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MONTANA'S POWER TRIP: ELECTRIC DEREGULATION, CONSUMERS, AND THE ENVIRONMENT

by

Patrick Judge

B.A. The Colorado College, 1993

presented in partial fulfillment of the requirements

for the degree of

Master of Science

The University of Montana

November 2000

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LIST OF ABBREVIATIONS

ACEEE American Council for an Energy Efficient Economy

aMW Average Megawatt

AP Associated Press

ARM Administrative Rules of Montana

ASiMI Advanced Silicon Materials, Inc.

BPA Bonneville Power Administration

BDC Bozeman Daily Chronicle

BG Billings Gazette

CEERT Center for Energy Efficiency and Renewable Technologies

CFAC Columbia Falls Aluminum Company

CTC Competitive Transition Charge

CUB Citizens Utility Board

DEQ Department of Environmental Quality (Montana State Government)

disco Distribution Company

DOE U.S. Department of Energy

DSI Direct Service Industry

DSM Demand Side Management

EIA Energy Information Administration (U.S. Department of Energy)

EMF Electromagnetic Field

EPA Environmental Protection Agency (United States Government)

EPACT Energy Policy Act (Federal law passed in 1992)

EPCRA Emergency Planning and Community Right-to-Know Act

EPRI Electric Power Research Institute

ERC Emission Reduction Credits

esco Electric Supply Company

viii

EWG Exempt Wholesale Generator (designation contained in EPACT)

genco Generation Company

IndeGO Independent Grid Operator

IOU Investor-Owned Utility

IPP Independent Power Producer

<u>IR</u> <u>Independent Record</u> (Helena)

IRP Integrated Resource Planning

FERC Federal Energy Regulatory Commission (United States Government)

FTC Federal Trade Commission (United States Government)

GFT Great Falls Tribune

IPP Independent Power Producer

IRP Integrated Resource Planning

LCG Large Customer Group

LIEAP Low-Income Energy Assistance Program (Federal)

MCA Montana Code Annotated

MCC Montana Consumer Counsel

MDU Montana-Dakota Utilities

MEBC Montana Electricity Buying Cooperative

MECA Montana Electric Cooperatives' Association

MEGA Montana Electric & Gas Alliance (formed by cities in 2000 to bid on MPC)

MEIC Montana Environmental Information Center

MFSA Major Facility Siting Act

MontPIRG Montana Public Interest Research Group

MPC Montana Power Company

MPES Montana Power Energy Services Division

MW Megawatt

MWH Megawatt-hour

NCAC Northwest Conservation Act Coalition (now Northwest Energy Coalition)

NEEA National Energy Efficiency Alliance

NGCT Natural Gas Combustion Turbine

NRDC Natural Resources Defense Council

NREL National Renewable Energy Laboratory (U.S. Department of Energy)

NWEC Northwest Energy Coalition

PM-2.5 airborne Particulate Matter less than 2.5 microns in diameter

PM-10 airborne Particulate Matter less than 10 microns in diameter

PP&L Pennsylvania Power & Light

PSC Public Service Commission (Montana State Government)

PUD Public Utility District

PUHCA Public Utilities Holding Company Act (Federal law passed in 1935)

PURPA Public Utilities Regulatory Policy Act (Federal law passed in 1978)

QF Qualifying Facility (PURPA designation for alternative energy producer)

REC Rural Electric Cooperative

REPP Renewable Energy Policy Project

RNP Renewable Northwest Project

RPS Renewable Portfolio Standard

RTO Regional Transmission Organization

SB 390 Senate Bill 390 (Montana's deregulation law passed in 1997)

SCBC Small Customer Buying Cooperative

TAC Transition Advisory Committee

transco Transmission Company

TRI Toxics Release Inventory

USBC Universal System Benefits Charge

USBP Universal System Benefits Programs

WET Wholesale Electric Transactions (tax)

WPPSS Washington Public Power Supply System (now Energy Northwest)

DEDICATION

To my mother, Carol Judge, whose support was as boundless as the task.

CHAPTER 1 INTRODUCTION

Restructuring. Deregulation. Direct Access. Retail Wheeling. Customer Choice. What does it all mean? How will Montana's families, small businesses, and natural environment fare in the move toward a competitive electricity market? In the spring of 1997, the Montana legislature passed Senate Bill 390, the "Electric Industry Restructuring and Customer Choice Act." SB 390, signed by Governor Marc Racicot on May 2, puts Montana at the forefront of a national movement to introduce competition into the generation of electricity and the sale of that electricity to retail customers. The policy statement of this 48-page bill proclaimed that "Montana customers should have the freedom to choose their supplier of electricity" and that "affording this opportunity serves the public interest." Others were less certain, as evidenced by strong opposition testimony from low-income, environmental, and consumer organizations.

The Basics

The changes contained in SB 390 herald a fundamental shift in the way electric companies and customers do business. Previously, residential customers and small businesses were divided between utilities according to location alone. Each utility had its own geographic district, or service territory, in which it was the only provider of electricity. This monopoly arrangement was protected by Montana's Territorial Integrity Act (MCA 69-5-102) which forbids utilities from stringing distribution lines into neighboring service areas.³ All of the customers in the district were automatically assigned

¹ The bill, and a summary of the bill, can be found at http://www.psc.state.mt.us/gaselec/gaselec.htm See also http://statedocs.msl.state.mt.us/

² MCA 69-8-102.

³ DEQ, "Restructuring the Electric Utility Industry in Montana," executive summary.

to that utility, and the utility had an obligation to serve them. As the sole provider of electricity in its franchised district, each utility acted as a monopoly, but not without controls. The type of control depended on the type of utility.

In Montana, most electrical utilities fall under two categories. Historically, urban areas were served by investor-owned utilities (IOU) and rural areas were served predominantly by rural electric cooperatives (REC), or "co-ops." Most of Montana's major cities -- Billings, Butte, Bozeman, Great Falls, Helena, and Missoula -- lie in Montana Power Co.'s (MPC) service territory. Montana's largest utility, MPC is also the only IOU that sells all of its power to Montanans. With 290,000 customers in all, it also happens to be the only Montana company that is publicly traded on the NY stock exchange, the state's only Fortune 500 firm, and the state's largest private-sector employer with 3000 workers including 2500 in Montana.⁴ A second investor-owned utility, PacifiCorp, historically supplied power to 35,000 customers in northwestern Montana including Kalispell, Whitefish, and Libby, but announced in July 1998 that it intended to withdraw from Montana.⁵ In November of that year, the PSC approved the sale of its facilities to the Flathead Electric Cooperative. A subsidiary corporation, Energy Northwest Inc., was later formed by Flathead to serve PacifiCorp's former urban customers.⁶ Finally, urban areas of eastern Montana are served by Montana-Dakota Utilities (MDU), an electric and natural gas utility with headquarters in Bismark, North Dakota. MDU's 260,000 customers include 92,000 residential accounts in Montana.⁷

To prevent IOUs from abusing their status as monopoly providers, and to ensure a fair price and quality service, they were subject to regulation by the popularly-elected, five-

⁴ John Stucke, "MPC pulls plug," Montana Standard, 10 December 1997. Malone, Montana: A Contemporary Profile, 20. Charles S. Johnson, "MPC exec defends strategy changes," IR, 12 September 1998. IR State Bureau, "Baucus to meet with MPC chair," IR, 31 March 2000.

⁵ AP, "Pacific Power to sell Montana operation," <u>GFT</u>, 10 July 1998.

⁶ AP, "Public Service Commission OKs PacifiCorp deal," <u>Missoulian</u>, 3 November 1998. Charles S. Johnson, "Bill would require profits to go to customers," <u>IR</u>, 24 September 1998.

⁷ Mike Dennison, "Co-ops preparing bid for MPC properties: MDU shows interest too," <u>GFT</u>, 20 April 2000.

member public service commission (PSC). The system by which the business interests of the IOUs and the public interest of customers were balanced against each other was informally known as the "regulatory compact." Under this arrangement, IOUs were granted: 1) a unique service territory with exclusive rights to the customers within it, and 2) the ability to recover from these customers their operating costs and a profit they could return to their investors. Customers, on the other hand, were protected by their elected officials (the PSC) from arbitrary rate increases and fraudulent behavior. Costs were not eligible for recovery until reviewed by the PSC. Finally, customers were allowed to observe the proceedings of the PSC and, to some degree, participate in them. According to the Washington, DC-based Resources for the Future, "The basic goal of regulation is deceptively simple: set prices as low as possible, consistent with raising enough revenue to cover the utility's costs, including a fair return on its investment."

So what, then, is the basic goal of deregulation? According to proponents, deregulation will open the generation and sale of electricity to competition, allowing people to shop for the company and product that best meet their needs. The transportation of that electricity over transmission and distribution wires would remain regulated monopolies. Deregulation promises two principal benefits for consumers: lower prices and increased choices. As we will see, both claims have been seriously contested.

Before new companies can compete for the business of customers, the former system must first be dismantled. Specifically, the regulatory authority of the PSC (particularly over prices) must be diminished and the system of exclusive service territories must be dissolved. Once these barriers have been removed, proponents claim that a competitive market will develop that will keep prices low, improve efficiency, and deliver new and innovative products to consumers.

Having never been under PSC authority, the co-ops occupy a somewhat different, although no less significant, position with respect to deregulation. Collectively, the co-ops are a political force to be reckoned with in Montana. While most Montanans buy their power from IOUs, most of Montana's area is served by the state's 26 co-ops.

⁸ Drummond, "The Small Customer Buying Cooperative," 6.

⁹ Brennan, 67.

Traditionally, these businesses have ranged in size from 800 to about 10,000 customer households. A total of about 90,000 Montana households (or 330,000 people -- about half of the state's electricity customers) buy co-op power. ¹⁰ The 1939 Montana legislature authorized the creation of cooperatives "for the purpose of supplying electric energy and promoting and extending the use of electric energy in rural areas" which might otherwise have been neglected (customer density in co-op country averages only about two customers per mile of power line, compared with 40-60 for the urban areas served by IOUs). 11 The co-ops differ in several important ways from their for-profit, publicly-traded IOU counterparts. In place of shareholders, these non-profit corporations are owned and controlled by their "customer-members," i.e., all of the residents living in that service territory. As such, the co-ops are self-regulated and "exempt in all respects from the jurisdiction and control of the public service commission of this state."12 For co-ops, then, the term "deregulation" is somewhat meaningless -- you can't deregulate what was never regulated. But co-ops are nonetheless involved in the move toward competition that was initiated by SB 390. As was the case for the IOUs, SB 390 envisions co-ops opening their service areas to competition, giving their customers a choice of electric supply companies ("escos"). But unlike IOUs, co-ops are not compelled to do so under SB 390. Each coop can choose to "opt out" of competition and maintain its traditional role as the monopoly provider within its service area.

It is important to recognize that the restructuring of the electric utility industry applies only to certain aspects of the electricity business. Broadly speaking, that business can be divided into two primary activities. The first deals with the generation or acquisition of the electrical energy itself, what some call the "commodity component" or simply the "juice." This is the piece that is being deregulated. Competition is authorized for retail

With the PacifiCorp sale, these numbers have recently increased. The Flathead Electric Cooperative now has 48,500 customers. Dave Wheelihan, "Testimony of the Montana Electric Cooperatives' Association before the Senate Taxation Committee - SB 390," 13 March 1997. Mike Dennison, "Rural co-ops adopt 'wait and see' attitude," GFT, 6 June 1999.

¹¹ MCA 35-18-105. Guest opinion by Gary Wiens, "Joining forces to buy electricity not exactly a new idea," GFT, 30 April 1998.

¹² MCA 35-18-105.

suppliers wanting to sell customers the "juice" that runs their appliances. These suppliers may include a host of entities such as utility subsidiaries, nonutility generators, and energy marketers. By comparison, the delivery of that energy over the "poles and wires" that make up the electrical grid will continue to be a monopoly function regulated by the PSC (or, in the case of co-ops, by their governing boards) and federal agencies. ¹³ Customers will continue to purchase delivery service from their former utility leaving the service territory boundaries intact. For the first time, then, customers will have separate electricity companies performing separate functions. It will be these local distribution companies, not the competitive energy supply companies, that will inherit the term "utility." Other functions, such as metering (measuring the energy usage) and billing, may remain with the distribution utility, or they too may become eligible for competition. ¹⁴ Previously, all of these functions were performed by each "vertically integrated" utility in its respective service territory. ¹⁵ In some instances (such as with MPC's eastern Montana coal mines), these utilities also owned the fuel sources for the generation plants.

The reason for limiting deregulation to the generation side of the business is simply that it would be enormously inefficient, redundant, and expensive for each competing company to construct its own set of power lines to carry its product to its customers. ¹⁶ To prevent this scenario and to encourage competition, the Federal Energy Regulatory Commission (FERC) (which performs a role similar to the PSC's, but on the national level) issued a pair of orders (888 and 889) in 1996 that did two important things. First, they authorized "wholesale wheeling," allowing for competition in the sale of electricity to

¹³ The delivery of power is further divided between "transmission," which is the transport of power over long distances using high-voltage lines, and "distribution," which is the transport of power to the end-use customers using lower-voltage lines. The former is regulated by the Federal Energy Regulatory Commission (FERC), and the latter by the PSC. Unfortunately the distinction between transmission and distribution is not always clear. Brennan, 8.

¹⁴ Mike Dennison, "Top adviser to Racicot warns MPC sale could hurt consumers," <u>GFT</u>, 19 March 1998.

¹⁵ In the world of electric utilities, the use of jargon abounds. I have tried to present and define the most important terms in the introduction. Time constraints did not allow for the creation of a glossary for this document. See http://eia.doe.gov/oiaf/elepri97/glossary.html

16 Large fixed costs associated with securing rights-of-way and building a transmission system are a strong disincentive to would-be competitors. Brennan, 18.

wholesale customers (a wholesale customer is an entity such as a utility that purchases a block of power that it in turn sells to retail end-use customers), and second, they guaranteed power companies "open access" to the transmission lines owned by other utilities for wholesale transactions. 17

But how might the changes initiated by SB 390 play out for residential customers, small-business owners, low-income families, and the natural environment? Unfortunately, no one can predict the exact course that deregulation will ultimately take in Montana, especially as it applies to small customers. But these constituents have access to some good navigational aids, and some important opportunities to help steer that course in a sustainable and equitable direction. What is certain is that the implications of restructuring are bound to be numerous, complex, and significant. The intent of this professional paper is to familiarize citizens with the changes being made in the industry and to help empower them to protect themselves, their communities, and their environment in the midst of tremendous upheaval.

The Issues

If deregulation were to work according to plan, the dissolution of service territories would immediately be followed by the entrance of multiple electricity companies vying for the business of Montana's businesses and residences. Customers would peruse marketing materials scrutinizing factors such as price, environmental impact, service options, and incentives in order to select the company and the plan that best meet their needs and desires. Customers might choose between variable rates which track market prices (with or without collars to control the risk), or fixed rates which would be more dependable but also probably more expensive. Or they might "diversify their portfolio," with percentages of each. ¹⁸ Some customers may opt for a discounted rate in exchange for interruptible service, or for service at off-peak hours (hours of low demand). Other customers may choose to pay extra for greater reliability. To many, greater choice means greater freedom. Electricity companies too will share in this freedom, having shed the constraints of their ¹⁷ Brennan, 62.

¹⁸ Drummond, "The Small Customer Buying Cooperative," 13. John Stucke, "Power surges: Industry feels early pains of electric deregulation," <u>Missoulian</u>, 9 July 2000.

Electricity companies too will share in this freedom, having shed the constraints of their traditional geographic service areas.

But these new choices and freedoms also carry risks and responsibilities. Utilities and customers alike lose many of the protections to which they are accustomed. For a utility, moving to a competitive environment is a two-edged sword that can just as easily mean losing its formerly captive customers as picking up new customers. With the very real potential for a net loss of customers (especially at first) and the absence of a guaranteed rate of return on their investments, utilities face the possibilities of bankruptcy and takeover along with the possibility for growth. Depending on the details of the proposed changes, utilities have acted as both strong proponents and strong opponents to deregulation measures around the country.

For customers, the freedom to choose (if one is to choose wisely) implies the responsibility of becoming informed. This inevitably requires some investment of time and energy. A Missoulian editorial commented on how we are already "juggling with complex information and decisions" with regard to telephone service and health care. "Almost everything we do these days -- from 401(k)s to service contracts on cars to life insurance -takes hours and hours of study, monitoring funds and investments, comparison shopping, meeting deadlines to submit forms, and careful attention to billings. It provides more choice, and more headaches too."19 Not everyone was looking forward to becoming an electricity shopper, especially considering that Montanans could formerly rely on elected officials to do this for them. And in Montana, with some of the cheapest electricity in the nation, there was a general feeling that the PSC was a doing a relatively good job ensuring that quality service was provided at a reasonable price. There was also a sense of security in numbers, with all of your neighbors getting the same deal as you. In short, sifting through complex flyers and fielding dinnertime solicitation calls will strike some customers as burdensome rather than liberating. To others, it could be downright frightening as they are accosted by potentially fraudulent telemarketers.

But at an even deeper level, there are serious questions as to whether or not consumers will actually have any choices. While most agree that workable competition is Missoulian editorial, "Consumers uneasy as state dives into deregulation," Missoulian, 4 November 1998.

likely to develop for the state's large industrial customers (because of the sheer quantities of power they purchase), it is less certain whether competitive energy supply companies will come looking for the business of Montana's residential and small-business customers. Many argue that Montana's small population and rural character make it unattractive to energy suppliers. The most pressing concern for small consumers is not the specter of annoying solicitors asking them to change their electricity provider, but the opposite -- that no one will call wanting to serve them. The worst case scenario is that customers will be left in a vacuum with only one or a few companies, no real competition, and no regulation of prices. This possibility of an "unregulated monopoly" was a cornerstone issue for opponents of SB 390. More than an idle fear, a regional study commissioned by the governors of the four Northwest states concluded that while direct access should be implemented,

There are risks inherent in the transition to more competitive electricity services. Merely declaring that a market should become competitive will not necessarily achieve the full benefits of competition or ensure that they will be broadly shared. It is entirely possible to have deregulation without true competition. Similarly, the reliability of our power supply could be compromised if care is not taken to ensure that competitive pressures do not override the incentives for reliable operation.²⁰

Small customers may be further handicapped in their ability to secure reasonably priced electricity by the transition timeline outlined by SB 390. Under the law, large industrial customers were guaranteed the ability to begin purchasing power from competitive suppliers beginning July 1, 1998. While pilot programs for small customers were supposed to begin on that same day (but in fact arguably did not begin until June 1999 when the first residential customer switched to Energy West), these customers were not guaranteed "choice" until July 1, 2002.²¹ This head start gives large customers a "first come, first served" advantage in obtaining the most affordable power on the market. Large customers will already be in a position, because of their larger demand, to attract better offers from supply companies. Consumer advocates worry that deregulation will lead to "cost-shifting" between customer classes, whereby energy suppliers will offer "artificially

²⁰ Collins, "Comprehensive Review," 1.

²¹ Personal telephone conversation with Jim Morin, Energy West, 2 September 1999. MCA 69-8-201.

low prices to attractive (industrial) customers financed on the backs of smaller (residential, commercial) customers."22

Another highly contentious and complicated issue created by deregulation was that of "stranded costs." Stranded costs are utility assets rendered uneconomical by the move to a competitive environment. Consider a utility that borrows money to build a power plant. Traditionally, the utility pays off that loan through rates charged to customers. Following deregulation, however, customers are no longer captive to that utility and may leave in search of cheaper power, perhaps from a company that has no such debt. This decreases the size of the body of customers that the utility draws upon to pay its debts, which then become "stranded." Or let's say the utility owns power plants that are inefficient and expensive to operate (usually old and "dirty" plants). If, upon deregulation, the market price for power is 3 cents per kilowatt-hour and it costs the utility 5 cents to produce a kilowatt-hour of energy from that plant, the utility is stranded with the 2-cent difference.

Wherever and whenever deregulation is discussed (including the 1997 Montana legislature), utilities argue that they are entitled to recover these costs from their former customers. And the Montana legislature agreed, awarding utilities most of their stranded costs, which at the time were expected to approach a billion dollars for MPC alone. The public interest community criticized this "billion dollar bailout" as an inexcusable example of corporate welfare. They pointed out that other states had achieved a better solution that more equitably balanced the interests of consumers with the interests of utilities -- for example, by providing customers with guaranteed rate reductions in exchange for stranded cost recovery for utilities. While Montana does have a temporary rate moratorium (with some exceptions), there are no rate reduction provisions.²³ In general, the stranded cost issue is pivotal, and it is not unfair to describe it as "the highest priority issue for utilities."

²² Patrick Judge, "Legislature Leaves Energy Road-map at Home," <u>Down to Earth: A membership publication of the Montana Environmental Information Center</u>, June 1997.

²³ <u>MCA</u> 69-8-211.

²⁴ Mazza, "How the Northwest Can Lead a Clean Energy Revolution," An Atmosphere Alliance Special Report, 18.

In many ways, the concerns of environmentalists mirrored those of consumer groups. With regard to stranded costs, environmentalists argued that recovery would subsidize dirty and inefficient power plants that would otherwise rightly succumb to competitive pressure from cleaner alternatives. Furthermore, grandfather exemptions to emission standards under the 1977 Clean Air Act already give these plants an unfair advantage over plants with more advanced (and costly) environmental controls.²⁵ With a genuine level playing field, deregulation could lead to improvements in the overall efficiency of the nation's power plant fleet. Competition from newer, cheaper, and more efficient power plants could accelerate the decommissioning of older plants.

While competitive pressure may help retire environmentally offensive nuclear, coal-fired, and even certain hydroelectric plants, deregulation will likely bring about a greater dependence on natural gas-fired generation. Combined-cycle combustion turbine technology and low prices in the 1990s made this fuel an attractive source of energy. Cleaner burning than coal, natural gas (which is a mixture of methane and other hydrocarbons) still has significant environmental impacts associated with both extraction and combustion. In addition to the carbon dioxide it produces when burned, methane is itself a powerful greenhouse gas. An overdependence on this fuel (which is often imported) is risky both ecologically and economically, as it is certain that the recent supply glut will eventually tap out and that prices will increase. While natural gas may be an important bridge fuel, it is undeniably in our nation's best interest to cultivate a diverse resource mix relying principally on sustainable energy sources rather than fossil fuels. 27

One of the most troubling environmental consequences of deregulation began taking shape a couple of years prior to the enactment of SB 390. In the past, regulation provided a mechanism by which government (in this case the PSC) required utilities to invest in energy

²⁵ Thompson, "Poisoned Power," A Clean Air Network Report, 18.

²⁶ Indeed, natural gas prices in the year 2000 were nearly double what they were a year prior (partly due to increased demand from new combustion turbines). Analysts expect prices to stay high for some time. Mark Glyde, "'Perfect Storm' Jolts Northwest Power Grid," Northwest Energy Coalition Report, July 2000. One newspaper article reported that wholesale natural gas prices in the Fall of 2000 were \$5 per thousand cubic feet, compared to the normal \$2. AP, "Governors huddle amid predictions for winter's higher home heating bills," <u>IR</u>, 21 September 2000.

²⁷ Northwest Conservation Act Coalition (NCAC), 30.

conservation, renewable energy, and low-income programs. Utilities often resisted these programs partly out of principle and partly because they added to the cost of electricity which in turn caused consumers to buy less. While such "cost-induced conservation" can magnify the environmental benefit of these programs (by decreasing the need for new power plants and by allowing existing power plants to operate below capacity), it can also decrease utility revenues.²⁸ Nevertheless, utilities limited their objections in light of assurances that the direct costs of administering these programs could be recovered.

In a competitive environment, however, utilities are even more antagonistic to these programs, which are seen as liabilities inhibiting their ability to survive and grow. Regulators no longer have the authority to require such investments, and the utilities themselves can no longer depend on "captive" customers to pay for them. Following deregulation, the size of a utility's base of customers will in all probability suffer an initial decline reducing the company's ability to fund such programs. Fearing an additional exodus of customers looking for cheaper power (from companies "unencumbered" by equivalent public benefit programs), utilities may adopt fairly radical cost-cutting measures. Environmental and low-income programs are usually among the first casualties, and can suffer even before formal proposals to deregulate the industry have been considered.²⁹ For example, in 1996 MPC slashed its conservation budget by 70% (see figure 1, page 19). Such anticipatory effects of deregulation are known as "virtual deregulation," and can also adversely affect employees and safety. According to a Montana Standard article, between 1990 and 1997, MPC cut 600 jobs in Montana "to prepare for deregulation." 30 Such layoffs have been described by some as the "stranded human costs" of restructuring.31 MPC has also struggled with safety violations recently, with two fines from the Occupational Safety and Health Administration in excess of \$100,000 in less than a six-

Attempts have been made to sever the relationship between utility sales and utility revenues which otherwise act as a disincentive for energy conservation. This approach is known as "decoupling," and is discussed in Chapter 5.

²⁹ Smeloff, 123, 126.

³⁰ John Stucke, "MPC officials readying for stiffer competition," Montana Standard, 18 March 1997.

³¹ Mary O'Driscoll, "Labor Union Raises New Restructuring Issue: Stranded Human Costs," <u>The Energy Daily</u>, 13 February 1997.

month period. While these incidents probably have little to do with deregulation, cost-cutting could increase the frequency of future accidents.³² In January 1998, PacifiCorp also announced the layoff of 600 workers, including its 50 Montana employees.³³

To provide for the continued support of these programs, many states (Montana included) have adopted a "universal system benefits charge" (USBC) as part of their deregulation law. Montana's USBC was established at 2.4% of each utility's 1995 retail sales. Less than the 3% recommended by a regional agreement (the Comprehensive Review of the Northwest Energy System), Montana's USBC only lasts for a four-year period (unless renewed by the legislature) and is limited by a series of qualifying clauses and exemptions.³⁴

Finally, environmentalists were concerned that passage of SB 390 would signal an increase in the development of generation and transmission facilities in Montana. Montana is already a net exporter of electrical energy. Its low-cost energy resources (hydro, natural gas, high-energy coal) will continue to be highly valued in national energy markets. SB 224, also passed by the 1997 legislature to amend the Major Facility Siting Act, eased the construction of new facilities and increased the possibility that power plants and transmission lines would be located in sensitive areas. Environmentalists consider the comprehensive weakening of environmental laws and the loss of regulatory control through the deregulation of various industries as synergistically dangerous phenomena.

On the positive side, some environmentalists are optimistic that deregulation will create a market for "green power." For the first time, Montanans may be able to select a power company that offers a strong portfolio of renewable energy resources, but only if opportunities for fraudulent "greenwashing" (where companies offer a not-so-green "green" product) are guarded against. The PSC could require meaningful disclosure and labeling of utility fuel sources as a condition of doing business in Montana.

³² Jan Falstad, "MPC fined for safety violations," <u>IR</u>, 6 June 1997.

³³ AP, "PacifiCorp to cut 600 jobs," Missoulian, 13 January 1998.

³⁴ Collins, "Comprehensive Review," 6. MCA 69-8-402.

³⁵ The siting act is found in title 75, chapter 20 of the Montana Code Annotated.

These are just some of the many ripples set in motion by deregulation -- ripples that may be felt profoundly or imperceptibly by small customers (including homeowners, small businesses, senior citizens, etc.) and the natural environment. It is important to note that these two interest groups (which along with low-income form the "public interest" triumvirate in the world of Montana energy policy, occasionally supplemented by labor) have shared an historic alliance. This not only reflects a desire to coalesce their own individually limited political power into a formidable presence, but also a recognition that environmental and social justice issues should not, and cannot ever, fully be divorced from one another.³⁶

Why Electricity Matters

In the legislative debate over SB 390, one thing that proponents and opponents managed to agree upon was the importance of the issue. "I don't know that I'll ever carry legislation that is more significant," reflected Senator Fred Thomas (R-Stevensville), the lead sponsor.³⁷ And the lead opponent, Rep. David Ewer (D-Helena), commented quite plainly, "This bill is the most economically significant bill of the session and one of the most economically significant of our history."³⁸

The significance of the changes being made to the electricity industry, in Montana and elsewhere, stems partly from the significance of the industry itself. As a nation, we spend roughly \$220 billion on electricity each year, which is more than we spend on telecommunications, more than we spend on automobiles, and more than we spend even on secondary education. As one of the most frequently purchased commodities, electricity is of obvious concern to American consumers and their advocates. For years, public utility commissions (like Montana's PSC), citizen utility boards, and citizen watchdog groups have wrestled with utilities over rate increases, customer service, and consumer protection policies. The central and growing role that electricity plays in our economy also means that

³⁶ See Appendix D - Exploring the Conservation Consumer Alliance.

³⁷ Kathleen McLaughlin, "Low-key Thomas carries weighty issues," IR, 24 March 1997.

³⁸ Charles S. Johnson, "Utility-bill amendments defeated," IR, 11 April 1997.

such changes will also affect the ability of U.S. firms to compete in international markets.³⁹ Commissioner Bob Anderson of the PSC observes that in Montana "there is a rough equivalent between the money the utilities take in and the entire state budget, so it's big money." According to him, "the transition to competition is probably the most important phase in the commission's history."⁴⁰

But more than just a key component of our economy, electricity should be seen as a basic necessity of life, especially for those with medical conditions or who live in harsh climates such as Montana's. Low-income customers are particularly vulnerable to changes in electricity prices and services, with a greater percentage of their income dedicated to heating and lighting. 41 Low-income housing is often poorly insulated, and low-income families have fewer resources to invest in conservation upgrades meaning "higher electricity bills for those who can least afford them." 42 One particularly disturbing trend revealed by a 1992 Boston City Hospital study found a 30% increase in emergency underweight children cases at the close of Boston's cold season. The result was attributed to a "heat or eat dilemma," in which extreme poverty forced families to choose between adequate nutrition and heat for their homes. 43 Should deregulation raise prices, the type of "choices" being made by these customers may be at a far more basic level than comparison shopping for an energy supply company. 44

In addition to the economic and social impacts of the electricity industry, its environmental impacts are truly staggering. In the 1970s, concern over the environmental and social impacts of coal-fired power plants (which account for 58% of Montana's electrical generation) led to the enactment of a 30% coal-severence tax, a strip-mining

³⁹ Brennan, xi. AP, "Hot spell could pull plug on nation's electricity," IR, 6 July 2000.

⁴⁰ Mike Dennison, "Political balance of PSC up for grabs," GFT, 5 October 1998.

⁴¹ Column by Molly Ivins, "Deregulating natural monopolies," <u>IR</u>, 17 August 2000.

⁴² According to the Comprehensive Review, the Pacific Northwest has about 540,000 households (about 14%) with incomes below 125% of the federal poverty level. Collins, "Comprehensive Review," 21.

⁴³ NCAC, "Plugging People into Power," 36.

All Relying on natural gas may be an ineffective way to skirt the implications of deregulation. In 1997, companion legislation which mirrored SB 390 was passed to deregulate the natural gas industry (SB 396).

reclamation act, and the Major Facility Siting Act. Nationwide, the process of burning fossil fuels to make steam, turn turbines, and create power is the leading source of industrial air pollution. Power plants account for two-thirds of all sulfur dioxide emissions, over one-third of the carbon dioxide (the largest single source), 29% of the nitrogen oxides, and 1/5 of the air toxics. In addition to making utilities the largest single source of U.S. greenhouse gases, the combustion of fossil fuels to produce electricity depends on the extraction of coal and natural gas which also causes significant environmental impacts.

Montana's other primary source of electricity is hydropower generated on both sides of the Continental Divide from the Columbia and Missouri River basins.

Environmental impacts of dams include impaired fish and wildlife habitat, the disruption of natural flooding cycles, the collection of sediment, and impacts on water quality and quantity. Large-scale hydro projects in the Pacific Northwest have had a devastating impact on wild salmon populations and the people and communities that depend upon them.

Montana remains free of nuclear power generation, which must in part be attributable to a citizens' initiative passed in 1978 requiring public approval of any nuclear power plant. The production of energy through nuclear fission has proven economically and environmentally disastrous. Crises such as Brown's Ferry (1975), Three Mile Island (1979), and Chernobyl (1986) have financial counterparts in the Trojan, Watts Bar, Rancho Seco, and Washington Public Power Supply System (WPPSS) plants. Even smoothly operating nuclear plants require a continual supply of uranium and add to the 22,000 ton national stockpile of high-level radioactive waste for which there is still no permanent disposal site.⁴⁷ Generating electricity through nuclear fission also carries the potential for nuclear weapons proliferation.

⁴⁵ Alan Davis, DEQ, "Electricity in Montana -- an Overview," <u>T.A.C. Report</u>, November 1997. Malone, <u>Montana</u>: A History of Two Centuries, 394-397.

⁴⁶ Thompson, "Poisoned Power," A Clean Air Network Report, 1, 4. NCAC, "Plugging People into Power," 4. <u>IR</u> State Bureau, "Study: Montana sizable contributor to global warming," <u>IR</u>, 11 November 1998. See also: http://www.citizen.org/CMEP/RAGE/index.html

⁴⁷ Kraushaar, 136. NCAC, "Plugging People into Power," 6.

<u>Purpose</u>

Given the pervasive and profound environmental and consumer issues associated with the electric utility industry, monumental changes such as those contained in SB 390 are bound to have an effect. Inevitably, such sweeping changes will present both risks and opportunities, a constellation of both positive and negative repercussions. Deregulation should, therefore, be neither blindly embraced nor dismissed out of hand as a matter of ideology. Whether the consequences prove, on balance, to be a boon or a bust depends largely on perspective, and will be determined by numerous events and variables still impossible to predict. A central point of departure for the various camps involved in the debate over restructuring is simply a matter of what to do in the face of such uncertainty. The public interest community urges caution, in recognition of the high stakes involved. Environmental and consumer groups argue that important values must be secured before moving forward. Others are more optimistic, believing that deregulation poses no significant dangers and that any problems that arise can be dealt with as we go. They find a greater risk in waiting for the rest of the nation to catch up, and letting attractive opportunities slip by.

In the time since SB 390 became law, some middle ground has emerged between the worst fears of opponents and the wildest fantasies of proponents. The stranded cost issue, for example, looks like it will be largely resolved by the sale of MPC's generating facilities to Pennsylvania Power and Light at a price higher than many expected. And yet, more than two years into the transition period, small consumers are still waiting for meaningful choices between multiple companies offering them energy supply service.

But for better or for worse, Montana has decidedly set the deregulation ball in motion. All efforts to oppose or reverse deregulation (including two separate attempts to call the legislature back into special session and a citizens' initiative to repeal the law) have failed. On the other hand, it should be emphasized that citizens still have a number of venues available to them in which they might help steer the final course of deregulation. These include future sessions of the legislature, PSC transition plan hearings, transition advisory committee meetings, and congressional deliberations concerning restructuring at

the federal level.⁴⁸ While deregulation diminishes citizens' ability to influence policy through the direct avenue of PSC rate cases, it amplifies their ability to do so indirectly, through market pressure. As mentioned above, for the first time citizens may have the opportunity to select a power provider based on its commitment to environmental and social values. Such choices will help alternative energy sources become more competitive. The formation of "buying co-ops" and a renewed interest in municipal utilities and other manifestations of public power can help promote such choices and offer further venues for citizens to influence policies. And as always, customers continue to have the ability to reduce their electricity consumption through conservation and energy efficiency measures. This paper rests on the premise that an active citizenry can and must play a central role in the unfolding drama of electric deregulation. Montanans must act creatively and decisively to secure the potential benefits of deregulation while sidestepping the pitfalls.

But in order to effectively influence either markets or decision-makers, citizens must first become well informed. It is hoped that this document will prove useful as a general primer on the consumer and environmental dimensions of deregulation and as a reference that will point citizens in the direction of additional information and resources.

<u>Scope</u>

The process of replacing 90 years worth of regulation with competitive markets is enormously complex, with ramifications for all classes of customers, for investors, and for the utilities themselves. As we will see, the spectrum of related issues is broad -- taxation, employment, public benefits programs, and industry infrastructure will all be dramatically affected. A full discussion of the potential impacts of deregulation on Montana's small consumers and natural environment would be unmanageable. Utility policy is always complex, and the pace of change continues to be rapid. Therefore, a number of steps have been taken to narrow the scope of this study. Most importantly, the document focuses on events transpiring immediately prior to, during, and after the 1997 legislature. The 1999

⁴⁸ For example, continuation of Universal System Benefits funding past the year 2003 requires further legislative action.

legislature is also discussed briefly, as are developments leading up to the 2001 session.⁴⁹ While such a work might be rendered quickly obsolete, the truly historic aspect of the changes enacted in 1997 might impart greater relevance to this snapshot.⁵⁰ At a minimum, a guide to the jungle of obscure jargon words that has cropped up should be useful for some time.

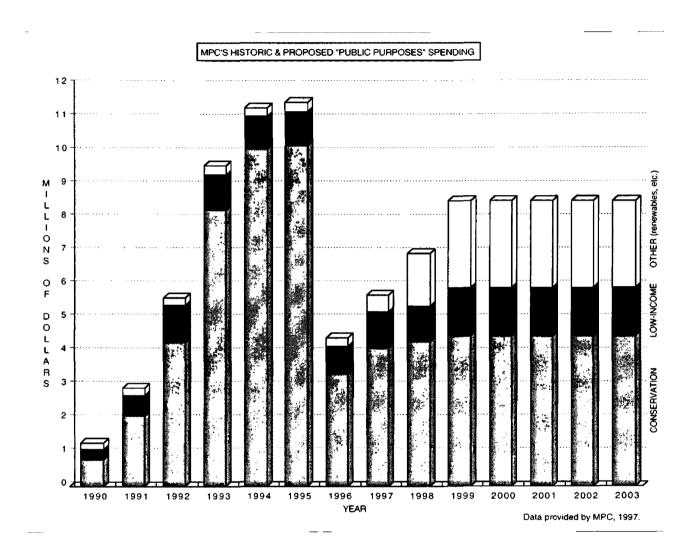
As the state's largest utility and also the central player in the push for deregulation, the MPC will occupy a central role in this paper, providing most of the examples. Not only did SB 390 give co-ops the ability to "opt out" of competition, it allows MDU to defer choice until 2006. Like MDU, the other utilities in the state serve relatively small portions of Montana's electricity customers and will not be examined in depth.

Finally, the paper will adopt a "surface-map" or survey approach to acquaint the reader with the environmental and social impacts of restructuring. As mentioned earlier, many of the concerns initially voiced during the legislature have been adequately addressed or have disappeared as the result of unexpected developments. Likewise, new formerly unanticipated concerns have arisen. In light of such uncertainty, the paper will not attempt to analyze the likelihood of any particular scenario. Instead this paper is meant to impart a general understanding of the terms and issues surrounding deregulation. With this knowledge, it is hoped that consumers and conservationists will have a greater ability to monitor developments, prepare for changes, and effectively influence the course of energy policy in Montana.

⁴⁹ A timeline of important dates pertaining to the deregulation of Montana's electric utilities is provided in Appendix C.

⁵⁰ However, the two most significant developments since January 1, 2000 serve only to further confirm the fears of consumer and environmental advocates and the trends analyzed in Chapter 6. In March, MPC abandoned its involvement in electricity entirely by announcing plans to sell off its distribution system. And by mid-summer, national power shortages caused reliability problems and dramatically increased competitive electricity prices, even for Montana's large industrial customers.

FIGURE 1



CHAPTER 2 SB 390 BACKGROUND

Deregulation -- A National Perspective

A number of circumstances contributed to the deregulation of the electric utility industry in Montana. Technological, economic, and political forces at the local, regional, and national level all played a role. Similar forces also spurred deregulation of other industries in recent years, and some comparisons can be drawn. In many ways, the reshaping of electric utilities parallels changes in telecommunications, transportation, and banking.

Important is the argument that such industries are no longer the "natural monopolies" they once were. In the case of electricity, technological advances have made the model of an integrated utility supplying power from large centralized plants somewhat obsolete. In the past, such an arrangement was virtually necessitated by the economies of scale that could be achieved. Expensive duplication of capital-intensive equipment could be avoided, and prices could be kept low. But the advent of highly efficient combined-cycle natural gas combustion turbines (NGCT) (essentially jet engines anchored to the ground), has made the entrance of new competitors economically feasible. The effect that NGCTs are having on electric utilities is historically analogous to the advent of microwave communication technology, and its role in breaking up AT&T.3

Note that while the production of electricity may no longer be a natural monopoly, the delivery of electricity is. Brennan, 4.

² Jan Falstad, "Electric-utility deregulation bill sparking controversy," <u>IR</u>, 13 April 1997.

³ Smeloff, 2.

Because NGCTs are efficient, easy to build, and economical at small capacities, independent power producers (non-utility generators) can enter the market with relatively low capital costs. In order for traditional coal-fired generating plants to be profitable, they need to be at least 300-600 MW. Gas turbines, by comparison, can be economical below 100 MW, and possibly down to 20 MW. The cheapest energy source is no longer a conventional 1000 MW plant, but a 250 MW gas turbine. Furthermore, NGCTs pose low risk because they can be built incrementally to closely match load growth, and because they operate much cleaner than their counterparts. Adding to the cost-effectiveness of such technology is the low and stable price of natural gas which has resulted from the (comparatively straightforward) deregulation of that industry. Large natural gas supplies have been discovered in Canada, and domestic exploration has been aggressive since passage of the Natural Gas Policy Act in the 1970s. In addition, prices have been kept low by improved recovery technologies and an oversupply of pipeline capacity (although this appears to have reached at least a temporary limit as of 2000, with prices rising rapidly).

New power generating technologies are also able to respond to variable power demands more effectively, which enables companies to economically serve smaller numbers of customers. The more variable demand curves encountered when supplying local neighborhoods (as opposed to the larger geographical areas traditionally served by

⁴ "Today, the most efficient commercial power plant is a 40-Megawatt combustion turbine that was originally developed for a Boeing 747 airplane. When used in a cogeneration plant, 75% or more of the energy contained in the natural gas fuel can be captured for productive uses." Smeloff, 19. Note that all heat engines are governed by thermodynamic constraints which severely limit their theoretical potential maximum efficiency. Kraushaar, 75.

⁵ Brennan, 16-17.

⁶ Mazza, "How the Northwest Can Lead a Clean Energy Revolution," An Atmosphere Alliance Special Report, 17.

⁷ Cleaner plants have lower fuel requirements and environmental compliance costs. Natural gas produces less sulfur and carbon than coal, and until 2000 was a cheap fuel source. But natural gas plants have historically been less efficient than their coal-fired counterparts in converting fuel energy into electricity. However, in the last ten years significant efficiency improvements have been made lowering the heat rate of gas plants from about 9,000 BTU per kilowatt-hour to about 7,000 BTU per kilowatt-hour. Smeloff, 19.

⁸ NCAC, "Plugging People into Power," 30. Smeloff, 2.

⁹ Smeloff, 61.

integrated utilities) are also more easily served because of recent improvements in energy storage technologies (see Chapters 4 and 5 for further discussion). Finally, larger volume transmission lines and the move toward a connected national grid also allowed for the movement of electricity over long distances, facilitating the creation of a national market for electricity.

