southern Pecho landscape, the intricate intertwining of coastal oak branches, the superb ocean views, and even the occasional rattler. The wilderness had been opened up for the first time in many years. McKinney pointed out that “[H]iking here is a rare treat. The land between Avila Beach and Montana de Oro State Park is ten miles of coast that nobody knows, where nobody goes.”³⁰ Both McKinney and PG&E highlighted the land’s obscurity and privacy since Spanish Mission times. That the Pecho Trail bore local significance was played out on the cover of the 1994 San Luis Obispo visitors guide, with a panoramic picture of the ‘Victorian Lady’ lighthouse nestled between wild shrubs and crashing Pacific waves.³¹ The Pecho Coast trail booklet related the southerly lands as “some of the most pristine in the state.” It painted life on the headland as “Living on the Edge,” a dynamic place of passing whales, ancient volcanic flows and earthquakes - without mention of Diablo nuclear plant.³²

The presence of the atomic project nonetheless complicated visions of extending the trail northwards to Montana de Oro. The 1988 Montana de Oro Park plan stated a desire to re-unite the Pecho Coast as part of the California Coastal Trail, a state-long

³⁰ Ibid., 133; 132.

³¹ “San Luis Obispo, California,” San Luis Obispo Chamber of Commerce Visitors Guide (1994), front cover. In the same magazine, an advertisement by Pacific Gas noted how “Your neighbours at PG&E are pleased to be a part of the central coast.”

³² “Hike the Pecho Coast Trail,” leaflet (undated), designed by Pandora & Co., Los Osos.

1,300-mile walking route.³³ Progress nevertheless stalled. The stumbling block, the crack in a complete Pecho Coast, remained Diablo nuclear plant. Safety and security considerations pre-empted any serious thoughts of the public sauntering between nuclear plant and Pacific Ocean. Ultimately, Point Buchon did not mark the critical line dividing north from south. The atomic project thwarted coastal reconnection.

In November 1994, PG&E successfully extended the licence of the Diablo project into the twenty-first century. Unit 1 reactor was expected to shut down in 2021, with Unit 2 following four years later. Obispans considered the long-term prospects for the southern Pecho Coast past 2025. Moves by the California Regional Water Quality Control Board to protect Diablo as parkland, rather than losing it to housing estates or industry, reflected a resurgent conservation interest in the region. Ideas of setting aside the Diablo lands for park status dated back to 1959, when the National Park Service earmarked the whole Pecho Coast for protection.³⁴ The California Coastal Commission Survey of 1977 recommended the terrain between Diablo nuclear plant and Point Buchon for “designation to protect the view, marine resources, and potential recreational use.” It discounted land from Diablo Cove to the Pecho Lighthouse “largely on the existence of the Diablo Canyon power plant.”³⁵ In the 1960s, local conservationists entertained the notion of extending Montana de Oro southwards. At a park advisory committee meeting held in 1966, an unidentified person “commented

³³ “Montana de Oro State Park General Plan,” 146.

³⁴ National Park Service, “Pacific Coast Recreation Area Survey” (1959), Sierra Club Collection (SCC), Bancroft Library, University of California, Berkeley, 71/103c, box 110, file 1.

³⁵ California Coastal Commission, “Staff Recommendation of Designation of Coastal Areas Where Power Plants would be Inconsistent with Coastal Act Objectives,” (December 1977), 61, Abalone Alliance Collection (AAC), Abalone Alliance Safe Energy Clearinghouse, San Francisco, file: California Coastal Commission.

that we should never disregard moving into the Rancho Pecho owned by O. C. Field, for future park acquisition when the time is right.”³⁶ The 1988 Montana de Oro General Plan noted similar intentions.

The viability of a state park at Diablo Canyon will partially depend on the successful decommissioning of PG&E’s nuclear project. In the late 1990s, PG&E officials considered how best to store a growing number of spent fuel rods at Diablo, following delays in the opening of a national repository for nuclear waste at Yucca Mountain, Nevada. Wary over the transportation of high-level waste along highways and past urban dwellings, environmentalists motioned for the radioactive artefacts to stay on the headland indefinitely.³⁷ Permanent on-site storage might, however, jeopardise moves to protect the Pecho coastline. Diablo nature preserve may be forced to await the removal of all traces of the nuclear artifice. Alternatively, atomic plants might be deemed appropriate features for a twenty-first-century state park. An interpretative programme would explain how a nuclear sarcophagus had come to rest alongside ancient Indian graves. On a tour of the restored Pecho lighthouse in 1993, John McKinney pondered how tourists of the future might view “a moth-balled nuclear plant turned museum” at Diablo Canyon. The nature-lover contemplated: “Will such visitors be amused at this quaint artifact from the late industrial age? Or will they be a

³⁶ Notes from the Montana de Oro Advisory Committee meeting, Morro Bay Museum, 6 December 1966, Ian McMillan Collection (IMC), Cuesta College Environmental Archives, box 15, file 24.

³⁷ High-level radioactive waste from Diablo Canyon, along with waste from all other US nuclear plants, will eventually be stored at Yucca Mountain repository. Priority will be given to spent-fuel heralding from the oldest reactors. PG&E may have to keep waste on site until past 2020. See David Sneed, “A place for nuclear waste,” *Tribune*, 12 December 1999.

little horrified, the way we modern museumgoers regard the Civil War surgeon's medical bag with its knives and saws?"³⁸

[2] Pecho Stories

In June 1995, the *Telegram-Tribune* reported an incident at Montana de Oro. A mountain biker came across a rattlesnake on a backcountry trail. The *Tribune* described how, "after a few warning shakes of its tail, the serpent struck at the mechanical monster that had disturbed it." Unfortunately, the snake got caught in the spokes, and the cyclist killed the rattled reptile.³⁹ The confrontation had been short and deadly, with the rattlesnake the clear loser. The story seemed unrepresentative of life at Montana de Oro, a park celebrated as a place of peaceful co-existence between humans and nature. Images of devilish rattlers and mechanical monsters edged it closer to historic tales of Diablo Canyon. The encounter resembled explorer J. Smeaton-Chase's meeting with a Pecho rattler in 1911. PG&E's atomic project had often been nicknamed an 'industrial monster' by anti-nuclear protesters. Atomic opponents had expected nature to die at Diablo under the weight of the nuclear juggernaut, like the rattlesnake under the wheels of the bicycle.

Nature never died there. Neither did it die in stories of Diablo. Abalone backcountry protesters and PG&E biologists continued a conversation between people and place

³⁸ McKinney, *A Walk Along Land's End*, 139. Describing Diablo as "a wonderful spot for a public park," Langdon Winner similarly suggested keeping PG&E's project as a poignant "monument to the nuclear age." See Langdon Winner, *The Whale and the Reactor: A Search for Limits in an Age of High Technology* (Chicago: University of Chicago Press, 1986), 177.

³⁹ *Telegram-Tribune*, 29 June 1995.

started in Chumash times. The 'warning shakes' of the Montana rattler harked back to a period when Chumash Indians pictured earthquakes as signs of restless underground serpents. Native American stories embodied a reciprocal, sometimes amorphous, dialogue between humans and their environs. Chumash narratives merged explanations of indigene belief systems and cultural traditions with valuable details regarding local fauna and flora. Storytellers regularly relied on material supplied by nature to set the tone of their narrative. Experiences of collecting shellfish, wandering in the woods, and watching coyotes were passed on in stories, wild animals and physical landscapes re-emerging in the guise of oral testimony. Chumash tales embodied a culture of nature.

Modern Americans rarely immersed themselves in the natural world to the same degree as their Native American predecessors. However, twentieth-century stories of Diablo Canyon still related experiences of California nature. The sweeping headland continued to influence modern narratives. Sierra Club preservationists Fred Eissler and Martin Litton wrote of the entangled coastal oaks and wild canyons in carefully crafted letters. The physical and spiritual experience of walking across the Irish Hills heightened Starhawk's determination to stop PG&E's atomic plant. Meanwhile, wildlife biologists detailed the actions of coastal creatures, attempting to create objective narratives of animal lives. Such stories appeared, on the surface, to have very little in common with each other or with Native American tales, but all reflected a desire to understand and appreciate the natural world. Walking the Pecho trail

offered a path towards reconnection with other species, towards rediscovering a culture more in step with nature.

“I am alarmed when it happens that I have walked a mile into the woods bodily, without getting there in spirit...What business have I in the woods, if I am thinking of something out of the woods?” pondered Henry David Thoreau in *Walking* (1862).⁴⁰

Many Americans who talked of Diablo Canyon felt no such obligation to immerse themselves in the coastal oaks of the Pecho Coast and put to one side their thoughts of outside life. Terra firma subsequently drifted in and out of narratives, scenic shorelines often smothered by the woes of civilised society. Rather than seeking transcendental inspiration *from* trees and wildlife, a number of Californian visitors superimposed religious metaphor *on* the material scene. The Spanish word ‘Diablo’ associated the headland with malevolent forces. Smeaton-Chase’s story of the devilish rattler unfairly victimised one reptilian resident of the Pecho terrain. Sierra Club conservationists Will Siri and Ansel Adams interpreted Diablo as ‘prophetically named’ by devilishly compromising the preservation of Nipomo Dunes. Diablo Canyon represented an unwelcome chapter in the story of moving sands south of Pismo Beach. During the nuclear age, potent atomic imagery threatened to vanquish nature from Diablo narratives. ‘Diablo Canyon’ became the nomenclature of atomic discourse rather than a living coastal environment. Stories dealt with the wonders or dangers of nuclear energy. In the late 1960s, PG&E betrayed little interest in promoting the natural splendour of the Pecho Coast. Any talk of earthly beauty

⁴⁰ Ralph Waldo Emerson / Henry David Thoreau, *Nature / Walking* (Boston: Beacon Press, 1991 [*Walking* 1862]), 78-9.

threatened the vitality of the nuclear project planted there. Disconnecting nature from the Diablo narrative suited corporate intent.