In addition to technology's role in making competition possible, deregulation could in turn spur technological innovation giving customers additional products and services (as well as suppliers) to choose from. Certainly this has been the case with telecommunications. A recent advertisement from US West offered 17 different telephone features, such as call waiting, caller ID, three-way calling, call forwarding, custom ringing, last call return, call rejection, and continuous redial. Whether or not such a diversity of options will present itself in the area of electricity (and whether that would be desirable) can be debated.

While technological changes have made deregulation both possible and economical (at least for some customers), equally important has been the political will to deregulate. In recent years, that will has been present in strong measure both nationally and in Montana. Deregulation can be seen as part of a broader trend (by no means limited to our borders, and by no means limited to electricity) favoring free markets over government regulation. With respect to electrical utilities, the United Kingdom, Norway, Argentina, Chile and New Zealand have all seen developments favoring competition over regulated monopoly service. Between nations, free-trade initiatives such as NAFTA and GATT underscore a similar "laissez-faire" philosophy. And over the past twenty years, deregulation has visited our nation's airline, banking, insurance, communications (both long-distance and local telephone service, as well as cable television), trucking, and railroad industries in accordance with this ideological shift toward a diminished role of government in commerce. In

¹⁰ See http://www.uswest.com/customchoice

¹¹ Brennan, 8.

Montana, words such as "decontrol" and "privatization" pepper the speech of politicians with startling regularity. 12

Unfortunately, the benefits of this philosophy are not uniformly distributed. Too often small customers in sparsely populated areas are left out. In Montana, objections to deregulation have a familiar ring: "No kind of deregulation has been good for average Montanans," according to a press release written by Ken Maki of the Montana Farmers Union. "Railroad deregulation has made almost every shipper in the state a captive to Burlington Northern & Santa Fe Railway. Telephone deregulation continues to be a hassle as people are hustled incessantly by the various long-distance providers. We all know what happened when the savings-and-loan industry was deregulated. Airline deregulation has brought us fewer flights." 13

Representative Bob Raney (D-Livingston) also places electric deregulation in a larger context: "It appears we Montanans once again fail to learn from history -- even recent history. All we got out of deregulating the rail industry was the loss of the Milwaukee Road and numerous branch lines while receiving higher freight rates in return. Deregulating airlines got us a \$400 ticket to fly to Salt Lake City and back. And, with deregulated phone service, we can't even get a simple service like caller ID in much of Montana." 14

The <u>Great Falls Tribune</u> also took up the theme, expressing disappointment in how the 1996 telecommunications bill has affected the cable television industry: "Instead of lower prices and a rich range of competitors from which to choose, consumers see higher prices and, for a variety of reasons, almost no new competition....And as essential as call-

¹² It might be noted that the public seems less enthused about this philosophy than their elected officials, at least in its application to mental health care, corrections, and environmental protection, all of which have been the subject of significant and lasting controversy in Montana.

¹³ Ken Maki, Montana Farmers Union, news release announcing support for a special session to reconsider electric deregulation, 27 February 1998.

¹⁴ Guest editorial by Bob Raney, "What's the rush with deregulating electricity?" <u>BG</u>, 29 April 1998.

waiting and the History Channel might be, they're pure luxuries compared with electricity."15

On the other hand, Rep. Bill Ryan (D-Great Falls), who carried SB 390 in the Montana House of Representatives, feels that there is a distinction:

Why is deregulation of electricity supply going to be any better than deregulation of airplanes or railroads was? I think we learned something important from those earlier events: When outsiders make decisions for us, Montana's best interests are not considered, Montanans didn't write those laws.

That's why it was important to get ahead of the others and create a framework for electricity choice that was designed for us, and by us."16

While it is true that Montana was one of the first states to pass comprehensive deregulation legislation, it was not done in isolation. Instead, SB 390 grew out of recent policy initiatives undertaken at the federal level. These, in turn, were the culmination of a century's worth of law pertaining to electric utilities. Between 1882 (when Thomas Edison opened the Pearl Street Station) and 1907, utilities were unregulated by state or federal government (note that MPC was formed in 1912, and has been regulated since its inception). ¹⁷ Private ownership soon gave way to public companies, which in turn were rapidly consolidated into multistate holding companies. In such a climate, many utilities were eager for the protection afforded by regulation. To meet this concern and to combat rampant corruption, the Public Utilities Holding Company Act (PUHCA) was passed in 1935 reformulating utilities into the vertically integrated and state regulated companies of today. At the same time, the Federal Power Act was passed giving the direct ancestor of FERC the regulatory powers it enjoys today. ¹⁸

This trend toward greater regulation began to reverse itself in 1978, with passage of the Public Utilities Regulatory Policy Act (PURPA). Among other reforms, PURPA required utilities to purchase power from qualifying facilities (QF), which were small

¹⁵ GFT editorial, "Dereg? Been there, done that," GFT, 13 February 1998. "Promises unfulfilled two years after big telecommunications bill," GFT, 20 January 1998.

¹⁶ Guest editorial by William M. Ryan, "Electricity deregulation by Montanans, for Montanans," <u>GFT</u>, 30 April 1998.

¹⁷ Brennan, 21-24. Guest editorial by Bob Gannon, "All Montanans benefit from utility competition," Missoulian, 14 April 1997.

¹⁸ Brennan, 21-24.

cogeneration and renewable energy plants. In other words, for the first time new players were allowed to sell their product into existing power grids, an important step toward reintroducing competition. At the same time, the Power Plant and Industrial Fuel Use Act created a strong market for such newcomers by forbidding new oil- and natural gas-fired power plants. And it was also in 1978 that MIT researchers developed the first models for deregulated power supply. In 1979, the U.S. Supreme Court handed down the Otter Tail decision recognizing the right of a power company to transmit power through a neighboring utility's electrical grid. 19

The 1992 Energy Policy Act (EPACT) confirmed and extended this move toward greater competition by mandating open, nondiscriminatory, and reasonably-priced access to transmission facilities for wholesale transactions. In April 1996, FERC issued orders 888 and 889 to implement EPACT and to foster a national wholesale electricity market. Each utility that owned transmission equipment was henceforth required to "wheel" other companies' power through its lines in order to facilitate competition. In other words, no longer would a utility have exclusive access to its own power lines. Instead, anyone who wished to use those lines to send power to a wholesale customer could now do so, and at a reasonable price. EPACT also created the new category of Exempt Wholesale Generators (EWG). EWGs are allowed to compete without meeting either the definition of qualifying facility or the constraints imposed by PUHCA regarding corporate structure. But neither are they assured guaranteed buyers, as are QFs. Instead they must compete on their own.²⁰

"Wholesale wheeling" is widely regarded as an improvement over the previous system, even by critics of Montana's deregulation law. According to Tom Power, chair of the University of Montana's Economics Department, wholesale competition "has already driven electric prices in the region to record lows and led to an effective expansion in the size of the electric supply available. That is one of the reasons that no new electric generation has had to be constructed despite the ongoing economic growth in the region." And there is evidence that the benefits of wholesale competition can be felt even

¹⁹ Brennan, 28-30.

²⁰ Brennan, 30.

²¹ Guest editorial by Thomas M. Power, "Put brakes on MPC," GFT, 5 February 1998.

by Montana's small rural customers. In 1998, Gary Wiens of the Montana Electric Cooperatives' Association wrote that wholesale deregulation had already allowed Montana co-ops to secure cheaper electricity for their members.²²

EPACT did not, however, require utilities to open their lines for "retail wheeling." ²³ In other words, a utility could still prevent other companies from accessing its end-use customers through its distribution network. Instead, these customers, whether large industrial or small residential, would continue to belong to their traditional utility. To qualify as a wholesale customer, you needed to either resell the power or self-generate power. An important exception in the Pacific Northwest pertains to a special class of BPA customers known as "direct services industries" or DSIs. DSIs, which include more than a dozen aluminum smelters (all with massive electrical demands), enjoy the privilege of being able to contract directly with BPA, "despite a DOE policy of not granting end-use customers the equivalent of wholesale power purchase rights." ²⁴ For the first time, these companies were finding that they could buy cheaper power elsewhere and began doing so, but not without controversy. ²⁵ Most troubling was that the DSIs were allowed to switch to alternate suppliers without paying off their share of BPA's nuclear debt (all the while continuing to make use of BPA transmission lines). The ensuing protests helped initiate the Comprehensive Review of the Northwest Energy System, which is discussed below. ²⁶

Retail wheeling is more contentious and complicated than wholesale wheeling.

While EPACT prevents FERC from ordering direct access, it does allow individual states to proceed. Since the passage of EPACT, numerous bills to deregulate the industry on the national level for retail customers have come before Congress (from all points on the

²² Guest editorial by Gary Wiens, "Joining forces to buy electricity not exactly a new idea," GFT, 30 April 1998.

²³ Brennan, 7.

²⁴ Smeloff 118, 144.

²⁵ Proponents of deregulation use just such an example to illustrate how deregulation can work in Montana. "Montana saw the biggest customer switch in the country when the Columbia Falls Aluminum Plant switched from the Bonneville Power Administration (BPA) to service from the Flathead Electric Coop, PacifiCorp and Enron." DEQ, "Restructuring the Electric Utility Industry in Montana," 1.

²⁶ Smeloff, 125.

ideological spectrum), but none have gathered much momentum. To a point, the potential benefits of retail access mirror those of wholesale competition. First, lower cost electricity would become available to many customers, especially those in high-cost states or with large power demands (two groups that happen to carry a fairly high degree of influence). Second, greater efficiencies could be achieved as utilities scrutinize their operations to eliminate waste. A competitive retail market might also help avoid the overbuilding that plagued a system in which cost recovery was all but guaranteed.²⁷ Customized services would likely be offered by companies endeavoring to stake out their niche. Finally, state-tostate (or even utility-to-utility) price variability would be substantially reduced. And all these benefits, proponents argued, could begin to materialize even prior to passage of deregulation legislation, in a positive manifestation of "virtual deregulation." PSC commissioners Dave Fisher and Danny Oberg pointed to changes made within MPC long before the drafting of SB 390: "With just the threat of competition on the horizon, it voluntarily began to do what we as regulators had only been marginally successful at getting them to do -- cutting costs, rather than continually coming back to the regulator for higher rates."28

Such benefits, however, rest primarily in the eye of the beneficiary. Customers in lower cost states or with small power demands may encounter higher prices and reduced service. Others may be subjected to annoying, confusing, or fraudulent marketing tactics. "Trimming the fat" may indeed lower prices, but it can also threaten jobs, compromise maintenance, safety, and reliability, and eviscerate environmental and social programs. The cost-cutting praised by commissioners Fisher and Oberg included the elimination of hundreds of jobs and a drastic curtailing of conservation programs. Opponents argue that wholesale deregulation delivers most of the benefits small customers are likely to see, with none of the risk. At the very least, it would be prudent to see how far wholesale

deregulation can take us before embarking on the next step.29

²⁷ But the extent to which these advantages can be augmented by retail competition over wholesale competition may be nominal. See Chapters 4 and 5, in particular the discussion of the WPPSS fiasco.

²⁸ Guest editorial by Dave Fisher and Danny Oberg, "Experts agree on power restructuring bill," <u>GFT</u>, 8 April 1997.

²⁹ Guest editorial by Thomas M. Power, "Put brakes on MPC," GFT, 5 February 1998.

In short, the greatest push for deregulation has come (predictably) from those who stand to benefit most, i.e., the large industrial customers and high-cost states that will likely see reduced energy bills. Industrial customers expect that more accurate cost-of-service pricing will translate into lower energy bills. They believe that industrial prices have been artificially inflated in order to subsidize the residential sector, and that cost-shifting between customer classes is not so much a threat of deregulation as a symptom of regulation. If true, this prediction represents yet another "benefit" that will not be universally enjoyed. So while deregulation may decrease regional price variability, it could increase customer-class price variability (as large customers already pay lower, quantity-discounted rates).

Joining with large customers in supporting retail competition are the independent power producers, energy marketers, and utilities that wish to serve these loads -- in particular, the energy providers that feel confident that their low-cost resources or unique service options will make them competitive in the new environment. Many high-cost utilities fear the loss of security provided by protected franchises and (in some cases) compliant commissioners. Yet, deregulation can present attractive opportunities to get out from under old debt, assuming the utilities can negotiate a generous stranded cost package. Additionally, they may choose to get out of the electricity business altogether by tapping into the consolidation frenzy which is yielding handsome prices for utility properties around the country.

Examples of deregulation's double-bladed sword abound. In an effort to eliminate out-of-market power purchase contracts with qualifying facilities, some of the restructuring bills before Congress contemplate the repeal of PURPA. Many consider these contracts to be an impediment to competition and a source of unreasonably high prices. Others point out that such reasoning neglects the environmental and national security benefits of PURPA, which though difficult to quantify, are real and substantial. In any event, the repeal of PURPA would represent a major blow to the renewable energy industry. The loss of the guaranteed income from utilities could also jeopardize other sources of financing for renewable energy firms: without the stability of these contracts, investors could become

³⁰ DEQ, "Restructuring the Electric Utility Industry in Montana," 3, 4, 12. Smeloff, 57.

³¹ Collins, "Comprehensive Review," 30.

skittish.³² Certainly some irony could be found if PURPA were to succumb to the same forces of competition it had helped create.

In short, the issues are of such number and importance that federal restructuring legislation will probably be some time in coming. While such a "top down" approach to deregulation offers advantages in terms of consistency (sidestepping the difficult question of "reciprocity"),³³ it is easier to address the concerns of individual stakeholders on the regional or state level, where they have more in common.³⁴ Such was the reasoning behind the Comprehensive Review of the Northwest Energy System.

Deregulation in the Pacific Northwest

Because of the low-cost hydropower produced in the Columbia River basin, the Pacific Northwest enjoys the nation's most affordable electricity. As can be seen in Appendix B, Washington, Idaho, and Oregon have the three lowest residential electricity rates in the nation, with Montana not far behind. In a nationally deregulated market, this low cost power would be highly valued and sought after. Hoping to work together to preserve these resources, the governors of the four Northwest states initiated a region-wide study in January 1996. They appointed a 20-member Steering Committee to conduct the study and to represent a broad array of interests (utilities, small and large customers, and environmental groups). The result was the "Comprehensive Review of the Northwest Energy System," often referred to simply as "regional review." The goal was to develop recommendations that would "protect the region's natural resources and distribute

³² Brennan, 38.

³³ Electricity, like wildlife, air, and water resources, knows no state boundaries. Brennan, 8. A patchwork of deregulation laws creates some difficult questions of interstate commerce. It seems unfair for Utility A in a regulated state to raid customers from Utility B in a deregulated state, because Utility B is prevented from picking up any of Utility A's customers. Reciprocity provisions seek to avoid such imbalances, but can raise jurisdictional and interstate commerce issues. Montana's, found at MCA 69-8-411, was amended in 1999 to apply only to in-state companies.

³⁴ Restructuring has, in fact, proceeded on a state-by-state basis, either by administrative rule or legislation. Appendix B shows the striking correlation between the average residential price of electricity in a state and that state's willingness to pursue deregulation. Montana is clearly anomalous.

equitably the costs and benefits of a more competitive marketplace, while at the same time assuring the region of an adequate, efficient, economical and reliable power system."35

In the fall of 1996, the committee held hearings to gather public input on their draft report. These hearings were heavily attended, with many participants expressing displeasure in the draft proposal.³⁶ While the report touched on numerous issues related to restructuring in the Northwest, language concerning the maintenance of environmental and social programs drew the greatest attention from the public. An overwhelming number of participants indicated their desire for stronger environmental and consumer provisions, a concern which had a significant impact on the final report.

Whereas the draft report contained only voluntary funding mechanisms for conservation and renewable resources, the revised report made them mandatory. The final recommendation was to "provide for maximum local control in the implementation of conservation, renewables and low-income energy services, while establishing an effective minimum standard that ensures stable funding for these purposes." The committee proposed that the regional minimum standard "for cost-effective conservation, renewable resource development and low-income weatherization" should be equivalent to 3% of the annual revenues raised from the sale of electricity (\$210 million, based on 1995 figures), with additional money directed toward low-income bill assistance. ³⁸ It is important to realize that the 3% figure was a compromise.

Environmentalists wanted significantly more. The Washington-based Atmosphere Alliance (now Climate Solutions) argued that, "The Northwest has invested up to five percent of

³⁵ Collins, "Comprehensive Review," 3.

³⁶ The hearing in Missoula (Montana's only) had the highest per-capita attendance of any in the Northwest, with approximately 125 people.

³⁷ Collins, "Comprehensive Review," 6.

³⁸ Note that this figure is rather modest, representing only about 65% of what BPA and Northwest utilities spent on these programs in 1995. Still, the 3% figure would later develop into a major point of contention in the development of Montana's deregulation bill. Collins, "Comprehensive Review," 6.

power revenues in these areas in the past, and SBCs should hit at least that point."³⁹ The term "minimum" used above is also important in suggesting that 3% was intended as a floor.

Also strengthened in the final report is the commitment to low-income bill assistance, with a recommendation for funding over and above the 3% figure. Similarly, fish and wildlife fared better under the final report, but this was an area that environmentalists still considered seriously flawed. In fact, the lone dissenting member on the steering committee was the representative of Trout Unlimited. Environmentalists were also disappointed that language from the draft report regarding subsidies had been stripped out. The draft report had called for a congressional study to assess and reevaluate Columbia River subsidies (totaling an estimated \$1 billion per year) such as those given to aluminum companies, the shipping industry, and agricultural interests.

While the report was considered a vast improvement over earlier drafts, opponents to deregulation were still confronted with a "go-forward" document. The report's underlying message is a hearty endorsement of customer choice, with a specific target date of July 1, 1999 by which time direct access should have been extended to all interested customers. The governors and the steering committee both adopted the premise that "the electricity industry is changing, whether we like it or not." The report argues, "The Comprehensive Review is not an initiation of change, but a response to change. It is an effort to shape that change, to the extent shaping is possible, to ensure that the potential benefits of competition are achieved and equitably shared, environmental goals are met, and

³⁹ "SBC" is an abbreviation for "System Benefits Charge." Mazza, "How the Northwest Can Lead a Clean Energy Revolution," An Atmosphere Alliance Special Report, 17. The Eugene Water and Electric Board received a Conservation Eagle Award in the year 2000, because of its commitment to invest 5% of its gross revenues in energy efficiency. "Clean, Affordable Energy Leaders Receive Eagle Awards," Northwest Energy Coalition Report, June 2000.

⁴⁰ The 3% includes money for low-income weatherization, but not for direct energy bill assistance. Collins, "Comprehensive Review," 25.

⁴¹ Collins, "Comprehensive Review," Appendix A.

⁴² Patrick Judge, "Testimony of MontPIRG on the Draft Plan of the Comprehensive Review of the Northwest Energy System," Missoula public meeting, 6 November 1996.

⁴³ Collins, "Comprehensive Review," 2.

the benefits of the hydroelectric system are preserved for the Northwest."⁴⁴ The goals of this section are "a more efficient power system, lower electricity costs, increased product choice and greater product innovation . . . subject to a commitment to maintain the reliability and safety of the electrical power system." However, the report recognizes that "the benefits of a competitive market may flow unevenly to different classes of consumers and that some small consumers may even suffer harm."⁴⁵

Deregulation in Montana -- Senate Bill 390

Shortly after the review was published, Montana Power Co. (MPC) came to the 1997 Montana legislature with an ambitious plan to deregulate the state's electric utilities. The 1997 session was the first in Montana in which bills pertaining to electric industry restructuring were introduced, but talks had been underway for some time. In July 1995, the Montana Public Service Commission (PSC) had begun an inquiry into the topic, and by December of that year, MPC had filed a restructuring proposal which would consolidate its three subsidiaries into two divisions: a regulated customer service and delivery division and a competitive energy supply division.⁴⁶ After two days of roundtable discussions in early 1996 (attended by representatives of most of the potentially affected constituencies), the PSC issued ten principles that it felt should guide electric restructuring in Montana. Additionally, the PSC felt that Montana's IOUs were sufficiently different from each other to warrant individual treatment, deciding to focus first on MPC. The PSC developed an outline of issues for the company to address in its restructuring filing, which the commission received in December 1996.⁴⁷ This filing, after numerous iterations, became the working draft of the company's proposed legislation. Leading into the legislature, the company enjoyed general support from other investor-owned utilities, large industrial customers, Montana's executive branch, and the PSC.

By contrast, the state's electric cooperatives originally approached the 1997

⁴⁴ Collins, "Comprehensive Review," 2.

⁴⁵ Collins, "Comprehensive Review," 7.

⁴⁶ Kathleen McLaughlin, "MPC plans restructuring," IR, 12 December 1995.

⁴⁷ Guest editorial by Bob Anderson and Bob Rowe, "Consumers must be protected," <u>IR</u>, 6 April 1997.

By contrast, the state's electric cooperatives originally approached the 1997 legislature advocating a more conservative plan. They proposed a task force to study the issue and to report back to the 1999 legislature. In a briefing packet sent to legislators prior to the session, the Montana Electric Cooperatives' Association (MECA) argued:

A cautious approach is needed because of past and current experiences. Restructuring of other industries such as natural gas, airlines, motor carriers, railroads and telephones have historically resulted in higher prices and reduced services to some residential and small-commercial customers, particularly those in rural areas. . . . The risks are enormous if policy decisions on electric industry restructuring are arrived at within the limitations of a 90-day legislative session. . . . Industry restructuring policies should be developed in public processes with participation open to all and accessible to all. 48

Environmental and consumer groups were somewhat torn between the two camps. On the one hand, they felt that the regional review had generated a lot of positive momentum for incorporating environmental and broader public interest values into restructuring legislation. Groups such as Montana Environmental Information Center (MEIC), Northwest Conservation Act Coalition (NCAC), and Renewable Northwest Project (RNP) were prepared to embrace the recommendations of the regional review, including its endorsement of deregulation so long as its consumer and environmental safeguards were honored. It was thought that the consensus document represented by the regional review would carry significant political weight (especially since it was signed by MPC's president, Bob Gannon, and both chartered and endorsed by Governor Racicot).

On the other hand, the composition of the legislature (with strong Republican majorities in both houses, as well as control of the executive) made these groups inherently nervous, fearing that whatever environmental provisions the bill might have could easily be stripped away in committee. In other words, given the political climate, most of these groups felt that this was not the ideal time to try to enact such sweeping changes. Furthermore, at least some representatives of the "public interest lobby" were ideologically uncomfortable with the notion of deregulation itself, and naturally suspicious of the ability of markets to deliver the environmental and social benefits of regulation. Finally, groups like MEIC and Northern Plains Resource Council were skeptical that their interests would be met working side-by-side with their corporate counterparts, who happened to be holding 48 Montana Electric Cooperatives' Association, "Talking Points: Customer Choice and Electric Industry Restructuring in Montana," Legislative Briefing Packet, 1996.

almost all of the cards. This attitude was partly the result of having recently endured a long, painful, and unsuccessful attempt to find consensus regarding changes to the Major Facility Siting Act, a process that had eroded what little trust existed between these camps. However, activists realized that if the bill could escape tampering, joining forces with such politically powerful interests had greater chances for success than trying to oppose them.

But the pro-deregulation forces did not hold every card. Together, the co-ops present a formidable political presence in Montana, especially in a legislature sympathetic to rural interests. The co-ops also had the natural advantage of defending the status quo (as it is theoretically easier to kill a bill, especially a large and complicated one with its immediate need in dispute, than it is to pass a bill). The co-ops had what seemed an eminently reasonable position -- not to reject deregulation outright, but merely to go about it cautiously and deliberately. MECA argued that its study-bill "does not stall the decision-making process, but simply moves it forward in a precise, well-reasoned manner." It still allowed "for the possibility of full implementation of retail customer choice well within the time frames sought by most supporters of retail competition," even with Montana's two-year legislative cycle. MECA affirmed that its concerns were primarily about process: "We absolutely support customer choice. We're just concerned that if you try to steamroll legislation in a 90-day whirlwind of legislative activity, we think that is a recipe for disaster." 50

Despite such arguments, and even assuming a unified coalition of co-ops, MDU (Montana-Dakota Utilities, the eastern Montana IOU that also originally supported a go-slow approach), environmentalists, senior citizens, low income and other small consumers, there was still a good chance that the forces for deregulation would prevail.⁵¹ And in the process, these groups would have alienated themselves from their opponents and lost whatever influence they might have had in shaping the bill. The resulting legislation would likely have little or no regard for environmental or other "public interest" values.

Furthermore, so long as there was a chance that the "dereg bill" would genuinely reflect the 49 MECA, "Talking Points: Customer Choice and Electric Industry Restructuring in Montana."

⁵⁰ Bob Anez, "MPC sketches plan for era of competition," <u>GFT</u>, 24 December 1996.

⁵¹ Charles S. Johnson, "MPC proposes 'shopping around," IR, 24 December 1996.

recommendations of the regional review, these groups felt some moral obligation to support it. Finally, despite whatever positive connotations environmentalists might harbor for the "cooperative" model, in Montana, at least, the co-ops are hardly their ideological brethren. While cooperatives sound like a progressive force, culturally and historically they have played a pro-development and often anti-environment role. A look at MECA's resolutions on hydropower, wilderness, endangered species, environmental externalities, environmental mandates, demand side management, and global climate change gives ample evidence of this philosophy. 52 In other words, working with the co-ops could prove equally challenging to environmentalists as working with MPC and its large customers.

In the beginning weeks of the legislature, numerous meetings took place among interested stakeholders to try to forge a compromise bill. For a time, the negotiations looked promising to environmental and small customer advocates. A January 30 draft prepared by MPC specifically referenced the regional review, and included a mandatory sixyear 3% - 3.37% funding level for public purposes. However, this proposal was quickly rejected by MECA.⁵³ Shortly thereafter, Republican leadership in the legislature determined that a dereg bill would be passed that session, with or without the support of potential critics.⁵⁴ In response, the Administration initiated a new set of negotiations, to which environmental and other public interest groups (and even the PSC) were not invited.⁵⁵ The spirit of productive collaboration involving all perspectives had dissolved. Having learned of the meetings from a tip, groups such as MEIC and MontPIRG attended anyway. After many hours of continued deliberations, these groups dropped out,

⁵² http://www.mcn.net/~mtcoop/

⁵³ Most of MECA's members are located east of the Continental Divide and outside of the Columbia River Basin. MECA argued fairly convincingly that, as such, they should not be bound by the recommendations of the regional review.

⁵⁴ Guest editorial by Sen. Greg Jergeson (D-Chinook), "Report from the Senate," <u>Havre Daily News</u>, 10 March 1997. Montana Electric Cooperatives' Association, "Legislature moves toward electric industry restructuring," <u>Rural Montana</u>, March 1997.

⁵⁵ Guest editorial by Dave Fisher and Danny Oberg, "Experts agree on power restructuring bill," <u>GFT</u>, 8 April 1997. Charles S. Johnson, "The passing of SB 390: One year after enactment, sparks still fly over utility act," <u>IR</u>, 3 May 1998. Guest editorial by Patrick Judge, "Legislators listened to MPC, but not to consumers," <u>GFT</u>, 11 May 1997.

recognizing that the bill was not going to be one they could support and frustrated that their concerns were falling on what seemed to them to be deaf ears.

In the meantime, the rural electric cooperatives had taken an abrupt about-face. They abandoned their plea for a slow, methodical, and open process, and instead began trumpeting the benefits of the deregulation bill. In part, this reflected the political reality described above -- either joining the losing effort to oppose a bill (in which they would get nothing), or embracing the bill and getting a few concessions in return. Opting for the latter approach, the co-ops obtained desired changes to the Territorial Integrity Act (which they had brought to the legislature as a separate bill) and the ability to "opt out" of deregulation which would allow them to maintain their traditional inviolate service areas.⁵⁶ Like other utilities, co-ops are authorized to collect stranded costs should they decide to open their territories to competition. SB 390 also preserved the co-ops' non-profit status and independence from PSC control. Finally, co-ops are granted the ability to "collectively pool their statewide credits to satisfy their annual funding requirements for universal system benefits programs and low-income energy assistance."⁵⁷ Co-op support of SB 390, then, is seen by some as a desire to achieve what benefits and protections they could, rather than a genuine endorsement of deregulation itself. This contention is bolstered by the co-ops' subsequent unwillingness to join the competitive fray, with only 2 of 26 having done so at the time of this writing.

Montana-Dakota Utilities (MDU) followed the co-ops' example, supporting the bill after having secured special language pertaining to "a public utility currently doing business in Montana as part of a single integrated multistate operation, no portion of which lies within the basin of the Columbia River." MDU was allowed to postpone customer choice in its territory until July 1, 2006 (versus July 1, 2002 for other IOUs).

Without the help of the co-ops and MDU, efforts to oppose the bill became essentially futile. Nevertheless, a coalition of low-income, senior citizen, consumer, and environmental groups organized a strong campaign, inside and out of the statehouse, to

⁵⁶ The Territorial Integrity Act is found at MCA 69-5-101.

⁵⁷ MCA 68-8-402.

⁵⁸ MCA 69-8-201.

protest what they felt to be an unconscionable bill. It was hoped that by bringing their message to the public, they could rally sufficient grassroots opposition to influence the outcome (or to at least create pressure for key amendments) -- a daunting task given the complexity of the bill and a public which was caught largely unaware.

Arguments in Support of SB 390

Meanwhile, proponents of deregulation orchestrated a strong campaign of their own. Nothing short of a masterful lobbying effort was required to pass this complex and lengthy bill under enormous time constraints.⁵⁹ Normally, in order to stay alive, all bills must pass out of the house in which they were introduced prior to the transmittal deadline. But owing to the size and complexity of SB 390, and the lengthy negotiating process by which it was formed, SB 390 wasn't even introduced until March 8, more than a week after the February 26 transmittal. Even so, the bill still needed to make it through committee and floor hearings in both houses (and subcommittee hearings in the House, as it turned out), all before adjournment. All told, dozens of votes would be taken on the bill and its amendments. Once introduced, intensive lobbying quickly yielded 58 cosigners (although several would ultimately vote against it) along with the primary sponsor, Sen. Fred Thomas (R-Stevensville). In committee, proponents ostensibly had the task of establishing not only the need for such a massive bill but its immediate need, especially in light of MECA's previous arguments as to the prudence of a "go slow" approach. In essence, their case was as follows:⁶⁰

⁵⁹ The opposing view was that with the firm commitment of the Republican legislative leadership (and with the power of having such strong majorities in both houses), the bill was "greased" from the beginning, a foregone conclusion regardless of the apparent hurdles. Likewise Butte Democrats, as a matter of record, often vote in parallel with the interests of the Butte-based company. The deregulation bill was no exception, with every Butte-area Democrat (and the single Butte Republican) voting for it. Incidentally, MPC executive vice president and chief operating officer Jack Haffey was a Senator representing Anaconda from 1981-1987. Many Great Falls Democrats also voted for the bill, following the lead of Bill Ryan (a former MPC employee) who carried SB 390 in the House.

⁶⁰ Note that the "pro and con" arguments which follow are presented from the perspective of those making them at the time of the 1997 session, and do not represent the views of the author.

- already a reality in the wholesale industry and is inevitable at the retail level as well. Even PSC commissioner Bob Anderson who opposes the bill has said "It's not a matter of whether, but when and how to have customer choice." The question, then, comes down to whether we proceed with a Montana-crafted solution or wait and let the federal government control our destiny for us (with a law that would more likely cater to the influential eastern states than to states like Montana). "It is too late to 'just say no.' ... Congress has seen five bills on restructuring that affect the states this session, and if Montana takes no action, Congress will decide the issue." While SB 390 acts responsibly by addressing this issue now, it is by no means rash or hasty. It was developed as the result of a collaborative effort involving more than 100 meetings and the participation of a broad array of interests. It represents a "seamless," orderly, and gradual transition to choice thereby avoiding the disruptions of "flash-cutting on day one."
- 2) If we do choose to wait, large industrial customers might take advantage of the new wholesale rules to go ahead and "leave the system" anyway, by switching to alternate energy suppliers. If they do go before Montana has a deregulation law in place, the utility will have to recoup its fixed costs from the remaining captive customers. In other words, large customers could effectively dump their share of stranded costs on the rest of us.
- 3) And not only <u>can</u> large customers leave, they likely <u>will</u> leave (if not figuratively, then literally). Although electricity prices in Montana are relatively low, cheaper prices

⁶¹ Mike Dennison "MPC president expects good price for facilities," GFT, 11 March 1998.

⁶² Charles S. Johnson, "MPC proposes 'shopping around," IR, 24 December 1996.

⁶³ DEQ, "Restructuring the Electric Utility Industry in Montana," 5.

⁶⁴ In retrospect, of course, this turned out not to be the case. DEQ, "Restructuring the Electric Utility Industry in Montana," 2.

⁶⁵ Guest editorial by Bob Gannon, "Power restructuring bill doesn't rip off consumers," GFT, 20 April 1997.

⁶⁶ Bob Anez, "MPC sketches plan for era of competition: If customers switch to other electric providers, move will have to be gradual, company warns," <u>GFT</u>, 24 December 1996. Charles S. Johnson, "MPC proposes 'shopping around," <u>IR</u>, 24 December 1996. Montana Power Company, "Customer-choice transition plan presented to PSC," <u>Montana Energy</u>, August 1997.

abound in other Pacific Northwest states, particularly for these attractive customers. Also, other low-cost opportunities are being made available nationally, by abundant natural gas and low-cost energy conversion technologies.⁶⁷ Deregulation would facilitate such opportunities and continue to provide a mechanism for collecting fixed costs from these industries. The alternative is to let out-of-state suppliers "cherry pick" the large industrials, in which case Montana would lose these customers' energy business and also their stranded cost payments. Before passage of SB 390, many of MPC's large customers had already been approached.⁶⁸ Without offering access to the competitive electricity market, it will be difficult for the state to attract new industry, let alone to retain existing industry. Relocating is a surefire way for these industries to escape MPC's stranded costs. Exported industries also take with them much needed jobs and tax dollars, a price Montana can ill afford to pay given its current economy.

- 4) In addition to being protected from the cost-shifting and other impacts that would result from large customers leaving, small customers will themselves benefit directly from competition. Improvements in system efficiency and reductions in regulatory costs will lower prices for all customers.⁶⁹ As MPC's Jack Haffey noted, "After the transition, consumers would be no worse off, and actually under the rate freeze for the next four years, better off, than if the bill didn't pass."⁷⁰ Furthermore, small customers will benefit from innovation and customized services. It is simply not fair to deprive them of the freedom to choose and the benefits that will flow from that choice.
- 5) Any problems that develop can be dealt with as we go, by the legislature, the PSC, or the Transition Advisory Committee (TAC).⁷¹ As MPC's Perry Cole said, "We

⁶⁷ Jan Falstad, "Enron competes with MPC," <u>BG</u>, 17 April 1997.

⁶⁸ Jan Falstad, "Electric-utility deregulation bill sparking controversy," IR, 13 April 1997.

⁶⁹ Bob Miller, "House approves deregulation bill," IR, 16 April 1997.

⁷⁰ Jan Falstad, "Utility choice bill debated," <u>BG</u>, 5 April 1997. Guest editorial by Bob Gannon, "MPC has a right to sell; legislators shouldn't meddle," <u>GFT</u>, 15 February 1998.

⁷¹ Jan Falstad, "Utility choice bill debated," <u>BG</u>, 5 April 1997. AP, "PSC commissioners disagree on effects of electrical deregulation," <u>GFT</u>, 9 April 1998.

think it's better to learn by doing than by studying. We've already been through the study process."72

Arguments in Opposition to SB 390

Opponents to deregulation presented a somewhat different picture, and offered specific rebuttals to the aforementioned arguments.

1) While it may be true that "there is no reason to regulate a truly competitive market," the converse is also true: that "there is no reason to deregulate a truly noncompetitive market," at least until such time as it becomes competitive. While retail wheeling may in fact be inevitable and even desirable, that day has not yet arrived -- markets for small customers have simply not yet matured. And as David Ewer pointed out to the Senate Taxation committee, we are not being left behind; "regional choice is not the law of the land." PSC commissioners Anderson and Rowe say that "the wholesale power market (sales to utilities or very large customers) is now starting, but has taken 20 years to develop. Workable competition for retail customers, small businesses, and residential customers is a long way off." And Montana may have some time yet before the "self-determination" window closes. The likelihood for quick action at the federal level is diminishing rapidly, as is some of the enthusiasm at the state level (thanks in part to early disappointments in California's implementation). Montana's own Senator Conrad Burns, a member of the Senate Energy Committee, indicated the wisdom and likelihood of Congress moving slowly:

⁷² Mike Dennison, "Utility reform '97 session's 800 lb. gorilla," GFT, 13 January 1997.

⁷³ Charles S. Johnson, "Utility bill sparks debate," IR, 14 March 1997.

⁷⁴ Guest editorial by Bob Anderson and Bob Rowe, "Consumers must be protected," <u>IR</u>, 6 April 1997.

^{75 &}lt;u>Missoulian</u> editorial, "No need for haste in power deregulation," 3 December 1996. <u>Missoulian</u> editorial, "Utility deregulation will drag on," 1 April 1997.

In the minds of many, whether to deregulate is a foregone conclusion. But to those who are already on that track, I would say "whoa." . . . If we determine that deregulation is in the best interest of the public and our economy, then we can focus on how to proceed. But it could take a great deal of time. ⁷⁶

If Congress does eventually decide to deregulate, its decisions on how to do so would have preemptive authority over state laws anyway. And only four states have enacted comprehensive restructuring laws (California, Pennsylvania, Rhode Island, and New Hampshire). And as high-cost states, they all have more to gain from deregulation than has Montana. Nor is it a decision that is reversible, as emphasized in committee by Sen. Fred Van Valkenburg (D-Missoula), who said, "We're being asked to put in place an economic earthquake that will ripple across Montana. . . . you can regret in your leisure what you engaged in at such a rapid pace now."77

2) The threat of large customers leaving the system prematurely is overstated. In fact, as end-use customers, it is at this time illegal for them to do so. And to reformulate themselves as "wholesalers" is not as trivial a task as it might sound. Even assuming that this threat is a legitimate concern, the remedy is just as easily found in the imposition of exit fees for companies that leave the regulated system, as it is in complex and sweeping deregulation proposals. As PSC Commissioner Bob Anderson put it, "we've got a 40-page solution when a couple-of-page bill would do." Exit fees have already been shown to work. University of Montana professor Tom Power notes that in the natural gas industry, we have managed to rely on that mechanism for half a decade. 80 Even if

[&]quot;choice" makes sense for large customers, that does not imply that all customers should be 76 Senator Burns did not, however, oppose faster action at the state level and later endorsed Montana's law. Daniel Meisler, "Group urges lawmakers to oppose electric-utility deregulation measure," IR, 7 May 1997. The quoted remarks were taken from an address given to the 1997 Montana legislature.

⁷⁷ Mike Dennison, "Panel amends, endorses utility bill," GFT, 22 March 1997.

Hardly a new or exotic idea, exit fees had been discussed in Montana since at least December 1995. Kathleen McLaughlin, "MPC plans restructuring," IR, 12 December 1995. Smeloff, 126.

⁷⁹ Mike Dennison, "Consumer advocates to line up against utility restructuring bill," <u>GFT</u>, 13 March 1997.

⁸⁰ Later, this approach would also be used as part of the repealer initiative discussed in Chapter 6. Guest editorial by Thomas M. Power, "Put brakes on MPC," <u>GFT</u>, 5 February 1998.

dragged into a competitive environment before market adequately developed. Other options should be explored that might better address the concerns of both types of customer.⁸¹

3) The relocation argument is really just a time-worn scare tactic. Throughout Montana's history, industries have repeatedly threatened to leave the state if various environmental laws were enacted, but have rarely done so. In this instance, the argument neglects the costs associated with relocation and the reality that Montana is already a low-cost region which limits the potential savings that could be achieved by moving.

One example proponents use to illustrate the reality of competition in the state is the Advanced Silicon Materials, Inc. plant in Butte. ASiMI, as it is known, will eventually be a \$500 million manufacturing plant that produces silicon chips for computers. When finished, the plant will employ 275 workers and will be MPC's largest customer, using about 100 MW (roughly twice as large as its former top account, the 48-MW Stone Container facility in Missoula). But the ASiMI plant just as easily serves as an example of why SB 390 is not needed. It is true that MPC's competitive electricity rates were a major drawing point when ASiMI was deciding where to locate. But it is also true that these rates were arranged under the current system of regulation -- a testimony to its flexibility. And because the competitive rate offered by MPC depended upon PSC approval, the commission was able to review it to make sure it was not being subsidized by other MPC customers. Similarly, the example of the Columbia Falls Aluminum Company (CFAC) switching from BPA to the Flathead Electric Co-op is a special case because of CFAC's distinction as the state's only DSI. And in this case, the company switched to a Montana utility, not from one (which is the primary concern). In both instances, the companies ended

⁸¹ See the discussion of the portfolio model ("dereg lite") in Chapter 6, under "The Small Customer Buying Cooperative."

⁸² Guest editorial by Fred Thomas, "State proactive in electric restructuring," <u>BG</u>, 9 April 1998. Malone, <u>Montana: A Contemporary Profile</u>, 20. John Stucke and Charles S. Johnson, "State's largest power users researching costs before switching," <u>IR</u>, 5 July 1998. Personal telephone conversation with Will Rosquist, PSC, 4 August 2000.

⁸³ Mike Dennison, "Critics say MPC ad is misleading," <u>GFT</u>, 18 June 1998. In fact, some contend that without the financial assurances enjoyed by utilities under regulation, subsidized rates aimed at attracting industry will be jettisoned just as subsidized rates for low-income customers are threatened. Brennan, 131.

up being served by the utility that they would have been based on geographic service territories.

- 4) The "clamoring for choice" that deregulation proponents talk about is really only coming from large customers. David Ewer captured the sentiments of many legislators in observing, "Nobody in my district is asking for choice."84 All told, there is very little evidence that ordinary Montanans are demanding the opportunity to choose -- a fundamental piece of the puzzle which seems to be missing. It seems equally plausible that Montana's small customers are in fact quite satisfied with the status quo, which happens to be low-cost, reliable power. Tom Power attested, "I haven't seen one shred of evidence that small customers want [choice] or that it would be particularly good for them. So why do we want to force them to spend more time and energy on this [decision], rather than spending their time fishing or hunting or reading to their children?"85
- 5) While there may be occasion to alter the course of deregulation in the future, many decisions in the bill simply cannot be revisited; you cannot simply "put the genie back in the bottle once you pass this bill," as David Ewer said.⁸⁶ The issue demands that we get it right the first time.⁸⁷

Another Opposition Argument -- Stranded Benefits

In addition to these rebuttals, one area in particular stood out as a central rallying point for opponents to SB 390, that being the issue of stranded benefits (treated in Section 22 of the bill).⁸⁸ Stranded benefits are environmental and low-income assistance programs (also known as public purposes) "that were funded and operated by regulated utilities but which are likely to be abandoned to make the supporting utilities more competitive with

⁸⁴ Jan Falstad, "Utility overhaul is goal," BG, 12 March 1997.

⁸⁵ Mike Dennison, "Critics slam company for quitting sale of electricity," <u>GFT</u>, 28 August 1998.

⁸⁶ Bob Miller, "House approves deregulation bill," IR, 16 April 1997.

⁸⁷ Even MPC's Perry Cole said, "It's like landing an airplane -- you can't make mistakes." Bob Anez, "MPC sketches plan for era of competition," GFT, 24 December 1996.

^{88 &}lt;u>MCA</u> 69-8-402.

other market participants that have no such responsibilities."⁸⁹ Because of the diversity of interests affected by these programs, this issue helped unify the opposition. And as one of the bill's more controversial (and comprehensible, as it turned out) sections, it provided an effective tool for galvanizing public sentiment. It is appropriate to examine this section here, because it bridges the consumer and environmental concerns discussed in later chapters. The term "stranded benefits" should not be confused with the terms "stranded costs" or "stranded assets" (which are synonymous).

While programs supporting energy conservation, renewable energy, low-income weatherization, and low-income bill assistance were traditionally required under regulation, they may well be "stranded" by the move to competition. This move has led some utilities to abandon or significantly curtail their commitment to these public benefit programs (also known as "public purposes"), despite their long-term economic, social, and environmental benefits. In a deregulated environment, utilities place a greater emphasis on short-term financial considerations as they attempt to be as lean and competitive as possible. Drastic cutbacks in environmental and low-income programs can occur even prior to the passage of restructuring laws, a process known as "virtual deregulation." In 1996, for example, the Montana Power Company reduced its conservation budget by 70% (see figure 1, page 19).

Acknowledging the threat that competition poses to these programs, SB 390 established a "universal system benefits charge" (USBC), equal to 2.4% of each utility's 1995 annual retail sales in Montana. The charge (which would be collected by the distribution utility) was to appear on consumers' bills beginning January 1, 1999 and

Montana, these programs include demand-side management (DSM - see "Conservation" in Chapter 4 and "Conservation / DSM -- Public Purpose Funding" in Chapter 5), renewable energy supports, and the "inclusion of environmental costs in utility resource decisions," which is known as integrated resource planning or IRP (see Chapter 5 for a more thorough discussion of these programs). Low-income programs include not only direct bill assistance and weatherization, but discounts and "prohibitions against winter service cutoffs." DEQ, "Restructuring the Electric Utility Industry in Montana," 8. MPC programs include: Efficiency Plus Home Energy Audit, Free Weatherization (for customers below 150% of Federal Poverty Guidelines), and a 15% low-income discount federally funded by the Low Income Energy Assistance Program (LIEAP). Montana Power Company, "Explaining the Universal Systems Benefit Charge (USBC)," Montana Energy, June 1999.

continuing until July 1, 2003 (4.5 years).⁹⁰ The rationale behind a sunset date is that such benefits may one day flow from the market itself, becoming "free-standing, self-sustaining and self-financing."⁹¹ In the case of renewable energy, declining prices may reach the point where such subsidies are no longer needed.

While supportive of the USBC concept, environmentalists criticized this section of the bill on several grounds. They urged a funding level greater than 3% and for a longer duration, in accordance with the regional review's recommendations. And whereas the regional review's funding level was established as a constant percentage, able to grow with increases in regional retail sales, Montana's was a frozen dollar amount. 92 Note too that the region's 3% figure does not include direct low-income energy bill assistance, while Montana's 2.4% does. The regional review separated this category out, and called for additional funds to continue "the energy system's historic role in providing energy bill assistance," thereby maintaining current levels. 93 According to the regional review, \$39 million was spent on bill assistance in the Northwest in 1995, \$16 million of which came from utilities (representing 0.23% of retail sales). 94 The report recommended that the 3%+ standard should be met by July 1 1997 and for ten years thereafter, at which time it would be reevaluated. Each of the four states (Montana, Washington, Oregon, and Idaho) was to pass legislation by July 1, 1999 requiring its electric utilities to meet the standard. It is

⁹⁰ As a "nonbypassable lines charge," the charge could not be avoided by simply switching suppliers. All electricity customers in the state would pay it, regardless of whether or not their utility had entered the competitive arena. This arrangement (versus a charge collected by the supply companies) makes sense, as it might prove difficult to require non-utility generators to collect and remit these funds. Regulator-mandated DSM creates a patchwork system of funding that is inappropriate in a competitive environment as it would grant an advantage to those energy suppliers that do not support these activities. DEQ, "Restructuring the Electric Utility Industry in Montana," 8-9. Another advantage of designating the USBC a "lines company charge" is that the distribution utility is guaranteed recovery from a captive customer base, and is not in the position of having to cut costs in order to be competitive.

⁹¹ DEQ, "Restructuring the Electric Utility Industry in Montana," 9.

⁹² The regional review translated the 3% into a dollar figure for 1995 only for the sake of comparison. Montana's law, in contrast, firmly established its funding level as a percentage of 1995 sales with no adjustments for inflation or increased sales.

⁹³ Collins, "Comprehensive Review," 25.

⁹⁴ Collins, "Comprehensive Review," 21.

Northwest follow suit. 95 Nonetheless, environmentalists found themselves in the uncomfortable position of advocating a figure which they had only agreed to as part of a grudging compromise. Suddenly, what was to them the floor funding level had somehow been transformed into a ceiling, the highest figure they had any chance of getting. Arguing from a position of political weakness, their goal was to defend the 3% and the good faith process that had produced it. But any further weakening became wholly unpalatable. And, as they learned, there was a great deal of difference between a solid 3% and a "swiss cheesed" 3%, hollowed out by qualifications. The fierce controversy over the regional review's recommendations was somewhat baffling to environmentalists, because of the relatively small amounts of money involved. According to an MPC bill insert, of the \$47 the typical residential customer pays each month, only \$1.05 would go to USB programs, whereas \$11.50 would go to stranded costs. 96

Representatives of the public interest community took strong exception to a series of provisions limiting the universal system benefits obligations of large industrial customers, provisions they maintained were emblematic of the bill's overall bias in favor of big business (see "Preferential Treatment" in Chapter 3). The first such objectionable provision is the exceptionally vague statement that "(6) An individual customer may not bear a disproportionate share of the local utility's funding requirements, and a sliding scale must be implemented to provide a more equitable distribution of program costs." The next provision reads as follows:

⁹⁵ At the time of this writing, it appears that Washington and Oregon may indeed move forward with 3% funding levels. Danielle Dixon, "WA Considers System Benefits Standard," and Steven Weiss, "Oregon Presents Draft Restructuring Rules," Northwest Energy Coalition Report, February 2000.

⁹⁶ Montana Power Company, "What effect will customer choice have in the years to come -- Expected Breakdown of a Typical Unbundled Bill," Montana Energy, June 1997.

- (7) (a) A customer with loads greater than 1,000 kilowatts shall:
- (i) pay a universal system benefits program charge equal to the lesser of:
- (A) \$500,000 less the customer credits provided for in this subsection (7); or
- (B) the product of 0.9 mills per kilowatt hour multiplied by the customer's kilowatt hour purchases, less customer credits provided for in this subsection (7);
- (ii) receive credit toward that customer's annual universal system benefits charge for internal expenditures and activities that qualify as a universal system benefits program expenditure and these internal expenditures must include but not be limited to:
- (A) expenditures that result in a reduction in the consumption of electrical energy in the customer's facility; and
- (B) those portions of expenditures for the purchase of power at retail or wholesale that are for the acquisition or support of renewable energy or conservation-related activities.
- (b) Customers making these expenditures must receive a credit against the customer's annual universal system benefits charge, except that any of those amounts expended in a calendar year that exceed that customer's universal system benefits charge for the calendar year must be used as a credit against those charges in future years until the total amount of those expenditures has been credited against that customer's universal system benefits charges.⁹⁷

The first thing to note is that SB 390, here and elsewhere, distinguishes between ordinary customers and customers that have "loads greater than 1,000 kilowatts," which serves as an effective definition for "large industrial customer." The perks that such customers enjoy under this section are several. First, there is a two-tiered rate cap. In no instance can any customer pay more than \$500,000 in a year. And in no instance can the customer pay more than 0.9 mills per kilowatt hour. The 0.9 mill standard would apply to customers using between 1 Megawatt and 63.4 Megawatts (in other words all large customers in the state other than CFAC and eventually ASiMI-- see Chapter 5, "Deregulation Stalls"). Therefore, the \$500,000 limit would apply only to CFAC (where it would work out to 0.165 mills) and ASiMI (where it would be equivalent to 0.571 mills). 99

It is useful to contrast these figures with the USB obligation of residential customers. In September 1999, when MPC's bills were first itemized (or "unbundled") to show individual charges, the USBC was 1.334 mills per kilowatt hour (about 50% higher

⁹⁷ MCA 69-8-402.

 $^{^{98}}$ By contrast, the average Montana family uses about 1 average kilowatt of power. A kilowatt is a rate of energy consumption, whereas a kilowatt-hour is a quantity of energy. Therefore, a home which uses 1 kilowatt of power, consumes about 9000 kilowatt-hours per year (because there are 8760 hours in a year). Energy = Power * Time 99 \$500,000 / (345,000 kw * 8760 hours) = 0.165 mills.

 $^{$500,000 / (100,000 \}text{ kw} * 8760 \text{ hours}) = 0.571 \text{ mills}.$

than industry's 0.9 mills, and more than eight times the "rate" paid by CFAC). For the average residential customer, who uses 750 kwh and pays approximately \$50 per month, this comes out to exactly \$1 per month (or about 2% of the customer's total bill, close to the 2.4% suggested by the standard). A basic inequity arises for a commercial customer using, for example, one Megawatt of power. If charged the 1.334-mill rate, the obligation would be about \$11,686, the same as a customer using 1.482 Megawatts and paying the 0.9-mill rate! Similarly a 1.001 Megawatt customer would pay the same as a 675 kwh customer (\$7,892).

Subsection (7) also grants large customers credits for their internal expenditures. This credit, which was later predicted to consume approximately 30% of USB funds, was opposed on a number of grounds. 100 First, it did not seem fair that a factory could skate on a portion of its USB obligation by means of an internal efficiency improvement while a residential customer could receive no such credit for, say, buying a compact-fluorescent bulb. Second, internal investments in energy efficiency pay for themselves over time and are sound business decisions already. As such, companies are allowed to waive their USB contributions because of actions that make sense anyway, and which need no subsidy. Third, low-income interests opposed the credit because this use of USB funds is 100% allocated to conservation. Fourth, with the ability to roll funds forward, a company could conceivably opt out of this charge for a decade or more with a one-time retrofitting investment. Finally, the credit system poses significant verification issues.

On the other hand, the Natural Resources Defense Council (NRDC) pointed out that from an environmental perspective the credit represents a legitimate use of USB funds. It is with these large industries that the greatest opportunity for conservation gains can be had, and at the least cost. And environmentalists had agreed to the general concept of credits as part of the regional review compromise. ¹⁰¹

MPC's Perry Cole said that without these various exemptions, the funding levels would be too burdensome for businesses that operate in "a very competitive marketplace." Consumer advocates were perplexed as to how such industries could have a more difficult 100 Jan Falstad, "Changes urged to aid small electricity users," BG, 16 November 1997. 101 Rachel Shimshak and Peter West, "Testimony of the Renewable Northwest Project to the Montana Senate Taxation Committee," 13 March, 1997.

time paying their share than ordinary Montanans. Nor were their sympathies stirred by the recollection of group agreement held by Mr. Cole: "We thought we heard the group say, 'Yeah, Columbia Falls, you should be treated differently." 102 Even NRDC (which was probably the most conciliatory environmental group involved) was adamant on this point, including as an explanation to a proposed amendment language reading in all caps, "NRDC DOES NOT SUPPORT LEGISLATIVELY SPECIFYING CAPS ON LARGE CUSTOMER PUBLIC-PURPOSE CONTRIBUTIONS." 103

In defense of the standard, proponents of SB 390 noted that the 2.4% USBC represents an increase over current funding levels. For MPC, 2.4% is equivalent to \$8.6 million annually, which exceeds the 1996 (\$4.4 million), 1997 (\$5.7 million), and 1998 (\$7 million) levels. In 1995, however, the utility spent \$11.5 million, the culmination of a build-up lasting at least five years (see figure 1, page 19). The 2.4% represents an increase in funding levels for many if not most co-ops. SB 390's supporters contended that opportunities for cost-effective conservation and renewables are currently limited (particularly for many co-ops), because of the low prices generated by natural gas combustion turbines and low-cost power surpluses. Cost-effective options will continue to

¹⁰² Charles S. Johnson, "Enviros say new utility law 'sweetheart' deal for MPC," <u>IR</u>, 14 February 1997.

¹⁰³ NRDC's proposed amendments to SB 390 written by Deborah Smith, 3rd reading copy, 10 April 1997.

¹⁰⁴ A report issued in the year 2000 by MPC showed that of the \$7.8 million collected, \$2.7 million (35%) was used by large customers for efficiency improvements in their own facilities, \$1.7 million (23%) went to low income bill assistance and weatherization, \$800,000 went to the Northwest Energy Efficiency Alliance for market transformation, \$2.1 million was spent on conservation and renewables, and \$500,000 was retained by the company for administrative costs. "Around the Region," Northwest Energy Coalition Report, June 2000.

diminish if competition further lowers prices. ¹⁰⁵ Co-ops also resisted the regional review's proposed funding level on the grounds that most Montana co-ops do not even fall within the geographic boundaries of the Pacific Northwest region (which is thought of as encompassing the Columbia River Basin and therefore only the portion of Montana west of the Continental Divide). Finally, they wished to maintain their strong tradition of democratic self-reliance and self-governance. If co-op customer-members feel that additional conservation funds are warranted, they can always express that desire through their elected boards of directors. ¹⁰⁶

The USBC was also heralded for its ability to bring greater consistency to public benefits programs. DEQ observed that under regulation, "coverage is incomplete (e.g. low-income co-op members do not receive the same programs or benefits under those programs) and the costs are not spread evenly or equitably (electricity bills are not necessarily correlated with ability to pay)." 107 In other words, both benefits and costs depend upon geography.

Beyond Montana's USBC, broader implications of virtual deregulation and stranded benefits have been pointed out. The effects of cost-cutting, for example, can

¹⁰⁵ DEQ, "Restructuring the Electric Utility Industry in Montana," 9. Charles S. Johnson, "Enviros say new utility law 'sweetheart' deal for MPC," IR, 14 February 1997. Note that by the summer of 2000, such surpluses no longer existed in the Pacific Northwest. In fact, there was a 3000-Megawatt deficit due to a number of long-term and short-term factors which together have increased demand, reduced supply, and increased price. Population growth and unusually warm weather this year have increased demand while a late runoff and drought conditions have limited hydroelectric capacity. Furthermore, several major coal-fired plants have been out of commission due to routine maintenance and break downs. And conditions in the Northwest usually intensify, not improve, during the winter months due to higher heating and lighting demands and declining power production from hydroelectric dams. High natural gas prices also contributed to the price spikes. Bob Anez (AP), "Experts to meet over soaring rates: Escalating electricity rates attributed to hot weather, no rain and plant failures," IR, 1 July 2000. AP, "Northwest may experience energy shortage this summer," IR, 1 March 2000. Bob Anez (AP), "Experts to meet over soaring rates: Escalating electricity rates attributed to hot weather, no rain and plant failures," IR, 1 July 2000. AP, "High demand, low supply mean astronomical prices for energy," GFT, 30 June 2000. AP, "Utilities scrambling for power: Last week's power shortage that hindered the Northwest calling attention to region's potential for major blackout," IR, 3 July 2000. Mark Glyde, "'Perfect Storm' Jolts Northwest Power Grid," Northwest Energy Coalition Report, July 2000.

¹⁰⁶ DEO, "Restructuring the Electric Utility Industry in Montana," 5.

¹⁰⁷ DEQ, "Restructuring the Electric Utility Industry in Montana," 9.

extend far beyond environmental and low-income programs. Between 1988 and 1997, Montana witnessed the first "stranded human costs" of deregulation as MPC reduced its workforce by 700 employees, down to 1925. 108 According to Amory Lovins, such layoffs are the inevitable result of a tendency, created by deregulation, to "treat employees as liabilities rather than assets." 109 Equally distressing is the possibility that safety will be compromised (perhaps a greater concern outside Montana at the nation's 112 nuclear power plants). 110 Cost-cutting under a competitive regime may also take its toll on research and development programs, including cooperative ventures like the Electric Power Research Institute (EPRI). 111 Social and environmental programs, employment, safety, and research -- all may be sacrificed to some extent by the transition to a competitive environment. The emerging short-term focus causes Peter West of the Renewable Northwest Project to worry that "restructuring will mean a race to the bottom, the cheapest price and nothing more." 112

Another Opposition Argument -- Process

Perhaps most frustrating to opponents of SB 390 was the political process that led to its passage. Montana would become the first, and perhaps only, state to pass such a bill in a single session of the legislature, without having first formally studied it. 113 One Associated Press article described a Senate floor debate in which opponents "chided the GOP majority for embracing an industry-written bill and rushing it through the Legislature 108 Jan Falstad, "Electric-utility deregulation bill sparking controversy," IR, 13 April 1997. Three years later, an article reported "At present, Montana Power has 2,500 employees, including 934 in Butte, down from its peak of 4,000 workers. Touch America has 200 employees. . ." Charles S. Johnson, "MPC to sell all remaining energy assets," IR, 29 March 2000.

¹⁰⁹ Smeloff, xi.

¹¹⁰ Kraushaar, 107.

¹¹¹ Brennan, 131.

¹¹² Mazza, "How the Northwest Can Lead a Clean Energy Revolution," An Atmosphere Alliance Special Report, 17.

¹¹³ Incidentally, Montana is also thought to be the first state to deregulate both electric and gas, which is thought by many to be an advantage over other states. Personal conversation with Jim Morin, Energy West, 2 September 1999.

GOP majority for embracing an industry-written bill and rushing it through the Legislature in a matter of weeks. The Democrats argued that such complex issues deserve longer, more thoughtful study and a legitimate opportunity for the public to get involved." Another columnist put it more bluntly, "No legislator supporting the deregulation bill could explain anything about it without help from the Montana Power Company. The debate on the Senate floor was pure ventriloquism. The simplest question would send a supportive senator scurrying to the gaggle of MPC lobbyists outside the chamber to get the next piece of script to recite." 115

These quotes touch on a number of important themes regarding process. The first pertains to the development of the bill itself -- that is, whether SB 390 was a "power company bill" or a "consensus bill." 116 On one occasion MPC's Jack Haffey argued, "it's not appropriate to characterize it as something that is other than a balanced, equitable bill that was reached by a consensus group." This statement, ironically, came as a response to a press conference condemning SB 390 as "MPC's sweetheart deal for industry" -- hardly the stuff of which consensus is made. MPC's April 1997 bill insert similarly confuses participation with support:

The restructuring bill reflects a product that involved participation by electric providers like Montana Power, rural electric cooperatives, Pacific Power and Light, Montana-Dakota Utilities, as well as customer groups, several environmental and low-income groups, state policy leaders and others. The Montana Public Service Commission (PSC) also supports the bill." [117] (Emphasis added.)

In light of their strong protests against the bill, opposition groups (including the environmental, consumer, low-income, senior citizen, and other groups listed in Appendix A) felt that this use of the word "consensus" was a gross abuse of language. They

¹¹⁴ Len Iwanski, "Senate advances bill to deregulate electric utilities," GFT, 26 March 1997.

¹¹⁵ Column by Mary Sheehy Moe, "A study in organized hypocrisy," IR, 8 July 1998.

¹¹⁶ Mike Dennison, "Utility restructuring bills expected to spark fight," <u>GFT</u>, 14 February 1997. Kathleen McLaughlin, "Low-key Thomas carries weighty issues," <u>IR</u>, 24 March 1997. Bob Miller, "Utilities urge passage of electric industry changes," <u>GFT</u>, 14 March 1997. Jan Falstad, "Enron competes with MPC," <u>BG</u>, 17 April 1997.

¹¹⁷ Montana Power Company, "Legislature considers electric restructuring bill," <u>Montana Energy</u>, April 1997.

maintained that you either have consensus or you do not, that you cannot have "pretty much of a consensus." 118

While it is true that the bill was primarily drafted by MPC lawyers, it is also true that there was considerable input from other sources. And while many different perspectives were represented at various stages of the process, the degree of influence these voices had varied greatly, as a function of their current political and economic clout. Therefore, while it is certainly fair to say that MPC collaborated with other groups, it is wholly unfair to declare the result a consensus product. A related concern held by opponents was the incredible disparity in resources between those lobbying for and those lobbying against SB 390. MEIC charged that MPC had won the "triple crown of corporate influence" at the 1997 legislature, "with the most lobbyists, the greatest lobbying expenses, and the biggest contributions to legislative candidates" (see Appendix A). 119 Opposition groups also felt that parties which ought to have been strong allies had failed them, again because of reigning political forces (various charges of conflict of interest also arose during the session, because of key legislators' business ties with MPC). 120 For example, initially it looked as if the Montana Consumer Counsel would oppose a deregulation bill at the 1997 legislature. MCC had participated in the PSC's inquiry into restructuring in 1996. At that time, MCC (as paraphrased by the PSC) was not convinced "that retail direct access will produce significant benefits for Montana consumers. MCC asserts that most of the efficiency gains will come from competition in wholesale markets. MCC agrees that there are benefits from greater customer choice, but asserts that the level of consumer choice could be greatly increased with the present regulatory structure." 121 Also, prior to the 118 Charles S. Johnson, "Enviros say new utility law 'sweetheart' deal for MPC," IR, 14 February 1997. MPC would again encounter similar criticism for the inappropriate use of the term "consensus" in describing the PSC's jurisdiction over the sale of MPC's regulated delivery business. Mike Dennison, "PSC: Law change needed to monitor MPC sale," GFT, 28 April 2000.

¹¹⁹ Patrick Judge, Montana Environmental Information Center, "The Human Rights Hour with Albert Niccolucci," Carroll College Radio, 14 April 1998.

^{120 &}lt;u>BG</u> editorial, "Legislators cannot serve dual masters," <u>BG</u>, 8 March 1998. Mike Dennison, "Who is watching watchdog?" <u>GFT</u>, 21 March 1997.

¹²¹ Department of Public Service Regulation before the Public Service Commission of the State of Montana, "Notice of Commission Action," Docket No. D95.7.96, 21 May 1996, 6-7.

PSC's narrow endorsement of SB 390, its restructuring staff had unanimously urged the commission to "recommend to the 97 legislature that it pass a study bill on restructuring," with the intent of moving to customer choice by December 31, 1999.¹²²

Undoubtedly, the most frustrating aspect of the passage of SB 390 to environmental and consumer groups was the mischaracterization of their position. Early in the session, meetings between MPC and newspaper editorial boards generated a number of unqualified, glowing endorsements. An editorial by the Bozeman Daily Chronicle read, "The lack of any significant opposition to SB 390 so far indicates the [bill] may in fact address most of the potential concerns." While more effective media relations on the part of opposition groups prevented further such statements by the press, proponents never abandoned their strategy of portraying the bill as "consensus." 125

A second issue, mentioned earlier, was that of speed. The <u>Great Falls Tribune</u> was sharply critical of this aspect, going so far as to warn (prophetically) of the possibility of a citizen backlash in the form of initiative campaigns:

This bill may not get adequate scrutiny. And legislators should have learned in the 1995 session that they must understand the issues they are voting on. Their changes in the water quality laws were responsible for the introduction of Initiative-122 and the multi-million-dollar battle between miners and environmentalists last year. A poor decision on power deregulation this session could be nearly as traumatic. 126

¹²² PSC Electric and Gas Restructuring Staff, "Memorandum to Commissioners," 19 December 1996, 1.

¹²³ Bob Anez, "Bill shields electricity users," Montana Standard, 11 March 1997. Bob Anez, "Measure intended to protect electrical consumers," GFT, 11 March 1997. Bob Anez, "Bill protects customers from unfair utility costs during deregulation," IR, 11 March 1997. IR editorial, "Deregulation bill needed," IR, 12 March 1997. BG editorial, "Montana Power looks to the future," BG, 16 March 1997.

^{124 &}lt;u>BDC</u> editorial, "Open market for electricity is in consumers' best interest," <u>BDC</u>, 13 March 1997.

¹²⁵ Dave Fisher and Danny Oberg, "Experts agree on power restructuring bill," <u>GFT</u>, 8 April 1997. Rep. Bill Ryan (D-Great Falls), Floor debate in Montana House of Representatives, 15 April 1997.

^{126 &}lt;u>GFT</u> editorial, "Power deregulation bill comes too late this year," <u>GFT</u>, 9 March 1997. <u>GFT</u> editorial, "Power play: Take time to study utility deregulation," <u>GFT</u>, 26 March 1997.

The <u>Missoulian</u> had a similar take, before, during, and after the legislature. SB 390 did not represent the slow and deliberate approach the editorial board had urged. In March 1998, the paper wrote:

[W]hat is good in concept may be wretched in detail. How and when you deregulate matters a great deal. The Montana Legislature, not generally known for its radical innovation, chose, for reasons that defy comprehension, to be among the first states in the nation to deregulate the electricity business. 128

For ammunition on this issue, both sides drew comparisons to other states. While proponents were emphasizing the number of states considering deregulation (and their populations, as most of the activity was occurring in populous states), opponents stressed the caution exhibited by Montana's neighbors. Thomas Power wrote in a guest editorial:

The adventuristic nature of this legislation is made clear by the refusal of the other states in the Pacific Northwest, the Rocky Mountains, and the Great Plains to follow suit. . . . The approach being taken in other states has been to first assure that all of the benefits for customers are wrung from wholesale competition. This has included finding ways of providing access for large industrial and commercial customers, who are more like wholesale customers anyway. 129

The speed issue represented two conflicting philosophies. One camp believed that the risks of going slow exceeded the risks of embracing change. They believed that fundamentally, deregulation would work, and that problems and kinks could be addressed as they arose. The other camp believed that the risks of moving too quickly were substantial enough to postpone action, at least until adequate safeguards were in place, that "the time to protect Montanans from the uncertainties of electric deregulation is before, not after, deregulation." 130 This approach would later be taken by the State of Washington, which put consumer and environmental protections in place before ever passing a deregulation law. Unlike his Montana counterparts, a spokesman for a Washington utility captured this more

^{127 &}lt;u>Missoulian</u> editorial, "No need for haste in power deregulation," <u>Missoulian</u>, 3 December 1996. <u>Missoulian</u> editorial, "Utility deregulation: sooner or later?" <u>Missoulian</u>, 16 March 1997. <u>Missoulian</u> editorial, "State, communities should sort our power plays," <u>Missoulian</u>, 13 January 1998. <u>Missoulian</u> editorial, "Point of no return approaching for deregulation," <u>Missoulian</u>, 22 March 1998.

^{128 &}lt;u>Missoulian</u> editorial, "Point of no return approaching for deregulation," <u>Missoulian</u>, 22 March 1998.

¹²⁹ Guest editorial by Thomas M. Power, "Put brakes on MPC," GFT, 5 February 1998.

¹³⁰ Letter from legislators to Cooney asking for a special session, 23 April 1998.

AP, "Deregulation foes again push for special session," BG, 23 April 1998.

conservative approach: "We're a little disappointed that it hasn't been moving forward more quickly. But, in the same respect, we don't want to make mistakes. We want to do it correctly. These are huge questions." 131

One final objection, brought by commissioners Anderson and Rowe, was that the bill "locks in place too many detailed decisions," not allowing the PSC enough flexibility to deal with changing, unforeseeable conditions. 132 On the other hand, critics claimed that while the bill may be too prescriptive, it also leaves too many unanswered questions (which is not as paradoxical as it might sound -- an obvious result of attempting to lay out too many details in too short a time). The legislature delegated major unresolved issues to the existing Revenue Oversight Committee (which was to perform a study of the tax impacts and make recommendations to the 1999 legislature) and the newly created Transition Advisory Committee (TAC). 133

The TAC is an interim legislative committee charged with studying and reporting on the status of electric utility restructuring. Among its most important tasks is to determine (near the end of the four-year transition period) whether or not effective competition exists for small customers and to make recommendations regarding the need for additional consumer protections. The TAC is also empowered to make recommendations regarding the universal system benefits program.

The TAC consists of eight legislators (balanced by house and party, but selected by Republican leadership), seven gubernatorial appointees, and five others. In addition to meetings of the full TAC, several subcommittees (USBP, education, PSC liaison, etc.) formed and met throughout the first interim. The TAC has fallen under criticism as a venue for resolving issues of concern to opponents of deregulation. They charge that the TAC: 1) is powerless in that it can only make recommendations, 2) performs functions more properly carried out by the PSC, and 3) is biased, as all of its voting members (the eight

¹³¹ Mike Dennison, "Is Montana a bold pioneer or guinea pig?" GFT, 22 February 1998.

¹³² Guest editorial by Bob Anderson and Bob Rowe, "Consumers must be protected," <u>IR</u>, 6 April 1997.

¹³³ MCA 69-8-501.

legislators) voted in favor of SB 390. Based on these points, environmental, senior citizen, and labor groups staged a walk-out of the TAC in April 1998 (see Chapter 6).

SB 390 Amendments and Passage

In the end, despite the tight time schedule, proponents succeeded in ushering their bill through the statehouse, but not without first undergoing a lengthy amendment process. Before passing out of the Senate Tax Committee on March 21, approximately 75 changes were approved, including an extension of the rate moratorium from 2 to 4 years which was one of the amendments Governor Racicot had made a condition for his support. In another amendment, universities succeeded in getting special language to combine their loads to qualify as a large customer. In this committee, only Republican amendments passed.

On the Senate Floor, one important amendment, which was offered by Sen. Barry Stang (D-St. Regis), would have established a range for the USBC between 2.4 and 3%, to be determined by the PSC (in the case of IOUs) or by a co-op's governing board. A slight improvement, this amendment made it conceivable that utilities like MPC would support public benefits programs more generously. After failing in the Senate, this amendment was later offered by Rep. Joe Quilici (D-Butte) in an effort to gain environmental support for the bill. Yet because of the bill's other flaws, and the failure of

¹³⁴ See MCA 69-8-211. While in general the amendment strengthened the rate moratorium, it also added a number of exceptions to it. The first two years of the rate moratorium applies to all charges, while the second two years applies to energy supply costs only. Rate increases were in fact filed in 2000 for energy delivery costs. An MPC official described the increase as a "catch-up filing." Presumably this did not mean that the company was recouping all the savings customers acquired under the rate moratorium over the preceding two years, a situation which would run seriously counter to the spirit of the rate moratorium. Charles S. Johnson, "MPC requests rate hike," IR, 12 August 2000. Mike Dennison, "Panel amends, endorses utility bill," GFT, 22 March 1997. Charles S. Johnson, "Utility bill sparks debate," IR, 14 March 1997.

¹³⁵ MCA 69-8-103 (6). Jan Falstad, "Utility choice bill debated," <u>BG</u>, 5 April 1997.

¹³⁶ Charles S. Johnson, "Panel clears utility deregulation," IR, 22 March 1997.

¹³⁷ Guest editorial by Bob Anderson and Bob Rowe, "Consumers must be protected," <u>IR</u>, 6 April 1997.

this amendment to create a solid 3%, environmental interests were unswayed. ¹³⁸ When these interests honestly told the committee that although they supported the amendment it was not enough to gain their endorsement of the bill, the amendment promptly failed. ¹³⁹ In a disingenuous political move, environmentalists were later accused of killing the amendment.

The House Appropriations subcommittee considered an additional battery of amendments, rejecting dozens of consumer-oriented changes proposed by Representatives David Ewer and John Cobb (R-Augusta). One exception was a change (that was approved) to remove a possible barrier to aggregators. Another amendment (one of the few that MPC indicated it could live with) to eliminate the open-ended definition of transition costs ("costs that include but are not limited to") failed on a tie vote. ¹⁴⁰ All in all, 51 of 216 drafted changes were adopted. ¹⁴¹

One amendment that did pass changed the low-income USB allocation from an exact value of 17% (of the 2.4%) to a minimum of 17% (although low-income weatherization was brought under this category). Environmentalists were concerned that a utility could conceivably spend all of its USB monies on low-income, and none on conservation (other than the conservation represented by low-income weatherization) or renewables. In response to this concern, Representative Ewer attempted to amend the bill, in both the Senate and the House, to designate specific allocations for the different categories of public purposes (as had the regional review), thereby preventing infighting between these interests. 142

¹³⁸ Note too that this amendment would have perpetuated the patchwork system of costs and benefits that currently characterizes public benefits programs.

¹³⁹ In an earlier press conference, they had opposed the bill even when the figure was still at 3%. Charles S. Johnson, "Enviros say new utility law 'sweetheart' deal for MPC," <u>IR</u>, 14 February 1997.

¹⁴⁰ MCA 69-8-103.

¹⁴¹ Many of the unsuccessful amendments were tried again on the House Floor on April 15, all with the same result.

¹⁴² MCA 69-8-402. Collins, "Comprehensive Review," 23.

The final legislative history of the major votes taken on SB 390 is as follows:

<u>Date</u>	<u>Action</u>	For Votes	Against Votes
March 8, 1997	Introduced		
March 26, 1997	Passes Senate	36 (32 R, 4 D)	14 (2 R, 12 D)
April 16, 1997	Passes House amended	78 (63 R, 15 D)	21 (1 R, 20 D)
April 18, 1997	Senate approves changes	35 (31 R, 4 D)	15 (3 R, 12 D)
May 2, 1997	Signed into law 143		

¹⁴³ The legislative journals can be found on-line at: http://statedocs.msl.state.mt.us/Charles S. Johnson, "The passing of SB 390: One year after enactment, sparks still fly over utility act," IR, 3 May 1998.

CHAPTER 3 CONSUMER ISSUES

The question of how Montana's move to deregulate its electric utilities will affect small business and residential customers is enormously complex, and controversial. The range of potential consequences is staggering. While changes in price, customer service, and reliability might be expected (whether positive or negative), other implications are less obvious. Consumer advocates have expressed concern over a host of issues including impacts on privacy, taxes, customer education, economic development, and the potential for fraud. In addition, low-income customers have special concerns regarding universal service and disconnection policies. When Montana Power Company announced that it planned to sell its generation properties, the debate further expanded to include questions of local control, water rights, and recreational opportunities (see Chapter 6).

As discussed in earlier chapters, deregulation holds the promise of lower rates, increased service options, spurred innovation, and increased system efficiency. But whether these benefits will in fact materialize for small or rural customers is a valid and important question, and one that critics argue should have been definitively answered before plunging forward. Part of their hesitancy was a natural suspicion toward any proposal championed principally by MPC and its large industrial customers. But their concern was also based on parallels drawn from other industries, where deregulation has failed to deliver (or to deliver in an equitable fashion) benefits promised to consumers. The central problem, they pointed out, is that deregulation does not necessarily lead to meaningful competition. Mergers and acquisitions can lead to a few large, powerful players that effectively control the market despite the best intentions of antitrust laws. Even if markets do develop for some customers in some areas, others (often those that live in less populated areas) may be deprived of any

¹ Unfortunately, the scope of this paper did not allow a full treatment of many of these worthy topics, particularly low-income issues. Tax impacts are discussed in Chapter 6, under "HB 174 -- Revise Taxation of Utilities."

real benefits. Even assuming that these markets do become generally accessible, the ability of Montana's residential customers to save money on their energy bills (especially in the short term) remains a subject of fierce debate. Concerns over "slamming" and other types of fraudulent behavior, as well as objections to dinnertime solicitation phone calls, also pervade the discussion.² While deregulation will likely present consumers with new opportunities, it will also bring new risks and responsibilities that deserve at least as much consideration.

Existence of Markets

The most pressing concern from the small-customer perspective is that deregulation will lead not to robust competition, but instead, to an unregulated monopoly (or its oligopoly equivalent). A common comment overheard at the legislature was that "you can deregulate an industry, but you can't legislate the growth of a market." Or in other words, "You can build it, but they won't necessarily come -- there's a fundamental difference between a marketplace and a market." More than just pessimistic nay-saying, such comments reflected an attitude of genuine concern. Unfortunately, specific circumstances in Montana make such less-than-ideal scenarios plausible, if not likely. Montana's low population and rural character render it fundamentally less attractive to energy providers than other potential markets. Low volume and high transaction costs that characterize the residential customer business make for small profits.³ Bill Drummond of Western Montana G&T put it this way, "Given the meager margins associated with selling power to small users of electricity and the experience in other states where residential customers have had limited, if any, choices, it is not clear that the benefits of retail competition will filter down to these customers. Add the high cost of marketing in a largely rural state like Montana and it [is] hard to see how any competitors can beat the existing incumbent utility."⁴ This is in

² AP, "PSC commissioners disagree on effects of electrical deregulation," <u>GFT</u>, 9 April 1998.

³ Mike Dennison, "Montana observers weigh impact of power marketer's failure to lure Californians," <u>GFT</u>, 23 April 1998. Mike Dennison, "Critics slam company for quitting sale of electricity," <u>GFT</u>, 28 August 1998. Smeloff, 160, 164.

⁴ Drummond, "The Small Customer Buying Cooperative," 23.

addition to the standard market barriers that must always be overcome whenever deregulating an industry. Incumbent utilities, for example, enjoy many advantages over would-be competitors, including name recognition and market share if they remain the default provider. If a competitive market fails to develop for these smaller customers, they could end up purchasing power from a monopoly provider, but without the protections of the PSC. In the absence of vigorous competition, none of the promised benefits of deregulation will appear. Instead, prices, inefficiencies, and fraudulent activity could all increase.

During the 1997 legislative session, a major criticism of SB 390 was that it contained no "off-ramp" mechanism in the event markets failed to develop. Consumer advocates argued for a market test -- a trial period to see if companies would in fact offer their services to small customers. In fact, MPC's working draft did contain such a provision as late as January 20 (1997), but it was stripped out and converted to a pilot program using language provided by the Large Customer Group (LCG) representing the state's large industrial consumers.⁵ At that point, deregulation under SB 390 became a foregone conclusion. No longer was the bill interested in determining "whether sufficient markets and bargaining power exist to the benefit of smaller customers" but only "the best means to encourage and support the development of sufficient markets and bargaining power for the benefit of smaller customers."6 If it is found that viable markets do not exist, customers are not to be returned to the protections offered by regulation. Instead, the interim committee is to recommend "the best means to further encourage the development of customer choice and meaningful market access for the benefit of smaller customers."7 The argument was that failing to commit wholeheartedly to competition would in fact discourage businesses from setting up shop here, leading to the very situation opponents

⁵ Pilot programs are discussed in MCA 69-8-104.

⁶ Don Quander, "Proposed Revisions / Comments to the 1/20/97 DRAFT by LCG," 23 January 1997, 6.

⁷ Don Quander, "Proposed Revisions / Comments to the 1/20/97 DRAFT by LCG," 23 January 1997, 33. MCA 69-8-501.

feared -- the absence of robust markets.⁸ An amendment to grant the PSC continued authority for small-customer rate regulation in the absence of competition was offered, but rejected.⁹ The final version of SB 390 allows the PSC to postpone deregulation for small customers if there is no workable competition, but only for two additional years.¹⁰ The PSC cannot break up a utility, or return customers to a regulated environment.

Aggregation

Proponents of deregulation argue that even if such worst-case scenarios -- in which small customers have little or no market clout -- come to pass, the market may itself deliver an adequate remedy. A niche will have developed for a new service to be performed -- that of assembling (or "aggregating") small customers into larger buying groups that can act more effectively in the market. Aggregators will be able to save customers money by pooling their purchasing power together and tapping into various economies of scale. 11 Not only will they have access to wholesale power rates and a greater variety of sellers, they will potentially see reduced transaction costs and a simplified buying process. 12 A single trustworthy and knowledgeable aggregator can take the guesswork out of complicated purchasing decisions for thousands of customers, while providing them with a ready response to any unwanted telephone solicitors. Ironically, aggregation can be just as useful in a highly competitive retail market as in a stagnant one, although the benefits may differ.

⁸ A similar argument is also used against what industry representatives consider to be excessive and burdensome proposals for customer protection and environmental disclosure rules. They contend that labeling and other requirements would discourage companies that would otherwise be interested in serving Montanans. See Chapter 5.

⁹ Mike Dennison, "Senate [sic] panel powers up electric deregulation bill," <u>GFT</u>, 11 April 1997.

¹⁰ According to PSC commissioners Anderson and Rowe, "economists say at least five companies, with no one company having the lion's share of the market," are required for workable competition. Guest editorial by Bob Anderson and Bob Rowe, "Consumers must be protected," IR, 6 April 1997. Elsewhere, Bob Rowe has defined effective competition as "multiple firms with no firm or group of firms having significant market power, resulting in a market structure that does not produce an upward effect on prices." Bob Rowe, "Comments on DEO draft electric paper," 3 December 1996, 2.

¹¹ Smeloff, 91, 160.

¹² Smeloff, 159.

Aggregation provides protection from nonexistent markets, ease of mind in frenzied markets, and cost savings in both.

Aggregators may appear in many different forms, from local governments to private businesses. Ironically, small customers may encounter the same frustrations attracting the interest of private aggregators as they do with energy supply companies. Aggregators interested in making a profit will initially direct their attention to larger customers who want to acquire still greater market presence. Local governments have several advantages. They can combine their own load (street lighting, water treatment, government buildings, etc.) with those of their citizens. They are also "publicly accountable, non-discriminatory, non-profit, subject to open meeting and ethics laws, and oriented toward advancing economic development and the public interest." In short, they are a known quantity which, at least in theory, is already working on behalf of its would-be electricity customers. In Montana, the League of Cities and Towns and the Montana Association of Counties have both taken steps to play this role. Montanans are also trying to establish a "Small Customer Buying Cooperative," a novel concept discussed in detail in Chapter 6.

Some consumer advocates argue that aggregation is nothing new, that in fact all we are doing is reassembling what we just took apart. And why should customers carry the burden of piecing back together what already existed, an aggregated load? "After all, it was the benefits of load aggregation that led to the utility monopoly service territories in the first place." And for the customers who were historically left out of that process, the rural electric cooperatives performed a similar function. Hence, some consumer advocates insist that aggregation be recognized as a partial remedy of deregulation's impact on small customers, rather than a newfound benefit. MPC itself acknowledged that small customers will have to band together to increase their market clout and "achieve sufficient electricity

¹³ Mazza, "How the Northwest Can Lead a Clean Energy Revolution," An Atmosphere Alliance Special Report, 17.

¹⁴ Guest editorial by Gordon Morris of the Montana Association of Counties, "Giving consumers collective clout," <u>GFT</u>, 21 November 1997.

¹⁵ Smeloff, 158.

supply savings."¹⁶ In other words, aggregation should be seen more as a necessity than a perk.

Mergers

Because SB 390 looked like it would give MPC a continued strong customer base in Montana while getting out from under its debt, commissioner Anderson worried about the possibility of a corporate takeover. "Montana Power would become a prime target for a large, multinational company to buy it out." ¹⁷ There was little reason to imagine that Montana would somehow be insulated from the rising tide of utility mergers that began around 1994. ¹⁸

Mergers are portrayed by corporate executives as a means to increase efficiencies and reduce costs to the consumer. But this assumes that our antitrust laws' safeguards against concentration of market power work perfectly. In reality, forecasting future market conditions, as conducted by FERC, the U.S. Justice Department, and the FTC, is an inexact science. ¹⁹ Their battle against the "fraud, deceit, misrepresentation, dishonesty, breach of trust and oppression" discovered in this industry by the FTC during the Great Depression is unfortunately far from over. ²⁰ Collusion, predatory pricing, and other anti-competitive behaviors are always a threat. In recent times, lessons can be learned from other industries where "the urge to merge has overwhelmed the compulsion to compete." Resources for the Future asserts that "most people are still waiting for lower phone rates and better

¹⁶ P. R. Corcoran of Montana Power Company, "Docket No. D97.7.90: Electric Restructuring Transition Plan Filing," 1 July 1997, PRC 22.