During the 1970s and 1980s, Diablo served Californians as a springboard for discussing broader economic, social and environmental issues. Financial sections in San Franciscan tabloids interpreted the troubled fortunes of Pacific Gas on the Pecho Coast as symbolic of the American nuclear industry in its death throes. Abalone activists associated Diablo plant with the decay of social values, whilst setting up an alternative community in nearby Los Osos Valley. The 1981 Peace Camp was infused with themes of grassroots democracy and the protest spirit, thousands of assembled activists finding fertile ground for a new society on the California Central Coast. Shortcomings in traditional American democracy resounded throughout the Diablo story. Public antagonism towards atomic power failed to derail PG&E's project, whilst the Mothers for Peace struggled against the inherent momentum of the nuclear licensing process. In the 1990s, Diablo Canyon had assumed the form of a cosy tale told by protest veterans of how they became involved in social justice, deep ecology, or humanitarian programmes. Protest at Diablo represented an outburst of youthful idealism before settling down to a humdrum job. In the San Luis community, citizens thought of schools, taxes, evacuation plans, jobs, and electricity when they spoke of Diablo. Events on the southern Pecho Coast were tied to the county's burgeoning environmental consciousness, reflected in the willingness of the *Tribune* to criticise industrial and corporate ventures. Academic Harvey Molotch described "the impact of this [Diablo] event on San Luis Obispo" as "comparable to

that of the Santa Barbara Channel oil spill on the city of Santa Barbara.”⁴¹ The significance of Diablo transcended corporate, county, and even state boundaries.

The diverse array of stories regarding Diablo Canyon all reflected human perceptions. Social traditions and political sentiments shaped the words of storytellers. Narratives rarely accepted nature as co-author and prominent protagonist in the Diablo story. Chumash tales weaved natural forces and human agents together in a fashion vastly removed from twentieth-century renditions. However, modern Americans failed to guarantee such a strong voice for nature. Ignorance of physical place translated into narratives deriding Diablo’s oak-clothed hills as ‘a treeless slot,’ lacking in intrinsic worth. Yet the absence of nature in modern narratives did not always work to jeopardise regional ecological survival. The nuclearized identity of Diablo brought thousands of protesters to defend a landscape few had even heard of, let alone experienced. Backcountry protesters linked landmarks along the coast with social ideals. Abalone Alliance members realistically bound human fates with those of the natural world. During the 1990s, new stories of Diablo contained abundant references to flora and fauna. The PG&E stewardship programme, the Pecho Coast trail, and newspaper details of pollution at Diablo Cove all highlighted ecological circumstances. Without the input of resident flora and fauna, the Diablo story, after all, remained incomplete, a tale of one species in artificial isolation rather than about the evolution of a biotic community. John Muir received his “most impressive

⁴¹ Leonard Nevarez, Harvey Molotch, William Freudenburg, eds., *San Luis Obispo County: A Major Switching*, Final Report for the US Department of the Interior, (Minerals Management Service, March 1997), 65. Nevarez et. al. rated the effect of Diablo plant on San Luis County as comparable to that of the Santa Barbara oil spill on Santa Barbara, noting how both ‘events’ “polarized sentiments among county residents, and brought forth a new generation of local activists and government officials” (p.65).

sermon” from a “cheerful confiding bird” by a stream in Tennessee, valuing his communion with non-human brethren.⁴² Pelicans and peregrines no doubt had something to add to the story of Diablo Canyon whilst gathered on ocean-sprayed rocks.

[3] An Alternative Energy Landscape

The activities of Americans on the Pecho Coast varied over time and in extent, yet *Homo sapiens* rarely settled on the promontory. Chumash visited irregularly, following seasonal variations and subsistence needs. Without a village on the headland, their impact on the Pecho Coast tended to be spread out, rather than focused on one specific site. Hunters tracked their prey through oak woods or scoured the shoreline for shellfish. Native Americans most likely treated the Pecho landscape as a domain shared with other creatures and spirits. Euro-American conquest of California ushered in a period of unbridled ecological change, colonists bringing virulent diseases, domesticated animals, and alien political, economic and religious ideals. The Spanish established a Mission at San Luis Obispo, although Diablo Canyon remained isolated from Catholic prayer. In the 1800s, the Pecho Coast became private property for the first time. Euro-American owners exercised, at least in legal terms, total dominion over their territorial acquisitions. Ranching began, with rising numbers of cattle testing the carrying capacity of coastal grasses. The human

⁴² John Muir to Rachel Trout Beach, 13 September 1870, cited in Stephen Fox, *The American Conservation Movement: John Muir and His Legacy* (Madison: University of Wisconsin Press, 1981), 50. The letter can be found in the John Muir papers, Bancroft Library, University of California, Berkeley.

population failed to match bovine proliferation. Captain Wilson often resided in San Luis Obispo, whilst Luigi Marre preferred his own hotel at Avila Beach. Fred Hazard and Alden Spooner did stay at their ranches on the northern Pecho Coast. Spooner lavished attentions on the land immediately surrounding his family cabin, fostering new plants, a small-scale dairy, and an unexpected trading port. Spooner Cove represented a focal point of human endeavour, yet, as a whole, the Pecho Coast continued to be thought of as largely unsettled, wild, and remote terrain.

PG&E's plant signified the most concentrated use of the coastline in the region's history. Security fences nonetheless re-affirmed the status of the southern Pecho Coast as isolated land off-limits to casual visitors. Meanwhile, the creation of Montana de Oro State Park attracted vast numbers of recreationists to the northern Pecho Coast. A section of the coastline had been designated for common use, granting modern Americans the right to wander the shoreline like their Native American predecessors. The park system encouraged thousands of people to discover the land for themselves, but as visitors rather than permanent inhabitants. At Diablo Canyon, PG&E workers travelled daily to the Pecho Coast but returned home after their shifts. Generations of Americans had used, exploited, and valued the California headland, yet the promontory had never been settled in any meaningful way. The lack of sandy beaches at Diablo, or easy routes through the Irish Hills, served as geographical impediments to human encroachment.

Whilst Californians colonised Morro Bay and Pismo Beach, the Pecho Coast remained largely unsettled due to its inaccessibility and rocky demeanour. The lack

of dwellings on the rugged coastline benefited the non-human residents of the region, biotic communities flourishing without significant human intervention. In the absence of suburban gardens and cityscapes, the Diablo lands retained a semblance of their primeval wildness. When few people affected change there, and Diablo was invariably forgotten, flora and fauna continued to shape a coastal landscape. Wild nature appeared eminently capable of outlasting human culture on the Pecho Coast, native grasses growing over Chumash tombs, ranch-house relics, and, given time, elements of the nuclear landscape.

Rather than land for settlement, the Pecho Coast provided Americans with malleable forms of energy. Diablo Canyon served as an energy landscape in a far broader sense prior to the protracted installation of atomic appliances. Indigenous peoples gathered and expended energy in a direct relationship with the earth. The Diablo lands provided Native Americans with valued sustenance. They hunted animals and fish for food, as well as burning areas to encourage vegetation regrowth. During the nineteenth century, Euro-Americans utilised the Pecho Coast for raising crops and cattle. Coastal residents focused on exporting energy - as meat and dairy products - to outside markets. Energy production became an exploitative and commercial venture. New technologies fuelled entrepreneurial ambitions. Gas lanterns replaced open fires. Spooner tapped nature's economy for an ambitious hydropower project. Yet natural forces continued to demarcate human activity. Years of drought compromised ranching success, with dried grasses limiting forage. In the 1960s, PG&E envisaged a revolutionary project for the California coast that promised to overcome lingering dependence on natural resources. No longer did humanity have to depend on finite

coal and oil supplies and lengthy geological processes for its energy needs. The wonder of the atom pledged to free humans from natural boundaries. Americans could create their own suns, their own energy source. On completion, Diablo nuclear plant fed electricity into the homes of thousands of Californians. Marching pylons linked Diablo with distant places, plugging the Pecho Coast into a state-wide energy network. According to Pacific Gas, the environmental cost of nuclear generation was negligible. Whilst the atomic plant tapped the ocean for coolant, water was duly recycled back into the Pacific at Diablo Cove. Diablo Canyon was a prime example of the ultimate energy landscape. From providing the shellfish on Chumash hunts to producing “2000 megawatts of electricity - enough to serve more than 2 million people,” the Pecho headland had continued to meet rising human demands.⁴³ Yet, in the gradual escalation of energy production, an important bond between humans and the rest of nature had been severed. Out of grim necessity, thickly cemented walls divided the atom from the outside world. One species attempted to play God and outperform nature’s own energy provisions. When the lights from Diablo’s electrical enterprise finally go out, will the cut-off in power lead to a reconnection with nature, or will the nuclear project be replaced by even grander schemes of human dominion?

⁴³ PG&E, scenic postcard of “Diablo Canyon Nuclear Power Plant.”

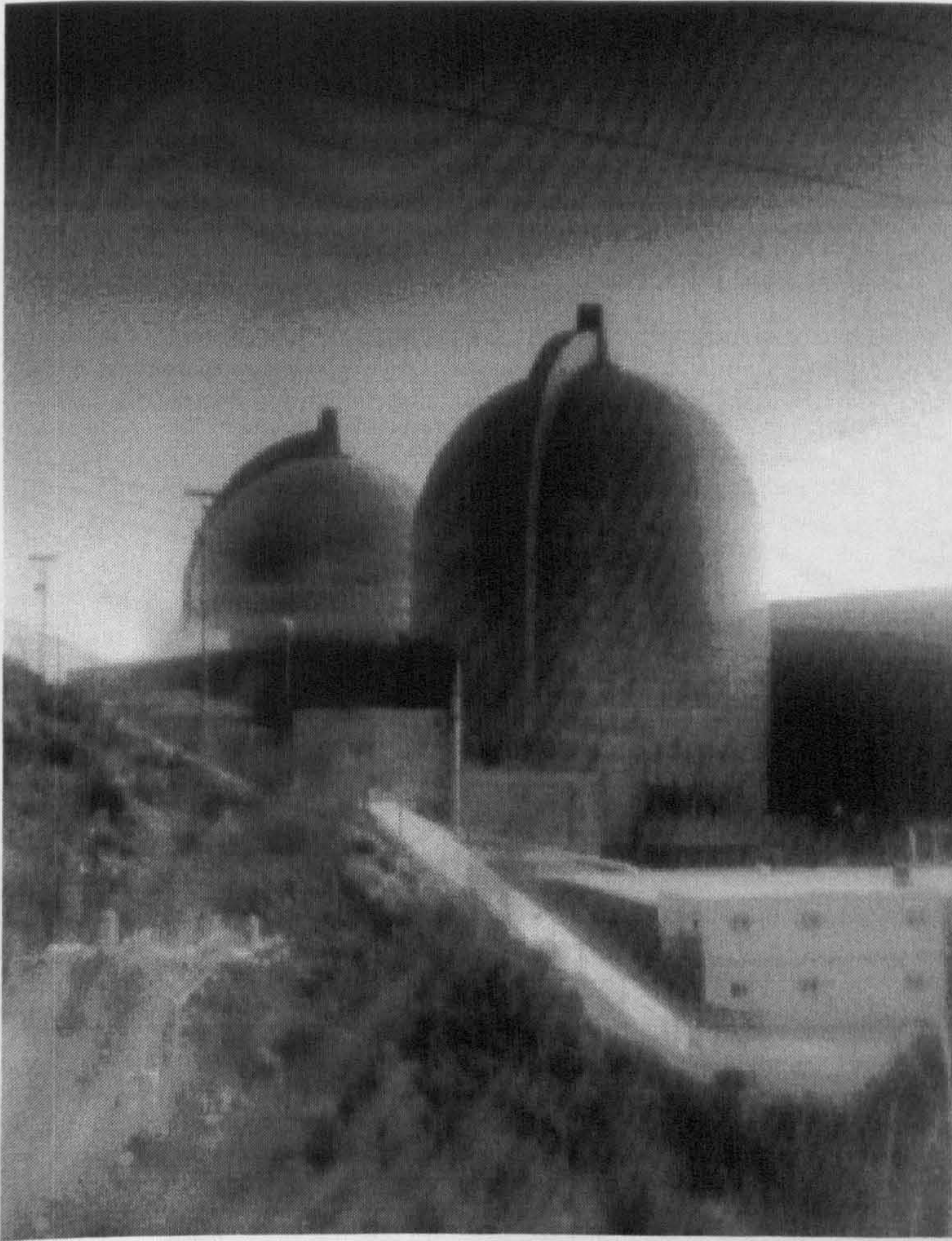
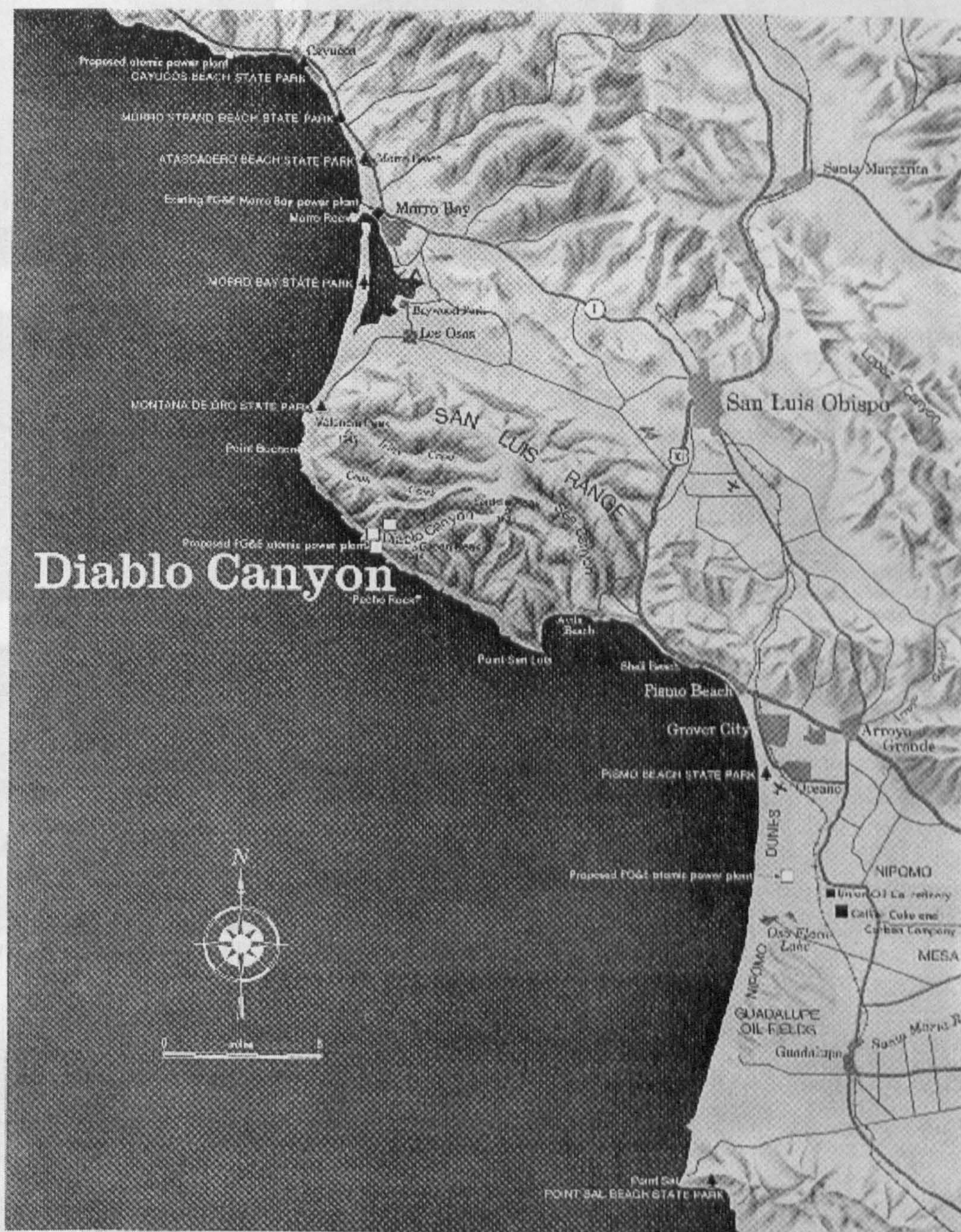


Figure 1: Diablo Canyon Nuclear Power Plant.
(courtesy of Jay Swanson, San Luis Obispo)

Sierra Club Bulletin
FEBRUARY 1967

Two and one of the Diablo Canyon...
which will be out to a size of the...

Figure 2: Front cover of the controversial February 1967 edition of *Sierra Club Bulletin*. Club president George Marshall claimed the cover exaggerated the significance of Diablo near Pismo. (courtesy of Martin Lavin, Pismo Valley)



Sierra Club Bulletin

FEBRUARY 1967

Pros and cons of the Diablo Canyon issue,
which will be put to a vote of the membership

Figure 2: Front cover of the controversial February 1967 edition of *Sierra Club Bulletin*. Club president George Marshall claimed the map exaggerated the significance of Diablo over Nipomo. (author's copy, courtesy of Martin Litton, Portola Valley)