¹⁷ Mike Dennison, "Is SB 390 bonding plan boon to consumers or MPC?" <u>GFT</u>, 7 April 1997.

¹⁸ Smeloff, 4, 150. One industry observer, Larry Geske of Energy West, later predicted that the U.S. would eventually be left with a mere 10 to 12 massive utilities. Wendy Raney, "MPC will need seed money to underwrite newest venture," <u>GFT</u>, 29 March 2000.

¹⁹ Brennan, 130.

²⁰ Brennan, 23.

service, while the nation's telephone giants seem intent on trying to see which one can become the biggest the fastest."21

Self-Dealing

Serious conflicts of interest can arise when a formerly vertically integrated utility wishes to participate in the energy commodity business (generation and retail sale) while still providing the regulated energy delivery service (transmission and distribution). This arrangement (designated by various terms such as "self-dealing," "affiliate transactions," and "favoritism"), gives the company's energy supply arm a distinct advantage over its competitors. Even if a utility complies with the law by charging a competitor the same rate it charges itself for the use of its lines, it could extend preferential access to its affiliate in subtle ways. In addition to having to deal with the line losses associated with transmitting its power over a greater distance, it could face delays and interruptions.²² A utility might service the transmission lines connecting to its own generators more regularly and competently than those connecting to competing facilities. Or the utility may be in a position to "preferentially dispatch" power generated by its own plants ahead of that produced by its rivals.²³ If a company is involved in both regulated and unregulated businesses, it could potentially (through creative accounting) cross-subsidize its competitive business by charging costs to its regulated business. In addition to the unfair advantage it creates on the competitive side, cross-subsidization burdens captive customers on the regulated side with phantom costs.²⁴ Or maybe the unregulated division just has exclusive access to certain types of market information held by its affiliate distribution company. Such practices, although illegal, may be difficult to prevent. In addition to overt and illegal anticompetitive business practices, the deregulated utility will enjoy the "advantages of

Wall Street Journal, as quoted in an article by Mike Dennison, "Socialism at MPC? Well, sort of ...," GFT, 17 May 1998.

²² Brennan, 82.

²³ Brennan, 92.

²⁴ Smeloff, 98.

incumbency" such as name recognition. Self-dealing and these other advantages are of real concern to both consumer advocates and to nonincumbent energy supply companies.²⁵

A number of possible remedies exist. First, laws can be passed and orders issued to establish "codes of conduct." The effectiveness of this approach necessarily depends (as it does with all governmental regulation) on both the specifics of the provisions enacted (including the penalties for violations), and the specific agency's ability and determination to monitor and enforce the law. 26 Second, the utility can be restructured to separate the generation and delivery operations (a process known as "functional separation," "functional unbundling," or "structural separation") or required to choose which side of the business it wants to be in and sell off all unrelated assets (a process known as "divestiture").²⁷ An example of this latter, more aggressive approach was the breakup of AT&T in 1984.²⁸ SB 390 required investor-owned utilities to functionally separate and also proclaimed that federal standards of conduct be complied with and that rules be issued by the PSC.²⁹ During the session, public interest groups unsuccessfully pushed for an amendment allowing the PSC to order divestiture "if the commission determines that the divestiture is necessary to avoid anticompetitive behavior."30 The final version of the legislation specifically denies that power.³¹ Co-ops deciding to enter the market have to set up separate for-profit corporations.³²

²⁵ Incidentally, it was to combat this same situation -- the potential corruption that can result from companies participating in both regulated and unregulated businesses -- that PUHCA was passed in 1935. Brennan, 82.

²⁶ Smeloff, 145.

²⁷ "The fact that 'restructuring' has come to be synonymous with expanding competition in the electricity industry underscores the prominence of these considerations." Brennan, 82.

²⁸ Brennan, 82.

²⁹ <u>MCA</u> 69-8-204.

³⁰ Amendment offered to House Appropriations Committee by Rep. David Ewer, prepared by Larry Mitchell, 9 April 1997.

³¹ MCA 69-8-204.

³² MCA 69-8-309.

Services

Although the electricity commodity market will likely be characterized by low growth and low profit margins, the energy services market could well experience significant growth and vibrant competition. Because companies may find it difficult to distinguish themselves on the basis of price, customer service and bundled services may attain greater relative importance.³³ "One nice thing about open access (to power) is it gives people the chance to work with a supplier and be a little more customer focused."34 Special products for niche markets (such as a green power option or the sale of photovoltaic or fuel cell systems) will likely become more common.³⁵ Customers might choose between variable rates, which track market prices, or fixed rates which would be more dependable but also probably more expensive over time. On the other side of the transaction, generation companies might desire more dependable income, and offer cheaper rates to customers who pay fixed amounts and to those who have longer-term contracts. Or companies and customers may wish to bracket prices, allowing for some variability within preestablished limits.³⁶ Other options may include price breaks for less reliable, off-peak, or interruptible service; premiums for locally-generated power (supporting local industry and jobs); or "community options" that donate proceeds to charitable causes.³⁷ All one has to do is look to long-distance to imagine the unending array of plans, services, incentives, and outright gimmicks that may soon descend upon the electricity business. Carving out a niche will become a key strategy in the survival of energy supply companies, as companies will likely not be able to offer price savings sufficient to get small customers to switch. Unfortunately, because of virtual deregulation, companies have been cutting the very

³³ James E. Larcombe, "MPC plans for competition with customer service," GFT, 16 July 1997. Smeloff, 164.

³⁴ Mike Dennison, "Energy 'choice' working for business and suppliers: Residential customers waiting, but it's still not certain they won't pay more," <u>GFT</u>, 6 June 1999.

³⁵ For a further discussion, see "Green Power" in Chapter 5. Smeloff, 164.

³⁶ Brennan, 54, 57, 72.

³⁷ Note that time-of-use rates (such as off-peak) can apply to time of year, time of day, weather conditions, economic business cycles, etc. Brennan, 56, 71.

programs that might have distinguished them from their competitors and ensured their survival.³⁸

Price

Consolidation of economic power, whether it be through a lack of competitors or through consolidation of competitors through mergers, can negatively impact consumers in a number of ways, frustrating most of the touted advantages of deregulation. Innovation could be stifled rather than fostered, customer service compromised, and reliability diminished. But the most commonly thought-of impact, and the most fiercely debated, is that on price.

The price question is, in many ways, the crux of the issue. Both sides rely heavily on price arguments to make their case and present widely varying predictions of deregulation's impact. Supporters of deregulation contend that market forces will improve system efficiency, bringing about savings for all customers. Furthermore, regulatory costs will be lessened and companies will be subject to stronger incentives for cost-cutting (in addition to the less-tangible but nevertheless valuable benefits of consumer choice, innovation, etc.)³⁹ Opponents commonly argue that Montana's circumstances almost guarantee price increases for small customers and businesses (which will in turn discourage economic development, reduce the tax base, etc.).

Under traditional "rate of return" regulation (also known as "cost-of-service" or "cost-plus" regulation), a utility commission sets prices to compensate the utility for all of its costs (provided they were determined to be prudent and "used and useful"), and to provide a fair rate of return on invested capital -- the utility's profit.⁴⁰ With prices based on utility costs, the only incentive to run an efficient operation comes from the oversight by the public utility commission. Any cost savings associated with an increase in efficiency are ultimately passed on to consumers and the utility gets no reward.⁴¹ Nor does the utility

³⁸ Smeloff, 159-160, 164.

³⁹ DEQ, "Restructuring the Electric Utility Industry in Montana," 3.

⁴⁰ DEQ, "Restructuring the Electric Utility Industry in Montana," 7. Brennan, 34, 101.

⁴¹ Brennan, 4, 43.

always get penalized for inefficiencies, the costs of which are too often passed along by regulators either unwilling or unable to effectively do their job. But "doing a good job" incurs costs of its own, as "effective rate-of-return regulation requires that regulators exert considerable micromanagement of the operations of the utilities they regulate. It commits the government to a continuing need to investigate and audit the cost data reported by utilities, creating the potential for disallowances and protracted legal disputes." While there are alternative, incentive-based forms of regulation which can be implemented to address these concerns (by implementing profit-sharing plans or cost ceilings, for example), many look to competition as the most effective avenue for eliminating waste and reducing prices. Competition can be too effective, however, when cost-cutting goes too far.

Utilities may sacrifice programs valuable to the public (as discussed under "Stranded Benefits" in Chapter 2), pare down workforces, or cut corners on safety and reliability. 44

To bolster the vision of deregulation's price benefits, proponents of deregulation drew on comparisons with other industries. Fred Thomas, SB 390's principal sponsor, argued, "There has not been an industry that has been deregulated or restructured where the prices have not gone down." MPC's Jack Haffey agreed: "The likelihood is that as competition blossoms, the prices are likely to go down. That's happened in the railroad industry. That's happened in the airline industry. That's happened in all the industries that have deregulated." 46

But Don Judge of the AFL-CIO pointed out that even if deregulation brings about price reductions (or savings in the form of slower rate increases) "on average," that doesn't necessarily translate into price reductions for homeowners or small businesses.⁴⁷ In fact, it is widely accepted that whatever the benefits of deregulation, large customers will be in the

⁴² Brennan, 68.

⁴³ Brennan, 9, 34, 43, 69.

⁴⁴ Smeloff, 96.

⁴⁵ Mike Dennison, "Consumer advocates to line up against utility restructuring bill," GFT,

¹³ March 1997.

⁴⁶ Jan Falstad, "Utility choice bill debated," <u>BG</u>, 5 April 1997.

⁴⁷ Mike Dennison, "Future cost of power still in the dark," GFT, 14 March 1998.

best position to take advantage of them. Conversely, whatever the drawbacks of deregulation, small and rural customers will in all likelihood suffer disproportionately. This situation poses a serious equity question, one recognized by both the PSC and the Racicot Administration in their separate Electricity Restructuring Principles. Among the administration's three governing principles (which were issued on January 15, 1997), was the statement, "Legislation should provide that all electricity customers in Montana share in the benefits from a restructured industry." The PSC had virtually identical language, and both parties were apparently of the opinion that SB 390 ultimately satisfied that goal, a level of confidence not universally shared.

Opponents feared that deregulation would result in higher electricity bills for Montana's small customers. ⁴⁸ In addition to the concern over markets developing, they predicted that under deregulation Montana would lose control of its low-cost power. At the time of SB 390's passage, Montana's residential rates were the sixth lowest in the nation, thanks to abundant and affordable native energy resources (hydro and coal). ⁴⁹ The fear is that as a national marketplace develops, the resulting price of electricity will gravitate somewhere between the current high and the current low -- a process known as homogenization. ⁵⁰ That deregulation more clearly benefits the citizens of high-cost states is evidenced by the enthusiasm with which states have embraced these changes. As mentioned in Chapter 2, a fairly strong correlation (with the notable exception of Montana) between state residential prices and date of legislative or administrative action can be seen in Appendix B. Because of this potential for what one consultant termed "a massive shifting

⁴⁸ In recognition of these concerns, SB 390 did include a rate moratorium consisting of a two year freeze on customers' power bills (July 1, 1998 - June 30, 2000), and an additional two year freeze on the energy commodity portion of customers' bills (July 1, 2000 - June 30, 2002). MCA 69-8-211.

⁴⁹ At the time of the legislature, the most recent Energy Information Administration (U.S. Department of Energy) price data was from 1995. That price data is included in Appendix B, and shows Montana to have the sixth cheapest residential rates (tied with Wyoming).
50 While the resulting commodity price may well be below the current average (because of increased system efficiencies and the removal of "historic sunk costs" to other areas of customers' bills), it could still be higher than what Montanans are used to paying. DEQ writes that "all states, including Montana, could see lower power costs if the cost of new gas fired generation stays around 20-25 mills." But this is an assumption environmental and consumer advocates are not at all comfortable accepting. DEQ, "Restructuring the Electric Utility Industry in Montana," 12.

of costs from high-cost areas to low-cost areas," some feel that direct access in states like Montana should be limited to the large customers for whom it makes sense (even though this reasoning controverts the restructuring principle mentioned above).⁵¹

In the paper it presented to the 1997 legislature, the Department of Environmental Quality pointed out that while "some fear that the value of low-cost power generated in Montana will be 'bid up' by larger markets elsewhere in the region . . . current market prices in the Northwest are well below the cost of 'low-cost' Montana electricity supplies." The argument here is that homogenization, to the extent that it is a real effect, works in favor of Montanans who otherwise would be locked out of cheaper regional power. This point is well taken, as the Pacific Northwest included three of the five states with lower rates than Montana in 1995 (Washington, Oregon, and Idaho), which makes it the lowest-cost region in the nation. Incidentally, a fourth neighbor, Wyoming, was listed as having the same price as Montana. However, direct access would plug Montana into yet larger regional or even national markets that do in fact have higher prices.

Another way to look at this potential dilemma is that Montana's energy resources can be sold at a greater profit in higher priced markets characterized by larger and more influential populations who are accustomed and able to pay more than Montanans for their electricity. Representatives Bob Raney (D-Livingston) and Jon Ellingson (D-Missoula) saw deregulation (and MPC's subsequent sale announcement) in terms of Montana's historic role as a resource colony: "Once again, Montana will be selling its exports cheap

⁵¹ AP, "Consultant: No question electric deregulation will raise rates," <u>GFT</u>, 8 May 1998.

⁵² DEQ, "Restructuring the Electric Utility Industry in Montana," 3.

⁵³ Smeloff, 79, 144.

⁵⁴ Again, see Appendix B.

⁵⁵ Robert G. Miller (AP), "State taking the slow approach," Missoulian, 6 October 1996.

⁵⁶ The likelihood that this scenario will occur is potentially increased by the sale of MPC's generation facilities to an out-of-state company (see Chapter 6). Before the sale was finalized, one consultant estimated the chance for rate increases if the properties were sold to outside interests at 95%. AP, "Engineer: Electric rates likely to go up with MPC plants sale," IR, 20 February 1998.

and paying dearly for its imports. Choice under these circumstances is hardly a benefit."⁵⁷ But Judi Johansen of Avista Energy (and now BPA Administrator) argued that Montana will always be somewhat isolated from higher energy prices. Transmission costs and bottlenecks place a limit on the quantity of Montana power that can be exported.⁵⁸

In an attempt to resolve these differences, Commissioner Bob Rowe, a nationally recognized utility expert, had the following to say on homogenization:

Here's how I summarize the dispute: A fundamental disagreement in the restructuring debate concerns whether merging a low cost state into a higher cost region will produce lower or higher prices for in-state customers, especially core customers. An economically sound view is that if the regional marginal price is even lower than the jurisdictional price, and if jurisdictional customers have access to the regional market, jurisdictional customers will benefit from lower prices. The opposing view is that the combination of demand-elasticity bidding up the marginal price, transition costs associated with moving to competition, transaction costs, market imperfections and the opportunity for cost-shifts will result in higher prices for at least some customers. ⁵⁹

With deregulation, the market price is predicted to move toward the marginal price, or the price of producing one extra unit of power (the extra fuel required, for example). In other words, fixed costs which cover the up-front capital expenditures of power plant construction will no longer be included in the price of the electricity commodity (instead appearing as transition charges for "stranded costs" -- see below for a further discussion). And new power plants, such as combined cycle gas turbines, have much lower initial startup costs than traditional fossil, hydro, or nuclear plants. 60

This marginal price, however, can be "bid up" for small customers by a process known as Ramsey pricing. Small customers generally have a lesser ability than their 57 Guest editorial by Bob Raney, "What's the rush with deregulating electricity?" BG, 29 April 1998. Guest editorial by Jon Ellingson, "Power deregulation: Montanans losing their livelihood to benefit a few wealthy executives," Missoulian, 28 April 1998. Indeed, history has a way of repeating itself, at least when it comes to arguments over the destiny of Montana's energy resources. In the 1970s, Montanans were attacked as "blue-eyed Arabs" for depriving the rest of the nation cheap access to its coal. Malone, Montana: A History of Two Centuries, 397.

⁵⁸ Mike Dennison, "Future cost of power still in the dark," GFT, 14 March 1998.

⁵⁹ Bob Rowe, "Comments on DEQ draft electric paper," 3 December 1996, 5.

⁶⁰ On the other hand, start-up companies must be able to recoup all of their costs eventually. Hence, their marginal price must be at least somewhat below market price if they are to make it, an unfortunate situation which could end up limiting competition. Brennan, 101.

industrial counterparts to adjust their consumption in response to price changes -- their demand is relatively inelastic. If an energy supply company wishes to increase its profits, it is more efficient to do so by raising prices for those customers less able to curtail their demand in response.⁶¹ Some predict that while such effects may indeed lead to price increases in the short term, over time savings will be had by all customers.

Other arguments, predicting either price increases or decreases, are also commonly made. In its report to the legislature, DEQ tried to identify some of the potential risks, as well as benefits. The first concern was that of homogenization. The second, discussed at the outset of this chapter, was the observation that "if the Montana market is not attractive to marketers and aggregators, utility retail marketing subsidiaries will not face competition, and residential and small commercial consumers may see higher prices reflecting abusive market power." Moreover, "if competitive markets are significantly riskier for investors than the traditional utility arrangements, the cost of capital will rise, investors will want shorter payback periods, and the cost of power from new power plants will go up." Finally, small customers could see rate increases resulting from the elimination of what some consider historic subsidies from large customers (that even though prices have been lower for large customers, they have not been low enough to reflect the full discrepancy in cost-of-service between these customer classes). 62

Some supporters of deregulation concede that because of such factors the potential savings for small customers may be modest. MPC's Perry Cole and Flathead Electric's Warren McConkey, for example, both acknowledged that deregulation may only lessen the size or frequency of rate increases for Montana's small customers rather than produce actual rate cuts. John Bushnell of the Montana Consumer Counsel said that some industry

⁶¹ Personal telephone conversation with Commissioner Bob Rowe, PSC, 10 July 2000. It should be noted that this phenomenon is not a new one, having long been attempted by regulated utilities. This strategy would only be effective under a zero- or limited-competition scenario.

⁶² DEQ, "Restructuring the Electric Utility Industry in Montana," 3.

experts expect rate hikes as power surpluses in the Northwest to evaporate (a prediction which was proven correct in the Summer of 2000).⁶³

It is also important to note that there is a significant difference between bills and rates. The price of the electricity commodity (or the "rate") may only account for a third or less of a customer's bill (in which case a promised savings of 30% by an energy supply company may really only save you 10% off your total bill). So even if deregulation ends up reducing rates, bills could remain constant, or potentially even increase due to other charges, such as those for stranded costs (see below).⁶⁴

So for small customers in the Pacific Northwest including Montana, the chances for significant price savings under deregulation appear slim. And few customers are likely to switch suppliers without some kind of real price incentive. To establish a foothold, energy supply companies must overcome a certain amount of inertia. Matching the price currently paid by customers is not good enough. Instead, they must be able to beat it by a significant margin, not an easy task in low-cost states like Montana. Few companies are likely to try, and without a vigorous market prices are not likely to drop. This reality underscores the fact that in the Northwest, the push to deregulate has come not from small business and residential customers, but instead from the only likely recipients of reduced prices, the large industrial customers.⁶⁵ For the rest of us, the words of Congressman Jim McDermott (D-Washington) may well be prophetic: "Every analysis I've seen so far shows our costs are going to go up. Every analysis I've seen shows that we lose."⁶⁶

Cost-Shifting

Central in the discussion of the price impacts of deregulation is the term "costshifting," which can refer to a number of different situations under which restructuring

⁶³ Bob Anez (AP), "Deregulation's impact on rates cloudy," <u>IR</u>, 14 March 1998. DEQ, "Restructuring the Electric Utility Industry in Montana," 4, 9. Smeloff, 151, 164. AP, "High demand, low supply mean astronomical prices for energy," <u>GFT</u>, 30 June 2000.

⁶⁴ Bob Anez (AP), "Deregulation's impact on rates cloudy," <u>IR</u>, 14 March 1998. Smeloff 78, 83, 93. The distinction between bills and rates is also important when considering investments in conservation, as discussed under "Decoupling" in Chapter 5. 65 Smeloff, 125.

⁶⁶ AP, "Action on deregulation likely won't happen this year," IR, 16 January 1998.

leads to a new (and not always intentional) allocation of costs. One example, already discussed above, is the geographic shifting of costs from high to low-cost states as regional price variability diminishes.

Perhaps the most commonly thought-of example is cost-shifting between customer classes. As mentioned above, under regulation industrial customers claimed to have partly subsidized rates for small commercial and residential customers. Deregulation would tend to eliminate any such subsidies, thereby entailing a shifting of costs from large customers to small customers (however justifiable this may be). On the other hand, with increasing frequency utilities have been granting special deals to large customers in anticipation of deregulation. High-cost utilities in particular have used this strategy to obtain long-term contracts with these valued customers before the onset of deregulation (making this phenomenon yet another instance of virtual deregulation). "What these exclusive and sometimes undisclosed bilateral contracts have done is shift costs from the large energy users to other customer classes that don't have as much political or market leverage."67 The competitive electricity package offered by MPC to ASiMI (as discussed in Chapter 2) is a good example. It should be noted, however, that such deals still required the approval of the public utility commission. Once deregulation hits, many fear that large customers with their superior buying power will essentially have first access to the nation's low-cost power, leaving small customers with the remaining more expensive power. Energy supply companies may be so interested in landing those accounts that they will offer them belowcost power, financed on the backs of their smaller customers -- either directly through expensive power, or indirectly, through diminished quality of service.

DEQ also reported that "utilities are worried about shifting of cost responsibility for the sunk costs of the existing transmission system. . . . Utilities are trying to come up with pricing methods to avoid the costs of other utilities being shifted to their own customers. Nevertheless, in the long run it probably is not possible to protect against some degree of differential cost increases." The question is how to ensure that the companies

⁶⁷ Smeloff, 151.

⁶⁸ DEQ, "Restructuring the Electric Utility Industry in Montana," 11-12.

that make use of the transmission lines adequately compensate those who originally paid for them.

A final manifestation might be termed environmental cost-shifting.⁶⁹ For example, if Montana were to increase its production at its coal-fired power plants in order to sell low-cost electricity to out-of-state markets, the resulting environmental impacts would all be borne locally while the benefits of the electricity would principally flow elsewhere.

Stranded Costs

A full understanding of the economic impact of deregulation on consumers is incomplete without a discussion of stranded costs. The stranded cost issue is at once important (with an estimated \$200 billion at stake nationally), and mystifying. 70 Getting a sense of what stranded costs are, let alone what to do with them, is something of a challenge. In general, the term "stranded costs" refers to any of a utility's past investments that are rendered uneconomic by the move to competition. These investments can take a number of different forms. In the past, utilities paid for capital-intensive projects such as the construction of power plants over time, using funds collected from customers' electricity bills. But with deregulation, customers might escape their share of these charges by simply choosing an alternate energy supplier. Upon opening their service areas to competition, utilities will experience an initial decline in customer numbers, leaving the utility at least partially "stranded" with its own debt. Stranded cost recovery is the mechanism by which utilities would continue to collect these costs from their historic customers, independent of a consumer's choice of energy company. In other words, regardless of whether customers stay with their traditional utility or choose an alternate supplier, they will continue to pay for their former utility's historic costs unless they physically move out of its service area -- of course, they will continue to pay the utility anyway for energy delivery services. These costs will be paid off over the course of a few decades.

Stranded costs can also arise from utility-owned generation assets (even those

⁶⁹ A section devoted to this topic, "Regional Environmental Cost-Shifting," is found in Chapter 5.

⁷⁰ Brennan, 13.

already paid for) that simply cannot compete on the open market. As mentioned earlier, under "cost-plus" regulation, rate recovery for utility construction projects included: 1) cost of labor and supplies, 2) debt service, and 3) a profit for the company (a return on shareholders' investment). In other words, utilities could be confident not only that their costs would be met, but that they would receive a profit. Under true competition, no such guarantees exist. If a company produces power at a cost greater than market price, it will lose customers and potentially be forced to decommission its inefficient power plants. This scenario, if realized, could present an important environmental benefit of deregulation since inefficient plants are also generally heavily polluting plants (see "Decommissioning" in Chapter 5). But utilities argue that such plant closures would be economically disastrous and that they should receive external support to keep these plants competitive. Stranded cost recovery can therefore also be thought of as a subsidy amounting to the difference between power production costs and market price (assuming the former is greater than the latter).

Unlike such subsidies, other categories of stranded costs receive support from the environmental community as legitimate candidates for recovery. Under PURPA, passed by Congress in 1978, utilities are required to purchase what usually turns out to be relatively expensive power from "qualifying facilities" -- small alternative energy generators. The federal government forced utilities to enter into these contracts as a matter of public policy, to encourage domestic alternative energy sources. Utilities make a strong argument to be compensated for their unfulfilled contractual obligations with such companies.

Many utilities have themselves invested in conservation measures for their customers. For example, a utility might have purchased an energy-efficient appliance for a customer with the expectation that the customer would pay the utility back over time with the savings achieved on his or her energy bill. Again, the utility was acting in the public interest and deserves compensation for the unpaid portion of its investment.

⁷¹ For example, in many parts of the country the term "stranded costs" is virtually synonymous with nuclear power plants (accounting for \$70 billion of the nation's \$200 billion in costs). In addition to the large unpaid debt resulting from the ubiquitous cost overruns during construction, utilities claim stranded costs from "above-market operating and maintenance costs." Smeloff, 107, 171.

⁷² PURPA is also discussed in Chapter 5.

National Perspective and General Theory

The issue of stranded costs has assumed a great deal of prominence in the national debate over utility restructuring. In addition to the profound economic implications for both power companies and consumers, decisions regarding stranded cost valuation and recovery will hold important repercussions for other industries grappling with similar questions in the future. Similarly, participants in the stranded cost debate draw on parallels with other industries to illustrate their point through precedence, or the lack thereof. Opponents, for example, argue that the appeal for stranded costs in the electric utility industry is both unique and unfair. After all, stranded costs are really just "mon[ies] that ha[ve] been invested that cannot be recovered" due to changes in the industry.⁷³ In other sectors of the economy, losses that come as a result of innovation and obsolescence are commonplace, and companies who suffer them are not compensated by their customers. It is this kind of argument, coupled with the sheer magnitude of costs involved, that leads some activists to consider cost recovery for electric companies "the most egregious example of 'corporate welfare' in history."⁷⁴

On the other hand, some argue that special circumstances were created by the history of regulation that make a stronger case for stranded cost recovery in the case of electric utilities. The first argument is that utilities have not been adequately compensated for their risks. Regulated prices, the theory goes, do not respond as well to changes in risk as market prices.⁷⁵ It is important to remember, however, that deregulation might have been a foreseeable risk, and "to the extent that expansion of competition has been driven by changes in technology and demand, the utilities may have been in a better position to forecast and insure against competitive risk than their regulators."⁷⁶

⁷³ Brennan, 97.

⁷⁴ Charles Higley of Public Citizen's Critical Mass Energy Project, "Stop the Bailout: Don't Charge Consumers for Utilities' Past Mistakes," 7 August 1997. A copy of this news release can be found at: http://www.citizen.org/CMEP/restructuring/Stop-bailout.html 75 Brennan, 98.

⁷⁶ Recall from Chapter 2 that the trend toward increased competition really began more than 20 years ago with the passage of PURPA. Brennan, 104.

The second major argument, according to the Washington, D.C.-based Resources for the Future, is that many of today's stranded costs are grounded in policy initiatives imposed on utilities by legislative and regulatory mandates in years past, starting with the obligation to serve all customers, and continuing with "explicit decisions by state and federal regulators -- to discourage energy demand, to encourage renewable forms of electricity production, and to permit entry and competition." But the group argues that these actions are still "not sufficient to warrant special policies to protect electric utilities. Government programs routinely result in stranding costs throughout the economy."77

Regulatory Compact

And proponents of recovery insist that electric utilities are unique. The argument over whether governmental actions have entitled utilities to stranded costs hinges on another difficult question concerning the existence and nature of a "regulatory compact" between regulators and utilities. The idea behind this term is that federal and state governments have an obligation to ensure that utilities are compensated for their legitimate costs, in return for the utilities' submission to regulation and their obligation to serve the customers in their territories. Opponents to recovery argue that even if such a compact existed, utilities long ago forfeited these rights through irresponsible investments in unneeded or over-priced power plants. After deregulation many of these assets will no longer be "used and useful" (whether or not they ever were), and should therefore no longer be paid for by consumers. The counter-argument, of course, is that the people already had their chance to object to such expenditures through their public utility commission (which is an elected body in Montana), and that approval of the projects implied full cost recovery for them.

And yet the situation becomes more subtle still. While a 1944 Supreme Court decision ruled that prices must be set to allow utilities a "just and reasonable return," it can

⁷⁷ Brennan, 98.

⁷⁸ Brennan, 96, 102, 103.

⁷⁹ Brennan, 101.

⁸⁰ Brennan, 99.

be argued the utilities have already been compensated for their risk.⁸¹ As the Montana DEQ noted, "There are legal precedents that indicate the regulatory compact was not intended to shield utilities from market risk."⁸² There were never any guarantees that the regulatory system would endure forever, and it would have been foolish to assume so. Shareholders have already been handsomely rewarded -- overly so, had their investments been simply no-risk loans.⁸³ Full stranded cost recovery shifts all the risk that investors were compensated for to rate payers. Finally, the argument that utilities must be protected from decisions by the government which changed the rules on them rings rather hollow in Montana, where it was the utilities themselves that championed the legislation.⁸⁴ Ultimately, a satisfying resolution of the issue cannot be found in such debates: "Neither the implicit compacts between utilities and regulators nor explicit rules set by regulators address directly the question of stranded-cost recovery."⁸⁵

Precedence

Just as important as the question of "fairness" when determining the amount and allocation of stranded costs are the economic implications of any proposed settlement. On the one hand, an overly generous award for utilities may set us up for similar future disputes in other industries, sending a message that companies "need not worry about the prospect of future competition when planning and advocating investments." In many ways, stranded costs can be considered "a measure of inefficiency." Allowing utilities to recover these costs rewards the companies with the greatest inefficiencies, giving them an unfair advantage in the emerging competitive environment. On the other hand, regulated industries that require "large, fixed, irreversible, and long-lived investments" depend upon 81 Brennan, 102.

⁸² DEQ, "Restructuring the Electric Utility Industry in Montana," 7. Guest editorial by Bob Anderson and Bob Rowe, "Consumers must be protected," <u>IR</u>, 6 April 1997.

⁸³ Brennan, 104.

⁸⁴ See Appendix A.

⁸⁵ Brennan, 102.

⁸⁶ Brennan, 104.

⁸⁷ Smeloff, 107.

industries that require "large, fixed, irreversible, and long-lived investments" depend upon capital from investors. Denying all cost recovery could set a similarly dangerous precedent which discourages investment in such enterprises. It is, however, difficult to imagine a future regulated industry (and certainly not the electricity industry) demanding the kind of funds that have been absorbed by electric utilities in the past hundred years. 88

Technological and regulatory changes are freeing the electricity industry from its dependence on such large-scale and long-term investments. 89

Size and Allocation

Most industry observers agree that there should be some sharing of stranded costs between rate payers and shareholders. It is not in the public interest for power companies to be run out of business (certainly not from the perspective of trying to foster competition), but neither should they receive a windfall. 90 This still leaves a rather large gray area. Which categories of costs should be included? How should they be valued? Should the money that utilities collect be limited to their past costs, or should it also include costs plus profit? One area of agreement among consumer groups is that future costs, such as those associated with safety and environmental programs, should not be included. They are particularly insistent that utilities not be subsidized for conforming to the law. They argue that "treating future cost obligations, including capital upgrades, as stranded costs will only delay a competitive market and create barriers for new market entrants." 91

Another important question is what to do with positive stranded assets. If utilities are to be compensated for the uneconomic costs they were left with by regulation, should they not in turn compensate the rate payers for their economic assets? This approach of looking at both sides of the ledger is known as "netting," and is an important consideration in Montana where low-cost power (particularly from dams) will prove highly valuable in a

⁸⁸ Few if any industries are as capital intensive, with a single nuclear reactor costing as much as \$5 billion. Smeloff, 2.

⁸⁹ Brennan, 104.

⁹⁰ Smeloff, 93.

⁹¹ Mazza, "How the Northwest Can Lead a Clean Energy Revolution," An Atmosphere Alliance Special Report, 18.

competitive market. One author writing about California put it this way: "For each utility, the transition costs are the combined above-market costs of all its assets, both economic and uneconomic." Another explained "Some utility assets may be worth more in an increasingly competitive environment, and these gains should be counted against any stranded-cost liability." §3

Although there is widespread agreement on the principle of sharing risk between shareholders and customers, there is no simple formula for striking this balance. Montana's DEQ suggested that "utilities should try to mitigate stranded costs by renegotiating contracts, cost control, marketing efforts and other means. Recovery of stranded costs should be conditioned upon demonstration that such means were exhausted." While this is a fairly good description for the approach ultimately taken in Montana, consumer advocates argued that it did not go far enough, that even though the costs had to be mitigated the utilities were still granted essentially full cost recovery. Had there been a more explicit sharing of costs (even if utilities only absorbed a small, but specific percentage), they would have had a stronger financial incentive to effectively mitigate those costs. 95

Elsewhere, other attempts at a fair resolution of the stranded cost question have been made. In some states, cost-recovery is balanced with guaranteed rate reductions for consumers. 96 In Texas, a tradeoff was proposed whereby utilities could qualify for a higher level of stranded cost recovery if they voluntarily divested their energy commodity business from their energy delivery business. 97

⁹² Smeloff, 94.

⁹³ Brennan, 101.

⁹⁴ DEO, "Restructuring the Electric Utility Industry in Montana," 7.

⁹⁵ Jan Falstad, "Enron competes with MPC," BG, 17 April 1997.

⁹⁶ Bob Miller (AP), "House approves deregulation bill," IR, 16 April 1997.

⁹⁷ Smeloff, 137.

Montana Perspective

To a large degree, the arguments made in Montana paralleled those made as part of the broader national debate. Here, as elsewhere, the stakes were incredibly large. MPC came to the session looking for roughly \$1 billion in stranded costs, although the figure was later reduced to around \$800 million. 98 Consumer advocates (including large industrial customers) vigorously objected to such large figures, and argued that MPC had in fact little or no legitimate stranded costs if the positive value of their assets was taken into consideration. Montana's low cost (and relatively environmentally benign) hydropower would certainly be of great value in a national marketplace.

MPC lobbyists employed essentially a three-pronged strategy in promoting SB 390's stranded cost recovery provisions. The first was that these costs were not new charges, but were old costs associated with projects already approved for recovery by Montana's regulatory body and already in rates. 99 As such, they cannot increase bills for consumers. 100 This point was not disputed, nor did it imply any particular recovery package. Mike Dennison of the Great Falls Tribune wrote, "Montana Power Co. spokespeople say the 'transition charge' will pay for assets that rate payers already pay for now, and that's true. But the exact amount of this charge into the future remains to be seen, for many variables come into play." 101 In fact, no costs are stranded until restructuring legislation is passed and until customers begin to leave the utility. 102 In order to determine stranded costs at the front end, as proposed by the legislation, future conditions such as the price of electricity must be estimated. Consumer advocates feared that by doing so, we would lock in a value for stranded costs based on erroneous predictions. If electricity prices rise faster than anticipated, assets that were forecast to become stranded may in fact turn out

⁹⁸ Bob Miller, "Utilities urge passage of electric industry changes," GFT, 14 March 1997.

⁹⁹ Guest editorial by Bob Gannon, "All Montanans benefit from utility competition," <u>Missoulian</u>, 14 April 1997.

¹⁰⁰ GFT editorial, "Who'll pay MPC's stranded costs?" GFT, 27 March 1997.

¹⁰¹ Mike Dennison, "Utility deregulation marches on, but some questions remain," <u>GFT</u>, 30 March 1997.

¹⁰² Note that the longer the move to competition is delayed, the longer we pay down past debts under regulation leaving fewer costs that could ultimately be considered stranded.

to be quite valuable. 103 The utility would have been compensated for losses it never incurred. Similarly, if the utility enjoys a high level of customer retention (which may be likely due to the various "advantages of incumbency" 104 and the possibility of relatively sparse competition), the stranding of costs is a somewhat curious notion. 105 If customers theoretically have "choice" but in reality do not (through lack of competition), then there really are no costs that have been stranded -- the utility still has all of its historic customers. It could well be a wash for consumers if the money they saved by going to market-based rates goes back to the utility as a separate stranded costs charge. Utilities, on the other hand, would receive a distinct benefit -- a lump sum, up-front payment covering all the costs. 106 Consumer advocates objected that giving the incumbent utility such a huge infusion of cash with essentially no strings attached could have severe negative consequences. For one, the utility could gain an unfair advantage in the energy supply business, perhaps acquiring the means to buy up other potential competitors. 107 Furthermore, awarding the utility at the outset makes it difficult or impossible to adjust stranded costs later on. So while stranded costs mostly reflect charges already seen in rates (although some are new, such as sizable legal costs associated with the process of restructuring), there is significant dispute over the

¹⁰³ Certainly, there is precedence for incorrect price forecasts. The QF stranded costs exist partly because avoided costs set in the early 1980s were based on estimates of oil prices that were too high. See Chapter 5 for a discussion of avoided costs. Smeloff, 80.

¹⁰⁴ Utilities that continue to operate in the competitive energy supply business as well as the regulated energy delivery business enjoy a number of advantages over would-be competitors. These can include name recognition, one-stop shopping, and designation as the default supplier -- the supplier for those who "choose not to choose."

¹⁰⁵ It is true, however, that MPC's large customers were in fact eager and willing to leave, and to take with them their equally large share of sunk costs.

¹⁰⁶ See the section below on transition cost financing.

¹⁰⁷ Charles Higley of Public Citizen's Critical Mass Energy Project, "Stop the Bailout: Don't Charge Consumers for Utilities' Past Mistakes," 7 August 1997. A copy of this news release can be found at: http://www.citizen.org/CMEP/restructuring/Stop-bailout.html

wisdom and fairness of automatically allocating these costs to customers in a competitive environment. 108

The second argument used to bolster stranded cost recovery as laid out by SB 390 had to do with government mandates. According to the utilities, not only were their past investments made in good faith with a reasonable expectation for a return, some of them were made simply to comply with laws and regulations. In other words, not only did the government approve these costs, it required them. Examples include demand side management programs, qualifying facility contracts, and deferred taxes. ¹⁰⁹ MPC's Bob Gannon described it as follows: "Federal law required us to purchase power at rates that are much higher than would be sustainable in a competitive market. The government made us do it -- we shouldn't be forced to write off those costs; we didn't want them in the first place." ¹¹⁰ Many consumer advocates agreed with the Great Falls Tribune, which considered it "legitimate for Montana consumers to cover stranded costs when utilities can show they made particular investments at the behest of regulators. But consumers shouldn't be hit for poor investments that were the result of bad business decisions. The utilities and their shareholders should be." ¹¹¹ But here again, the distinction can be difficult to determine.

The third major argument proved extremely effective in convincing the legislature that Montana needed to move forward quickly with deregulation. It involved the fear that large customers would leave the system anyway, and without SB 390, there would be no mechanism in place for capturing their share of stranded costs. 112 These costs would have to be shouldered by the remaining Montana customers, in the form of increased electricity bills. As a result, additional large customers would be tempted to leave the system, thereby

¹⁰⁸ It should be noted that there is a more basic argument against the "already in rates" justification. Some costs were historically approved for recovery, but only in the face of strong opposition from consumer advocates. In other words, although those costs were indeed already in rates, they perhaps never should have been and were in some sense forced upon rate payers.

¹⁰⁹ DEO, "Restructuring the Electric Utility Industry in Montana," 7.

¹¹⁰ Jim Ludwick, "MPC, competitors gear up for deregulation," IR, 20 April 1997.

¹¹¹ GFT editorial, "Who'll pay MPC's stranded costs?" GFT, 27 March 1997.

¹¹² Smeloff, 131.

worsening the problem and creating a circular feedback or "death spiral." While the argument was powerful, it was not entirely genuine, as it portrayed a limited range of options. While large customers leaving their stranded costs behind was indeed a potential problem, although perhaps a slightly exaggerated one, immediate passage of comprehensive deregulation legislation was not the only, nor necessarily the best, solution. As discussed in Chapters 2 and 6, opponents to deregulation felt that alternatives to SB 390's comprehensive approach (such as using exit fees to capture large customers' stranded costs, or the "dereg lite" approach ultimately taken by Oregon) were not adequately considered. 113

What SB 390 Did

The resolution of the stranded cost issue as specified by SB 390 was to grant utilities near full recovery of "net verifiable" (non-mitigatable) stranded costs, with the final determination of those costs left to the PSC. Critics charged that the legislature had abrogated its responsibility to find a fair balance for consumers. While utilities and large industrial customers secured tangible and immediate benefits -- stranded costs, and access to lower prices respectively -- benefits for small customers were distant and uncertain. There are no guarantees that markets will develop, and therefore no guarantees that prices will drop, that services will flourish, or that customers will be able to exercise choice. SB 390 does contain a 4-year rate moratorium and a limit allowing only 4 years' worth of generation-related stranded costs to be recovered. MPC stressed that that provision gave them "significant exposure for our generation costs after the year 2002," estimated by the company to exceed \$300 million. MPC's Bob Gannon also argued that those claiming an unfair stranded cost burden for consumers ignored the requirement that costs

¹¹³ Guest editorial by Bob Anderson and Bob Rowe, "Consumers must be protected," <u>IR</u>, 6 April 1997. See Smeloff, 126, for a discussion of exit fees.

114 MCA 69-8-211.

¹¹⁵ Jan Falstad, "MPC chief fires back at deregulation critic," <u>BG</u>, 17 April 1997. MPC, "Legislature considers electric restructuring bill," <u>Montana Energy</u>, April 1997.

be legitimate and mitigated. 116 Even so, consumer advocates felt that the company should have absorbed a definite and greater percentage of these costs, which would spur them to more effective mitigation. 117 The cost of the "competitive transition charge" to the average Montana household was estimated to be \$126 per year for the first four years, falling to \$63 afterward for the next sixteen. 118

Note that the sale of MPC's generation assets, announced in December 1997, largely alleviated concerns over stranded costs and radically altered the terms of the debate. These developments are discussed in detail in Chapter 6.

Transition Costs Financing

In addition to the fierce debate over stranded costs, SB 390's method of recovering those costs (found at MCA 69-8-503) also came under fire. This long and complex section describes a process whereby state-issued bonds would be sold and then paid off by customers over time. The proceeds would go directly and immediately to the utility. Proponents argued that the state-backed bonds would have a high rating that would allow consumers access to low interest rates (lower than the utility's cost of capital), thereby saving them money just as if they were refinancing their house. 119

But opponents led by Rep. David Ewer, a bond officer at the State Board of Investments, were not convinced. The concern, as mentioned above, was that costs would be awarded before they actually become stranded, and also before we really know what they

¹¹⁶ Guest editorial by Bob Gannon, "All Montanans benefit from utility competition," Missoulian, 14 April 1997.

¹¹⁷ Jan Falstad, "Enron competes with MPC," <u>BG</u>, 17 April 1997.

¹¹⁸ The competitive transition charge, or CTC, is the stranded costs charge and is divided into three categories. Approximately 25% of MPC's costs are for obsolete hydro and thermal plants (CTC-HT). Another 25% encompasses the "regulatory assets" including conservation and deferred taxes (CTC-RA). The remainder accounts for above-market contracts with qualifying facilities (CTC-QF). The CTC is collected "at the meter" by the regulated distribution utility or "lines company." Jan Falstad, "Electric-utility deregulation bill sparking controversy," IR, 13 April 1997.

¹¹⁹ Jan Falstad, "Electric-utility deregulation bill sparking controversy," <u>IR</u>, 13 April 1997.

will be. Mike Dennison of the <u>Great Falls Tribune</u> captured the argument using the following lighthearted, if unflattering, analogy:

Let's say you own a business that wants to unload \$1 billion of debt on equipment that soon may be obsolete -- debt that currently is being paid off by your customers.

You're a pretty smart guy, so you arrange to borrow most of the cash upfront at a lower interest rate, pay off part of the debt, spend the rest of the money how you like, keep some of the equipment for your own use, just in case it's worth something -- and still have the customers pay off the loan." 120

Another argument was that locking in a value for stranded costs at this time could be particularly dangerous because of the current low energy prices. If these are assumed to remain low into the future, the stranded cost calculation could be quite high. Multiple amendments were offered by David Ewer to address these concerns. And while none of them were adopted, it did appear that some progress was made, particularly regarding the ability to "true up" the costs to respond to changing conditions.

Reliability

Proponents assured legislators that SB 390 posed no reliability issues. They pointed out that reliability problems stem primarily from failures in the transmission or distribution systems, and because these functions will continue to be regulated reliability will be unaffected. Unfortunately, this argument does not capture the full range of potential impacts. With deregulation, the national electricity grid will be used in a radically different way. Coordination of power sales will need to take place at a much more sophisticated level to handle the complexity of a national retail electricity market and to "maintain the load balances necessary to preserve the integrity of the nation's electrical delivery system." Greater complexity and increased demand on at least some power lines could increase congestion and threaten reliability of the system. Power outages around the country had already been attributed to deregulation. Power "sources are more interdependent, so

¹²⁰ Mike Dennison, "Is SB 390 bonding plan boon to consumers or MPC?" GFT, 7 April 1997.

¹²¹ Brennan, 59.

¹²² Transmission lines have a finite capacity to deliver electrical energy. Exceeding this capacity results in a thermal breakdown which interrupts the flow of power. Brennan, 75.

interruptions at pivotal points along the network create cascading blackouts" over greater areas. 123

Furthermore, even though Montana's poles and wires will continue to be regulated, relaxing governmental oversight on the generation side could increase the possibility for error. 124 As we have seen, cost-cutting as a result of competition can lead to work force reductions and deferred maintenance which reduces the overall reliability of the system as a whole. There is also a concern (based on recent trends) that companies will lose interest in the energy supply business because of its low profit margins and high risk, and instead divert their attention to telecommunications or other ventures. Other observers fear that deregulation will select for generating facilities that are presently cheap to run, but not necessarily reliable over the long haul. An overreliance on natural gas combustion turbines, for example, could leave customers without power should prices spike, fuel become scarce, and companies fold. 125

Another argument concerning reliability has to do with the demise of the vertically integrated utility (a single company performs the multiple functions of generation, high-voltage transmission, and local distribution). A guest editorial that appeared in the Missoulian asked, "What happens when each part of the system is operated by an independent company? A seam develops at each step and the seam will become a rift whenever there is trouble." Disputes between the independent companies over responsibility for power outages could lead to lawsuits and rate increases. "When an electrical delivery problem happens, how long do you think it will take the several companies to get into action? That depends on how long it takes for them to agree which outfit is liable." The pressure to minimize costs is a powerful incentive for shifting responsibility to another party. Communication and coordination simply cannot be as efficient as they were within a single company. While it may make sense to clearly separate 123 Benjamin A. Holden, "Did Competition Spark Power Failures?" The Wall Street Journal, 19 August 1996.

¹²⁴ Brennan, 2.

¹²⁵ Guest editorial by Geoffrey Rothwell For The Los Angeles Times, "Trading reliability for low costs," <u>GFT</u>, 15 July 1997. Already, natural gas prices are increasing over the lows seen in the mid-1990s. Mark Glyde, "Aluminum CEO Fueling Rush to Gas," <u>Northwest Energy Coalition Report</u>, June 2000.

the different functions of the electricity business from the standpoint of preventing anticompetitive behavior, "that is exactly wrong if there is any intent to provide reliable service to the customer and quick response to trouble." 126

As a final and interesting note, reliability was of sufficient concern to homeowners and businesses to cause a surge in purchases of renewable energy equipment as a protective measure against power outages associated with the year 2000 "millennium bug." 127

Preferential Treatment

While issues such as stranded costs and reliability affect all consumers, advocates for Montana's small residential and commercial customers took exception to multiple provisions in SB 390 which they described as preferential treatment for large customers. In addition to the universal system benefits charge exceptions granted to customers "with loads greater than 1,000 kilowatts" (discussed in Chapter 2, "Another Opposition Argument -- Stranded Benefits"), opponents pointed to the transition schedule as violating a basic principle of fairness in restructuring. 128 The bill grants large industrial customers the ability to choose an alternate energy supplier "on or before July 1, 1998." While pilot programs were supposed to begin for small customers on that same date, those customers are not guaranteed "the opportunity to choose an electricity supplier" until July 1, 2002. This four-year headstart may adversely affect the ability of small customers to find affordable electricity, much of which may have already been locked up through contracts with large industrial customers. "Many may worry that 'the big dog will eat first,' theoretically leaving them, as small, individual electricity buyers, to scrape up the 'leftovers' of the market -- higher, less stable prices and an unreliable supply."129 Even without such a delay, small customers would have a difficult time competing with large, easily-served

¹²⁶ Guest editorial by Donald E. Michels, "Utility Deregulation: Under new system, problems will be met with many layers of bureaucracy," Missoulian, 10 June 1998.

¹²⁷ Written testimony of Tom Bishop, sales manager of Sunelco, "Senate/House Debate on the Net Metering Bill," 9 February 1999. AP, "Y2K fears prompt residents to look into alternative energy," GFT, 3 January 1999.

¹²⁸ MCA 69-8-402.

¹²⁹ Guest editorial by Gary Wiens, "Joining forces to buy electricity not exactly a new idea," GFT, 30 April 1998.

industrial accounts for the attention of suppliers. According to Mark Palmer, a spokesman for Enron, a California judge found staggered starting dates illegal. Arguing from a position of desiring to compete for Montana customers, Palmer not surprisingly objected to certain elements of SB 390:

I can tell you, in general terms, that it's been our experience that any time a utility writes a bill, it's overly friendly to utilities and not that friendly to consumers. Making consumers wait four years is unnecessary. If the consumers are going to have to pay for stranded costs, their return is that they get to shop for the best supplier on day one of this bill going into effect. 130

Seemingly, one solution to the headstart issue is the "dereg lite" approach discussed in Chapter 6. This model grants "choice" to all customers at the same time, yet also recognizes that markets for small customers are still undeveloped. These customers receive a scaled-down version of choice (a menu with approximately four options), but remain aggregated and therefore retain significant buying power and protection from both cost-shifting and fraud. Just because direct retail access makes sense for large customers does not mean it makes sense for everyone. Dereg lite is the "third solution" that acknowledges that reality, while still allowing small customers the chance to share in some of the benefits of "choice."

It should be noted that not everyone agrees that small customers would suffer from a delayed transition to choice. Roger Davis of the Montana DEQ considered this complaint a "red-herring," particularly in Montana. He felt that because of Montana's early move to deregulate and because of our low population, there would be plenty of cheap energy available for everyone. ¹³¹ There are, of course, important considerations which demand a somewhat conservative pace for introducing small customers to choice. Not only markets, but metering and billing technologies need a chance to develop, reliability must be ensured, and customers need a chance to acclimate to the changes to avoid "ultimate chaos." ¹³² But the other option, of course, is to slow the pace of deregulation as a whole (which would

¹³⁰ Jan Falstad, "Enron competes with MPC," BG, 17 April 1997.

¹³¹ Personal conversation with Alan Davis, DEQ, December 1997.

¹³² Jim Ludwick, "MPC, competitors gear up for deregulation," <u>IR</u>, 20 April 1997. Bob Anez (AP), "MPC sketches plan for era of competition," <u>GFT</u>, 24 December 1996.

probably require exit fees, with some kind of true-up mechanism), until markets are proved extant for all customers.

A third major area where large customers obtained special language was that of stranded costs. One provision prohibits the collection of transition charges from "new or additional loads of 1,000 kilowatts or greater that were first served by the public utility after December 31, 1996." This language precludes any stranded cost payments by the Advanced Silicon Materials (ASiMI) plant in Butte. The argument was that Montana needed to honor its agreement with ASiMI, which had decided to locate in Butte partially because of the competitive electricity rates negotiated with MPC. 134 Second, businesses should not be held responsible for past investments and costs that had nothing to do with them. Yet, in order to be consistent, this argument would have to be extended to all new customers, including residential and small commercial. The Natural Resources Defense Council drafted an amendment to strike the provision in its entirety, with the following rationale:

To exempt new or additional loads of 1 MW or greater and all self-generator loads from transition-cost recovery inappropriately would shift stranded cost recovery from intensive users of electricity to smaller users. Such cost-shifting measures would result in a rate structure akin to declining block rates, under which the more you use, the less you pay. . . . The PSC rejected declining block rates long ago as grossly inequitable and as a strong disincentive to efficient energy use; the legislature should not reauthorize them in this bill. 135

In general, environmentalists charged that SB 390's special treatment of large industrial customers created an unlevel playing field -- "a peculiar trait for a bill supposedly about 'free and fair competition.'" ¹³⁶ Furthermore, there is the argument that because industrial customers use the lion's share of power, they are the ones most responsible for past investments in generation and therefore most responsible for paying stranded costs.

¹³³ MCA 69-8-211.

¹³⁴ Ironically, the competitive rate had been negotiated under the previous regulated system with PSC oversight and approval, calling into question the necessity of deregulation for economic development.

¹³⁵ NRDC's proposed amendments to SB 390 written by Deborah Smith, 3d reading copy, 10 April 1997.

¹³⁶ Patrick Judge, "Legislature Leaves Energy Road-map at Home," <u>Down to Earth, a membership publication of the Montana Environmental Information Center</u>, June 1997.

CHAPTER 4

THE ENVIRONMENTAL IMPACTS OF THE ELECTRICITY INDUSTRY

The complexity of electric industry restructuring is rivaled only by its importance -economically, environmentally, and socially. Few would dispute the central role that energy,
particularly electrical energy, plays in the lives of Montanans. We use electricity to light
and heat our homes, schools, and hospitals, to purify water, to smelt aluminum and refine
petroleum, and even to write a master's thesis. But not without costs. The production and
delivery of electricity hold profound consequences for the quality of our health and of our
air, water, land, and wildlife -- costs that have traditionally been largely excluded, or
"externalized" from the price per kilowatt-hour shown on electric bills. We have, in effect,
been subsidizing the electricity industry with our health and natural environment. And such
subsidies can cancel out potential gains. According to the Washington, D.C. group
Resources for the Future, "Competition may not be efficient from the standpoint of society
as a whole if prices do not reflect the environmental costs of electricity generation,
transmission, and use as well as the more obvious costs associated with labor, equipment,
and raw materials." I

Negative externalities associated with the electricity industry take many forms. In the 1970s, our increased dependence on imported oil to fuel "peak power plants" (plants brought online during periods of high demand) became a national security issue.² The production of power from nuclear fission carries the risks of radiation release and weapons proliferation, as well as the problems of long-term waste disposal. Questions have been raised about the health effects of electromagnetic fields (EMF) from power lines,

¹ Brennan, 110.

² If the cost of protecting U.S. oil interests in the Persian Gulf -- about \$50 billion per year -- were incorporated into the price of energy, oil would cost more than \$100 a barrel, instead of the \$15 to \$25 to which we are accustomed. Mazza, "How the Northwest Can Lead a Clean Energy Revolution," An Atmosphere Alliance Special Report, 5. http://www.eia.doe.gov/oil_gas/petroleum/info_glance/prices.html

particularly in relation to childhood leukemia.³ Large hydroelectric dams have had devastating impacts on wildlife habitat and fisheries. Airsheds have been substantially compromised by coal-fired power plants and surface waters degraded through the discharge of thermal pollution. The rapid depletion of our finite fossil fuel energy sources is a cost that will most heavily be borne by future generations, as will changes in the earth's climate resulting from their combustion. Obtaining these fuels in the first place (through mining or drilling), transporting them, and disposing of their waste products also all have substantial environmental impacts known as "fuel cycle costs."⁴

In fact, every source of electricity has environmental impacts, although widely variable in type and magnitude. While the advantages and disadvantages of competing technologies inevitably depend on the specifics of the situation, it is possible to construct a general ranking of resource options based on their environmental characteristics. This is exactly what Congress did in 1980 by passing the Pacific Northwest Power Planning and Conservation Act. The "regional act," as it came to be known, was a response to the Northwest's financially catastrophic and environmentally dubious experiment with nuclear power. On the heels of an overzealous regional plan which forecast the need for 26 additional large coal and nuclear plants, the Washington Public Power Supply System (WPPSS, fittingly pronounced "whoops") aggressively pursued the construction of five nuclear power plants. The end result was cost overruns in excess of \$10 billion (leading to the largest public bankruptcy in history) and a single operating plant at Hanford.⁵ To avoid such debacles in the future, the regional act specified that power planning would proceed according to a hierarchy of resources that would minimize long-term environmental and financial costs, which gave rise to the new concept of "least-cost planning." 6 Conservation would be prioritized as the most attractive resource, followed by non-hydro renewables

³ NCAC, "Plugging People into Power," 33.

⁴ NCAC, "Plugging People into Power," 4.

⁵ Smeloff, 118-119. The Washington Public Power Supply System is now known as Energy Northwest. Mark Glyde, "'Perfect Storm' Jolts Northwest Power Grid," Northwest Energy Coalition Report, July 2000.

⁶ Mazza, "How the Northwest Can Lead a Clean Energy Revolution," An Atmosphere Alliance Special Report, 11.

(wind, solar, biomass, and geothermal), low-pollution / high-efficiency resources (gas-fired cogeneration and fuel cells), and last of all, traditional coal and nuclear power.⁷

In order to understand the environmental effects of electric utility restructuring, it is important to first become familiar with the impacts of each of these resource options, starting at the bottom of the hierarchy and moving toward cleaner and more efficient options.

Coal-Fired Power Generation

Conventional thermal power plants convert the energy in a finite fuel source (whether it be fossil fuels such as coal, oil, or natural gas or nuclear fuels such as uranium and plutonium) into electricity. Burning the fuel releases thermal (heat) energy which is used to boil water (or another substance), thereby creating high-pressure steam. The steam causes turbines to rotate, and this mechanical energy is transformed into electricity by generators. According to the second law of thermodynamics, some energy must always be discarded when converting heat into work. As it turns out, the theoretical maximum efficiency of a coal-fired power plant is around 63%, whereas the best available technology yields an efficiency of about 42%. As energy is always conserved (by the first law of thermodynamics), this "lost" energy typically goes into the environment, where it can become thermal pollution. In practice, what happens is that a power plant must cool the steam in a condenser to return it to liquid form and cycle it back to the boiler. In many cases, water from streams or lakes is used to carry the heat away. Increasing the temperature of water bodies can have adverse effects on fish and other aquatic organisms. 10

Coal-fired steam plants account for 56% of the nation's generating capacity and 58% of Montana's. ¹¹ The environmental and human impacts of coal-fired generation are numerous and legendary, with significant fuel cycle costs associated with mining and 7 Smeloff, 118-120.

⁸ DiLavore, 219-220.

⁹ Smeloff, 13.

¹⁰ DiLavore, 216-219.

¹¹ Brennan, 19. Alan Davis, DEQ, "Electricity in Montana -- an Overview," <u>T.A.C.</u> Report, November 1997.

numerous and legendary, with significant fuel cycle costs associated with mining and transporting the coal before it ever reaches the power plant. 12 Chronicling the abominable practices of Appalachian coal companies in the early part of the twentieth century, Harry Caudill wrote passionately:

Coal has always cursed the land in which it lies. When men begin to wrest it from the earth it leaves a legacy of foul streams, hideous slag heaps and polluted air. It peoples this transformed land with blind and crippled men and with widows and orphans. It is an extractive industry which takes all away and restores nothing. It mars but never beautifies. It corrupts but never purifies. 13

Such comments bode poorly for Montana, which has more minable coal than any other state (13% of the nation's reserves). ¹⁴ These effects can include a loss of agricultural lands; destruction of wildlife habitat; erosion; air, soil, and groundwater pollution; large-scale waste disposal issues; dewatering of rivers; subsidence of aquifers; and impacts on communities and aesthetic values. In Montana alone, 25,000 acres of land have been disturbed by coal mining with only 9000 having thus far been reclaimed. ¹⁵ In response to these concerns, the 1973 Montana legislature passed the Montana Strip Mining and Reclamation Act (five years ahead of the federal Surface Mining Control and Reclamation Act, or SMCRA), the Montana Water Use Act, the Montana Utility Siting Act, and the Strip Mine Coal Conservation Act. In 1975, the siting act was updated and a 30% coal-severance tax was established -- the most stringent in the nation, and, according to Governor Tom Judge, "the most significant piece of legislation enacted in Montana in this century." ¹⁶ Since that time, however, subsequent legislatures have weakened many of the provisions of these laws, most recently in 1997 with the changes to the Major Facility Siting Act (SB 224).

¹² Caudill, 117-121.

¹³ Caudill, x.

¹⁴ Although, it should be noted that differences exist between the underground mining of high-sulfur coal that occurred in Appalachia and the strip mining of Montana's low-sulfur coal. Malone, Montana: A History of Two Centuries, 337-338.

¹⁵ Erin P. Billings, <u>IR</u> State Bureau, "Reclamation law changed coal mining's face," <u>IR</u>, 18 August 1997.

¹⁶ Malone, Montana: A History of Two Centuries, 397.

But coal-fired power plants are perhaps best known for the atmospheric pollution they create (which often provides the textbook example of a negative environmental externality). Because power plants produce them so prodigiously, four pollutants are of particular concern -- carbon dioxide (CO₂), sulfur dioxide (SO₂), nitrogen oxides (NO₂), and mercury -- sometimes called the "four horsemen" of coal combustion. Respectively, coal-fired power plants account for 35%, 70%, 33%, and 23% of the nation's production of these pollutants (as well as 23% of the nation's point source particulate matter -- what might be considered the "fifth horseman"). ¹⁷ And it is coal-fired plants that account for the overwhelming majority of each of these. ¹⁸ Measured either in terms of total quantity, or normalized per unit energy, burning coal emits more SO₂, NO₂, CO₂, and mercury than any other fossil fuel or energy source. ¹⁹ While the EPA's Acid Rain Program has succeeded in reducing sulfur dioxide emissions (at a cost one-tenth what industry estimated in the 1980s), emissions of the other three pollutants are expected to rise over the next 15 years. ²⁰

Carbon Dioxide and Other Greenhouse Gases

Greenhouse gases include carbon dioxide (CO₂), methane (CH₄), chlorofluorocarbons (CFC), both nitrous oxides (N₂O) and nitrogen oxides (NO_x), ozone (O₃), carbon tetrachloride (CCl₄), and water vapor (H₂O).²¹ The burning of any carbon-based fuel (including coal, natural gas, oil, propane, gasoline, etc.) produces carbon dioxide, but here again, coal-fired power plants are the primary culprit. The electricity industry is the nation's leading source of carbon dioxide emissions (although vehicles are a close second)

¹⁷ Natural Resources Defense Council, "Risky Business," 1996. The report relies on 1994 data. It can be found at: http://www.nrdc.org/air/energy/rbr/chap2.asp The federal Clean Air Act directs the EPA to regulate particulate matter, sulfur dioxide, ozone, nitrogen oxides, lead, and carbon monoxide. Moore, "Dying Needlessly," REPP Issue Brief # 6, 4.

¹⁸ Thompson, "Poisoned Power," A Clean Air Network Report, 4.

¹⁹ Stadler, "Turn Up the Heat on Dirty Power," A Clean Air Network Report, 21.

²⁰ Thompson, "Poisoned Power," A Clean Air Network Report, 16, 24.

²¹ Schneider, 20-23.

and the largest source of greenhouse gases generally.²² While carbon dioxide is not the most potent greenhouse gas, its sheer volume makes it the most significant.²³ An average coal-fired power plant releases more than 2 pounds of carbon dioxide for each kilowatthour of energy it produces (by comparison, oil-fired plants produce 16% less carbon and natural gas plants 44% less).²⁴ For a typical Montana household using 9000 kilowatthours of energy each year, this would mean nearly ten tons of carbon dioxide (about what an average sport utility vehicle produces).²⁵

In addition to potentially severe economic, social, and political dislocations, global warming poses numerous environmental and public health concerns including increases in insect populations and the spread of infectious tropical diseases, a greater frequency of El Niño and extreme weather events (such as floods, droughts, and fires), the melting of glaciers and polar ice caps, rising sea levels, desertification, and general ecosystem disruption and extinctions caused by the rapid rate of change. Some of these effects, such as massive cracking of polar ice shelves and the disappearance of glaciers in our own Glacier National Park (which may be left "glacierless" in as few as 33 years and which is already down to less than a third of the glaciers that were present in 1850), are already dramatically evident. Further evidence of anthropogenic global warming includes atmospheric CO₂ concentrations 29% higher than at the beginning of the industrial

And the industry's share is growing. Nagusky, "Global Climate Change," Regulatory Assistance Project, executive summary. NCAC, "Plugging People into Power," 4.

23 Global emissions amount to 6 billion metric tons of carbon a year, 20% of it from the United States. (Note: a metric ton is 1000 kg or 2204 6 lbs. To convert from tone of

United States. (Note: a metric ton is 1000 kg or 2204.6 lbs. To convert from tons of carbon to tons of carbon dioxide, multiply by 44/12, the ratio of the mass of a carbon dioxide molecule to the mass of a carbon atom.) Roughly half of all human-caused warming is caused by carbon dioxide emissions. National Environmental Trust, "Science: Everyone Should Know the Basic Facts About Global Warming," Climate Countdown Factsheet. Thompson, "Poisoned Power," A Clean Air Network Report, 14.

²⁴ Nagusky, "Global Climate Change," 36.

²⁵ DeCicco, Green Guide to Cars and Trucks, Model Year 1998.

²⁶ Gelbspan, 6, 15, 23, 139, 143, 144, 175. National Environmental Trust, "Impacts: Global Warming: A Dangerous and Irreversible Global Experiment," Climate Countdown Factsheet.

²⁷ Gelbspan, 1. Mark Downey, "Global warming comes to Glacier . . . And so will vice president to raise awareness," <u>GFT</u>, 2 September 1997. Glacier National Park, 1999 "Summer Guide to Waterton-Glacier International Peace Park," obtained in 1998, 7.

revolution, the ten hottest years on record having occurred since 1980, and a rate of temperature change greater than any seen in the last 10,000 years.²⁸ Currently there are no federal limits on carbon dioxide production, although steps are beginning to be taken at the state level.²⁹ It is important to note that beyond direct CO₂ emissions, the mining of coal releases significant amounts of methane, a gas which, molecule for molecule, has 20 to 60 times the heat-trapping potential of CO₂.³⁰

Particulate Matter (PM-10, PM-2.5)

Particulate matter is referred to by many different terms, including dust (solid particles), soot (when comprised mostly of carbon), mist (liquid particles), smoke, smog, and aerosol. Regardless of the name, particulates lead to cancer, cause and aggravate cardiopulmonary problems, and have been linked to increases in Sudden Infant Death Syndrome.³¹ All told, exposure to fine particulates is thought to be responsible for tens of thousands of premature deaths each year in the United States alone.³² Fine particulates -- those measuring less than ten microns in diameter (a micron is one-millionth of a meter) -- are of particular concern because of their ability to penetrate deep into the lungs. Such "inhalable" particles can lodge deep in the lungs for months or years and pose "the greatest danger to human health from air pollution."³³ In addition to the "PM-10" standard which regulates particles of this size, a more stringent standard for ultrafine particulates measuring less than 2.5 microns in diameter (PM-2.5) was adopted by EPA in 1997, but was blocked by a federal appeals court and is now before the U.S. Supreme

²⁸ National Environmental Trust, "Science: Everyone Should Know the Basic Facts About Global Warming," Climate Countdown Factsheet. Gelbspan, 8.

²⁹ In 1997 Oregon enacted a law requiring new fossil fuel plants to achieve lower CO₂ emissions or to mitigate their effects.

³⁰ NCAC, "Plugging People into Power," 4. Schneider, 21. National Environmental Trust, "Leadership and Equity," 42.

³¹ Turk, 605. Brennan, 112.

³² Thompson, "Poisoned Power," A Clean Air Network Report, 7.

³³ Moore, "Dying Needlessly," REPP Issue Brief # 6, 5.

Court.³⁴ In addition to their health effects, particulates have aesthetic effects such as impaired visibility and coating of surfaces. Natural visual ranges of 80 to 100 miles have been reduced by pollution to averages of less than 20 miles in the eastern United States and 50 to 70 miles in the west.³⁵ Coal-fired power plants release particulates both directly and indirectly through precursors such as SO₂ and NOx.

Sulfur Dioxide

Sulfur dioxide is a gas principally associated with the combustion of coal. SO2 contributes to particulate levels through the formation of sulfate particles and acid aerosols and is the primary cause of acid precipitation. Acid rain is harmful to both terrestrial and aquatic environments (particularly forests, lakes, and streams) and can damage buildings, monuments, and other structures as well. In addition to tree and fish mortality, human health, livestock, crops, and wildlife can all suffer adverse effects from acid rain. The 1990 amendments to the Clean Air Act capped total annual industrial emissions of SO2 (at about one-half 1980 emission levels -- the cap will be further reduced in 2000 and 2010) and created a market for industries to buy and sell SO2 pollution credits. This law has been effective in decreasing total SO2 emissions. Low-sulfur coal can also help alleviate power plant SO2 production.

Nitrogen Oxides

Nitrogen oxides (NOx) include both nitric oxide (NO) and nitrogen dioxide (NO2). NO2 is a brownish gas that reacts with volatile organic compounds (VOC) in the presence of sunlight to create photochemical smog (of which the main component is ground-level ozone). While ozone is critically important in the upper atmosphere as a shield against the sun's high-energy ultraviolet radiation, it is itself a very reactive and harmful gas, both for

³⁴ AP, "Court blocks EPA's standards," <u>IR</u>, 15 May 1999. Carelli, Richard (AP), "Court to take second look at air fight," <u>IR</u>, 31 May 2000.

³⁵ Thompson, "Poisoned Power," A Clean Air Network Report, 13.

³⁶ Turk, 619. See also Moore, "Dying Needlessly," REPP Issue Brief # 6, 6-7.

³⁷ Thompson, "Poisoned Power," A Clean Air Network Report, 13.

humans and vegetation (including crops).³⁸ Like ozone, NOx itself destroys organic matter through oxidation. Unlike other pollutants such as organic compounds resulting from incomplete combustion, the formation of NOx is accelerated by greater combustion temperatures.³⁹ Therefore, power plant operators must optimize furnace temperatures to minimize total pollution. While those with respiratory illnesses such as emphysema, asthma, and chronic cough are most at risk from ozone pollution, "one study found that nonsmoking adults in Los Angeles were as impaired in breathing capacity as pack-a-day smokers."⁴⁰ While EPA's July 1997 rulemaking included stricter health-based standards for ozone, NOx itself is neither regulated nor effectively controlled.⁴¹

Like SO₂, NOx leads to higher particulate levels (nitrate particles) and contributes to acid rain.⁴² Also, "nitrogen overload" from deposition of atmospheric NOx can cause eutrophication of water bodies. Eutrophication occurs when high nutrient levels result in algal blooms that monopolize dissolved oxygen and suffocate other organisms. Forests too can suffer from "too much of a good thing" when tree growth is slowed by excessive nitrogen loading in soils.⁴³

Air Toxics

Coal- and oil-fired power plants release some 67 different toxic air pollutants (of EPA's 188 recognized hazardous air pollutants, or HAPs). Power plants are a major source for hydrogen chloride and hydrogen fluoride, which cause damage to the respiratory system.⁴⁴ But also included are heavy-metal elements such as mercury, arsenic, beryllium,

³⁸ Brennan, 112.

³⁹ Moore, "Dying Needlessly," REPP Issue Brief # 6, 9.

⁴⁰ Thompson, "Poisoned Power," A Clean Air Network Report, 5.

⁴¹ Thompson, "Poisoned Power," A Clean Air Network Report, 5. Brennan, 113.

⁴² NCAC, "Plugging People into Power," 4. Moore, "Dying Needlessly," REPP Issue Brief # 6, 8.

⁴³ Thompson, "Poisoned Power," A Clean Air Network Report, 10.

⁴⁴ Stadler, "Turn Up the Heat on Dirty Power," A Clean Air Network Report, 16-17.

cadmium, chromium, lead, manganese, nickel, and vanadium.⁴⁵ Furthermore, coal contains radioactive impurities that are released when burned.⁴⁶ Already in an elemental state, toxic heavy metals cannot be broken down through high-temperature combustion or natural processes. End-of-stack control devices still require disposal of the collected metals, with some risk of environmental contamination.⁴⁷ Of these metals, mercury probably poses the greatest concern, because of its toxicity and pervasiveness. Warnings have been issued concerning mercury-contaminated fish in 39 states including Montana, for over 50,000 bodies of water.⁴⁸ Mercury can cause severe and irreversible damage to the human neurological system, especially in infants and developing fetuses, in addition to impaired kidney function, liver degeneration, reproductive problems, and impacts to the gastrointestinal and cardiovascular systems.⁴⁹

Mercury is highly persistent in the environment, accumulates in the tissues of fish and wildlife, and increases in concentration (biomagnifies) as it moves up the food chain. For example, birds or mammals that ingest contaminated fish are particularly susceptible to mercury's effects: neurological and reproductive disorders, impaired growth, diminished resistance to disease, and death.⁵⁰

Coal contains more mercury, by far, than any other fossil-fuel used to produce power. EPA estimates that coal-fired power plants are the nation's largest industrial source of atmospheric mercury (but because monitoring requirements were only recently passed, there remains a degree of uncertainty).⁵¹ And it is thought that this route -- atmospheric deposition -- is responsible for 95% of the mercury in the Great Lakes.⁵² On average, a

⁴⁵ Brennan, 114. Stadler, "Turn Up the Heat on Dirty Power," A Clean Air Network Report, 17.

⁴⁶ Turk, 398-399.

⁴⁷ Stadler, "Turn Up the Heat on Dirty Power," A Clean Air Network Report, 2.

⁴⁸ Stadler, "Turn Up the Heat on Dirty Power," A Clean Air Network Report, 3, 30.

⁴⁹ Thompson, "Poisoned Power," A Clean Air Network Report, 9.

Stadler, "Turn Up the Heat on Dirty Power," A Clean Air Network Report, 5.

⁵⁰ Stadler, "Turn Up the Heat on Dirty Power," A Clean Air Network Report, 11.

⁵¹ Stadler, "Turn Up the Heat on Dirty Power," A Clean Air Network Report, 13, 20.

⁵² Thompson, "Poisoned Power," A Clean Air Network Report, 9.

100-Megawatt coal-fired power plant produces about 23 pounds, or 157 teaspoons, of mercury per year. The effect of 1/70th of a teaspoon of mercury on a 25-acre lake is significant enough to render the fish inedible.⁵³

In 1997, the EPA expanded the Toxics Release Inventory (TRI) reporting requirements under the Emergency Planning and Community Right-to-Know Act (EPCRA) to include electric utilities (coal- and oil-fired generation only). In the case of mercury, however, reporting thresholds were placed so high that utilities remained effectively exempt, despite their significance as a leading industrial source.⁵⁴ On January 1, 1999, utilities began some monitoring of mercury emissions as part of an EPA Information Collection Request. There remain, however, no regulations governing mercury emissions from power plants, the only major source without controls.⁵⁵

Hydroelectric Power Generation

In stark contrast to coal-fired power generation, hydropower (which represents 42% of Montana's generation and 9% of the nation's) has no atmospheric emissions or other waste products. Set it is not without major environmental impacts. If there was a "poster child" for the negative environmental externalities of hydroelectric power, it would have to be the salmon of the Pacific Northwest. Salmon and steelhead populations have been reduced to about 2% of their historic runs in the Columbia / Snake River basin with many varieties having been eliminated altogether. Large hydroelectric dams, the primary culprit, threaten these fish species in a number of different ways. Most obvious is the trauma young salmon experience when passing through the turbine blades. If they are not killed outright, stress from turbine pressure can leave them in a weakened condition which renders them more susceptible to predation. Predation is also a factor in the slack water behind dams, where the young salmon are in greater danger for a longer period of time. In

⁵³ Stadler, "Turn Up the Heat on Dirty Power," A Clean Air Network Report, 16.

⁵⁴ Stadler, "Turn Up the Heat on Dirty Power," A Clean Air Network Report, 21.

⁵⁵ Stadler, "Turn Up the Heat on Dirty Power," A Clean Air Network Report, 20.

⁵⁶ Alan Davis, DEQ, "Electricity in Montana -- an Overview," <u>T.A.C. Report</u>, November 1997 (this article relies on 1995 EIA data). The 9% figure comes from 1998 EIA data: http://www.eia.doe.gov/cneaf/electricity/chg_str/booklet/fuels.html

addition, if they fail to make the transition to a salt-water environment within three weeks, they can die. Unfortunately, that trip can now take over 40 days.⁵⁷ According to the Northwest Energy Coalition, "The combined effects of long, slow-moving reservoirs and deadly turbines kill between 5-15% of migrating young fish at each dam. Most Columbia and Snake River salmon and steelhead must survive four to eight dams on their trip to the ocean. The dams will kill 80-95% of the fish which have to face all eight of them."⁵⁸

It is also important to remember the up-front environmental costs of dam construction. The massive inundation that results can have social, environmental, and aesthetic impacts. In addition to the displacement of human communities and the submerging of archaeological sites is the loss of spawning grounds, wetlands, canyonlands, and other natural habitats. Meanwhile, downstream flows are interrupted, sometimes for decades (Lake Powell took more than 20 years to fill following the construction of Glen Canyon Dam in Arizona).⁵⁹ As Bruce Farling of Montana Trout Unlimited puts it,

Hydro dams have drowned thousands of acres in the Northwest, destroying some of the region's best crop and timber growing country, as well as immense sweeps of wildlife habitat needed by popular and endangered species. Hydro dams have also created huge pollution problems, generating unnatural temperature changes or gas supersaturation in trout streams, or by creating toxic sinks in their reservoirs. When we embraced dams, we took a lot of bad with the good.

He suggests the removal of both the Milltown (just upstream of Missoula) and Madison dams. Milltown obstructs the passage of native bull and cutthroat trout, which isolates their populations. It also carries a load of 6.6 million cubic yards of contaminated sediment from historic mining -- 2100 tons of arsenic, 13,100 tons of copper, 1700 tons of lead, and 19,000 tons of zinc -- all for a mere 3 Megawatts of generating capacity. The Madison dam produces similarly small quantities of power (7 Megawatts) and causes devastating thermal pollution with the "shallow, heat-sink of Ennis Lake."

⁵⁷ NCAC, "Plugging People into Power," 5.

⁵⁸ http://www.nwenergy.org/outreach/fact/dams_whydams.html

⁵⁹ Brennan, 124. Turk, 496.

⁶⁰ Bruce Farling of Montana Trout Unlimited, KUFM Editorial, 15 December 1997. Sherry Devlin, "PP&L excludes troubled Milltown Dam," <u>IR</u>, 3 November 1998. See also AP, "FERC extends MPC license despite protests," <u>IR</u>, 20 June 2000.

The build-up of sediment behind dams occurs because silt particles cannot remain suspended in the slower-moving water. By contrast, the water that passes through dams is correspondingly silt-free and has a greater capacity to scour and erode downstream areas. The disruption can adversely affect fish, agriculture, and ocean estuaries by inhibiting the natural dispersal of nutrients. Furthermore, the greater surface area of reservoirs can lead to staggering evaporative losses -- 750,000 acre-feet a year from Arizona's Lake Powell alone (enough to supply the needs of a city of three million). For these reasons, large-scale hydro projects cannot rightly be considered either renewable or sustainable.

Nuclear Power Generation

The third member of the conventional power triumvirate (along with coal-fired and hydroelectric generation) is power generation through nuclear fission. None of the 109 nuclear power plants that produce 19% of the nation's electricity are located in Montana.⁶⁴ In 1978, an important citizens' initiative (I-80) was passed prohibiting the location of any nuclear facility in the state without the approval of a majority of voters. Two years later, I-84 banned the disposal of radioactive waste within the state.

Nuclear power's environmental track record is notorious, and is rivaled only by its history of fiscal disaster. Delays on the order of decades and cost overruns in the billions of dollars have not been uncommon.⁶⁵ More importantly, safety problems and accidents such as those at Browns Ferry (Decatur, Ala.-1975), Three Mile Island (Harrisburg, Penn.-1979), Rancho Seco (Sacramento, Cal.-1985), and Chernobyl (Ukraine-1986) underscore the potential for serious mishap.⁶⁶ The language of I-80 captures the perennial issues associated with nuclear power:

⁶¹ Turk, 497.

⁶² Turk, 371.

⁶³ AP, "Sierra Club director suggests draining Lake Powell," Missoulian, 2 November 1996.

⁶⁴ Smeloff, 151. 1998 EIA data from:

http://www.eia.doe.gov/cneaf/electricity/chg_str/booklet/fuels.html

⁶⁵ Smeloff, 22, 128.

⁶⁶ Turk, 403-406. Smeloff, 25-27.

- (1) The people of Montana find that substantial public concern exists regarding nuclear reactors and other major nuclear facilities, including the following unresolved issues:
- (a) the generation of waste from nuclear facilities, which remains a severe radiological hazard for many thousands of years and to which no means of containment assuring the protection of future generations exists;
- (b) the spending of scarce capital to pay the rapidly increasing costs of nuclear facilities, preventing the use of that capital to finance renewable energy sources which hold more promise for supplying useful energy, providing jobs, and holding down energy costs;
- (c) the liability of nuclear facilities to sudden catastrophic accidents which can affect large areas of the state, thousands of people, and countless future generations;
- (d) the refusal of utilities, industry, and government to assume normal financial responsibility for compensating victims of such nuclear accidents;
- (e) the impact of nuclear facilities on the proliferation of nuclear bombs and terrorism;
- (f) the increasing pattern of abandonment of used nuclear facilities by their owners, resulting in radiological dangers to present and future societies as well as higher public costs for perpetual management; and
- (g) the detrimental effect of the large uranium import program necessary to the expansion of nuclear power on American energy independence, defense policy, and economic well being.67

Currently, the nation has 30,000 tons of high-level radioactive waste awaiting permanent disposal at a nuclear repository.⁶⁸ Critics charge that no storage solution is perfectly safe, as massive geologic or political change can occur during the hundreds or thousands of years required for radioactivity levels to sufficiently taper. Furthermore, while deregulation may accelerate the closure of some nuclear plants (which have a finite lifetime to begin with -- see "Decommissioning" in Chapter 5), the plants themselves must be decontaminated, disassembled, or entombed.⁶⁹

The biological effects of inadvertently released radiation can be devastating. In humans, radiation sickness can mean fatigue, nausea, diarrhea, nosebleeds, hair loss, compromised bone marrow function with implications for the immune system, infection, and bleeding. Radiation exposure can also impart a substantially increased risk of cancer as well as reproductive problems including a higher incidence of mental retardation in babies and possible mutagenic effects. High doses can cause damage to the brain and heart, and

⁶⁷ MCA 75-20-1201.

⁶⁸ Smeloff, 138.

⁶⁹ Turk, 401-403.

even death.⁷⁰ The fuel cycle costs of nuclear energy include a greater level of exposure to radioactivity by workers in uranium mines, refining mills, and processing plants as well as reactors. Beyond the potential for contamination of air, water, and land by radioactive materials, environmental impacts include greater thermal pollution than from coal-fired generation and impacts from the mining and transport of uranium.⁷¹ At California's San Onofre Nuclear Generating Station (SONGS), it was found that along with ocean water, the plant pumped 58 tons of fish through its cooling system each year.⁷²

Natural Gas Power Generation

Natural gas-fired power plants have a number of advantages over coal-fired plants. Methane burns almost twice as clean as coal in terms of carbon dioxide released per unit of energy produced, and is devoid of many of the other contaminants found in coal.⁷³ As with coal, the extraction of natural gas can release methane directly to the atmosphere where it acts as a powerful greenhouse gas. While the combustion of natural gas produces no SO₂ emissions, it does create NOx.⁷⁴

Because of its distinction as the "cleanest fossil fuel" (generally, natural gas power plants produce less pollution of all types per kilowatt-hour than corresponding coal-fired plants⁷⁵), some environmentalists see it as an appropriate "bridge fuel" to help make the transition away from coal while waiting for renewable resources to become fully competitive. But they also warn of the high risk of overinvesting in gas given a current glut in supply and what could be temporarily low prices.⁷⁶ Shifting all your eggs from one fossil-fuel basket to another is hardly a lasting solution. A diversified resource base, by

⁷⁰ Turk, 409-415.

⁷¹ DiLavore, 356.

⁷² Smeloff, 96.

⁷³ Nagusky, "Global Climate Change," Regulatory Assistance Project, 36. National Environmental Trust, "Leadership and Equity," 42.

⁷⁴ NCAC, "Plugging People into Power," 5.

⁷⁵ Brennan, 114.

⁷⁶ NCAC 5, 30-31.

comparison, would dampen the effects of sudden changes in fuel prices or supply and provide a more level and reliable power stream.⁷⁷

In addition to being by definition a finite "fossil" resource, the extraction of natural gas can carry a number of unpleasant externalities including surface and groundwater contamination, loss of wilderness values, disruption of aboriginal cultures and traditional lands, and damage to both aquatic and terrestrial habitat. Montanans are particularly sensitive to these "upstream" fuel cycle costs, because of the presence of natural gas resources along the prized Rocky Mountain Front. The Missoulian captured the feeling of many Montanans regarding natural gas and its connection to deregulation in its August 31, 1997 editorial:

The abundance and low cost of natural gas is a driving force in the nationwide deregulation of the electricity industry. . . . Gas is cheap because there's so darned much of the stuff produced in America and Canada. . . . Whatever energy potential exists beneath the ground here would be developed for the benefit of distant markets. The profits would flow to large, out-of-state energy conglomerates and their far-flung stockholders. Montanans would get a smattering of tax dollars and all of the mess, all of the problems. The benefits of developing energy resources along the Front would last as long as it took to deplete the reserves; the losses inflicted would last forever.