San Luis Range isolates Diablo coast



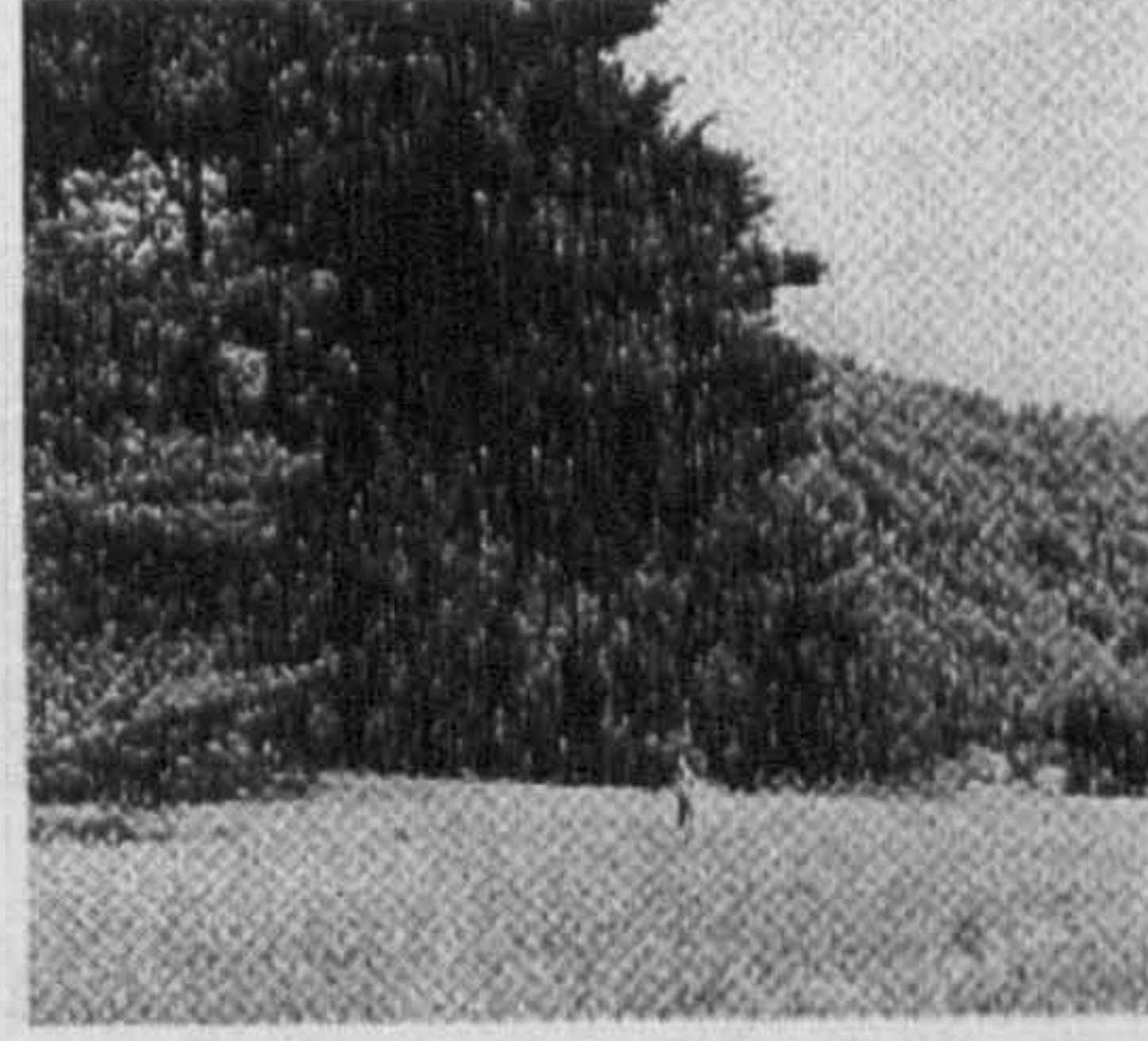
Jeep trail in woods, Diablo Canyon



Live oak at left has 123-foot span



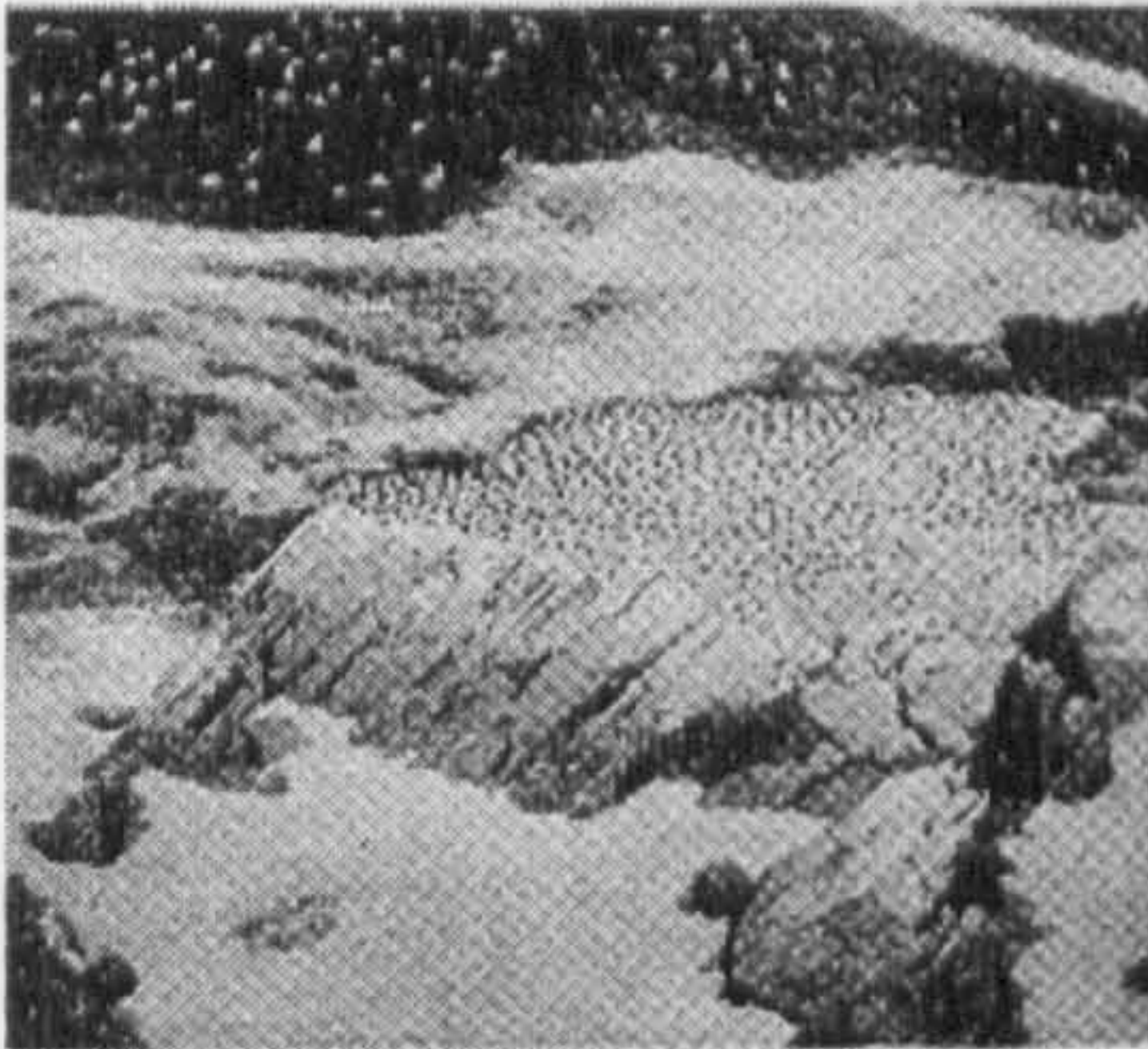
Diablo Creek



Monterey cypresses border a meadow



Wind-sculptured laurel, or bay trees



Pelicans (flying); red-footed booby

Intertidal zone and rugged coastline



Sea lion's frolic near Diablo Canyon

Coast near site of PG&E nuclear plant



Marine life in tide-pool, Diablo coast

Plant site (right); San Luis Range

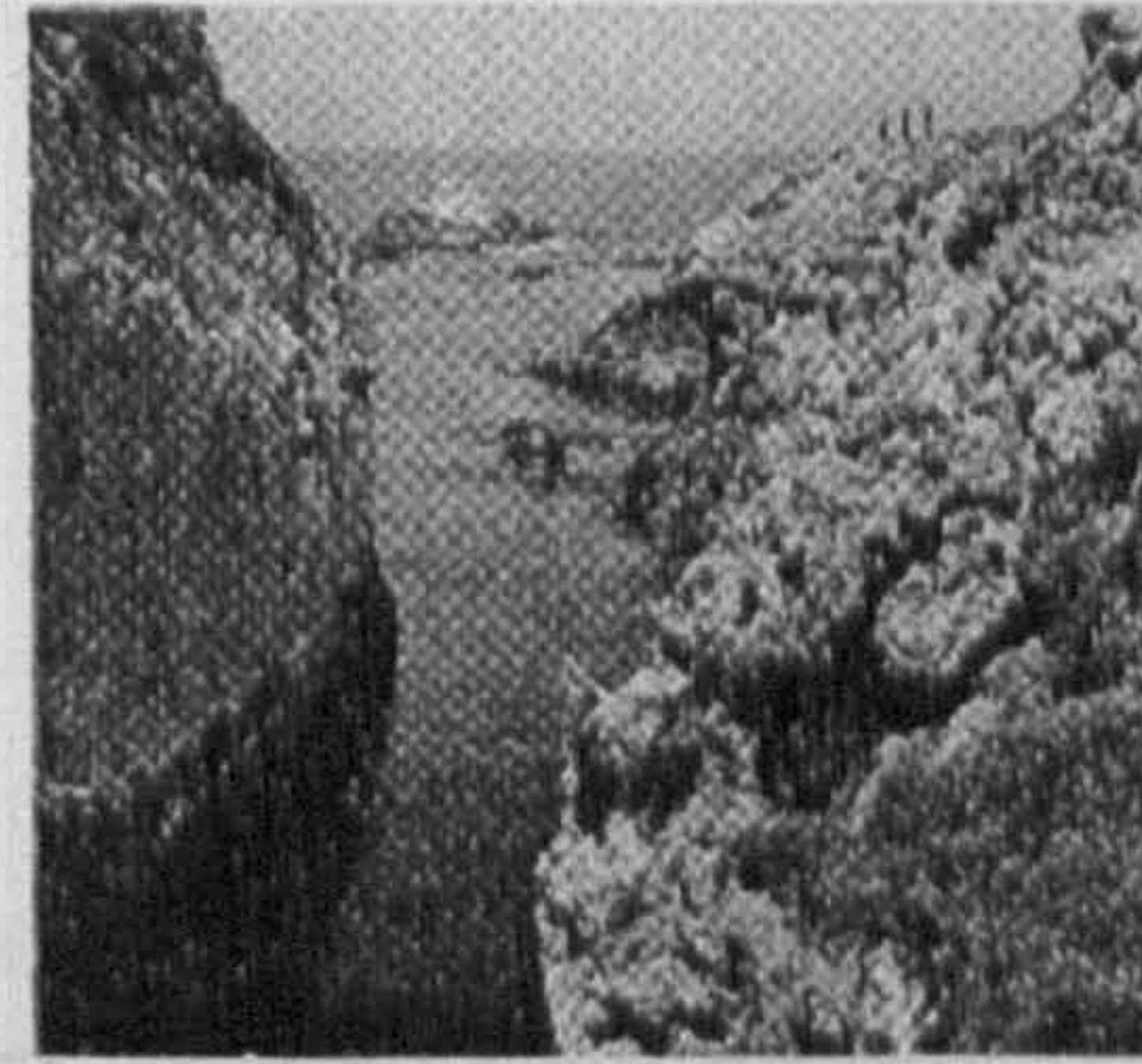


Figure 3: Diablo Coast, *Sierra Club Bulletin* (February 1967). (author's copy, courtesy of Martin Litton, Portola Valley)