Many natural gas fields (such as Pincher Creek just north of Montana in Alberta) also contain hydrogen sulfide, a poisonous gas which can be released to the atmosphere prior to "sweetening" the "sour gas". This gas is strongly offensive to the human nose (perceived as a rotten egg smell) and is added back in to natural gas supplies in trace amounts so that leaks may be detected.

In the final analysis, natural gas may end up acting more as a roadblock than a bridge for renewable energy. Just as new and efficient gas turbines (which produce power at around three cents per kilowatt-hour) may drive inefficient and highly polluting plants out of business (see "Decommissioning" in Chapter 5), they also provide stiff competition for fledgling renewable projects, hindering their commercialization.⁷⁸

⁷⁷ Smeloff, 49.

⁷⁸ Mazza, "How the Northwest Can Lead a Clean Energy Revolution," An Atmosphere Alliance Special Report, 15, 17.

Fuel Cells

Fuel cells produce both electrical energy and usable heat by chemically combining hydrogen and oxygen to form water in a process which is the reverse of electrolysis. When used as part of a cogeneration system, fuel cells can achieve energy efficiencies of greater than 80% and can sustain high efficiencies even when operating at less than full capacity. If the hydrogen is obtained from natural gas, the fuel cell process will produce carbon dioxide, but much less than the amount that would be produced by burning the gas to produce electricity. Alternatively and ideally, carbon emissions could be eliminated altogether if the hydrogen fuel was obtained through electrolysis using solar or wind power. (Obviously it would be more efficient to use the solar or wind power directly -- but for mobile applications such as fuel cell-powered vehicles, or for locations where solar or wind power are unsuitable, the hydrogen can be obtained by electrolysis using renewable energy sources).⁷⁹ Fuel cell power plants emit only about 1% of the nitrogen oxides of fossil fuel plants.⁸⁰

Fuel cells are particularly well suited for peak loads and distributed applications (smaller generating sources placed closer to end-use customers). In addition to their modularity (ability for small units to be built and used economically and incrementally) and short construction lead times, fuel cells do an exceptional job of quickly and efficiently ramping up and down to track changing energy demands. This is an important feature for distributed applications: As you get closer to individual loads, the energy demand curves become increasingly variable. The ability to smooth demand curves by serving large numbers of customers at once and the inability to economically store power are two of the original reasons that utility monopolies with centralized power stations were formed. The first need may soon be rendered obsolete by highly responsive fuel cells, and the second problem may similarly be met by developments in high-tech storage devices. For example, flywheel batteries may be used in which "lightweight materials, advanced magnetic bearings, and near perfect vacuums will allow . . . over 100,000 revolutions per minute, with

⁷⁹ Mazza, "How the Northwest Can Lead a Clean Energy Revolution," An Atmosphere Alliance Special Report, 6.

⁸⁰ Smeloff, 185.

coast down times that last for many months."81 Finally, fuel cells have the advantage of producing high-quality power (energy that flows at a constant reliable rate with few fluctuations), and also work well in urban settings because of their quiet operation.82

Renewable Energy

Renewable resources, such as wind and solar power, have tremendous advantages over conventional power plants, but still represent only 2% of the nation's electricity production. And Montana lags behind the national average, with less than 1% of its generating capacity derived from non-hydro renewables. This is a disappointing statistic considering the state's tremendous renewable energy producing potential: fifth in the nation in terms of wind capacity. Renewables also make sense from a cultural standpoint, resonating well with "Montana values" and the state's tradition of self-reliant individualism. This sentiment was captured by Russ Wahl, a Cut Bank farmer, who encouraged the 1999 Montana legislature to pass a renewable energy incentive bill as a way to . . .

... encourage more freedom and independence among the various citizens of Montana. Currently the generation and transmission of electricity is centralized. That centralization places the citizens of this state at the will of a few saboteurs or the unusual acts of God, which can easily disrupt the lives of many people. 86

The environmental advantages of renewable energy are legendary, with few or no emissions, water requirements, or fuel cycle costs. Their economic benefits are similarly impressive, including low operation and maintenance costs, independence from fluctuations in global fuel prices and availability, short construction times, and ability to be built incrementally according to need and resources. And yet each of the principal forms of

⁸¹ Smeloff, 157.

⁸² Smeloff, 184-185, 156.

⁸³ Brennan, 124.

⁸⁴ Alan Davis, DEQ, "Electricity in Montana -- an Overview," <u>T.A.C. Report</u>, November 1997.

⁸⁵ Chapman, "Expanding Wind Power," REPP Research Report # 6, 10.

Written testimony of Russ Wahl to the Senate Business and Industry Committee on SB 409, 10 February 1999. See Chapter 6, "SB 409 -- Net Metering." See also the testimony of Mary Hamilton, owner of Solar Plexus in Missoula.

renewable energy (solar, wind, geothermal, biomass, and small hydro) has an environmental footprint that needs to be examined, especially when developed as a centralized power station.

In general, the impacts of renewable energy projects tend to be more site-specific and local than those of their fossil fuel counterparts. 87 Wind farms, for example, have come under attack for both raptor mortality and their impact on the visual quality of the landscape, since they tend to be located remotely, often in scenic areas. 88 While solar and wind energy projects have no fuel costs, the drawback is that they have less flexibility when it comes to siting -- they simply must locate where the fuel is. 89 And as with other power plants, transmission to load centers still requires the construction and siting of high-voltage power lines. If Montana's Rocky Mountain Front were to be developed for its vast wind potential, the power produced would likely be destined for major population centers such as Portland or Seattle, which would require power lines across the relatively pristine Northern Rockies ecosystem. Furthermore, some find the thought of large and noisy whirligigs to be as aesthetically offensive as drilling rigs.

Another alternative also escapes high fuel costs, but has the added advantage of helping to dispose of unwanted waste products. Biomass resources include municipal and agricultural waste, landfill gas, and wood waste. Sometimes biomass uses crops grown specifically for that purpose, but the process of growing the vegetation can largely balance the carbon released later through combustion. It should be pointed out that net CO₂ emissions can still result if the full cycle of planting, harvesting, and transporting is considered. Biomass can be used directly as a fuel to produce electricity, or it can be gasified first for future burning or for use in a fuel cell.

In addition to its benefits as a relatively clean renewable energy resource, biomass has a number of positive environmental externalities associated with it. While it is unfortunate that solid waste would qualify as a renewable (endless) fuel stream, biomass

⁸⁷ NCAC, "Plugging People into Power," 28.

⁸⁸ Smeloff, 58-59, 63. NCAC, "Plugging People into Power," 28.

⁸⁹ NCAC, "Plugging People into Power," 28.

⁹⁰ Holt, "Disclosure and Certification," REPP Issue Brief # 5, 10.

energy production can help alleviate the pollution problems of landfills. Although the common process of flaring the potent greenhouse gases generated by landfills converts them into less potent carbon dioxide and water, it fails to utilize their energy potential. Biomass facilities can achieve both functions, and at relatively low cost if landfills are required to capture these gases anyway.

Another important byproduct of some biomass operations is the production of fertilizer. And in California, the biomass power industry assists in the prevention of catastrophic forest fires by paying people to collect underbrush. Early proposals to deregulate the industry in that state were met with opposition, not only from environmentalists but from loggers who were concerned that negative impacts to the biomass industry would be felt by the forests as well. 92

Conservation

By far, the resource choice that does the best job approximating a truly "green" energy source is conservation. Conservation refers to any measure or behavior that reduces energy demand -- using more efficient appliances, increasing insulation values, or converting a home from inefficient electrical to more efficient natural gas heat ("fuel switching"). In industry parlance, increasing the efficiency of the electricity system by supporting conservation activities (or by shifting demand to different "off peak" time periods) is called "demand-side management" or DSM. (An example of a "supply-side" decision, by comparison, would be increasing the efficiency of the electricity system by building a solar array instead of a coal-fired power plant.)

In many ways conservation can be thought of as an energy resource that can be invested in to meet a growing demand, just as a new coal-fired power plant might be. Power freed up by a "conservation power plant" is functionally equivalent to (and has a number of advantages over) power produced from new supply-side generating resources.⁹³ These "negawatts," as Amory Lovins calls them, are both inexpensive -- especially if externalities

⁹¹ Smeloff, 186.

⁹² Smeloff, 83-84.

⁹³ NCAC, "Plugging People into Power," 20.

are considered -- and plentiful, and typically have shorter "payback periods" than conventional power plants. ⁹⁴ In the Pacific Northwest alone, the energy potential of the untapped conservation resource rivals that of the oil reserves on the North Slope of Alaska. ⁹⁵ And conservation has already proven itself an effective and sizable resource, having saved the Pacific Northwest enough power to meet the needs of a city larger than Seattle (with 1700 average Megawatts being developed since 1981). ⁹⁶ According to the Northwest Power Planning Council's 1996 draft power plan, roughly 1500 Megawatts of cost-effective conservation could be developed in the region over the next 20 years. ⁹⁷

Unfortunately, however, the "negawatt" analogy breaks down somewhat in a surplus situation (you cannot avoid the cost of a new power plant that is not being proposed anyway). Such was the case in the early 1990s when surpluses led some to call for the dismantling of DSM programs in New England. Fortunately, the other benefits of energy efficiency improvements were considered -- cleaner air and reduced environmental compliance costs, the retention of federal transportation dollars, the creation of jobs, and more competitive businesses -- and the programs were retained. 99

Ultimately, consumers are interested in the services provided by electricity (e.g., hot tubs and ice cream) than the electricity itself. Conservation measures can provide these services as well and sometimes better than conventional resources, but with fewer kilowatthours. According to the Northwest Energy Coalition, "the Electric Power Research Institute (EPRI), the research arm of the utility industry, estimates that it is technically possible to save between 20% and 40% of all the electricity currently used in this country with no loss of comfort or service at a marginal cost of 4¢ per kWh. This is about half the cost of building a new coal plant." 100

⁹⁴ Smeloff, 17-18.

⁹⁵ NCAC, "Plugging People into Power," 20. Smeloff, 17-18.

⁹⁶ http://www.nwenergy.org/conservation/

⁹⁷ Collins, "Comprehensive Review," 20.

⁹⁸ Smeloff, 113.

⁹⁹ Smeloff, 113-115.

¹⁰⁰ NCAC, "Plugging People into Power," 22. However, in the electricity supply markets of the 1990s, it is also almost twice the cost of incremental supply.

And not only is conservation affordable, it is modular -- meaning that it can be purchased in any size blocks. This is an attractive feature in an era of deregulation, when large capital investments can be risky, especially if they lead to excess capacity. ¹⁰¹ Furthermore, conservation has very few negative environmental impacts ¹⁰² and is the one resource option that directly involves large numbers of customers. Utility conservation programs therefore provide the important (although difficult to quantify) function of raising public awareness of energy issues.

Conservation has still other advantages. Money saved by consumers (both residential and commercial) can be spent elsewhere in the local economy, and can increase the efficiency of businesses and their ability to compete globally. Note that between 1973 and 1986 U.S. electricity consumption remained nearly constant even though the economy expanded more than 40%. ¹⁰³ But the United States economy is still significantly more energy-intensive than Japan's, for instance, using roughly 60% more energy per unit of Gross National Product. ¹⁰⁴ In addition to creating more jobs than conventional power plants, conservation creates a more stable economy as it is less susceptible to boom-and-bust cycles. ¹⁰⁵

If multiple utilities work together, even greater savings can be realized through what are known as "conservation transfers." For example, suppose one utility has a large untapped conservation resource but no need to develop it because it already has plenty of capacity to serve its customers. If a second utility has insufficient capacity and little conservation potential, it can purchase "negawatts" from the first utility. In other words, one utility can help fund another's conservation programs in return for the power liberated through those programs. 106

¹⁰¹ NCAC, "Plugging People into Power," 7.

¹⁰² While conservation has no direct emissions, water usage, aesthetic impacts, etc., it does involve materials (such as fiberglass) that do pose environmental impacts in acquisition, manufacture and transportation.

¹⁰³ NCAC, "Plugging People into Power," 8.

¹⁰⁴ NCAC, "Plugging People into Power," 76.

¹⁰⁵ NCAC, "Plugging People into Power," 7.

¹⁰⁶ NCAC, "Plugging People into Power," 24.

A similar idea involves power exchanges between regions with differing seasonal supply and demand conditions. In the summer months, for example, extra power produced by the spring runoff in the Pacific Northwest is used to meet California's increased air conditioning load. Conversely, by purchasing excess power from California in the winter months, the Northwest no longer needs to store additional water behind dams in the summertime. This power exchange already amounts to roughly 1000 MW a year, the equivalent of a fairly large coal-fired plant. Alternatively, regional transfers could take place across lines of longitude (i.e., time zones) to meet the slightly staggered peaks of the respective utilities to avoid building new capacity. Ironically, while the transmission of electricity itself has serious environmental impacts, it is a necessary component of both conservation transfers and regional exchanges.

¹⁰⁷ NCAC, "Plugging People into Power," 24-25. Recall that decreased water velocity from storage behind dams creates hardship for migrating salmon and other negative environmental impacts.

¹⁰⁸ NCAC, "Plugging People into Power," 38. MPC has also participated in such exchanges, but recently sold all such contracts along with its power generating facilities. Missoulian State Bureau, "Assets bought by PP&L Global," Missoulian, 4 November 1998.

CHAPTER 5

ENVIRONMENTAL STRATEGIES AND RESTRUCTURING

As we have seen, the environmental impacts of the electricity industry are considerable, in both scope and magnitude. But how might deregulation alleviate or aggravate these impacts? Over the years, a complex framework of strategies has developed to address the environmental and social costs of producing and delivering electricity. Some of these strategies, such as utility-sponsored, demand-side management (DSM) programs and integrated resource planning (IRP), may be jeopardized by the move to competition. Other mechanisms, such as incentive-based environmental regulations and the marketing of "green power," may work better in a deregulated environment.

Integrated Resource Planning

A fundamental energy policy goal of environmentalists has long been to incorporate the true costs of energy production into the price per kilowatt-hour of electricity, per gallon of gasoline, or per cubic foot of natural gas. This would not only discourage consumption and, in the case of electricity reduce the need for new generating capacity (see cost-induced conservation below), it would also facilitate a meaningful comparison of alternatives and assist with the commercialization of environmentally preferred resources. Finally, it seems only fair that those who benefit from a product should be responsible for paying for it in full. Instead, too often the environmental degradation and the other externalized costs of electricity have been paid for not by those who benefit -- the electric company, its shareholders and customers -- but by society at large. Worse is when these costs are borne disproportionately by some members of society, particularly those who are already at a disadvantage. Numerous studies have demonstrated that certain characteristics (race, income, education, population, and even average age) influence the likelihood that a

community will be targeted for the construction of a polluting facility. The practice of singling out communities lacking in the resources needed to mount effective resistance campaigns has led to what Mark Dowie terms "massive inequities in environmental degradations and injustice in the policies used to correct them." Instances of environmental racism can be seen beyond the siting of industrial plants and toxic waste dumps, and beyond company board rooms. On average, penalties assessed against polluters by governmental agencies are lower in minority areas, and clean-up times longer.

In order to more adequately account for externalized costs, state governments have implemented "social costing" policies (Montana's Integrated Resource Planning Law, passed in 1993, can be found at MCA 69-3-1201). Under such laws, utilities are compelled to consider these costs in their decisions regarding the acquisition of new resources and the operation of power plants. For example, if a utility was deciding between a new coal-fired power plant or a renewable energy project, the direct costs of building the coal-fired plant would be supplemented by an "adder" representing the environmental costs of the air pollution it would create. Passage of the 1980 Pacific Northwest Electric Power Planning and Conservation Act (the "regional act") signaled a new era in which utilities began to prepare "least-cost plans" to factor environmental and social considerations into their planning process, and to begin choosing resources with the lowest overall long-term costs. True integrated resource planning (IRP) would minimize total costs to society by looking at alternative fuel options, such as encouraging homeowners to convert from electric to more efficient natural gas or propane heat ("fuel switching"). 7

Social costing policies are heralded by environmentalists as a way to recognize that clean air, clean water, and functioning ecosystems all have value. But the drawback of this

¹ Dowie, 142-143.

² Dowie, 141.

³ Dowie, 143.

⁴ Brennan, 34.

⁵ Smeloff, 120-121.

⁶ NCAC, "Plugging People into Power," 53.

⁷ NCAC, "Plugging People into Power," 31.

approach is trying to determine how much value. Choosing a method for evaluating such costs can be extremely difficult. For example, costs might be assigned to a negative environmental externality like air pollution, based on some kind of estimate of the damage it causes, or alternatively, based on the costs associated with controlling it. In addition to being remote and diffuse (and correspondingly difficult to link conclusively to the responsible party), social costs tend to be long-term in nature (or "backloaded"). If not ignored altogether, they are often devalued, sometimes according to a highly technical "discount rate." Assuming the guilty party ever actually pays for these costs, this "deferred payment plan" makes them more manageable. The ambiguity of cost issues and the challenge of assigning responsibility makes them difficult to implement in legislation, and equally difficult to enforce in subsequent administrative and court decisions.

But beyond these practical barriers, putting a price tag to things such as clean air, human health, and functional ecosystems leads to the ethically tenuous position that their value is finite and quantifiable. The Northwest Energy Coalition puts it like this:

It's hard to put an accurate number on these costs. The only number we know for sure to be wrong is zero. Yet that's exactly the number that energy planners use if they choose to ignore environmental damages. . . . What is the cost of a salmon stock gone extinct, of not being able to see Mt. Rainier because of pollution, of a human life?

Or as Colstrip area rancher Wally McRae puts it, "What is the value of something that's not for sale?" Certainly, some things money truly cannot buy, and there is a danger associated with assigning a monetary value to them.

One of the goals of least-cost planning is to ensure that resource decisions are made in such a way as to minimize the long-term financial, social, and environmental costs. Much of the debate surrounding whether particular conservation measures should be invested in as an alternative to new power plants centers on the definition of the term "cost-effective." "A number of tests of cost-effectiveness have been used that reflect different perspectives—participating customers, nonparticipating customers, the utility, all customers combined, and

⁸ Smeloff, 69-70.

⁹ NCAC, "Plugging People into Power," 54.

¹⁰ Erin P. Billings, "After 20 years, is coal railroad ready to roll?" IR, 9 August 1998.

society as a whole." 11 The "total resource cost test," the most frequently used, considers only the simple economics of the proposed measure. If the measure will pay for itself over its lifetime (saving at least as much money as its implementation costs), it is considered cost-effective. By comparison, the societal (or total social cost) test is more comprehensive, including external costs and benefits in addition to the direct financial impacts. This approach is less popular, in part because of the difficulties (discussed above) of assigning appropriate values, but also because of institutional and political reluctance. 12 To get a sense of scale, the 1991 Pacific Northwest Regional Plan considered conservation to be cost-effective up to 11 cents per kilowatt-hour, with other resources cost-effective only up to $7.5 \, \phi$, reflecting a belief that the externalized costs of conventional resources were at least 3.5ϕ per kilowatt-hour. 13

Before understanding the effect that deregulation may have on IRP and social costing policies, these mechanisms must first be seen in their historical context. It is important to realize that for many years, the economic arguments for new power plant construction were powerful. At the time, rapid technological developments, low fuel prices and interest rates, and large economies of scale achieved by steadily growing demand all made it possible to lower the price of electricity by building new power plants. ¹⁴ In such a climate there was little incentive to invest in conservation.

This all began to change, however, with the 1973 Arab oil embargo and ensuing energy crisis. As prices for oil and natural gas skyrocketed, people began to curb their consumption, which fell substantially short of demand forecasts. With increasing uncertainty in load growth predictions and increasing volatility in fuel prices and interest rates, investments in new power plants became riskier. Meanwhile, declining costs and rapid innovations were making renewable energy and demand-side management alternatives more and more appealing. Finally, increased public awareness of the environmental implications of traditional power generation created an atmosphere of support for landmark

¹¹ Smeloff, 61.

¹² Smeloff, 60-61.

¹³ NCAC, "Plugging People into Power," 20.

¹⁴ Smeloff, 60.

legislation such as the 1978 Public Utilities Regulatory Policies Act (PURPA). PURPA and other laws helped shift the economics of power generation to favor small alternative projects. Resource planning suddenly became much more than deciding when and where the next big fossil plant would be built. 15 Construction of large centralized power plants was taking longer and costing more because of new environmental laws and because of operational problems at new coal and nuclear plants -- for the first time such construction threatened to raise the price of electricity. Expressed differently, for the first time the marginal cost (the incremental cost per kilowatt-hour of new capacity) crossed over and surpassed the average cost (the cost per kilowatt-hour of obtaining power from the existing system). PURPA required utilities to purchase power from these alternative plants (known as qualifying facilities) so long as the price was below the utility's "avoided cost" of building a new plant. At the time avoided costs were quite high (especially when set by progressive utility commissions mindful of externalities), so many small and environmentally preferable power producers (including cogenerators and renewable energy plants) were given access to the transmission system and a market for their product. In the 1990s, however, we have seen a return to lower natural gas prices and lower avoided costs, conditions antagonistic to renewable energy. 16

Effects of Restructuring on Integrated Resource Planning

There is widespread agreement that the restructuring of the electric utility industry will likely spell the end of integrated resource planning, at least as we know it. ¹⁷ Because of deregulation, government will have diminished authority to require investor-owned utilities to engage in integrated resource planning or to prepare least-cost plans. Even if public utility commissions did retain this authority, they could not apply it universally. Independent power producers who lie outside the public utility commission's (PUC) legal and geographic jurisdiction would receive an unfair advantage. Instead, resource acquisition

¹⁵ Smeloff, 60, 112. Brennan, 29-30.

¹⁶ Brennan, 33, 124. DEQ, "Restructuring the Electric Utility Industry in Montana," 9.

¹⁷ An exception might be the "market-oriented version of IRP" passed in Texas in 1995. Smeloff, 135-136.

decisions will be based on each utility's internal assessment of market conditions. Competition will elevate the importance of short-term price signals and diminish the industry's ability and willingness to account for externalized costs.

Yet some observers feel that the loss of IRP will have little real impact on the environment. First, they point out that the principal environmental benefit of IRP was to prevent the development of large and unnecessary power plants. But under deregulation, the uncertainty of markets and the absence of guaranteed cost recovery (utilities can no longer pass their capital costs along to captive customers) make construction of large central stations with long lead times risky and unlikely. New power plant construction will be limited primarily to small, cheap, and efficient gas turbines which have a relatively small environmental footprint. ¹⁸

The other argument is based not so much on what deregulation might do to IRP, but on IRP's track record as an effective environmental tool. The demise of IRP is of little concern, the argument goes, because it did not do much to begin with. For whatever reason, whether it be the difficulties of quantifying social costs or the lack of political will to do so in a meaningful fashion, there is a perception that "current PUC efforts to tilt utility investment decisions to be favorable toward the environment have not been widespread or particularly forceful, so little will be lost." But rather than concluding the current system must be jettisoned, this argument could instead be used as a powerful wake-up call that social cost "adders" need to be adding more. Others reject the argument outright, asking how many new, large facilities were planned and build during the IRP period, in Montana, the Northwest, or elsewhere.

Cost-Induced Conservation and Rate Designs

Another tool which has been used to achieve environmental and other objectives is rate design. Rates can be structured to encourage either conservation or consumption. One guiding principle is that rates should reflect the "cost of service" that the utility incurs in

¹⁸ DEQ, "Restructuring the Electric Utility Industry in Montana," 10.

¹⁹ Brennan, 127.

²⁰ Brennan, 121.

serving its customers. These costs take two forms. "Variable costs" are proportional to the amount of power being produced. An example would be fuel costs (because to generate twice as much power, you need to buy twice as much fuel). "Fixed costs," on the other hand, exist independent of power output. Examples include construction costs, property taxes, interest, insurance, and depreciation which are all incurred regardless of the level of production. Prices paid by consumers follow a similar pattern. Typically, a customer pays both a fixed customer charge and a variable charge. The fixed charge remains constant regardless of the amount of energy he or she uses and covers the fixed costs of meter reading, billing, etc.²¹ The variable charge is proportional to the amount of energy consumed, and is sometimes called the "energy charge." 22 Some costs, such as distribution, are difficult to categorize. From a conservation standpoint, it is preferable to include as many costs as possible in the energy charge rather than the customer charge. To understand why, it helps to consider the two extremes. If all costs were treated as part of the customer charge, consumers would pay the same amount each month no matter how much power they used. This situation removes any economic incentive to conserve. The opposite scenario, in which all costs are treated as part of the variable energy charge, maximizes the conservation incentive. There is no limit to how low the monthly utility bill could be reduced as the customer scales back energy use (or increases the share derived from selfgeneration). Adjusting energy usage in order to save money is known as "cost-induced conservation."

In addition to promoting environmental goals, rates that emphasize variable charges benefit those customers who already have small electricity demands. Under a rate structure that depended on fixed customer charges, a low-income family living in a trailer park would theoretically pay the same electricity bill as the owner of a 10,000-square-foot "trophy home" (and would in fact be paying a much greater effective price per unit of energy). Incidentally, when MPC's first "unbundled" residential bills came out in September of

²¹ The customer charge can be thought of as an "admission fee to the system." NCAC, "Plugging People into Power," 57.

²² The energy commodity itself, or "the juice," is usually paid for this way, using a price per kilowatt-hour. Such charges are sometimes called "mill based" because they charge a certain number of "mills," or tenths of a cent, per unit of energy.

1999, the PSC ensured that all charges were "mill based" (assessed in proportion to the amount of energy used) other than the \$4.20 customer charge for distribution service.²³

Changing rate structures to more heavily emphasize variable charges over fixed charges is one way to encourage cost-induced conservation. Another, less popular, way is to raise prices. The most dramatic example in the recent history of this country occurred in 1973 when the Arab oil embargo tripled oil prices, causing widespread behavioral changes. Electricity rates spiked as utilities struggled to cover the fuel costs for their oil-fired power plants.²⁴ The strain on consumers was considerable, but not fruitless. For the next thirteen years, U.S. energy consumption plateaued while the economy expanded by more than 40%.25 However, while it is true that crisis situations and rate increases can raise awareness and curb consumption, advocating price hikes is not a winning strategy for environmentalists -- especially if they wish to maintain their alliance with other public interest constituencies.²⁶ Cost-induced conservation only works when prices rise, and when they rise substantially enough to prompt a behavioral change. As we saw in Chapter 3, the effect that deregulation will have on prices (and therefore on cost-induced conservation), locally and nationally, is heavily disputed and remains uncertain. Also uncertain is how, on the whole, deregulation will affect the apportionment of costs between fixed customer charges and variable energy charges. If a robust market develops offering different payment plans, customers might have some flexibility in selecting the relative percentages of these charges (but only on the deregulated energy commodity portion of their bill).

While in general the environment benefits from higher prices, there are also some drawbacks. Fuel-switching from more polluting energy sources to electricity is discouraged when electricity prices are high. For example, gasoline-powered lawnmowers and industrial motors powered by coal or oil-fired generators are more polluting than their electric

²³ The USBC, for example, was 1.334 mills per kilowatt-hour.

²⁴ Brennan, 26

²⁵ NCAC, "Plugging People into Power," 8.

²⁶ See Appendix D.

counterparts.²⁷ But in most cases, it is electricity that is the more polluting and inefficient energy source that needs to be switched from, not to (as is the case with natural gas as opposed to electric baseboard heating). This is because electricity is a very high-quality (low entropy) form of energy. While versatile, it is best used only by certain applications (especially if produced by polluting energy sources). But because electricity is such a high-quality, reliable, and universal form of energy, the amount of fuel-switching that might occur away from it is probably quite limited -- businesses cannot switch their computers over to run directly on oil or coal.

Before looking at other examples of how rates can be structured to encourage consumption or conservation, it might be beneficial to examine the steps traditionally taken by regulators in determining rates. The most basic approach is to divide the utility's estimated costs for the next year (or "revenue requirement") by the forecasted energy sales to get a price per kilowatt-hour. This approach has a number of environmental and consumer ramifications. First, it creates a climate in which conservation is a threat to a utility's profits. If energy sales come in lower than expected (for any reason -- conservation, changing demographics, or a mild Montana winter), the utility loses money. If, on the other hand, people use more energy than expected, the utility comes out ahead. ²⁸

If a utility underrecovers its costs, it will almost certainly propose a rate hike (in addition to grumbling about its conservation programs). But if it overcollects, quite possibly nothing will happen. According to the Northwest Conservation Act Coalition, public utility commissions often wait for the utilities to propose rate changes creating a serious bias against consumers. Even if energy sales meet or exceed expectations, customers can still face rate hikes in future years if the revenue requirement turns out to be greater than originally estimated (due to any number of variables including unexpected changes in interest rates, inflation, and even accounting practices).²⁹

This basic approach to setting rates becomes more complicated when utilities separate customers into classes (industrial, commercial, residential, etc.), and calculate a

²⁷ Brennan, 116.

²⁸ NCAC, "Plugging People into Power," 56-60.

²⁹ NCAC, "Plugging People into Power," 56-60.

separate rate for each. Distinguishing between customer classes allows a utility to more accurately approximate the actual "cost of service" it incurred for a particular customer. For example, industrial rates are lower than residential rates because economies of scale make it less expensive to serve large customers, who buy in bulk, and because large customers generally do not use or help pay for the distribution system. It is possible that with restructuring, cost of service will be calculated on an even more detailed level -- that instead of three or four different rate classes, each customer may pay a rate that reflects the "cost of service" of his or her individual load (instead of the average for customers in that class).30

Such changes in calculating cost of service could be a mixed bag for the environment. On the one hand, conservation could suffer. Because economies of scale make it cheaper to serve larger loads, the most profligate consumers of electricity would be awarded what amount to bulk discount prices (as industrial customers currently are). Unlike current residential rate structures in Montana, such a system encourages consumption. On the other hand, if the pattern of usage is considered (in addition to total quantity of usage), such pricing could increase system efficiency. Customers that use electricity during periods of peak demand³¹ would (and should) pay higher rates to reflect the higher cost of power from peaking units.³² Cost of service pricing might also penalize customers whose demands are growing by allocating a greater portion of new power plant costs to them.

In the past, the cost-of-service concept has been implemented in the form of "blocked" or "stepped" rates. Unlike flat rates under which the energy charge is the same

³⁰ DEQ, "Restructuring the Electric Utility Industry in Montana," 3.

³¹ "Periods of peak demand" and other periods in which electricity is more costly to produce can refer to certain hours of the day, certain days of the week, or certain months of the year. Seasonal rates are also appropriate to reflect seasonal variations in the costs of producing power. In the winter months, for example, power might be more expensive, not only because of increased demand but because of decreased production from low-cost hydro sources, necessitating greater reliance on more expensive coal or nuclear generation. Montana Power Company has historically used seasonal rates.

³² Peaking plants are typically the most expensive and are only brought online when needed. They also typically have high environmental costs. They are inefficient not only to run, but also to start up and shut down. Brennan, 53.

for each kilowatt-hour consumed, stepped rates price different "blocks" of energy differently. At different times in history, such rates have been used to encourage either consumption or conservation. Prior to the energy shortages of the early 1970's, electricity prices could still be lowered through the construction of additional capacity (such as new dams in the Pacific Northwest). In order to encourage power consumption from these new projects, declining block rates were used. A declining block rate might have a customer paying 6ϕ for each of the first 500 kilowatt-hours used in a month, but only 4ϕ per kilowatt-hour thereafter. The opposite rate structure, known as inverted block rates, might have a customer paying 4ϕ per kilowatt-hour up to 500 kilowatt-hours in a month and 6ϕ per kilowatt-hour thereafter, which encourages conservation (to a point). More sophisticated structures, using the same principle but with multiple tiers, have also been used.

Decoupling

As we have seen, utilities can be naturally antagonistic toward conservation programs, which is partly a result of the traditional approach to ratemaking discussed above. Successful energy conservation programs lower electricity sales and, along with them, utility profits. While recovering these costs from its base of customers spares the utility the direct costs of administering these programs, it also increases the energy bills sent to customers, which can elicit a conservation response. If sales drop, the utility may not be able to cover its revenue requirement and will probably pursue a rate hike or cuts in its conservation budget. In addition to this indirect effect (cost-induced conservation), these measures decrease sales directly by allowing people to use energy more efficiently (through low-flow showerheads, compact fluorescent lighting, or fuel-switching to natural gas heat). Partially mitigating these losses, however, are the reductions in the utility's variable costs (such as fuel for its plants) that result from lower demand. These reductions should act to lower the revenue requirement, or at least lessen the increase.

³³ Pacific Power, for example, has charged residential customers in northwest Montana according to a declining block rate.

³⁴ MPC, for example, has charged residential customers according to a seasonally differentiated inverted block rate (inverted in the winter, but not in the summer).

It is important to distinguish between rates and bills. Even with rate increases to cover conservation programs, customers may see lower total bills (which is what they actually pay and should be more concerned with). The energy charge depends upon two things: the amount of energy used and the price per unit energy (the rate). These are multiplied to determine the amount of money due (in addition to the customer charge). If there is a rate increase of 1% to fund conservation programs, but the conservation programs allow you to use 3% less energy, the rate increase actually saves you money.³⁵

In order to remove the financial bias of utilities against conservation, fuel switching, and progressive rate designs, environmentalists and state regulators (and some utilities) devised an alternative approach to ratemaking which breaks ("decouples") the link between utility sales and utility earnings.³⁶ Under decoupling, a utility's earnings are preestablished and remain independent of actual sales. The utility no longer has an incentive to encourage consumption or discourage conservation. If demand exceeds expectations, the extra income is returned to ratepayers in the form of rate cuts. If sales come in below estimates, the utility is compensated for its shortfall by a rate hike surcharge in the future.³⁷ This decreases both shipwreck potential and windfall opportunities making the utility a more stable investment. An added advantage is that with a guaranteed income level, any cost reductions that a utility makes -- say, through efficiency improvements -- increases its profits for that year. Customers too can benefit from such improvements in the form of rate reductions in subsequent years.

Decoupling has proven an effective tool in curbing the natural inclination of utilities to promote power sales. But as with other progressive rate structures, it is likely that decoupling will fall prey to deregulation. In a competitive environment, rates will be determined more by the market than by regulators, and utility revenues will be tied more closely than ever to sales. If a company doesn't cover its costs, it no longer has the luxury

³⁵ NCAC, "Plugging People into Power," 59.

³⁶ Smeloff, 121, 18.

³⁷ Smeloff, 21. Note that this creates a slight negative incentive for conservation from the customer's point of view. But because the customer enjoys the full benefit of the conservation improvement while paying only a tiny share of the increased revenue requirement, he or she still comes out ahead. The customer will still be able to see a net reduction in his or her power bills, even with a rate increase.

of imposing a rate hike on its captive customers (and, in fact, a common market price will effectively preclude any rate increase by acting as a ceiling for what may be charged). Instead, the utility must resort to either cutting costs or increasing sales, by finding new customers or encouraging consumption.³⁸

Conservation / DSM -- Public Purpose Funding

As discussed above, conservation programs are seldom popular with utilities under traditional regulation and even less so in a deregulated environment.³⁹ And, of course, in a deregulated environment, regulators are in less of a position to require them. Some of the forces responsible for deregulation have also acted to undercut funding for public purpose programs, especially conservation. For a time, conservation represented one of the lowest cost resource options available to utilities (even before considering externalities), but a recent abundance of cheap natural gas and the emergence of highly efficient combustion turbines have imperiled demand-side management (DSM) investments. In other words, since the early 1990s when conservation programs reached their greatest levels of support, both in Montana and elsewhere, the capital costs of new construction -- the "avoided costs"-- have dropped, decreasing the ability of conservation to save utilities money.⁴⁰ And deregulation only made them more risky (although it also makes new power plant construction more risky, which is also a cost to be considered).⁴¹ As we have seen, many of these programs became victims of virtual deregulation, suffering drastic cuts even before restructuring laws were formalized.

But a number of strategies have been proposed to help salvage these programs in the transition to a market-based retail electricity system. The first is the stipulation that the universal system benefits charge be collected by the local distribution utility (as a "lines charge"), as is the case under Montana's deregulation law.⁴² This arrangement has a

³⁸ Smeloff, 99.

³⁹ DEQ, "Restructuring the Electric Utility Industry in Montana," 9.

⁴⁰ Smeloff, 61. Thompson, Elizabeth B., "Poisoned Power," A Clean Air Network Report, 25.

⁴¹ Brennan, 101.

⁴² Smeloff, 101.

number of benefits over the alternative, in which the charge is collected by energy supply companies. First, the distribution company, which will continue to be a regulated monopoly, has no vested interest in the sale of kilowatt-hours and therefore no aversion to successful conservation programs (but only if the distribution charges are fixed, rather than variable).⁴³ This arrangement diminishes the historic conflict that made decoupling necessary. The distribution company (or "disco") is compensated for the use of its lines, not for the amount of energy consumed. In other words, because distribution costs tend to be fixed (although MPC has historically pushed for mill-based distribution rates), and because the disco will be able to depend on a captive customer base, the disco's profits will be insulated from declining energy sales. Logistically, using a single company (and one that has a known track record in Montana) as the "collection agency" for each service area is more efficient than using multiple and sometimes unknown or out-of-state companies. Because it is insulated from the risks of competition, the distribution company enjoys a higher degree of stability and provides a more reliable option over the long term than its energy supply counterparts. Finally, it makes sense that as a mandatory charge, the USBC would be implemented by a regulated entity.

Some of restructuring's proponents argue, however, that public purpose programs ultimately do not belong under the authority of the distribution utility. Instead, they advocate deregulating as many functions as possible, including metering, billing, and energy efficiency programs based on a belief that markets will develop to provide these or any other desirable service. If people truly value energy efficiency services, the reasoning goes, they will be willing to purchase them as a service option from their energy supply company or a more specialized company.⁴⁴ An energy supply company would be willing to offer these programs first because there is a demand for them, and second because DSM programs can improve a company's image -- a valuable commodity in a competitive market. Given the switching frenzy that has characterized long-distance telephone service, anything that can help build customer loyalty and lead to long-term contracts is priceless.⁴⁵ And yet we have

⁴³ Note that this is true only to the extent that utilities separate their regulated and deregulated activities.

⁴⁴ DEQ, "Restructuring the Electric Utility Industry in Montana," 9.

⁴⁵ Smeloff, 130.

seen that electric utilities often consider such programs liabilities in a competitive environment.

A second strategy, already alluded to, would help preserve public purposes by basing the distribution company's revenues on customers served instead of energy sold. While this approach would help remove any remaining internal bias against DSM programs, it would also work against cost-induced conservation by relying on fixed rather than variable charges. But considering that cost-induced conservation is an indirect effect, whereas DSM programs reduce energy usage directly and therefore more efficiently, this is an acceptable tradeoff. 46

Finally, conservation programs are likely to fare better if administered or overseen by a third-party, independent organization. This arrangement helps ensure the responsible use of funds and would provide some external accountability.⁴⁷

It is important to take a brief look at some of the benefits provided by utility-sponsored conservation programs, to appreciate the importance of preserving them in a deregulated environment. One important advantage of DSM programs is that they directly involve a utility's customers, who might otherwise be unaware of the savings they might achieve, in terms of both energy and money. Aside from being informed and motivated, many customers may be unable to afford the upfront costs associated with energy efficiency improvements, unless they can recoup those costs in a relatively short payback period of, say, a few months.⁴⁸ Utilities, on the other hand, are used to investments with payback horizons upwards of 40 years and have historically been able to help their customers over this cost barrier (by providing loans, for example). But their ability and willingness to do so may be reduced by deregulation, especially considering that the unpaid portions of similar investments in the past are now being considered stranded costs.⁴⁹

⁴⁶ Smeloff, 101.

⁴⁷ Smeloff, 101.

⁴⁸ Smeloff, 17.

⁴⁹ NCAC, "Plugging People into Power," 25. Smeloff, 17.

Renewable Energy -- Public Purpose Funding

While investments in renewable energy research, development, and demonstration projects do not pose quite the perceived threat to utility profits as have conservation programs, support has nevertheless been limited, and is further imperiled by restructuring. In the past, when resource planning was a public process overseen by regulatory commissions and utilities had monopoly franchises, long-term societal goals could be pursued. In a competitive environment, however, with energy firms in charge of their own planning, decisions will be made with more of an eye toward the company's bottom line. Here again, a non-bypassable, universal system benefits charge, assessed as a lines charge and responsibly administered by an independent organization, probably offers the best solution.

While MPC has traditionally allocated fewer dollars to renewables than conservation, renewables have suffered a less drastic cutback and even received a boost under MPC's transition plan to a record \$1 million each year through 2003 (see figure 1, page 19). The same year that MPC cut its conservation budget by 67% renewables were trimmed too, but by a more modest 32%. Although renewable energy sources are quickly becoming competitive with conventional power plants, most applications still require short-term supports before sufficient economies of scale or technological improvements make them fully independent. A number of compelling arguments justify allocating public dollars toward renewable energy commercialization. First, the process of ramping up production and demand in order to make these technologies cost-effective happens only once, and is not unlike the public investments and government markets that were instrumental in getting the railroad, aerospace, electronics, computer, and telecommunications industries off the ground.⁵¹ Second, such subsidies would provide important societal benefits that extend well beyond the environmental advantages of sustainable non-polluting power.⁵² Breaking

⁵⁰ Brennan, 125.

⁵¹ Note that wind is already the world's fastest growing energy source, and photovoltaics are second. Mazza, "How the Northwest Can Lead a Clean Energy Revolution," An Atmosphere Alliance Special Report, 5, 6.

⁵² Smeloff, 49, 134.

our national dependence on imported fossil fuels alone would have myriad benefits.⁵³ In addition, studies have shown that renewable energy carries a greater economic development potential than do fossil fuels, with more jobs created per dollar invested.⁵⁴ Finally, the funding levels petitioned for by environmentalists are modest when placed in comparison to other government subsidies. According to the Business Council for a Sustainable Energy Future, if renewables were given the same supports and subsidies currently enjoyed by the fossil fuel industry, they would become competitive overnight.⁵⁵ Instead, renewable energy companies are trying to compete on an uphill playing field -- taxes alone may be as high as twice those paid by fossil-fuel companies.⁵⁶

As discussed above (under Integrated Resource Planning), the late 1970s and early 1980s created conditions supportive of renewable energy development. But until recently, low natural gas prices and low avoided costs have slowed the annual growth of new renewable energy capacity (9.7% in 1989; 1.2% in 1993).⁵⁷ Numerous renewable energy projects have been delayed or abandoned because of uncertainties created by deregulation, and also because of the energy surpluses that lasted through the 1990s (which drove prices down and raised questions concerning the need for new capacity).⁵⁸ But as Ed Smeloff and Peter Asmus correctly forecasted in their book, Reinventing Electric Utilities,

[T]he surplus power market is not going to last forever. Sooner or later older and less-efficient power plants will be closed by competitive forces. As supply and demand come into balance, the price for power during peak periods of the year will rise. This will create opportunities for solar and other renewable technologies to enter the market.⁵⁹

It is important to remember during the lows in natural gas prices,, are historically very fickle. times of low-cost natural and that ultimately, this fossil fuel is by definition in finite supply,

⁵³ Smeloff, 136.