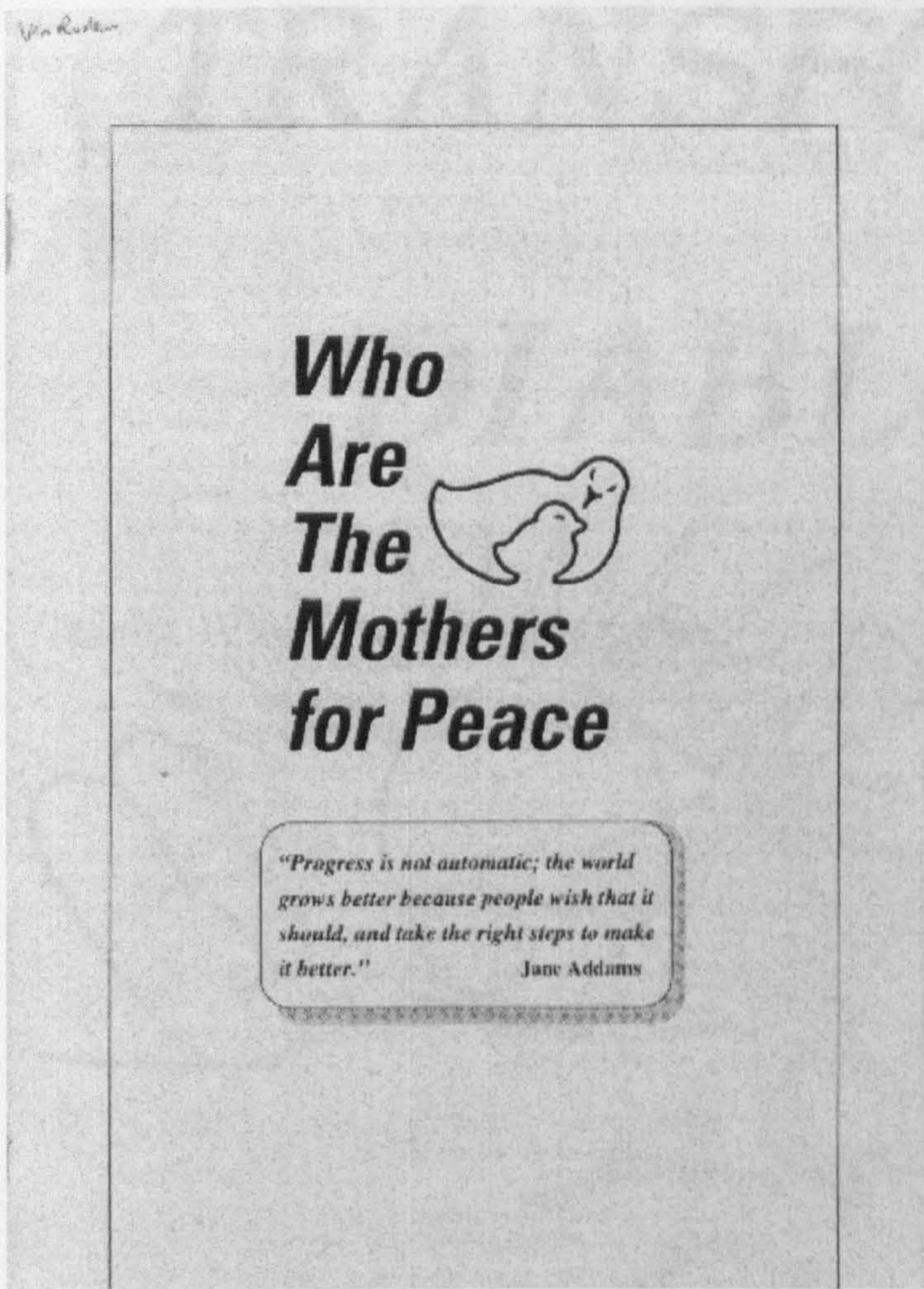
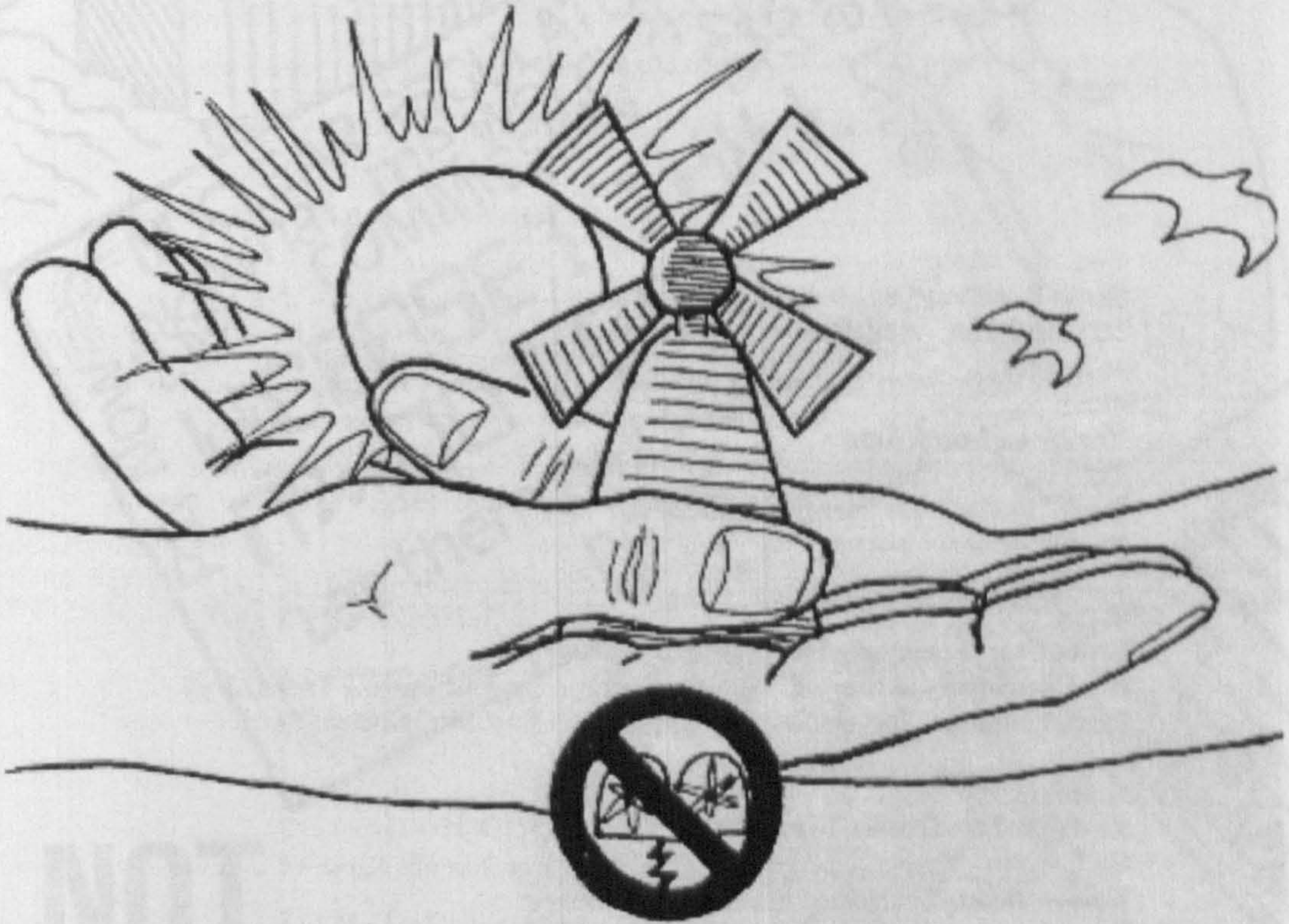


Figure 4: Mothers for Peace pamphlet.
(courtesy of June von Ruden, Pismo Beach)

FILE AUG 6 78 Diablo Action

TRANSFORM

DIABLO



AUGUST 6, 1978

PORT SAN LUIS BEACH
Avila Beach Exit
Off Highway 101

Figure 6: 'A Landscape is a ...'
(courtesy of Abalone Alliance)

Figure 5: 'Transform Diablo' Abalone Alliance flyer, 1978.
(courtesy of Abalone Alliance Safe Energy Clearinghouse, San Francisco)

A LICENSE FOR DIABLO CANYON IS A LICENSE TO KILL.

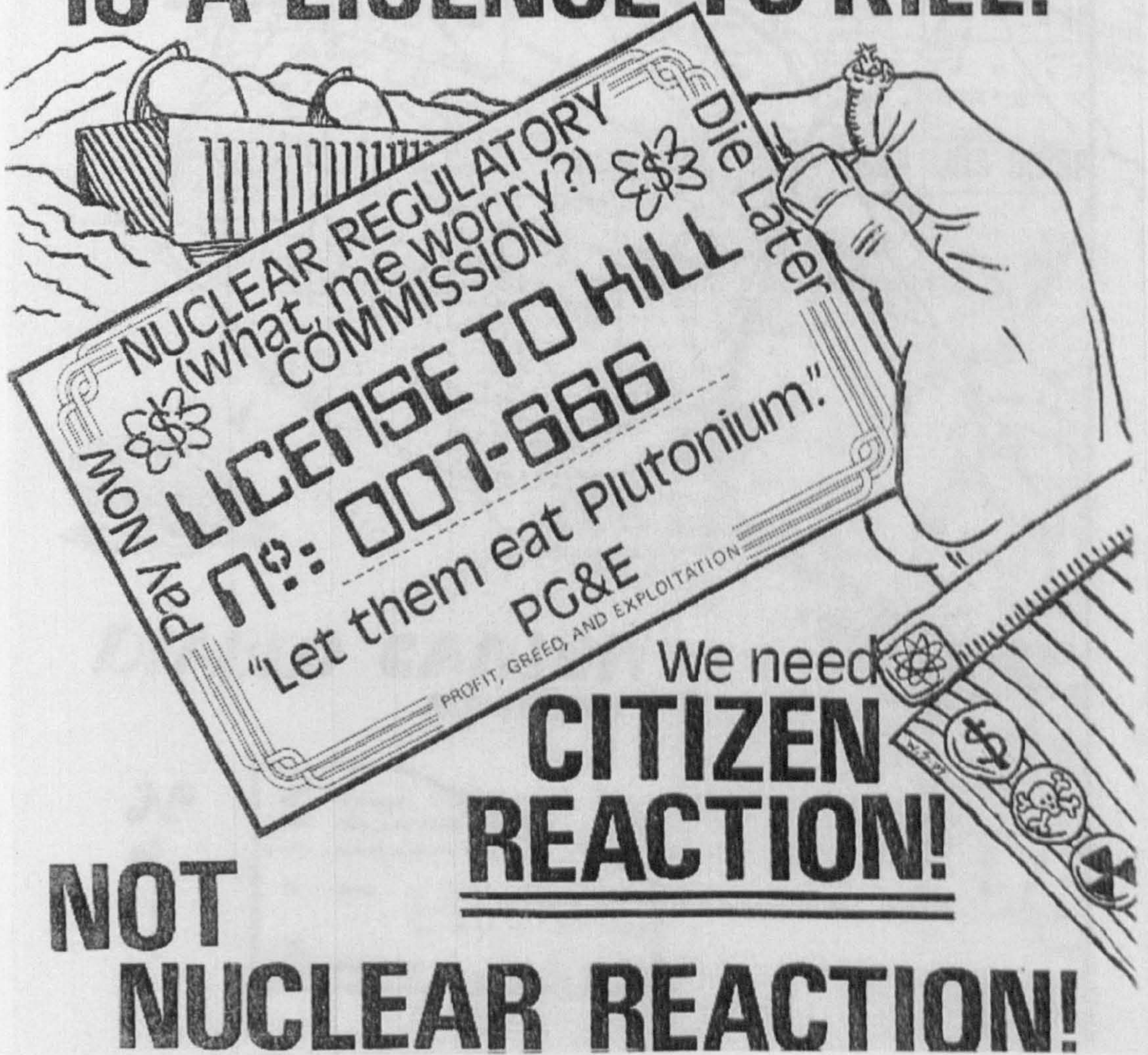


Figure 6: 'A License to Kill' Abalone Alliance flyer, 1979.
(courtesy of Abalone Alliance Safe Energy Clearinghouse, San Francisco)