⁵⁴ Gelbspan, 97.

⁵⁵ Gelbspan, 97.

⁵⁶ Brennan, 125.

⁵⁷ Brennan, 124.

⁵⁸ Smeloff, 115, 163, 167.

⁵⁹ Smeloff, 73-74.

and it is a fuel with a long history of price volatility. In the meantime, renewables may find it difficult to compete.

One possible solution, reminiscent of the approach taken by social-costing policies, is to look at costs more comprehensively. According to Resources for the Future, "some analysts have suggested that, with proper pricing of transmission, the advantages of localized generation will be recognized; changing the mix of generation facilities from large generators serving wide areas to smaller, more localized plants will lead to a greater use of some forms of renewable technologies." There is a strong case to be made that the future of energy production will be in distributed generation (dispersed, small-scale units), and that renewables will feature prominently in such a world. Smeloff and Asmus comment, "There is no doubt that the forces of competition can only accelerate a trend to smaller generation facilities, less waste, and fewer large investments in infrastructure," a somewhat ironic development in light of the recent trend in utility mergers. According to Amory Lovins of the Rocky Mountain Institute, over the long term, what he calls a "soft" energy path is bound to prevail:

Rather than hierarchical mega-monopolies commanding a brittle copper and aluminum web hooked to resource-intensive nuclear and coal plants, there will be resilient networks connecting manifold, diverse, and decentralized power plants. Many of these plants will be renewable, buffered by elegant small-scale energy storage systems; all will be managed by the distributed intelligence of local adaptive controls; and all will support customer devices that far more efficiently transform electricity into hot showers, cold beer, and other desired services. 62

Moving away from the centralized power stations of the past not only emphasizes more efficient and cleaner technologies, but it reduces the need for costly transmission lines (construction, maintenance, operation, etc.) making smaller units competitive even if they generate more expensive power. It also eliminates the ancillary concerns of power losses (which amount to about 6.2% of the electricity generated in the U.S.), siting, and electromagnetic fields.⁶³ Ultimately, we may see fuel-cell generators in each individual household and business, thereby eliminating the need for both power lines and electric

⁶⁰ Brennan, 125.

⁶¹ Smeloff, 4, 158.

⁶² Smeloff, xii.

⁶³ Smeloff, 155-157.

companies. A trend toward distributed generation would lower overall emissions, but it would also concentrate those emissions near population centers, which would potentially magnify their health impacts.⁶⁴

Environmental Laws -- Command-and-Control vs. Incentive-Based

As we have seen, it is likely that both integrated resource planning and progressive rate structures will be adversely affected by deregulation. Utility-sponsored conservation and renewable energy programs have already begun to suffer the effects of virtual deregulation and limited universal system benefits support (see Chapter 2, "Another Opposition Argument -- Stranded Benefits"). But how might deregulation affect our pollution control and siting laws? While there is no direct relationship between regulations designed to protect the environment and the regulation of utilities, it is likely that restructuring will influence the nature, level, and effectiveness of our environmental laws. But before exploring how, it will be helpful to first look at the kinds of laws currently used to combat pollution generated by electric utilities, particularly atmospheric emissions.

There are two primary legal strategies for controlling or reducing pollution which can be likened, more or less, to the proverbial carrot and stick. The first type (the stick) is known as command-and-control regulation. Such laws establish limits for individual emitters or for ambient concentrations in an "airshed." Command-and-control laws can also be used to mandate the use of specific pollution control technologies, as was the case with smokestack scrubbers required for new power plants under the 1977 amendments to the federal Clean Air Act. 65

In order to be effective, such laws require vigilant monitoring and enforcement. Also, limits must be strict enough to provide meaningful protections for human health and the environment, and penalties must be substantial enough to provide real disincentives for even the wealthiest corporations. While the first two criteria -- monitoring and enforcement -- are mostly a matter of political will and resources, the latter two -- setting

⁶⁴ Brennan, 119.

⁶⁵ Brennan, 115.

⁶⁶ So-called "right to know" laws can also provide an important disincentive by allowing the media and citizens to publicize violations.

limits and penalties -- pose significant and difficult scientific and ethical questions.

Accurately determining the risks imposed by pollution from a given plant is a tremendously contentious and inexact process. Even more problematic is what is done with the results:

How do we morally justify an additional "one-in-a-million" cancer cases or deaths? The debate over command-and-control laws resembles the one concerning externalities. While incorporating externalities and legislating pollution control are far preferable to the alternatives, both carry implicit assumptions (that finite financial values can be assigned to entities of immeasurable worth, and that at some level pollution and its effects can be justified by the societal benefits of industry) that should be evaluated in the context of environmental ethics.

This concern is intensified when dealing with incentive-based regulations, i.e., regulations that attempt to give industry a nonpunitive economic reason (the carrot) for reducing pollution. A good example is the tradable emission credits concept included in the 1990 Clean Air Act amendments. An aggregate national pollution cap is determined (which can be reduced over time) and individual companies are granted pollution rights under that cap. If the company finds a way to reduce its emissions it no longer needs the credit, which it can then sell for a profit. This mechanism can tip the scale to make an investment in pollution control equipment economical.⁶⁷

Yet, creating a legal property right to pollute strikes some as not only disturbing but profoundly unethical. Subsequently giving this "right" to companies free of charge rises to the level of intolerable, adding fiscal insult to ethical injury.⁶⁸ As Mark Dowie puts it, "In effect, Congress has created a valuable financial commodity out of the right to emit toxic gases and, instead of selling it, donated it to the electric utility industry."⁶⁹ That a company can augment this handout (in theory, without limit) by purchasing additional "rights" sends a message that not only is it acceptable to pollute, but that it is acceptable in

⁶⁷ Dowie, 109-111.

⁶⁸ To be fair, command-and-control pollution limits also grant this "right" free-of-charge. Both systems can be used to ratchet down the pollution levels. Furthermore, by allowing the highest bidder to obtain pollution the permit, the emission credits system tries to assure that those activities that produce the most valuable output do the polluting rather than a business producing little of value.

⁶⁹ Dowie, 111.

proportion to a company's financial resources. Furthermore, because the initial allocation of these pollution permits depends partly on historic emission rates, dirty plants are rewarded and clean plants penalized. This situation is especially troubling in a deregulated market in which they have to compete against each other. Finally, while these emission reduction credits (ERCs) can be effective in lowering national pollution totals, local areas can experience dramatic increases in pollution. Midwest utilities, for example, have been able to continue burning high-sulfur coal, increase their emissions, and further aggravate the downwind acid rain problem by purchasing ERCs. But some argue that while the geographic problem is a real one, it is the result of drawing the "bubble" in which the permit can be used too large. In general, pollution allowances have proved to be both popular and profitable; taking them away would be politically difficult.

Pollution Taxes and Subsidies

Another example of incentive-based regulations is pollution taxes. Carbon taxes have long been used in western Europe to combat carbon dioxide emissions and to raise money for environmentally beneficial programs.⁷¹ Norway and Sweden assess taxes at a rate of at least \$20 per ton of CO2 released, which raises the price of electricity from coal-fired plants by about 2 cents per kilowatt-hour.⁷² To a large extent, carbon taxes are fuel-blind in that they affect all types of fossil fuel burning (although not exactly equally, with some fuels being more carbon intensive than others). Hence, they do not cause fuel-switching to more polluting alternatives such as gasoline-powered lawn mowers.⁷³ Gasoline, natural gas, and electricity derived from burning fossil fuels would all be more expensive (with prices that more accurately reflect their true costs). Here again, consumer organizations and environmentalists might be at odds with each other because of the tradeoff between increased bills -- unless the revenues from the tax are applied to energy

⁷⁰ Dowie, 109-111. See also Gelbspan, 127.

⁷¹ Gelbspan, 126.

 $^{72 $20/\}tan x \ 1 \ \tan/2000 \ lbs \ x \ 2 \ lbs \ CO_2/kwh = 2 \ cents / kwh.$ Nagusky, "Global Climate Change," Regulatory Assistance Project, 37.

⁷³ Brennan, 122.

efficiency programs -- and cost-induced conservation. Low-income groups might also object that such taxes impose an unfair burden on the poor, who have a more difficult time paying an extra two cents per kilowatt-hour.

The United States has thus far shunned carbon taxes. Instead, the fossil fuel industry currently enjoys roughly \$20 billion in tax breaks and other benefits annually, which accounts for 69% of U.S. energy subsidies. By comparison, subsidies for renewable energy only amount to 14%.⁷⁴ These statistics are not entirely surprising, nor easily reversed considering the economic and political clout of the fossil fuel industry. According to Ross Gelbspan, author of The Heat Is On: The High Stakes Battle over Earth's Threatened Climate, "Together, oil and coal constitute the biggest single industry in history. Big oil alone does well over a trillion dollars a year in business." ⁷⁵

Effects of Restructuring on Environmental Laws

Command-and-control and incentive-based approaches to regulation both have their strengths and weaknesses. To a certain extent, these complement each another.

Undoubtedly, the optimum strategy for controlling and reducing pollution involves some combination of both the stick and the carrot, regardless of the structure of the industry. But with deregulation, the best mix may be somewhat different. There appears to be agreement that incentive-based regulations tend to work better in a competitive environment than they do in a regulated one. With restructuring, therefore, incentive-based approaches will likely achieve greater prominence. Beyond the obvious ideological similarities (incentive-based regulations can be thought of as market-based themselves), cost-cutting incentives simply get better results when a company is facing competition. The same forces that are leading utilities to gut conservation programs will also make utilities interested in reducing pollution if it allows them to profit by doing so (with the sale of ERCs). As regulated monopolies,

⁷⁴ Gelbspan, 97-98. Mazza, "How the Northwest Can Lead a Clean Energy Revolution," An Atmosphere Alliance Special Report, 5.

⁷⁵ Gelbspan, 5.

⁷⁶ Apart from sharing a more similar hands-off philosophy of government, incentives work better in a competitive market structure because survival pressures are more acute. Brennan, 114.

economic incentives can disappear because costs can almost always be passed on to customers. A company is more apt to continue polluting and purchasing credits if it can rely on a captive customer base to reimburse these costs.⁷⁷

In its 1996 legislative briefing packet, the Montana DEQ had the following to say about the effects of deregulation on both traditional and incentive-based environmental laws:

Restructuring alone probably will not do great damage to environmental quality. Utilities are subject to a wide range of direct environmental regulations, including facility siting regulation, air and water quality regulation, and the use of tradable SO2 allowances. Maintaining the integrity of existing environmental laws will ensure that the deregulation of generation and the restructuring of the industry does not result in wholesale damage to the environment. Nevertheless, concurrent efforts to relax environmental regulation, combined with restructuring, could in the future lead to significant loss of regulatory control over environmental degradation. This is a particular risk if changes in prices or technology make a polluting technology the most attractive generating alternative.

To protect the environment in a restructured industry, we should consider greater use of market-based environmental regulation such as tradable emissions allowances, and pollution taxes. A commitment to maintain siting and environmental regulation, together with restructuring legislation, might alleviate the worry some may have about a future return to dirty plants in a competitive industry.⁷⁸

The Washington, D.C.-based Resources for the Future echoed this analysis, asserting that "restructuring may have limited implications for the environment" assuming the "continuing presence of a federal and state structure for environmental regulation."⁷⁹ But environmentalists contend that, unfortunately, such assumptions were not warranted.

The block quote above shows a degree of alignment between DEQ and the conservation community leading up to the 1997 session (a somewhat rare phenomenon in recent years). As discussed in Chapter 2, environmental groups such as MEIC did not oppose the concept of deregulation itself so much as they opposed the particulars of SB 390, and for some of the very reasons identified by DEQ. During the 1997 legislature, they did in fact witness those "concurrent efforts to relax environmental regulation," with bills such as SB 224, weakening the Major Facility Siting Act (see section immediately

⁷⁷ Brennan, 127.

⁷⁸ DEO, "Restructuring the Electric Utility Industry in Montana," 10.

⁷⁹ Brennan, 127.

following).⁸⁰ Equally worrisome was the absence of strong public benefits programs, market-based regulations, or other environmental benefits (such as net metering or renewable portfolio standards) as part of SB 390 to replace what was being lost. In short, they felt there was no evidence of any real "commitment to maintain siting and environmental regulation," as described by DEQ above.

As a final note, governmental bodies such as DEQ or the PSC will have a more difficult time overseeing the operations of energy companies in a deregulated world. Diminished authority, limited resources, and the entrance of additional energy supply providers could make the job of enforcing those laws that do remain on the books more challenging. Such a climate can only increase the likelihood that companies will cut corners and possibly even break laws, especially in light of competitive pressures.

New Development and the Major Facility Siting Act

Changes in the structure of the electricity industry are partly grounded in, and partly responsible for changes in the technologies and fuels used to generate electricity. These changes, in turn, have implications for the location and size of power plants, and for their environmental impacts.⁸¹ Under deregulation, much of any new development will likely be in the form of natural gas combustion turbines. Eventually, other small-scale, efficient, and modular technologies (including both fuel cells and renewable energy projects) should also emerge as favored energy sources. In the meantime, however, some observers have predicted that deregulation could lead to an increased reliance on coal. If it does, the eastern plains of Montana could again come under considerable pressure from development interests.

The controversy over the Tongue River Railroad, originally proposed 20 years ago to ship coal between Decker and Miles City, has resurfaced in light of these conditions.

Some believe that both deregulation and the 1990 Clean Air Act will create a greater demand

⁸⁰ The 1997 session was considered among the most anti-environment in recent history. MEIC's average approval rating for legislators was 37%, rivaled only by the 1995 session at 32%. Down to Earth: A membership publication of the Montana Environmental Information Center, June 1995 and June 1997.

⁸¹ Brennan, 116.

for southeastern Montana's low-sulfur coal (mostly subbituminous and lignite, which happen to have relatively low heat content).⁸² Others argue that the principal beneficiaries would be Wyoming producers (with higher quality coal) and electricity consumers in the Midwest. On the losing end would be the Montana ranchers, who would lose their lands for right-of-way purposes, and the natural environment which would suffer the inevitable impacts of increased mining activity in the Powder River Basin.⁸³

Beyond such fuel-cycle costs, deregulation could signal an increase in the development of generation and transmission facilities in Montana. Montana is already a net exporter of low-cost electrical energy with around 40% of made-in-Montana energy currently shipped out of state.⁸⁴ In a nationally competitive electricity market, these low-cost and relatively clean energy resources (hydro, natural gas, and low sulfur coal) will be highly prized and courted.

In addition to the deregulation bill, the 1997 Montana legislature passed another measure, SB 224, which makes the development of these resources easier by weakening the Major Facility Siting Act (MFSA). The Siting Act (found in Title 75, Chapter 20 of the Montana Code Annotated) was passed in the 1970s (originally in 1973 as the "Utility Siting Act" before becoming the MFSA in 1975) as a response to increasing pressures for Montana to develop its energy resources. The 1971 Bureau of Reclamation North Central Power Study envisioned the construction of twenty-one massive coal-fired power plants in eastern Montana, and an additional twenty-one to be located in Wyoming and the Dakotas. While the power from these projects was destined for population centers elsewhere, the environmental and social impacts would have remained at home making Montana what some termed, the "boiler room of the nation." The Siting Act developed into one of Montana's bedrock environmental laws, specifying that large-scale energy

⁸² Tom Howard, "Tongue River plan started with 1980s synfuels legislation, gained steam again with passage of 1990's Clean Air Act," <u>IR</u>, 9 August 1998. Malone, <u>Montana: A History of Two Centuries</u>, 337.

⁸³ Erin P. Billings, "After 20 years, is coal railroad ready to roll?" <u>IR</u>, 9 August 1998. 84 Alan Davis, DEQ, "Electricity in Montana -- an Overview," <u>T.A.C. Report</u>, November 1997.

⁸⁵ Malone, Montana: A History of Two Centuries, 339.

projects (for example, power generating facilities greater than 50 Megawatts) could not proceed without a "certificate of environmental compatibility and public need."

Long under attack, the Siting Act was significantly modified in 1997. The requirement that proposals for new generation facilities demonstrate "public need" was stripped out based on the argument that deregulation rendered it obsolete. In the past, to prevent utilities from building unneeded power plants, costs could not enter the rates until approved by the PSC. In the early 1980s, for example, the PSC disallowed Montana Power's initial request to include Colstrip Unit 3 in rates on the grounds that the power was not "used and useful" in providing utility service to Montana customers.86 While the PSC would no longer provide that role, the legislature felt confident that market forces would accomplish the same objective, and with greater success. Although environmentalists agreed that the previous system did not always work flawlessly (see block quote in the section on "Efficiency of the Electricity System" below), they felt that simultaneously removing the protections offered by both the PSC and the MFSA was a misguided approach. SB 224 also created a fast-track review process, removed from consideration numerous environmental impacts, and limited the Act's applicability. Environmentalists charged that weakening the Siting Act just as Montana was again facing the prospect of major energy development was reckless and irresponsible.

Others, however, felt that the changes made to the Act would have little actual effect, arguing that new development (especially large facilities with long payback periods) is unlikely at this time. A surplus of power in the Pacific Northwest throughout the 1990s and the uncertainty caused by deregulation made building new capacity risky. Energy companies are no longer assured recovery of large investments of capital from captive ratepayers. And with competition on the horizon, companies are naturally more inclined to cut costs than incur new debt. Any new development that might occur would likely be small, modular units that automatically escape Siting Act review because of their size, even before the changes enacted in 1997. Finally, there are questions regarding the transmission system's ability to carry additional power out of state, and the cost-

⁸⁶ Personal telephone conversation with Tim Baker, DEQ, 15 August 2000.

⁸⁷ DEO, "Restructuring the Electric Utility Industry in Montana," 10.

effectiveness of doing so.⁸⁸ One DEQ official pointed out that there has been no new generation built in the state since the completion of Colstrip 4 in 1986, nor was any anticipated in the "foreseeable future." He conceded that conditions were liable to change.⁸⁹

In January 1999, it appeared that the "foreseeable future" might have arrived, when a Las Vegas company announced plans to build four 500-Megawatt power plants near Red Lodge. On The company also proposed mining 250 million tons of coal in the area for fuel. The 2000 Megawatts of power would be conveyed out of state to Wisconsin via a new 850-mile transmission line. In addition to rekindling the debate over the need for a strong facility siting act, this proposal highlights a number of concerns held by consumer and environmental advocates. Deregulation is creating a national marketplace for electricity, and with "open access" to the transmission grid, the incidence of long-distance power sales will inevitably increase. This could work against Montanans in a number of ways. First, consumers could lose control over their low-cost power if it is shipped to more lucrative markets (such as Wisconsin). Second, restructuring also increases the possibility that the proceeds from the sale of this power will also flow out-of-state (in this case, to Las Vegas). Meanwhile, the environmental costs -- degraded landscapes and compromised air 88 Brennan, 117.

⁸⁹ Erin P. Billings, "New state siting act is not expected to have much effect," <u>IR</u>, 7 June 1997.

⁹⁰ Environmentalists are skeptical that these plants will ever be developed, because of the expense and risk. But another proposal to build a 500-Megawatt combined-cycle natural gas plant in Butte is taken more seriously. The project would consume over two million gallons of water a day from Warm Springs Creek. The summer of 2000 saw energy shortages develop in the Pacific Northwest and elsewhere leading to radically increased electricity prices, and significant pressure to develop new capacity and to perhaps further weaken laws such as the MFSA. Personal telephone conversation with Jim Jensen, MEIC, 16 August 2000. Jeff Barber, "New Power Plant Proposed for Butte," <u>Down to Earth: A membership publication of the Montana Environmental Information Center</u>, August 2000.

⁹¹ Erin P. Billings, "Proposed coal generation plant has yet to apply for permits," <u>IR</u>, 11 May 1999.

⁹² Note that in the long term, distributed generation may counter this trend.

⁹³ This problem could be addressed, if the divestiture were to be accompanied by a payment to customers of the market value of that low cost power, or if some other mechanism could be devised to help reclaim this value (such as an excise tax on exported power which would provide refunds for Montana ratepayers).

and water quality -- and social costs -- boom and bust development -- of acquiring the fuel, generating the power, and sending it across new high-voltage power lines are left behind. This phenomenon, where the beneficiaries of a project live in one part of the country while those paying for the externalized costs live in another, can be termed "regional environmental cost-shifting."

Such cost-shifting can also occur on a more local scale. The practice of locating generating plants and power lines away from population centers decreases the total incidence of health impacts, but too often shifts those impacts onto rural populations and areas with significant ecological, scenic, or recreational value.⁹⁴

Regional Environmental Cost-Shifting

In addition to deregulation's effects on the probability and nature of new power plant and power line construction, restructuring is already having effects on the operation of the existing fleet of power plants, with significant environmental ramifications. Because there are some strong disincentives to new power plant construction under deregulation, utilities may tend to run existing (old and dirty) plants longer than they otherwise would have. 95 In other words, the normal process of switching out "dinosaur" plants in favor of more modern and efficient facilities is disrupted. 96 And many of these old and dirty plants have already increased their production of both power and pollution to take advantage of open access to the transmission system. 97

Because there remain large discrepancies in the price of electricity in different regions of the country, relatively low-cost (but not necessarily low-pollution) generators are

⁹⁴ Brennan, 118.

⁹⁵ Regulatory Assistance Project, 37.

⁹⁶ Simply upgrading what are fundamentally inefficient and archaic power generating technologies, however, is of limited long-term environmental benefit. And note too, that the opposite argument has been made: That with open access, new suppliers will enter the competitive fray with efficient low-cost resources that will gradually replace older plants and improve the efficiency of the system. See "Decommissioning," below. Brennan, 13. 97 Brennan, 117, 126.

able to sell power to distant markets for a large profit. 98 Old coal-fired power plants in the Midwest provide the textbook example, and have been the subject of several studies regarding the environmental repercussions of FERC's order 888. These facilities have both an incentive to sell power to distant markets and the ability to increase output. 99 On average, America's electricity industry runs at only about one-half its maximum operating capacity, with some plants running at only ten percent (meaning that in a year's time, they produce only one-tenth the number of kilowatt-hours they could if running full-bore). 100 Pollution created by power plants in the Ohio River Valley is carried into the Great Lakes area, New England, and parts of Canada. Too, wind transports not only pollution but the costs associated with mitigating that pollution. This situation is grossly unfair, considering that Northeast industries have already invested considerable resources in pollution controls. 101

To more fully determine the environmental implications of restructuring through this effect (the increase in output at existing plants), other questions must first be answered. What portion of this increased generation is replacing other generation sources, what were their environmental impacts, and what portion is meeting new demand? What are the relative environmental impacts of the old and new generation sources? In other words, is there a net gain or loss? How much of the new demand is attributable to deregulation? Depending on their answers to these questions, various studies have predicted as much as 10,000 extra Megawatts of coal-fired generation -- the equivalent of ten large power plants - with an annual increase of half a million tons of nitrogen oxides. Market-based approaches similar to the SO2 program have been proposed to help address such increases

Note that part of the reason these old and inefficient plants can generate low-cost power is because grandfather provisions in the Clean Air Act do not require the same pollution controls of them as of newer plants. Thompson, Elizabeth B., "Poisoned Power," A Clean Air Network Report, 18, 21-22.

⁹⁹ Brennan, 117.

¹⁰⁰ Because electricity is not easily stored, the generation system was built to accommodate the highest conceivable (peak) power demand. Excess capacity can also be attributed to inefficiencies of the regulated monopoly system, where regulators sometimes failed to sufficiently scrutinize what turned out to be unneeded power plants. Smeloff, 76.

¹⁰¹ Smeloff, 143.

¹⁰² Brennan, 117.

in NOx. Before generating additional power to sell into outside markets, each plant would have to either add sufficient pollution controls to prevent any increase in emissions or purchase "emissions offsets" to fund equivalent pollution reduction efforts at nearby facilities (see the discussion of incentive-based regulation above). ¹⁰³

In some ways, the situation in the Midwest is the converse of the Montana situation described above. In the Midwest, profits from the sale of electricity stay behind while the environmental impacts are exported. But both can be seen as examples of regional environmental cost-shifting.

Efficiency of the Electricity System

As demonstrated by the Midwest example, the emphasis on short-term prices that arises in a competitive environment combined with open access to the nation's transmission grid may act to favor increasing production at old and polluting plants over building new, more compliant (and more expensive) plants. And yet one of the alleged benefits of restructuring is increasing the efficiency of the electricity system. With regard to efficiency as with most other areas, the effects of deregulation are somewhat mixed and confusing. It is important to remember that the old system was hardly a model of economy and efficiency. When criticizing deregulation, environmentalists need to be careful not to end up defending the historic system which resulted in our current network of inefficient centralized power stations. To understand the "failure of traditional utility planning" one needs to look no farther than the WPPSS nightmare, and the regional plan, of which it was a part, that had called for 26 new large coal and nuclear plants in the Pacific Northwest. 104

In addition to over-enthusiastic projections of demand, other factors contributed to the construction (or attempted construction) of numerous large and unnecessary power plants. As mentioned above, the electricity industry currently runs at very low capacities. This is partly the result of "building for the peaks." Utilities need enough power to meet the maximum demand put on the system, even if it only occurs one day out of the year. Furthermore, with traditional power plants, ramping up and down to meet a highly variable

¹⁰³ Brennan, 126.

¹⁰⁴ Smeloff, 119.

demand curve is uneconomical, inefficient and, of course, polluting. Most machines run at optimal efficiency at some steady-state level of output (for the same reason that cars get better gas mileage on the highway than in town). Strategies such as DSM, load-management, regional exchanges, and time-of-use pricing can avoid these losses by flattening out the seasonal and daily demand curves. Unfortunately, DSM may suffer under deregulation, but the latter two strategies may be facilitated by a single national marketplace with more diverse pricing options, including a greater emphasis on cost of service.

The overcapacity of our current system also stems from the difficulties associated with economically storing power. Distributed generation technologies can more efficiently track changes in demand (which become greater as you focus in on a smaller area), and can be combined with new storage technologies such as flywheel batteries (which at the distributed level are not required to store as much power). 107

A third reason for historic overbuilding is the system of "cost plus regulation" itself. ¹⁰⁸ As we have seen, in a deregulated electricity market the construction of new capacity, especially of large power plants, is riskier than before. It is to be hoped that this situation will limit such construction to those cases where it is truly warranted (i.e., when even the most conservative forecasts predict increasing demand). According to Tom Power, wholesale competition will,

¹⁰⁵ Accelerating an object, be it a turbine or an automobile, requires energy. An object that continues moving at a constant velocity or angular velocity experiences no change in kinetic energy and consequently requires no energy to be supplied (other than that needed to overcome friction). The field of physics describes these effects in terms of conservation of linear and angular momentum and Newton's laws of motion (particularly Newton's first law, which can be thought of as the law of inertia).

¹⁰⁶ The model of the large, centralized utility also helps minimize the relative fluctuations in demand curves, by averaging over larger geographic areas and a greater number and diversity of customer types.

¹⁰⁷ Smeloff, 157.

¹⁰⁸ Smeloff, 76.

... solve one of the most serious flaws in the earlier approach to regulating electric utilities: the socialization of the risk associated with the building of large coal and nuclear generating facilities. By shifting these risks to customers, utility owners could largely forget about cost and reliability. The results were the costly electric white elephants that litter the American landscape and environment. By making electric generation competitive, these risks will shift back to the private investors and better investment decisions, both for the customer and for the environment, are likely to be made. 109

Ideally, assuming a level playing field can be created (see "Uniform Emission Standards" below), then the most efficient resources will also be the cheapest to operate and will be used to serve "base loads" (the minimum constant demand). Only during periods of peak demand would less efficient power plants come on line. 110 To more accurately reflect the higher cost of generation (and to help discourage consumption), prices during these times would be more expensive. In reality, the complexities of a truly competitive market would probably preclude optimal system efficiency -- especially in Montana, which is unlikely to have sophisticated and centralized coordination of power sales and dispatch. Therefore, situations will probably occur from time to time in which power from expensive and dirty plants is being sold while more efficient resources sit idle. 111

Decommissioning

Perhaps the most promising environmental benefit of deregulation is the potential closure ("decommissioning") of inefficient plants due to competitive pressure from cleaner and cheaper alternatives. According to this theory, once regulation recedes, market forces will be allowed to operate, and will select for only the fittest (most efficient) generators. But there are at least four principal reasons why this goal might be frustrated, at least in the short term. First, the electricity market for Montana's small customers thus far remains quiet, equally devoid of buyers and sellers alike (see "Pilot Programs" in Chapter 6). Second, as already discussed, the risks associated with deregulation may favor increasing production at existing plants over building newer, more efficient plants (although the recent change from a surplus to a deficit situation in the Pacific Northwest lessens the amount of untapped

¹⁰⁹ Guest editorial by Thomas M. Power, "Put brakes on MPC," GFT, 5 February 1998.

¹¹⁰ Brennan, 53-54.

¹¹¹ Brennan, 55.

capacity at existing plants). Third, existing plants enjoy competitive advantages in the form of fossil fuel subsidies (see "Pollution Taxes and Subsidies" above) and more lenient emission standards (see "Uniform Emission Standards" below). And fourth, there is a compelling case that the recovery of stranded costs itself amounts to a subsidy which threatens to undermine the chances of cleaner alternatives entering the market. Then again, above-market contracts with independent renewable power generators mandated by PURPA will also likely be phased out under deregulation. 112

The environmental implications of decommissioning (supposing it is accelerated by restructuring) depend on a number of factors, including the type of power plant being retired and the type that ends up replacing it. For example, while environmentalists desire "a transition strategy that allows for the orderly phaseout of uneconomic nuclear reactors and replacement of this capacity with a mix of renewable energy and DSM measures," replacement energy will more likely come from new natural gas plants. 113 Such a conversion would signify a net increase in the nation's CO2 emissions in violation of the 1992 Convention on Global Climate Change. 114 The nuclear power industry has capitalized on this situation both as a marketing ploy and as an argument that it deserves special subsidies as a carbonless form of energy production. 115 But environmentalists respond that artificially supporting nuclear power not only defies the premise of deregulation, but also amounts to a shifting of environmental risks and externalities that is especially egregious at a time when support for renewable energy is being slashed. Another problem with decommissioning nuclear energy is that it cannot simply be turned off and walked away from, because of substantial and ongoing safety and environmental concerns. And there is a substantial risk that before causing these plants to shut down, the economic forces of competition would lead first to workforce reductions and other cost-cutting

'Green' in a Deregulated Market," The Workbook, Fall 1999.

¹¹² Guest editorial by William M. Ryan, "Electricity deregulation by Montanans, for Montanans," GFT, 30 April 1998.

¹¹³ Smeloff, 155.

¹¹⁴ Smeloff, 153. Some dispute this fact, pointing to the use of Tennessee Valley Authority coal in old polluting power plants to process the fuel for nuclear plants.

115 Paul Fenn, Southwest Research and Information Center, "Nuclear Power Turns

measures that could jeopardize safety and reliability. In fact, such cost-cutting (and alleged safety violations) has already occurred at nuclear plants in New England, providing disturbing proof of the dangers of virtual deregulation. This situation strongly suggests government intervention, if not outright nationalization of the country's nuclear power plants. But such a strategy should only proceed as a means to safely retire these plants rather than to artificially support them over the long term. 118

Stranded Costs

When discussing government support for nuclear power plants, the question of stranded cost recovery inevitably arises. For much of the nation, the notion of stranded costs has become virtually synonymous with nuclear power (this realization at least makes new nuclear power projects unlikely under deregulation). Although Montana has no nuclear power generation, the issues surrounding stranded cost recovery for out-of-market power plants are similar. One of the principal concerns held by environmentalists during the debate over SB 390 was that stranded cost recovery would preclude the decommissioning of power plants too inefficient to compete on their own. 119 Existing plants owned by incumbent utilities already have an advantage over independent power producers in that at least some of their capital costs have been recovered under regulation, even before stranded costs are awarded. 120

¹¹⁶ Smeloff, 151.

¹¹⁷ Note that when England privatized its national utility, it retained ownership of the nuclear power plants because no company would agree to take them. Smeloff, 148, 152, 154.

¹¹⁸ Smeloff, 97.

¹¹⁹ While stranded cost settlements do not typically provide ongoing fuel or operating subsidies to plants, dirty qualifying facilities may have long-term contracts for the purchase of their above-market power. Stranded cost recovery for QFs is common, and often supported by environmentalists (when the QF is a clean, renewable energy producing facility).

¹²⁰ Brennan, 101.

Uniform Emission Standards

One solution that has been proposed as a compromise between utilities and environmentalists is to make stranded cost recovery contingent on achieving the more stringent pollution standards required of new power plants. ¹²¹ Grandfather exemptions under the federal Clean Air Act apply to power plants built before 1977 -- half of the nation's approximately 1,000 power generating facilities. ¹²² As the Clean Air Network describes it:

[T]he existing regulatory and legal system has created a patchwork of environmental requirements for power plants depending on age, location, and fuel source. As a result, the difference in environmental performance between older power plants and newer ones is significant. This situation is unfair from a competitive perspective and intolerable from an environmental one. Equally rigorous environmental standards for all electricity generating sources is the solution. 123

Part of the problem was a failure to place a sunset provision on the exemptions because of a belief that these plants would be shut down after a service life of 20 to 30 years. But as illustrated by the Midwest example, current conditions are acting to prolong their lifetime. 124 The disparity in emission rates between old and modern fossil fuel plants is substantial, with older plants creating as much as twenty times the pollution. 125 Consistent standards are not only an indispensable part of free and fair competition, but are also a powerful tool for curbing pollution (NOx alone could be reduced by as much as 75%). 126

Decommissioning could offer tremendous environmental benefits, but only if policymakers are serious about treating all players in a post-regulated world the same. Incidentally, at least one state, Massachusetts, included provisions in its deregulation

126 Thompson, Elizabeth B., "Poisoned Power," A Clean Air Network Report, 2, 20.

¹²¹ Smeloff, 142. Brennan, 107.

¹²² Thompson, Elizabeth B., "Poisoned Power," A Clean Air Network Report, 2, 18.

Note that "rigorous" is the key word. A level playing field is of little value if it is located in a swamp of mediocrity. Thompson, Elizabeth B., "Poisoned Power," A Clean Air Network Report, 21-22.

¹²⁴ Moore, "Dying Needlessly," REPP Issue Brief # 6, 14.

¹²⁵ Smeloff, 116. Brennan, 118. Stadler, Felice, "Turn Up the Heat on Dirty Power," A Clean Air Network Report, 21. Thompson, Elizabeth B., "Poisoned Power," A Clean Air Network Report, 2, 18. Moore, "Dying Needlessly," REPP Issue Brief # 6, 14.

settlement to bring old plants up to modern standards. ¹²⁷ But in the more likely scenario that preferential treatment for fossil fuel interests will continue, environmentalists have a final, more certain, and much more costly remedy available to them. Rather than waiting for market forces to decommission plants, the Conservation Law Foundation took the more direct approach of joining in a bid to purchase 18 power plants in order to shut down five of New England's most polluting coal-fired facilities. ¹²⁸

Green Power and Green Marketing

As we have seen, waiting for the market to select for the most efficient (and environmentally benign) power sources can be a long and frustrating strategy. Although most individuals do not have the resources to simply buy out power plants they dislike, they may soon have the opportunity to support, in a modest way, environmentally superior sources of energy. If markets do develop for small customers, it is likely that among the various options offered will be green power products. "Green power" refers to environmentally preferred electricity, especially that derived from low-impact renewable energy sources. Purchasing this power is a direct means of supporting the renewable energy industry. By ramping up production to meet a growing demand, renewable energy producers can achieve economies of scale that help reduce the price of their electricity, which makes it that much more competitive. Another, indirect advantage of green power is an increased awareness on the part of consumers concerning the environmental implications of electricity and the importance of renewable energy. 129

The success of green power under deregulation depends on a number of factors, of which the most important is consumer interest. Public polling data consistently shows support for environmentally sound power, and a willingness to pay extra for it. In a 1995 national survey, 75% indicated they would pay more for "electricity generated from cleaner

¹²⁷ Moore, "Dying Needlessly," REPP Issue Brief # 6, 14.

¹²⁸ National Journal's <u>Greenwire</u> email service, 12 May 1997. See: http://nationaljournal.com/pubs/greenwire/

¹²⁹ Rothstein, "Green Marketing in the Massachusetts Electric Company Retail Competition Pilot Program," NREL Topical Issues Brief, 9. Holt, "Disclosure and Certification," REPP Issue Brief # 5, 4.

renewable sources," but only about a quarter of them (26.5%) were interested if the increase was greater than 5%.130 A 1997 MSU-Billings poll suggests local interest in environmentally responsible power, with 56% of Montanans expressing a willingness to pay higher electric rates for emission controls at power plants. ¹³¹ MPC's 1995 customer survey showed, by nearly a 2-to-1 margin, a desire for the utility to move more in the direction of environmental protection than minimizing rates. 132 Unlike decommissioning, where market forces will only work to close a polluting plant when energy from alternative sources has a lower price, choosing to buy green energy can support renewable power even while it remains more expensive than conventional power. Consumers can expect to pay around 10% extra on the energy commodity portion of their bill to obtain power with a moderate percentage of renewable energy mixed into it. They might also choose to purchase an even more expensive "supergreen" product generated entirely by environmentally sound energy sources (but complex, multiple-tiered options with varying percentages may cause confusion for consumers). 133 Green options can also include energy efficiency services, incentives, or anything which might distinguish a company or a product as environmentally sound. 134

An obvious drawback to the "green power at a premium" approach is its fundamental economic disincentive. Those who voluntarily choose to "do the right thing" are penalized with higher electricity rates, as opposed to mandatory mechanisms such as integrated resource planning or universal system benefits charges which also support renewable energy. But as with command-and-control versus market-based regulations, the best arrangement probably involves a combination of both approaches. ¹³⁵ Shifting cost

¹³⁰ Smeloff, 162, 199-205.

^{131 36%} were unwilling. "Poll: Environment favored over mining," <u>IR</u>, 4 December 1997.

¹³² PSC, "Request for Comments on Revised Draft Electric Restructuring Rules and Natural Gas and Electric Customer Protection and Information Rules," 20 March 1998.

¹³³ Smeloff, 163. Rothstein, "Green Marketing in the Massachusetts Electric Company Retail Competition Pilot Program," NREL Topical Issues Brief, 8.

¹³⁴ Holt, "The New Hampshire Retail Competition Pilot Program and the Role of Green Marketing," NREL Topical Issues Brief, 6.

¹³⁵ Smeloff, 145.

analysis and resource planning away from formal public venues and toward individual businesses and households will inevitably involve the loss of some institutional knowledge and perhaps degrade the quality of decisions. ¹³⁶ Although customers invariably indicate a preference for environment-friendly power and a willingness to pay a premium for it, polls do not always correlate with behavior. ¹³⁷ Some observers feel that when actually confronted with more expensive power, consumers will balk, preventing green power products from ever establishing a strong presence in the market. Tepid interest would postpone the time at which the price of these resources would rival that of conventionally generated power. Finally, there is significant debate over how exactly to define green power, and how to prevent unscrupulous marketers from fraudulently advertising a product as such. These issues are covered at greater length in the next section, "Environmental Disclosure and Certification."

The green power approach is appealing in that, if successful, it could eventually phase itself out by helping these resources stand alone. But in order to significantly accelerate the commercialization of alternative power sources, sizable numbers of small customers must embrace green power options. Thus far, evidence from pilot programs has been mixed. In Massachusetts, 31% of residential customers chose a green option (although pilot program constraints may have led to artificially low prices for the green products). By contrast, only 3% of small business customers chose green, a disappointing result as such customers can potentially play an important role. Nationally, this block of consumers has a greater energy demand than the residential sector (but in Montana the reverse is true -- residential sales exceed commercial sales at 31.9% and 30.0% respectively), and yet they are small enough for decisions to be made according to the personal beliefs of the owner. 139 (It is difficult to imagine many large consumers basing

¹³⁶ Holt, "Disclosure and Certification," REPP Issue Brief # 5, 4.

¹³⁷ Mazza, "How the Northwest Can Lead a Clean Energy Revolution," An Atmosphere Alliance Special Report, 8.

¹³⁸ Rothstein, "Green Marketing in the Massachusetts Electric Company Retail Competition Pilot Program," NREL Topical Issues Brief, 4, 8.

¹³⁹ Holt, "Green Power for Business," REPP Research Report # 1, 1. Energy Information Administration (EIA), "State Energy Data Report 1997: Consumption Estimates," September 1999, 186-188.

their energy decisions on anything other than price. Businesses may want to buy green to improve their image, but in most cases fiscal considerations are probably going to remain the bottom line.)

One group that has worked hard to encourage green power is the Renewable Northwest Project (RNP) in Portland, Oregon. RNP uses a two-pronged approach which they call "policy push, market pull." While working to secure policies favorable for the growing renewable energy industry (working on the supply side), they simultaneously work to create consumer interest in clean energy (working on the demand side). RNP Policy Expert Peter West observes that current . . .

... low energy prices in the Pacific Northwest are both a curse and a blessing for RNP. The bad news is that it is very difficult to compete against such low prices. The good news is that some consumers are willing to pay a little extra for clean energy because the end result is still a very competitive electric rate. 140

As mentioned above, green power, like many of the environmental strategies outlined in this chapter, should not be thought of as a specific feature of deregulation. It is entirely possible to have any combination of green power and deregulation (one, the other, both, or neither). Deregulation does not guarantee that companies offering green products -- or any other product for that matter -- will arrive on the doorstep of electricity customers. Neither is there anything preventing a utility from offering a green product under traditional regulation and in fact, many do; this is usually called "green pricing," under which consumers pay extra so new renewable energy technologies can be acquired "beyond what

¹⁴⁰ Smeloff, 124. It should be noted that by purchasing green power a small customer would not actually be supplied with "green electrons" from a wind or solar plant. Instead, the customer is paying a company to replenish the power he takes off of the grid with power generated by clean technologies. One way to understand this scenario is to envision a pool of water. If a customer is standing at one end of the pool and wishes to purchase a cup of water from a seller (offering a "clean" product) on the other end of the pool, he could simply dip his cup into his end while the seller dumps hers into the other. He gets his cup of water (different from, but equivalent to the one she has to sell), she profits from the transaction, the pool level is maintained, its quality improved, and no energy is expended delivering the water from one end to the other. Electrons, like water molecules, are "fungible" -- indistinguishable from one another. Furthermore, the "drift speed" of an electron (even in a one-way direct current) is incredibly slow, and in AC circuits, that electron reverses direction 60 times every second. So the electrons are not supplied by the utility, only set in motion.

is cost-effective."¹⁴¹ But deregulation will hopefully encourage this effect by giving people a more direct role in deciding where their energy comes from (in effect, taking charge of their own integrated resource planning, pricing of externalities, etc.). Also, open access rules have afforded independent producers of renewable power the opportunity to compete, since they do not generally own their own transmission facilities. ¹⁴²

As mentioned earlier (in the context of command-and-control versus incentive-based regulations), some combination of voluntary mechanisms such as green power and mandatory approaches such as traditional environmental lawmaking is probably the most effective way to bring about improvements in environmental quality. The Renewable Energy Policy Project puts it this way:

Neither voluntary decisions made in a free market nor public policy <u>if relied on exclusively</u> seem capable of providing adequate environmental protection. . . . There may indeed be ways to market green power to large corporations, but they presumably will not purchase clean energy for personal reasons, as may some small business owners. For this reason, public policy mechanisms that set minimum environmental standards (e.g., the Clean Air Act and renewable portfolio standards) will remain necessary safety nets for public welfare. [Emphasis in original.]