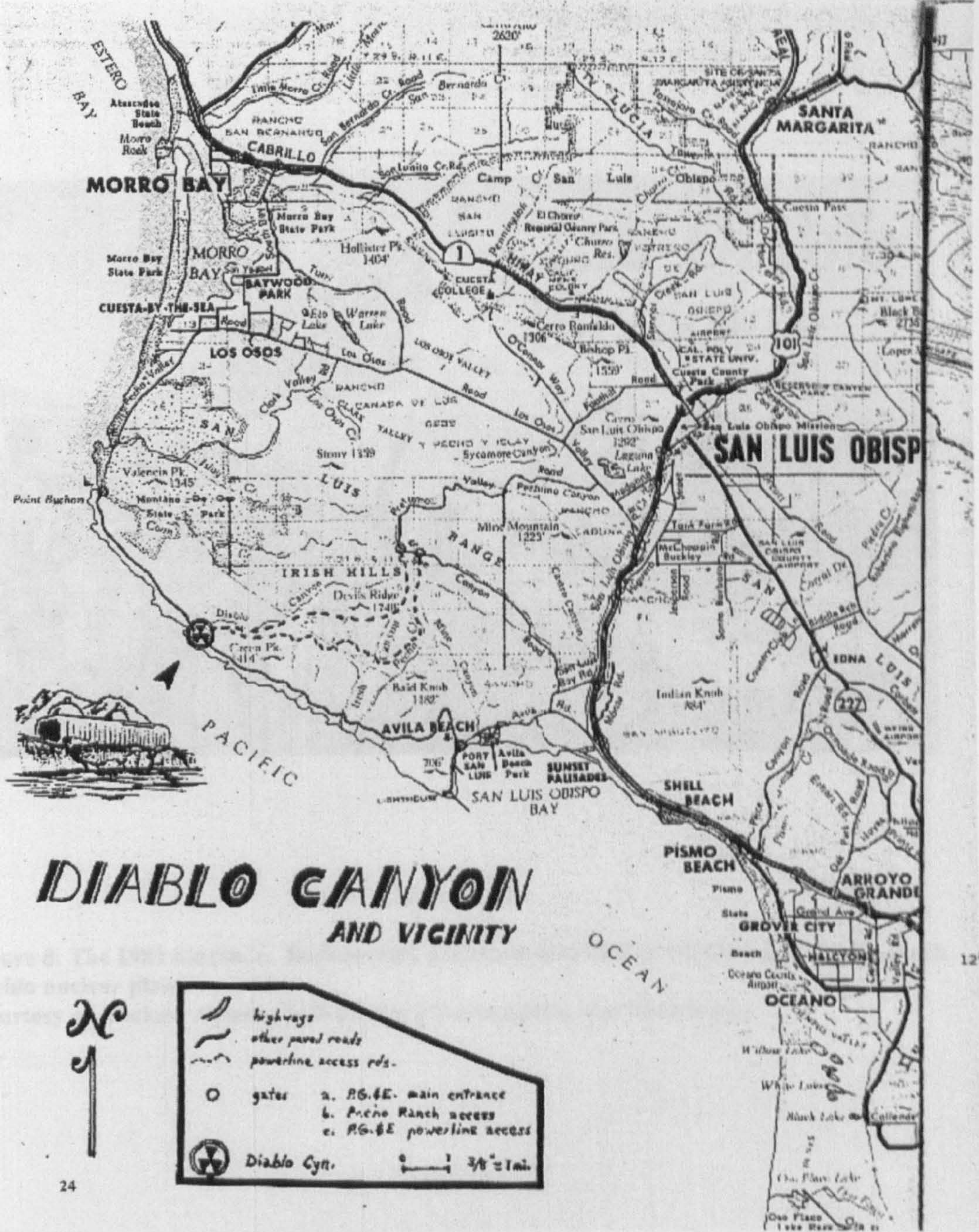


Figure 7: Map of 'Diablo Canyon and Vicinity' enclosed in the 1981 Abalone protest handbook. The Abalone camp was located in Los Osos Valley, close to Clark Valley Road and Los Osos Road.
 (courtesy of Abalone Alliance Safe Energy Clearinghouse, San Francisco)

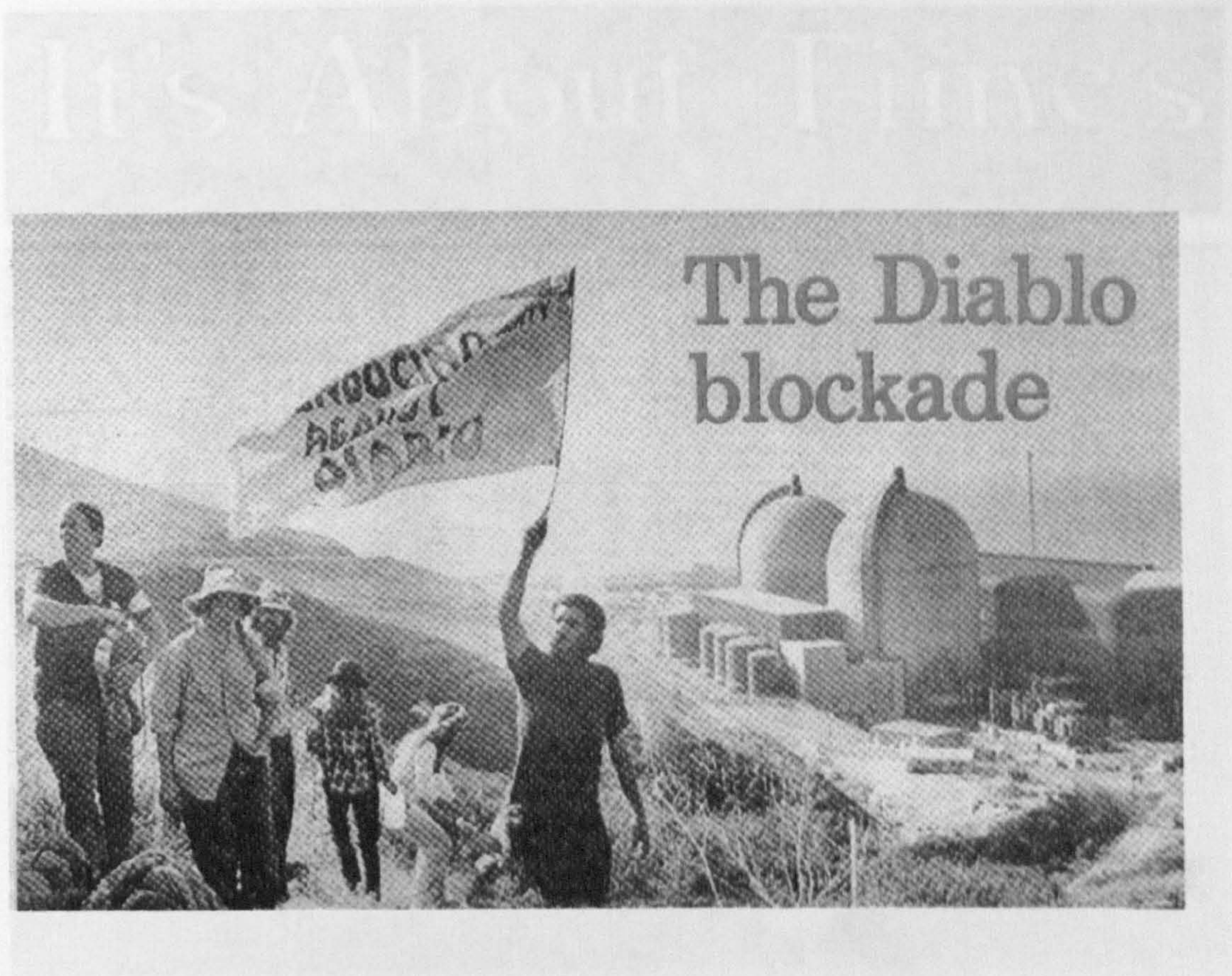


Figure 8: The 1981 blockade. Backcountry protesters travelled across the Irish Hills to reach Diablo nuclear plant.

(courtesy of Abalone Alliance Safe Energy Clearinghouse, San Francisco)

It's About Times

Abalone Alliance Newspaper

May-June 1982



Figure 9: 'Reagan's arms control plan.'
It's About Times (May-June 1982)

Figure 10: 'Peacekeeping as a bomb.'
It's About Times (December-January 1982)

It's About Times

Abalone Alliance Newspaper

December-January 1983



Peacekeeper on Earth, Good-bye to Men

Figure 10: 'Peacekeeper on Earth.'
It's About Times (December-January 1983)

Figure 11: The ...
It's About Times ...



Figure 10: Sponges the Affinity Group
It's About Times (April-May 1980)

Figure 11: The Mutant Sponges affinity group.
It's About Times (September 1980).

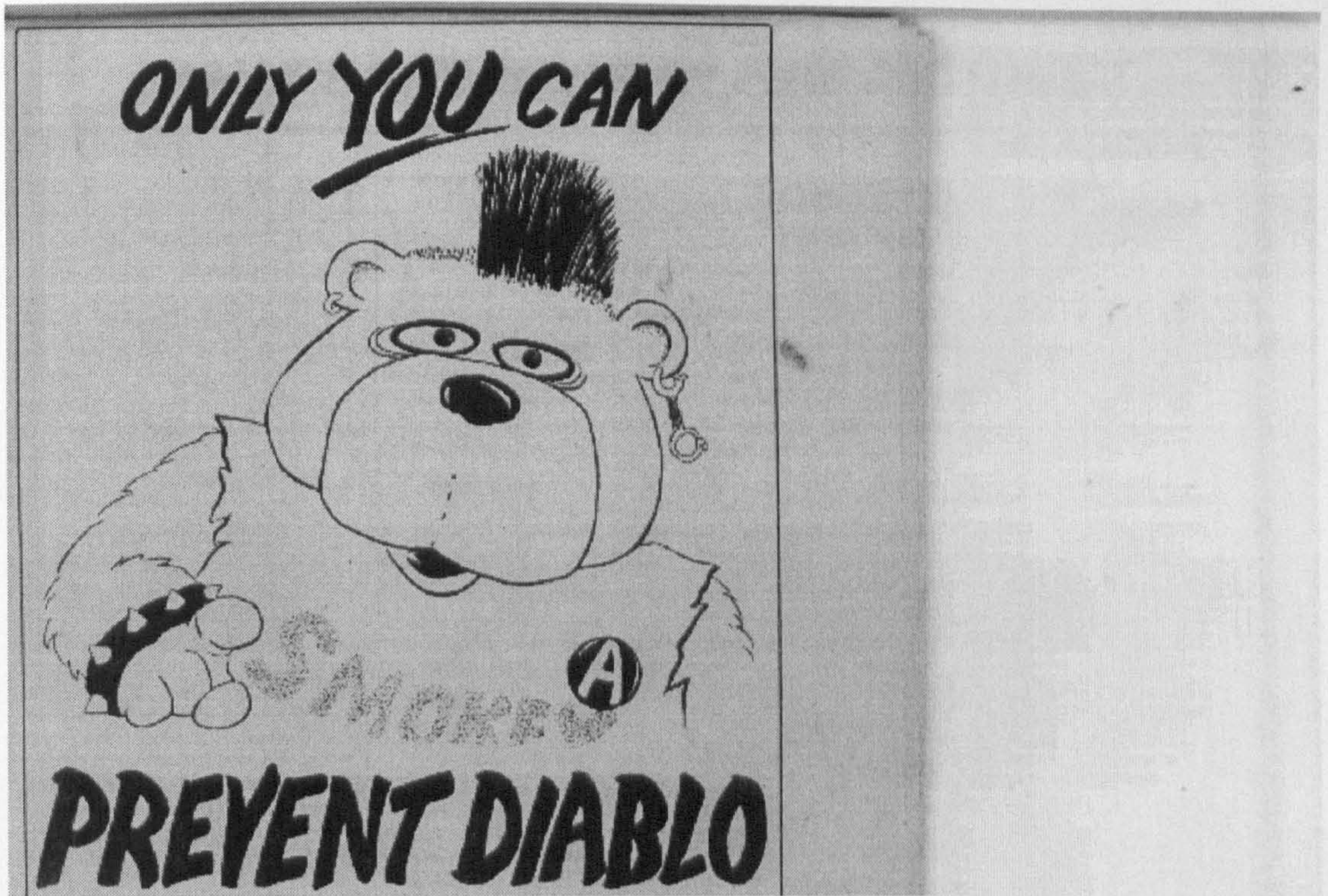
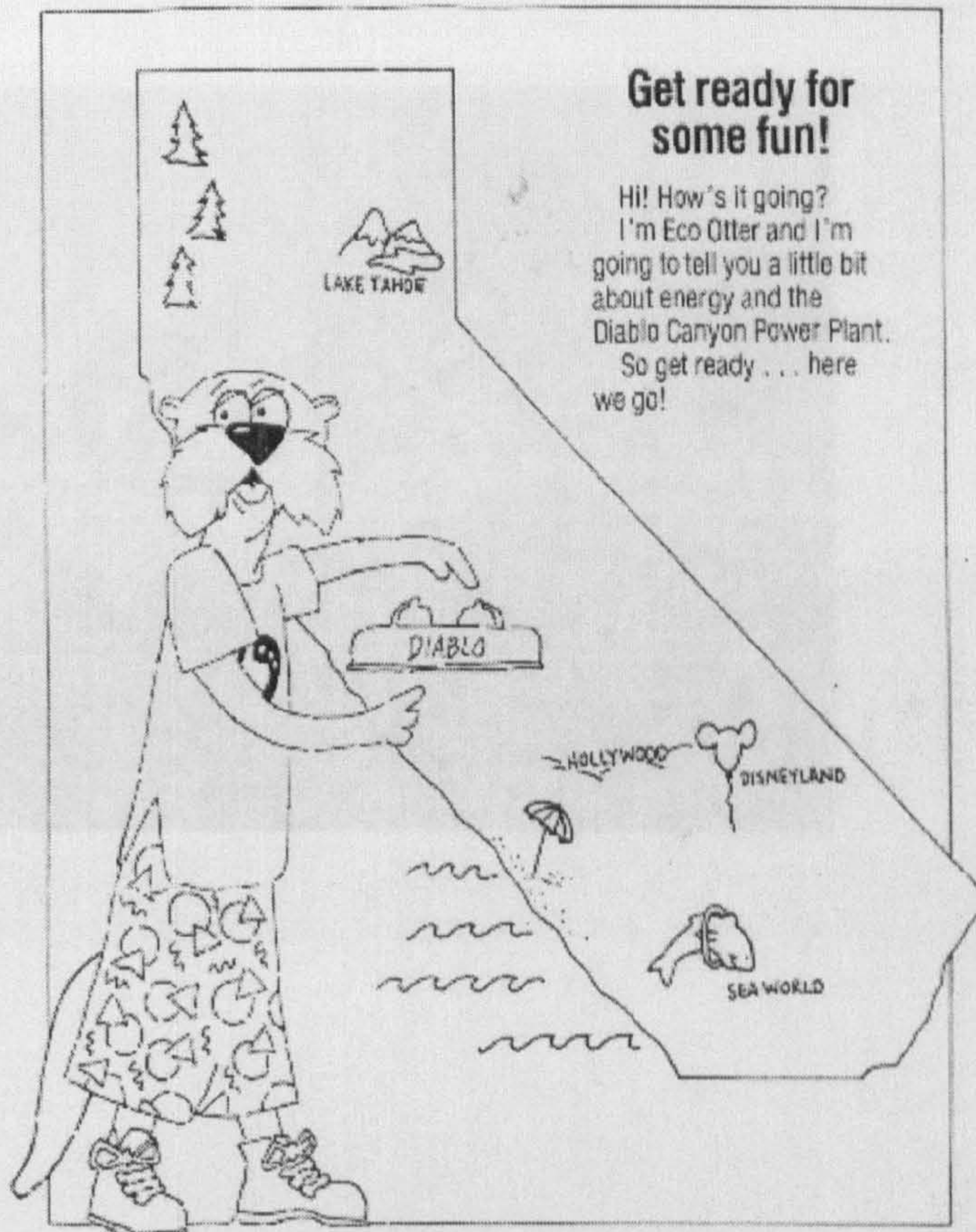


Figure 12: Smokey the Bear in countercultural garb.
It's About Times (April-May 1984)

Figure 13: "What's New?"
(courtesy of *It's About Times*)

From FILE #14 EYECS on 00960

WHAT'S WRONG WITH THIS PICTURE?



from PG&E coloring book, "Welcome to Diablo Canyon."

It's propaganda, that's what, and it's aimed at your children.

- ◆ Diablo Canyon is a storage site for nuclear waste and holds the most toxic substances known to humankind.
- ◆ Diablo Canyon is located on an active earthquake fault.

School children are being taken on field trips to the Diablo Canyon Nuclear Power Plant.

Call their school and say,

DON'T SEND MY KIDS ON A RADIATION VACATION!

For more information, call the Abalone Alliance Diablo Project Office 543-6614

Figure 13: 'What's wrong with this picture?,' Abalone Alliance poster.
(courtesy of Abalone Alliance Safe Energy Clearinghouse, San Francisco)

Figure 14: Diablo Canyon
(photograph by author)



Figure 15: Brown Pelicans, Middle Coast, 1997.
(photograph by author)

**Figure 14: Diablo Coast, north of nuclear plant, 1997.
(photograph by author)**

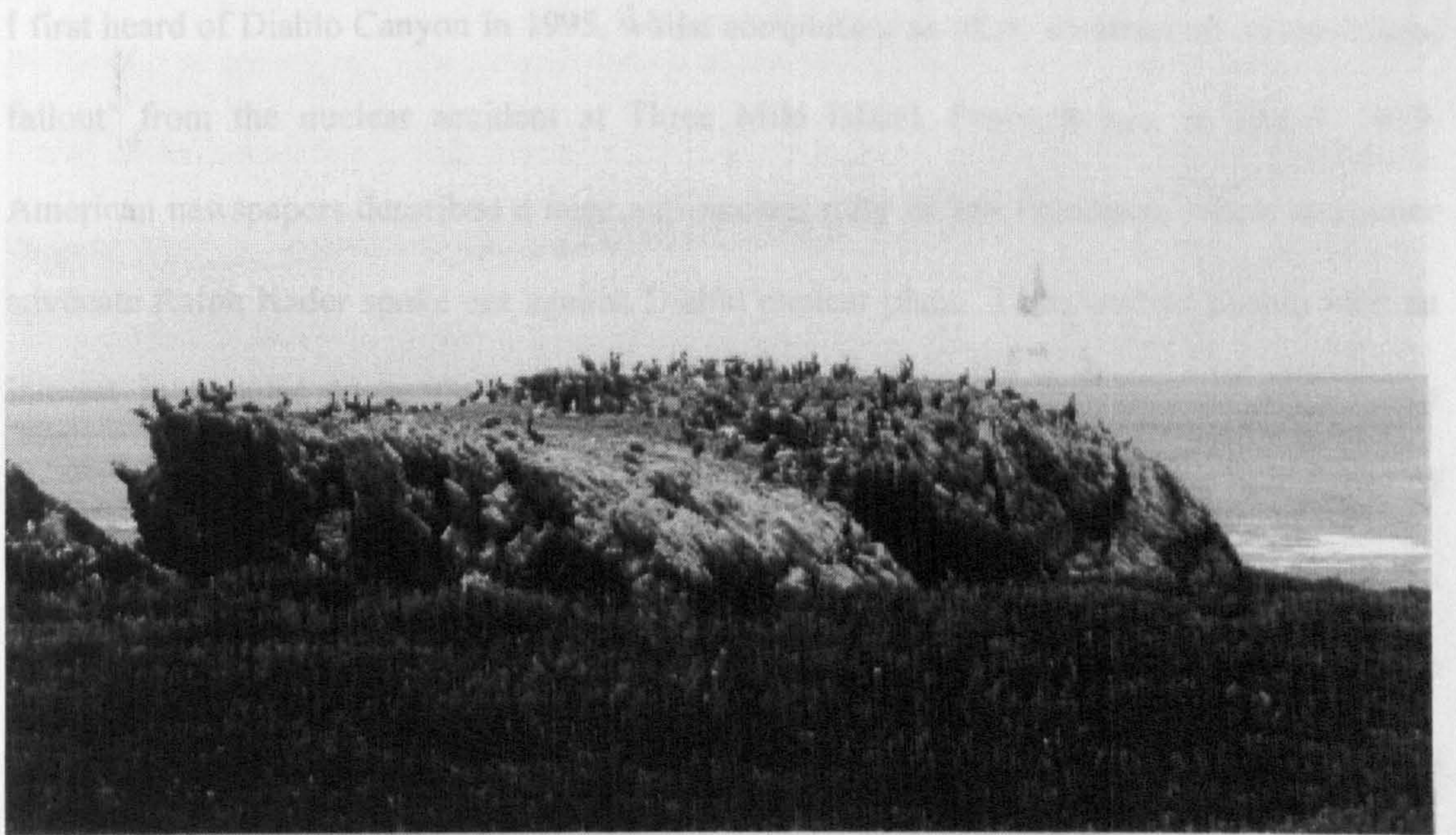


Figure 15: Brown Pelicans, Diablo Coast, 1997.
(photograph by author)

Field Methodology and Appraisal of Sources

I first heard of Diablo Canyon in 1995, whilst completing an M.A. dissertation on the 'social fallout' from the nuclear accident at Three Mile Island, Pennsylvania, in March 1979. American newspapers described a huge anti-nuclear rally in San Francisco, where consumer advocate Ralph Nader spoke out against Diablo nuclear plant. I approached Diablo with an interest in popular conceptions of nuclear landscapes and the dynamics of anti-nuclear protest. I also hoped to delve deeper into Diablo's past, to venture beyond the boundaries of its nuclear history and consider the role of nature in shaping the character of the headland. Visits to Diablo in 1997 convinced me of the need for a bioregional history that could take into account not just the nuclear plant on the headland, but also the wild country surrounding it.

Crafting the first environmental history of Diablo entailed significant challenges. Charting the interactions between people and place over time, environmental history frequently demands an interdisciplinary approach to scholarly enquiry. When considering the history of a region and its inhabitants (both human and non-human), environmental historians often depend upon other specialists, such as geographers, archaeologists, biologists and ethnologists, to have completed much of the groundwork. In the case of Diablo, little was known of the region prior to the arrival of Pacific Gas and Electric Company. Whilst an invaluable study of Native American artefacts on the headland, Roberta Greenwood's archaeological survey (*9000 Years of Prehistory at Diablo Canyon*) only scratched the surface in terms of Chumash activity in the wider coastal region. Perspectives on how Native Americans might have used Diablo in the pre-colonial era were complicated by contentions over Chumash identity in modern California society. Establishing any verdict on Spanish occupancy proved equally challenging. The name Diablo suggested a colonial origin, but with little to go on other than reports of Spanish ships sailing past the headland, no definitive

answer was forthcoming. I was left to explore tentatively how colonial invaders might have viewed the Pecho Coast, if indeed, they ventured there. In the 1840s, land grants clarified the ownership of the region. However, always on the periphery of county life, Diablo retained much of its anonymity. Information regarding military use of the headland in twentieth-century wartime conditions, along with details of Japanese-American settlement in the Irish Hills, proved difficult to locate.

A wealth of material relates to the nuclear history of Diablo Canyon. In order to manage my search, I deliberately focused on documents associated with environmental thought and human interaction with the material landscape. I resisted the temptation to document the organisational histories of the Mothers for Peace and the Abalone Alliance, although both groups deserve further scrutiny. The political controversy surrounding plant licensing remains another obvious target for future academic endeavour.

Dealing with a pariah landscape separated from mainstream society by hills, fences, and security personnel inevitably impeded research opportunities. I was unable to access freely PG&E documents relating to the canyon. Whilst PG&E's public portrayal of Diablo plant was easy to discern, internal memorandums might have given a different slant on corporate intentions. However, after I explained my interest in environmental matters, company biologists agreed to allow me on site to survey the region. They openly discussed issues of marine ecosystem fluctuations. I was also left alone in the marine biology library, to the extent that, when sirens at the plant sounded, I began to fear the worst!

Crucial to the conduct of environmental history, particularly when dealing with perceptions of landscape, is the need to gain familiarity with the region in question. Again, a nuclear landscape proved less than ideal. I was unable to visit the Pecho Ranch on the northern

stretch of PG&E lands, and had no way of contacting the Californians who apparently still ranched there. Restrictions on access were brought home to me during a 'sunset tour' of the plant. When a number of nuclear tourists strayed from the pre-determined route, a security guard appeared from behind the concrete reactor domes. The tour also revealed the extent to which PG&E 'moulded' the landscape for public consumption, with the guide labouring issues of plant safety, radiation as natural, and the wonders of Diablo wildlife. I received a very different appraisal of Diablo Canyon and the environment when Sierra Club member Martin Litton kindly flew me along the coastline.

The records of the Sierra Club (including members' papers) are located at the Bancroft Library, University of California, Berkeley. However, in order to study the Mothers for Peace and Abalone Alliance, I depended upon personal collections held by veteran protesters and materials stored at the Abalone Safe Energy Clearinghouse in San Francisco. Collections varied as to their focus, extent and degree of organisation. Whilst some protesters kept one or two scrapbooks, one Mother possessed her own filing cabinets and archival system. As the San Luis Obispo County *Telegram-Tribune* had yet to be indexed for articles in the 1970s and 1980s, I was glad to locate a plethora of newspaper cuttings on Diablo Canyon amidst activist collections. Whilst aware that activists had subjectively chosen what items to keep from their protest days, I often discovered articles critical of as well as complimentary to the anti-nuclear movement. Ex-Abalone and Mothers also volunteered the names and addresses of fellow protesters.

Interviews and conversations were essential to understanding perceptions of Diablo from the 1960s onwards. Interviews were pre-arranged, typically lasted for over an hour, and, where possible, were recorded and later transcribed. Conversations proved far shorter and were usually limited by the individual's wariness to talk, their work commitments, or cursory

involvement in the Diablo controversy. During taped interviews, participants were encouraged to talk freely and elaborate on their personal links to the canyon. Such a flexible approach, although sometimes time-consuming, allowed individuals to ponder their involvement with Diablo, and without prompting, describe their attitudes and actions towards the nuclear landscape. I also drew from a list of questions to probe some of the more pertinent aspects of Diablo's past. Interviewees frequently raised new issues, which I subsequently investigated.

My interview base was never designed to represent the whole spectrum of social attitudes regarding Diablo Canyon. Oral history was used as an additional tool to explore the relationship between activists, nuclear fear and environmental conscience. With regard to the Abalone Alliance, most interviewees had been committed activists, as opposed to casual one-day protesters. A wider survey of protest memories would deepen understanding of the anti-nuclear movement, although the task of locating 'casual' protesters is complicated by Abalone records listing only dedicated affinity group spokespeople.

In interpreting complex human behaviour via oral testimony, the need for caution is paramount. In the span of ten or fifteen years, subjects can easily shift their perspectives on land issues and redefine their role in past events. Nuclear energy has historically been a polarised issue, marked by intemperate bias and strident convictions. It thus proved important to recognise the relative position of each person interviewed, and to corroborate oral testimony with contemporary sources. Most interviewees held strong opinions over Diablo, consistent with their actions in the past. Abalone veterans were sometimes vague over the dates of protest activity. They also related a sentimental fondness for their protest actions. Rather than romanticising the past, I discovered that contemporary newspapers, activist pamphlets and memorandums, along with amateur videotapes, all supported

interviewee contentions of a positive protest experience. Interviewees also criticised structural problems within their organisations, such as the significant length of time required for consensus process to operate. Oral testimonies further elucidated how perceptions of Diablo altered over time. Whilst some activists retained a vehement aversion to the plant, others had grown accustomed to the nuclear complex.

In *Political Protest and Cultural Revolution* (1991), Barbara Epstein singled out oral history as the most effective method of understanding the non-violent direct action movement in California. Focusing on environmental attitudes, I nonetheless found that oral testimony supplemented, rather than replaced, other forms of historical evidence. The Abalone newspaper *It's About Times*, activist posters and internal memos, along with local and state newspaper articles, all represented invaluable source materials. Written information proved as fallible as oral testimony, and demanded an equally critical appraisal. The controversial nature of Diablo plant affected a wide range of narratives. Articulations of bias and vivid anecdotes illustrated the saliency of the Diablo issue in Californian popular consciousness. Moreover, such diversity of opinion enriched my scholarly understanding of perception and place.

This dissertation has explored in detail the environmental history of Diablo Canyon. Successive chapters have delineated changing attitudes and actions towards the headland. Research has shown how Diablo Canyon emerged in modern times as a starkly contested landscape, a place privy to shifting attitudes towards nuclear power, industrial growth and environmental stewardship. Equally, the non-human world has been acknowledged as an actor in the historical process, shaping both the material landscape and, to a lesser degree, perceptions of it. By considering both nuclear machinations and ecological dynamics, this

dissertation bridges the gap between nuclear and environmental history, fields traditionally divided in historical enquiry.

However, notable gaps remain in the documentation of Diablo's past. Understanding of the Pecho Coast would be enhanced by a thorough evaluation of ecological change there in the modern period. Biocentrists may be interested in further exploring the impact of non-human actors in Diablo's past. How peregrine falcons have viewed and used Diablo might be set alongside PG&E and Abalone Alliance activities. The political and economic issues surrounding Diablo nuclear plant also deserve scholarly attention. Meanwhile, the environmental history of Diablo Canyon is still unfolding.

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[6] Movies and Comics

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