In addition to advertisements for green power, consumers will encounter more general "green marketing" by companies wishing to distinguish themselves from their competitors. Green marketing, as opposed to green power, is any attempt by suppliers to characterize themselves as environmentally responsible, without making reference to the underlying energy sources behind their products. Examples of green marketing incentives seen during the New Hampshire and Massachusetts pilot programs include: donations to environmental groups or causes, emission reductions, free energy conservation literature and products, a raffle for an electric vehicle, free spruce seedlings, and a free bird feeder. Again, while such activities may be genuine attempts to improve environmental quality, they do not

¹⁴¹ Holt, "Disclosure and Certification," REPP Issue Brief # 5, 3-4. Smeloff, 162-163, 164. Holt, "Green Power for Business," REPP Research Report # 1, 2. Mayer, "The Grassroots are Greener," REPP Research Report # 8, 1. REPP Issue Brief # 11, 10. 142 NCAC, "Plugging People into Power," 33.

¹⁴³ Holt, "Green Power for Business," REPP Research Report # 1, forward.

facilitate the commercialization of renewable energy and should not be labeled "green power." 144

Environmental Disclosure and Certification

In order for green power to be an effective environmental strategy, it must be accompanied by strong labeling provisions and certification rules. Customers need access to quality information about the relative environmental impacts of competing products in order to make educated choices. More than just a ploy to advance an environmental agenda, information disclosure is a critical attribute of fully functional markets. According to the Renewable Energy Policy Project, "consumer choice will not lower total social costs -- the ostensible goal of deregulation -- if poor information prevents consumers from including the environmental consequences of energy use in their purchasing decisions." But if properly handled, disclosure and certification will "improve market efficiency, benefit the environment, and increase individual liberty by allowing consumers to base their decisions on a broad range of criteria." 145

The first issue, then, is one of requiring disclosure of environmentally relevant information, beginning with the underlying mix of energy sources (by percentage of nuclear, coal, hydro, natural gas, and renewables), and a description of how this mix changes under various conditions (periods of peak power demand, routine maintenance, etc.)¹⁴⁶

Next, companies should provide quantitative emissions data for CO₂, SO₂, NO_x, particulates, toxics, spent nuclear fuel and other radioactive waste. Most of these pollutants are already measured and reported under the Clean Air Act or the Emergency Planning and Community Right to Know Act (see "Air Toxics" in Chapter 4). Unfortunately, many environmental impacts are not so easily quantified (as discussed above under social costing), which is not to say that they should be ignored. Disclosure of information to

¹⁴⁴ Holt, "The New Hampshire Retail Competition Pilot Program and the Role of Green Marketing," NREL Topical Issues Brief, 3. Holt, "Disclosure and Certification," REPP Issue Brief # 5, 13.

¹⁴⁵ Holt, "Disclosure and Certification," REPP Issue Brief # 5, forward.

¹⁴⁶ Rothstein, "Green Marketing in the Massachusetts Electric Company Retail Competition Pilot Program," NREL Topical Issues Brief, 2.

consumers needs to be comprehensive enough to prevent resources from falling through the cracks. Hydroelectric power, for instance, has no air emissions but has serious environmental repercussions nonetheless. Qualitative information about the principal environmental and health concerns of each form of power would help alleviate this problem. Obviously, all information needs to be accurate and credible.

But in order to be useful, the information also needs to be presented in an easily understandable and consistent format. The second issue, then, is that of labeling. Standardized information labels should be required to give consumers the ability to comparison-shop with relative ease (this is an instance where federal legislation could be helpful in specifying both minimum standards for disclosure and consistent formatting guidelines). The labels should be included both in contracts and marketing materials, and the information should be updated and reported regularly. While consumers have convincingly demonstrated a desire for disclosure (in polls), this is a case where there can be too much of a good thing. A balance has to be struck between supplying consumers with the information they need to make good choices and overloading them with technical and potentially confusing data. Note that disclosure and labeling are already time-honored traditions in this nation, with perhaps the most familiar example being the Food and Drug Administration's nutrition labeling.

The next issue is one of definitions and certification. In order for marketing claims to be meaningful, there need to be clear standards for what does and does not qualify as green. These standards need to be applied (and possibly developed) by a credible, independent, and objective entity. The task is really two-fold. First, there needs to be agreement on what constitutes an environmentally sound energy generation project. This process can be complex and controversial, with gray areas such as projects using blended fuels, some biomass and geothermal operations, and natural gas-powered fuel cells. 148

Even hydroelectric power can be difficult to categorize. Less-than-scrupulous marketers would be all too willing to characterize even the most environmentally devastating dams as

¹⁴⁷ Holt, "Disclosure and Certification," REPP Issue Brief # 5, 6. Holt, "The New Hampshire Retail Competition Pilot Program and the Role of Green Marketing," NREL Topical Issues Brief, 5.

¹⁴⁸ Holt, "Disclosure and Certification," REPP Issue Brief # 5, 10.

green due to the absence of air pollution, and the renewable hydrologic cycle. 149 One environmental group, American Rivers, has developed five criteria for "low-impact hydropower." In order to qualify for this designation, a project must demonstrate that "fish are protected, river flows are adequate, water quality is satisfactory, flooded habitat is replaced, and recreational opportunity is available." Certifiers of green power can also rely on definitions for renewable power that have been developed in states with renewable portfolio standards and system benefits programs (and even in federal statutes such as PURPA, with its definition of qualifying facility). The Federal Trade Commission has definitions of "low-fat" and "organic" to fulfill a comparable need in the food services industry.

Once criteria are established for green projects, attention can be turned to green products. Because the price of power generated exclusively by renewable energy sources would likely be prohibitively high for most customers, most green products will consist of a mix of both green and conventional power. In California, in order to be certified by the Green-e Renewable Electricity Branding Project (which allows the use of the Green-e logo for marketing purposes), a product must contain at least 50% renewable energy and cannot contain any nuclear power. 151 Other approaches to certification include ranking products on the market according to environmental criteria (such as on a scale of -5 to +5). Consumers could then determine how green a product they want to buy relative to the other products on the market. An optional additional step would be to certify only the top 10% (say those products with a score of +5). 152 Here again, precedence exists with the Federal Trade Commission's EnergyGuide appliance labels. 153 Once projects and products have been certified, there needs to be ongoing oversight to ensure consumer protection. As one

One can imagine fossil fuel-fired plants being advertised as "solar," as the energy released originally came from the sun. Then again, all solar power is really nuclear power, with the reactor located a safe 93 million miles away.

¹⁵⁰ www.amrivers.org

¹⁵¹ Jan Hamrin, "When Shopping for Electricity, Look for the Green-e," <u>CEERT Clean Power Guide</u>, Spring 1998.

¹⁵² Holt, "Disclosure and Certification," REPP Issue Brief # 5, 8, 14.

¹⁵³ Holt, "Disclosure and Certification," REPP Issue Brief # 5, forward, 5.

author put it, "Ascertaining 'greenness' is one thing; determining whether the green power is in fact being generated and fed into the system is another." ¹⁵⁴ In the past, the federal government has assisted such efforts through uniform food pricing, truth-in-advertising, and truth-in-lending laws.

The final tier of certification, beyond projects and products, is providers -especially for companies claiming a strong corporate commitment to the environment.

Unfortunately, trying to certify companies as green is a difficult if not impossible task. One
of many complicating factors is whether to consider the track record of the generating
subsidiary alone, or that of the parent company and marketing affiliate as well. 155 A better
approach is to have some mechanism to verify green marketing claims, combined with
strong penalties and vigilant enforcement.

Pilot programs around the nation have already demonstrated the need for substantiation of claims. In New Hampshire, for example, customers were subject to misleading marketing tactics by companies touting their environmental credentials. One company described, in idyllic terms, the lake it used to produce low-cost hydro power. They also mentioned that they pumped water back up to the lake during the night, but neglected to say where the power for the pumps came from. The company benefited because it was off-peak, and therefore inexpensive, power from the grid. Thus, while their facility may have been a good example of a hydroelectric battery (called "pumped storage"), the underlying (and undisclosed) energy sources were not necessarily green. 156

Incidentally, companies in the New Hampshire pilot were also criticized for categorizing power from existing renewable energy plants as green. Environmentalists argued that the "green" distinction should be reserved for new applications that actually lead to environmental improvement by displacing dirtier plants. Furthermore, existing renewables lack attributes important to customers who have other goals for renewable energy usage, including "a fascination with new technology for personal use (such as photovoltaics), reducing dependence on utility companies, making sure energy resources are

¹⁵⁴ Holt, "Disclosure and Certification," REPP Issue Brief # 5, 9, 18.

¹⁵⁵ Holt, "Disclosure and Certification," REPP Issue Brief # 5, 11, 16.

¹⁵⁶ Holt, "The New Hampshire Retail Competition Pilot Program and the Role of Green Marketing," NREL Topical Issues Brief, 7-8.

available for future generations, protecting themselves against electricity price fluctuations, or reducing risk and vulnerability to supply interruptions." Of course, there are problems with limiting green power to resources that do not yet exist, including significant lag time between the payment of premiums and the delivery of power from the new resources. 157

Under deregulation, then, not only do former monopoly utilities need to learn how to promote themselves and their products, but public utility commissions need to learn how to police those advertisements in what may be a "complex and sometimes chaotic market." ¹⁵⁸ It is also important that they prevent utilities from "double-counting" by marketing "green power" that they were in fact required to generate to meet system benefit program or renewable portfolio standard requirements. ¹⁵⁹ Disclosure and certification are key tools for exposing greenwashing and preventing green scams. (See "Customer Protection and Information Rules" in Chapter 6.)

Other Strategies

During the 1997 legislative session, environmentalists were alarmed by SB 390's weak support of conservation and renewable energy, and by SB 224's rollback of the Major Facility Siting Act. But just as significant as what was in these bills was what was missing from them. While in Montana, the struggle was focused largely on maintaining environmental protection, other states have used electric deregulation as an opportunity to advance the goal of environmental improvement. Two of the more common mechanisms that have been implemented as part of restructuring packages are renewable portfolio standards and net metering.

Renewable Portfolio Standards

"Renewable Portfolio Standards" (also known as "resource set-asides") direct that a certain percentage of power sold within a state comes from renewable energy sources.

Under a renewable portfolio standard (RPS), each supplier (including marketers,

¹⁵⁷ Holt, "Disclosure and Certification," REPP Issue Brief # 5, 13-14. See also Means, "Evaluation of a proposal for green power price insurance," REPP Special Report.

¹⁵⁸ Holt, "Disclosure and Certification," REPP Issue Brief # 5, 4.

¹⁵⁹ Holt, "Disclosure and Certification," REPP Issue Brief # 5, 5.

Under a renewable portfolio standard (RPS), each supplier (including marketers, aggregators, etc.) must maintain this minimum threshold of clean power in each of its products in order to operate in the state. ¹⁶⁰ As adopted in a number of states, this minimum percentage ratchets up over time. Another option is to create tradable "renewable energy credits" which gives companies currently lacking in renewable generation a degree of flexibility. ¹⁶¹ Some observers also suggest that the RPS should be stratified, designating sub-percentages of support for specific technologies. This mechanism would help prevent the cheapest resource (usually wind) from automatically monopolizing the renewable portion of each supplier's portfolio. ¹⁶²

As with green power options, renewable portfolio standards help create a stronger market for renewables and encourage a diversity of resources. ¹⁶³ But because resource set-asides are mandatory rather than market-based, they can offer greater assistance to the producers of green power. Low-cost financing can be obtained because of reliable demand and predictable increases. ¹⁶⁴

Once again, renewable portfolio standards can be adopted independent of restructuring. As is the case when an RPS is administered by the distribution utility, responsibility for the RPS would then fall to the regulated utility. In Montana, the most immediate opportunity to implement an RPS appears to be through the default supplier rules contemplated by the PSC. Once renewables (or certain renewable technologies) become fully commercialized, they will no longer need to be supported by renewable portfolio standards.

¹⁶⁰ The alternative would be to place the responsibility for meeting the RPS on the regulated distribution utility. Smeloff, 198.

¹⁶¹ Creating a market for renewable energy credits is somehow less offensive than the buying and selling of pollution credits discussed earlier. Smeloff, 103. 162 Smeloff, 197.

¹⁶³ According to the original model put forward by the American Wind Energy Association, these resources include wind, geothermal, solar electric, solid-fuel biomass, landfill gas, and existing solid waste-to-energy facilities. NCAC, "Plugging People into Power," 55. Smeloff, 195.

¹⁶⁴ Smeloff, 102.

Net Metering

Another environmental strategy that has become a popular feature in state restructuring laws is "net metering." Net metering is an accounting technique that provides an incentive for homeowners or businesses to become "self-generators" of renewable power (by installing solar panels or wind turbines on their homes, for example). Any excess energy that a customer produces flows back onto the grid, turning the meter backward and lowering his or her power bill. In essence, the utility is required to purchase the excess power from the self-generating customer. While not initially included in SB 390, Montana did adopt a net metering law in 1999 (see "SB 409 -- Net Metering" in Chapter 6).

Technically, PURPA already requires utilities to purchase power from small independent renewable power generators. ¹⁶⁵ But as a practical matter, residential self-generators were usually prohibited from taking advantage of PURPA because no distinction was made between retail users and larger commercial producers. In the absence of specific net metering rules or laws, small customers were unable to comply with the enormous administrative barriers placed in front of them by utilities. ¹⁶⁶ And net metering laws such as Montana's have an added advantage for the customer in that they require utilities to purchase the power at the retail price, instead of the lower wholesale or avoided cost prices required by PURPA. Financial losses to utilities are minimal, because of the small number of customers with such systems. Utilities also share in the benefit of sidestepping the administrative complexities of power purchases under PURPA. ¹⁶⁷ And in most netmetered states including Montana, the utility is never required to cut a check to one of its

¹⁶⁵ Prior to 1995, fifteen states had net metering requirements. Fourteen of them were administrative rules adopted to implement PURPA. Since that time, states have been implementing net metering through legislation (often as part of deregulation). This is a preferable approach because the laws cover the entire state and are more resistant to changes. For example, if PURPA is repealed (as some in Congress would like it to be), net metering laws will probably be secure, whereas rules may be threatened. At the end of 2000, there were 30 states with net metering laws (See Appendix B). Thomas J. Starrs, "Net metering: An Update on Legal and Regulatory Issues," presented at the annual conference of the American Solar Energy Society, Albuquerque, NM, June 1998. 166 Personal telephone conversation with Peter West, RNP, 17 September 1999. 167 Factsheet by Thomas J. Starrs, Kelso Starrs & Associates (Vashon, WA), "Net Metering: Questions and Answers," February 1999.

customers. If the customer produces more excess power than he or she takes from the grid, the difference merely appears as a credit on the next month's bill. At the end of the every twelve month period, the customer forfeits any remaining credits.

As with green power, net metering is a voluntary means to support renewable energy. Unfortunately, while it can help defray costs, installing photovoltaic cells and wind turbines remains an expensive proposition with long payback horizons, especially in states like Montana with inexpensive grid power. The advantage over green power is that net metering offers direct financial benefits to customers.

Like so many of the strategies above, net metering can be implemented independently of restructuring, and has been in effect in several states since the early 1980s (Arizona, Idaho, Iowa, Minnesota). Other states have moved forward with net metering only recently, often passing or updating their law concurrently with restructuring (Connecticut, Delaware, Massachusetts, Nevada, New Jersey, New Mexico, Ohio, Oregon), taking advantage of the natural conceptual relationship between competitive energy supply markets and the ability of customers to sell power to their utility. Still others (like Montana) have enacted or updated their net-metering laws following the passage of deregulation legislation (California, Illinois, Maine, New Hampshire, Pennsylvania, Rhode Island, Virginia). ¹⁶⁸

Other

Renewable portfolio standards and net metering help accelerate the commercialization of renewables by creating manufacturing economies of scale, lowering transaction costs, and removing market barriers. But what other tools have states employed to protect environmental values in the face of industry restructuring?

One intriguing idea is known as "social-cost dispatching." As we saw earlier, integrated resource planning (IRP) will likely suffer under deregulation. IRP is a planning tool, and as such it is inherently limited to decisions regarding new capacity only. As discussed earlier, "adders" are applied to help account for the true cost of electricity from these plants. Social-cost dispatching attempts to duplicate this system in a deregulated

¹⁶⁸ Information taken from Appendix B and Thomas J. Starrs, "Summary of State 'Net Metering' Programs," found at http://www.spratley.com/ncp/pvr2/, and updated April 2000.

market. But in order to do so, "adders" must be applied to existing as well as new generation (otherwise utilities will rely more heavily on old and polluting plants rather than absorbing the costs of building new plants made more expensive by the adders). Tremendous efficiencies could then be achieved if the lowest-cost (although not necessarily the lowest-priced) resources were dispatched preferentially to serve base load. Only during periods of peak demand would the highest cost electricity be sold. While the market is expected to do a decent job of preferentially dispatching the lowest-priced electricity, socialcost dispatching requires a more sophisticated system of analysis and coordination. All electricity transactions would need to be routed through a central dispatcher. 169 Montana, at least at this time, has no such entity. Adding yet another layer of complexity (and cost), the social costs of the resources could be continuously updated based on conditions. "For instance, on windy days, it might make sense to allow expanded operation of cheaper but dirtier plants; during heat inversions, when the air is stagnant, more expensive, cleaner plants could get heavier use."170 All of this, of course, costs money. Ironically, the relentless pursuit of the lowest-cost power delivered with maximum efficiency could itself eventually drive up rates. And the environment could also lose out if this caused people to turn to

Myriad other ideas from around the nation can offer Montanans additional environmental strategies. Some of these strategies may be better suited to the regulated world that Montana is leaving behind. An example is Minnesota's "renewable default" policy which requires that utilities, prior to building new non-renewable energy capacity, demonstrate why renewables are not in the public interest. ¹⁷¹ Other strategies are designed specifically for a deregulated paradigm. One such proposal, offered in California and promoted by the national office of the Sierra Club, would exempt customers from competitive transition charges (CTCs) if they are willing to purchase a green power product

energy sources with costs still externalized.

This central dispatcher is sometimes known as a "Poolco." Poolcos perform a couple of different functions. In addition to acting as system operators (balancing loads and coordinating power delivery), they also act as a centralized power exchange or spot market. Brennan, 51.

¹⁷⁰ Brennan, 121.

¹⁷¹ Smeloff, 139.

with some specified minimum renewable energy content. Without such an option, many customers may be prevented from paying green power premiums because they cannot afford them on top of the CTCs. 172

172 Smeloff, 172, 198.

CHAPTER 6 SB 390 IMPLEMENTATION

Adjournment of the 1997 legislative session provided little respite from the debate surrounding SB 390. The implementation of SB 390 would ultimately prove more controversial than the original bill, leading to two attempts to reconvene the legislature in special session and three proposed ballot measures. A year after its passage, deregulation was finally regarded as a significant policy issue, with extensive coverage in the media and significant attention from political candidates.

The first scuffle occurred just two months after SB 390 was enacted. On July 1, as required by SB 390, Montana Power Company and PacifiCorp filed their transition plans before the PSC. This date also marked the deadline for the Governor to appoint eight members representing various constituencies to the Transition Advisory Committee, including "one representative from the community comprising environmental and conservation interests." Environmentalists took it as a minor insult that the Governor delayed his appointment for this one position only, and then declined the recommendation of a coalition of state and regional organizations. In the end, however, conservationists were pleased with (and well-served by) the appointment of Kathy Hadley, associate director of the National Center for Appropriate Technology.²

Additional controversy erupted when MPC began curtailing the power it purchased from a number of independent producers under long-term power purchase contracts required by PURPA. The company maintained it was legitimately trying to mitigate its stranded costs (as required by SB 390), which include above-market contracts with "qualifying facilities." A spokesman for two of the independent power generators called

¹ MCA, 69-8-501.

² Mike Dennison, "Racicot rejects environmentalists' choice for utility deregulation oversight committee," GFT, 12 July 1997.

the move not only illegal, but a "flagrant attempt to eliminate competition." Additional curtailments from the 16 IPPs (including the state-owned Broadwater Dam near Toston) would continue to make the news well into 1998, raising questions over whether ratepayers would ultimately have to pay for the damages if MPC lost in court.⁴

In the fall of 1997, additional events added fuel to the smoldering discontent over restructuring. In September, a Department of Energy (DOE) study predicted deregulation would lead to substantial rate increases for the residential customers of the Pacific Northwest. Ironically, Montana is split between the only two (of thirteen) regions with forecasted rate increases (the Pacific Northwest and the Upper Midwest). A November announcement that MPC had obtained a \$200 million contract to provide power to the California Manufacturers Association intensified fears that Montana's low-cost power would be destined for out-of-state markets. It also raised some serious questions. If some of the power was to come from Montana power plants (rather than being purchased on the market), shouldn't Montana ratepayers who had funded their construction share in the profits? And how could MPC consider their properties "stranded costs" if they were continuing to win competitive contracts with them?

But these minor tremors were nothing compared to MPC's December announcement that it was going to sell all of its electrical generating resources -- 13 dams, 4 coal-fired power plants, and an assortment of power-purchase contracts.

The Sale Announcement

MPC's decision to sell its power plants left many observers both surprised and puzzled. The most obvious question was, Why would MPC work so hard to acquire the right to compete in the open market and then almost immediately abandon power generation? MPC's explanations did not seem entirely satisfying. In its press release, the

³ Mike Dennison, "Montana Power averts court showdown," <u>GFT</u>, 6 August 1997.

⁴ Mike Dennison, "MPC cuts power buys," <u>GFT</u>, 6 May 1998.

⁵ AP, "DOE: Electric deregulation will hit Northwest the hardest of any region; Rates would rise 25% or more," IR, 26 September 1997.

⁶ Mike Dennison, "MPC contract with California raises concerns: officials say power won't come from plants in Montana," <u>GFT</u>, 7 November 1997.

company pointed to the advantages of having different companies responsible for generating electricity and distributing it. Yet they had resisted divestiture language during the legislature (a point which also makes it unlikely that the company had "known all along" that it was going to sell). MPC also said that its "size and geographic presence" would make it difficult to compete against larger companies more able to absorb risk. In addition to the threat of mergers, owners of conventional power plants may soon be responsible for significant fish restoration costs and expanded pollution regulations (such as carbon taxes). Also, the low profit margins expected in electricity supply make it a difficult business for small companies. And yet, just months earlier, the company was confident of its ability to survive and grow as a provider of electricity. Just before the bill was signed into law, Bob Gannon said, "Our vision is to retain 100 percent market share in Montana. We intend to fight -- to earn the right to serve all of our customers." The company would argue that the generation business simply became riskier than they had originally anticipated. At the same time, the company noticed that many utilities around the nation were fetching good prices for their properties. 11

Other reasons given by MPC include its desire to apply the proceeds from the sale to business opportunities with greater growth potential. A <u>Great Falls Tribune</u> article paraphrasing a D.A. Davidson stock analyst reported that the "several hundred million dollars from the sale . . . will be a considerable financial warchest to finance the company's telecommunications expansion, pay off debts, or buy back stock." Also, the company

⁷ Guest editorial by Bob Gannon, "MPC has a right to sell; legislators shouldn't meddle," <u>GFT</u>, 15 February 1998. Charles S. Johnson, "Montana Power denies hidden agenda," <u>IR</u>, 11 March 1998.

⁸ "Electric deal may leave consumers powerless," <u>Missoula Independent</u>, 18 December 1997. <u>Missoulian</u> editorial, "Look hard before leaping after Montana Power dams," <u>Missoulian</u>, 25 February 1998.

⁹ Mike Dennison, "Montana observers weigh impact of power marketer's failure to lure Californians," <u>GFT</u>, 23 April 1998.

¹⁰ Jim Ludwick, "MPC, competitors gear up for deregulation," <u>IR</u>, 20 April 1997.

¹¹ Charles S. Johnson, "Montana Power denies hidden agenda," IR, 11 March 1998.

¹² Mike Dennison "Critics slam company for quitting sale of electricity," <u>GFT</u>, 28 August 1998.

reasoned that a sale would go a long way toward resolving the ongoing and divisive stranded cost issue. 13 SB 390 did contemplate a competitive bid as one of several allowable valuation techniques for stranded costs. 14

This last point was thought by many observers to be a key issue. At the time of the announcement, the PSC was engaged in a lengthy review of MPC's transition plan filing, which had been submitted the previous July. In the weeks leading up to the sale announcement, the plan had been heavily critiqued by a battery of expert witnesses. In particular, the company's proposal for recovering nearly \$800 million in stranded costs was roundly criticized. Testimony from numerous parties asserted that the company had overestimated its stranded costs by hundreds of millions of dollars -- some even asserted that the correct figure should be zero, or negative. Among the interveners displeased with MPC's plan was the Racicot administration's Department of Environmental Quality, which had stood by MPC in supporting deregulation. From the sum total of the intervener testimony, it appeared unlikely that the PSC would authorize stranded cost recovery in the amount MPC had requested. Instead, the sale, which was expected to fetch between \$600 million (the book value of the plants) and \$1 billion, would provide MPC roughly the same "financial warchest" as their \$800 million stranded cost proposal. 16

A second important financial consideration that may have been a contributing factor had to do with property taxes. Historically, MPC had been taxed at the 12% centrally assessed rate (the state's highest). MPC believed that deregulation would make it eligible for the locally assessed business equipment rate, which is only 6%. However, the state Department of Revenue maintained that separating regulated and deregulated activities into different divisions (functional separation) did not automatically qualify MPC for a change

¹³ Charles S. Johnson, "MPC to sell power plants," Missoulian, 10 December 1997.

¹⁴ MCA 69-8-211. Later MPC would argue rather weakly that this obscure reference constituted "fair warning" to the legislature that a sale was in the cards.

^{15 &}quot;Experts say MPC plan won't help consumers," GFT, 30 November 1997.

¹⁶ Jim Ludwick, "Montana Power's windfall: Utility may invest profits in telephone, gas industries," <u>IR</u>, 5 May 1998.

in tax status.¹⁷ The state would later end up fighting MPC on this same point with regard to its natural gas producing properties.¹⁸ In contrast to functional separation, however, a sale would likely result in a change to the 6% rate, making a sale attractive to both buyer and seller, at the expense of the governmental units that would lose an estimated \$7 million in tax revenues (although the tax impact would be partially mitigated by a one-time capital gains tax of up to \$30 million).¹⁹ Rosebud County alone faced a \$1.2 million shortfall, an amount representing a third of its total budget.²⁰

Others suspected more devious motives -- that the sale was something of a ruse. If the assets were put out to bid and there was little interest, MPC could keep the power plants and have a greater chance of convincing the PSC of its stranded costs. But because the assets were expected to (and did) bring in a high sale price (\$988 million), this theory had little merit.²¹ In any event, deregulation and the sale of its generating assets both seem to have benefited MPC's shareholders. In the year following the enactment of SB 390, MPC's stock jumped from \$23 to \$37 a share (by November 1998 it would climb to \$54, and by January \$85, although much of this growth is attributed to its telecommunications activities).²² But not everyone was happy with this arrangement. Representative Jon Ellingson (D-Missoula) wrote, "While deregulation provides no benefits to consumers, none to local governments and taxpayers, and none to utility workers, deregulation does

¹⁷ Montana Department of Revenue, "Taxation Issues Pertaining to the Deregulation and Restructuring of the Electric, Natural Gas, and Telecommunications Industries in Montana," April 1998, 8.

^{18 &}quot;Utility industry next to tackle Legislature for tax break," GFT, 6 December 1998.

¹⁹ Jacquie Burchard, "Selling dams may eat into county funds," <u>GFT</u>, 13 December 1997. Charles S. Johnson, "Utility taxes will try Legislature," <u>IR</u>, 10 January 1998. Mike Dennison, "MPC plant sale may enrich tax roll \$30 million," <u>GFT</u>, 26 November 1998.

²⁰ Bob Anez, "Deregulation's impact on rates cloudy," <u>IR</u>, 14 March 1998.

²¹ Charles S. Johnson, "MPC inks deal," <u>IR</u>, 3 November 1998. Guest editorial by Bob Gannon, "MPC has a right to sell; legislators shouldn't meddle," <u>GFT</u>, 15 February 1998. Mike Dennison, "MPC president expects good price for facilities," <u>GFT</u>, 11 March 1998.

²² Mike Dennison, "Socialism at MPC? Well, sort of ...," <u>GFT</u>, 17 May 1998. AP, "Montana Power has seen its stock surge," <u>Missoulian</u>, 24 November 1998. Mike Dennison, "Montana delegation seeks meeting with new owners of 17 power plants," <u>GFT</u>, 4 November 1998.

provide an enormous and certain benefit to one small but privileged class of citizens: the stockholders of Montana Power."²³

The Sale -- Implications

Whatever the reason for MPC's decision, the announcement served to focus attention on Montana energy policy. To be sure, there were some positives. Ralph Cavanagh, a nationally regarded energy expert from the San Francisco office of the Natural Resources Defense Council (NRDC), hailed it as a great victory for consumers. He predicted a high sale price and confidently proclaimed that "the immediate beneficiaries will be the citizens of Montana." Divestiture would help remove "obvious and fundamental conflicts of interest." But despite the sale of its generation assets, MPC still planned to be a player in the deregulated energy supply business through its subsidiary, MP Trading and Marketing. So while the sale did appreciably lessen concerns over affiliate transactions, it did not remove them entirely.

Locally, the response was less optimistic. Consumer advocates interpreted the sale as disturbing confirmation of a national merger craze causing consolidation of market power among electric utilities. They also saw it as further evidence that Montana was losing control of its energy resources. Not only would deregulation likely funnel Montana's cheap power into national markets, but now an out-of-state company would likely be calling the shots at most of the state's generating facilities. Environmentalists framed this concern in terms of the state's historical role as a resource colony. Montana's forfeiture of control

²³ Guest editorial by Jon Ellingson, "Power deregulation: Montanans losing their livelihood to benefit a few wealthy executives," <u>Missoulian</u>, 28 April 1998. News of the sale of MPC's distribution business also increased its stock to near-all-time highs. Wendy Raney, "MPC will need seed money to underwrite newest venture," <u>GFT</u>, 29 March 2000.

²⁴ Charles S. Johnson, "Sometime critic applauds proposed divestiture," <u>IR</u>,11 December 1997.

over its natural resources has an almost compulsive quality to it -- as if the state, despite knowing its history, is somehow condemned to repeat it.²⁵

Questions concerning local control and self-determination resonate strongly with Montanans, and with good cause. Montana's history is laden with instances of powerful out-of-state interests determining its course of events. Exactly 100 years prior, another sale of a Butte-based company (the Anaconda Copper Mining Company) to a large, out-of-state conglomerate (Standard Oil) caused Montanans considerable distress. The parallels with this earlier sale are striking. Both were reflective of broader national trends. The authors of Montana: A History of Two Centuries tell us, "During the last years of the nineteenth century, control of American industry was becoming increasingly concentrated in fewer and fewer hands. It is hardly surprising that Anaconda got caught up in this monopolistic trend."26 It was with reference to this earlier sale that Governor R. B. Smith delivered one of the most colorful quotes in Montana history. In attempting to persuade the 1899 legislature to prevent the sale from occurring, he declared: "If you do not assert your independence now and defeat this measure, it will be too late when the tentacles of this octopus have fastened their fangs on the strong limbs of this fair commonwealth."27 As vivid as this quote was, and as mixed in metaphor, it was hardly overstated. At the time, approximately three-quarters of the state's wage earners were employed by "The Company" (a term denoting the Anaconda - Montana Power monolith) and its various businesses.²⁸

The feelings of Governor Smith seem to be shared by some modern-day observers of MPC's sale. For them, whatever its drawbacks, MPC is preferable to a faceless and unknown corporation with headquarters located out of state or even overseas -- in other words (in fact those of the late Senator Lee Metcalf), "Better the devil ye know than the 25 Guest editorial by Bob Raney, "What's the rush with deregulating electricity?" BG, 29 April 1998. Guest editorial by Jon Ellingson, "Power deregulation: Montanans losing their livelihood to benefit a few wealthy executives," Missoulian, 28 April 1998. Guest editorial by Patrick Dawson, "Amnesia allows MPC deals to flourish," TheBillings Outpost, 12 February 1998.

²⁶ Malone, Montana: A History of Two Centuries, 210-211.

²⁷ Toole, 165-166.

²⁸ Toole, 195. Malone, Montana: A History of Two Centuries, 210, 323. Lopach, 34.

devil ye don't." Others, however, were tempted to celebrate. They were certain that you could not find a corporate steward as lacking as MPC, which was, after all, the last vestige of the notorious Anaconda company. An informal debate developed over whether "the new boss" would be better or worse than "the old boss." Bruce Farling of Montana Trout Unlimited captured this ambivalence, predicting that the new owners would be . . .

... hydro mercenaries who won't be as understanding of how we treasure our rivers. The new guys will be bottom line guys. Which is really no different than Montana Power, except that MPC, which is largely run by Montanans, has learned that some accommodation for river values is good for business.²⁹

Montana Power has itself seemed unable to make up its mind about its role as corporate citizen. On the one hand, in the early 1990s MPC had shown encouraging signs of progress with its funding of conservation, renewable energy, and low-income assistance programs -- so much so that, in 1994, it won the Northwest Energy Coalition's prestigious "Conservation Eagle" Award. Furthermore, MPC is Montana's largest private employer and the only investor-owned utility that conducts all of its electricity business in the state. In theory, at least, the company is more sensitive to local political pressure, and more accessible and responsive to customers, who know where to call with complaints. The company has also been supportive of the arts, and of high school and college activities. To top it off, it has a good track record with irrigators, having never issued a "call" on junior water right owners in drought years, and with recreationists who have enjoyed access to MPC's riverfront properties. 31

On the other hand, these laudable characteristics cannot entirely be attributed to the benevolence and altruism of the company, and in some instances were short-lived.

Investments in public purposes, for example, grew out of recommendations of the "Least Cost Planning Collaborative." This committee arose out of a court-ordered settlement resulting from a lawsuit against the sale of power from Colstrip Unit 4 to Los Angeles.³² In a regulated environment, utilities also had the luxury of knowing that costs they incurred,

²⁹ KUFM Editorial by Bruce Farling, Montana Trout Unlimited, 12 January 1998.

³⁰ Lopach, 20.

³¹ Mike Dennison, "Irrigators fear water rights could be lost," GFT, 24 May 1998.

³² Personal telephone conversation with Tim Baker, DEQ, 17 August 2000.

especially for public purpose programs (but also for athletic events, concerts, conservation easements, etc.), would by and large be approved for recovery by the PSC.³³ As monopolies, utilities had no risk that such expenditures would make them "less competitive" -- a meaningless phrase in a regulated environment. But with a different set of incentives at work (those of deregulation), it is certainly plausible that MPC would focus as much on the bottom line as any other company. MPC's recent workforce reductions and conservation cutbacks (see Chapter 1) give compelling evidence for this line of thinking. By 1995, the company had slipped so much in terms of environmental programs that it instead won the Northwest Energy Coalition's "Turkey" Award.³⁴ And any illusions that MPC would continue as a "Montana only" electricity business were shattered by the news of its contract with the California Manufacturers Association.³⁵ Finally, some felt that an out-of-state corporation might not command quite the level of influence at the statehouse that MPC historically had. But through the years, foreign companies (particularly mining) have enjoyed a warm reception at the Montana legislature, and have amassed numerous lobbying victories.

In addition to arguments over local control and self-determination, the sale touched off other debates. As most of these power plants happened to be dams, the sale's impact on the state's rivers became a prominent theme. Issues included the effect that transferring water rights would have on other water users and fisheries, the fate of riverfront property, and the question of recreational access.³⁶ Exhibiting the kind of ardor that many Montanans feel for their rivers, Representative Bob Raney (D - Livingston) proclaimed:

³³ Letter to the editor by Ken Boyer, <u>IR</u>, 1 September 1999. Personal telephone conversation with Tim Baker, DEQ, 11 August 1999.

^{34 &}lt;u>Down to Earth: A membership publication of the Montana Environmental Information Center</u>, June 1995.

³⁵ MPC's vigorous support for deregulation at the legislature had already suggested an intention to expand at least beyond its historic customer base.

³⁶ Impacts would be aggravated if the dams were used to produce additional peaking power, which is more damaging than base load.

These are our rivers, our water, our economy and our ecology... There isn't much doubt that Montanans will have a significantly reduced role in what happens to our rivers. What does dereg give us? Corporate rivers.³⁷

Water Rights

Questions concerning water rights quickly developed into a key point of dissension in the wake of MPC's sale announcement. In addition to MPC's dams, the legal rights to the water used to operate them would be included in the sale. Because they date back to the turn of the century, MPC's water rights are considered "senior" to those held by other water users (according to the "first in time, first in use" principle of water law).³⁸ This means that the company can insist that its needs are met before others can fulfill their own. While MPC has never issued such a "call" on junior water rights, irrigators worried that the buyer might have fewer scruples, especially under a deregulated scenario. Preventing upstream river users from fully exercising their water rights maximizes the water available for power generation and maximizes profits from the sale of electricity. This effect is potentially massive, as MPC's water rights on the Missouri exceed the average flow of the entire river.³⁹ At stake are a quarter million acres of irrigated land representing potentially \$45 million in agricultural losses. 40 The second concern was that in times of need, downstream water users would have no ability to require MPC, or its successor, to release water from its reservoirs. Some suggested figuring out a way to subordinate MPC's water rights, or to include a provision in the sale agreement that would protect junior water rights holders from a call. MPC resisted both ideas, and claimed consumers would lose out if such stipulations ended up lowering the sale price (as everything above book was supposed to flow back to the ratepayers, and everything below book would have been stranded costs).41

³⁷ George Ochenski, "Montana's deregulation dilemma," <u>High Country News</u>, 27 April 1998.

³⁸ Jim Gransberry, "Water rights for sale," IR, 4 May 1998.

³⁹ Mike Dennison, "Irrigators fear water rights could be lost," GFT, 24 May 1998.

⁴⁰ George Ochenski, "Montana's deregulation dilemma," <u>High Country News</u>, 27 April 1998. Jim Gransberry, "Water rights for sale," <u>IR</u>, 4 May 1998.

⁴¹ GFT editorial, "MPC's dam sale raises a water rights question," GFT, 13 April 1998.

MPC tried in general to deflect the water rights arguments and reassure Montanans. The company argued that to obtain the water from upstream irrigators, the owner of the dams would first need to enforce the water right in court, which would be a lengthy and difficult process. MPC also noted that its license (which would be inherited by the buyer) specifies certain in-stream flows. Finally, the company stressed that it would sell its dams as a package, which would help maintain the coordinated release of water.⁴²

Recreation

Others questioned how the sale would affect recreational opportunities along the Missouri River. In addition to the dams and the water rights, the sale included roughly 16,000 acres of property (although a 3000-acre parcel near Great Falls represented the only sizable portion above-water). Opponents to the sale argued that new owners could attempt to amend their FERC license to either change the use of the lands or sell them off for development. Doing so would probably be more cost-effective than dealing with the liability created by public access to their land. Licenses for the dams (which are usually good for 30 to 50 years) in the Missouri River basin were up for renewal in 1999.⁴³

MPC disputed this concern, arguing that "recreation is treated with the same importance as generating electricity under federal licensing. . . . There could be no changes in the licenses, conditions and requirements -- which include public access to recreation -- without public hearings. . . . Any purchaser of Montana Power's dams would have to meet all the conditions and requirements that we are required to meet." ⁴⁴ MPC ultimately protected the 3,000-acre parcel with a conservation easement which will be used, in part, to extend the popular River's Edge Trail by eleven miles. ⁴⁵

⁴² Mike Dennison, "Irrigators fear water rights could be lost," GFT, 24 May 1998.

⁴³ Mike Dennison, "What will happen to MPC land?" <u>GFT</u>, 31 May 1998. Paula Clawson, "Harper proposes committee to protect public access to Montana Power Co. dams," <u>IR</u>, 30 September 1998.

⁴⁴ MPC paid advertisement, "Recent News, Fair Questions, Straight Answers," <u>IR</u>, 11 June 1998.

⁴⁵ AP, "Montana Power announces easement near new center," <u>Missoulian</u>, 6 July 1998. Karen Ivanova, "MPC land will add 11 picturesque miles to trail," <u>GFT</u>, 8 July 1998. Jacquie Burchard, "Donation protects river land from development," <u>GFT</u>, 5 November 1999.

The Resistance

With MPC's sale announcement, deregulation suddenly moved from an abstract and complex piece of arcane policy to a real-world issue with tangible and significant impacts. Previously silent parties entered the debate and began asking important questions: Would the new owners manage the dams with the interests of recreationists, fisheries, and junior water rights holders in mind? What would become of the 550 workers at these facilities? How would the state make up an estimated \$7 million in lost property taxes each year? And what about price, reliability, and customer service?

These issues were compelling enough to spark two separate attempts at a special session of the legislature. In addition to the governor's ability to call the legislature to Helena, the legislature can convene itself by means of the following process: Upon receipt of a petition for a special session signed by at least ten legislators, the Secretary of State polls the full legislature. The proposed session must be approved by majority vote within 30 days in order to occur.

Furthermore, the petition must contain the conditions warranting the call, the purpose of the session, and the proposed date and time for the session to begin.⁴⁷ In this instance, the purpose of the proposed one-day session was to reconsider and potentially postpone deregulation until some time after the next regular session in 1999.

The first call was initiated primarily as a response to MPC's sale announcement. In addition to the issues discussed above, the sale had created logistical problems. Because SB 390 was adopted prior to knowledge of the sale, the timeline outlining the transition to deregulation was no longer tenable. Slowing the process would have the added benefit of allowing public entities such as city and state governments to offer bids for MPC's properties.⁴⁸

⁴⁶ Charles S. Johnson, "MPC to sell off properties" IR, 10 December 1997.

⁴⁷ MCA 5-3-105.

⁴⁸ Eve Byron "City backs special session on dam sale: Second committee formed to explore purchase feasibility," <u>IR</u>, 24 February 1998. Bob Anez, "MPC sale tangled in deregulation," <u>IR</u>, 20 December 1997. Charles S. Johnson, "Complaint claims MPC sale illegal," <u>IR</u>, 7 May 1998. Guest editorial by John Board, "Slow down! Deregulation shouldn't be rushed," <u>GFT</u>, 1 March 1998.

In January, Senator Mike Sprague (R-Billings) suggested that the State of Montana consider buying MPC's dams, to ensure continued access to affordable and reliable power and to protect Montana's water resources. He said, "I would hate to see some out-of-state corporation charge into Montana and turn a beautiful place like Holter Lake into an exclusive and overbuilt private enclave." Representative Bill Ryan (D-Great Falls), who had carried SB 390 in the House, supported the idea, seeing it as a way to "protect our streams, protect our low-cost power, replace our tax losses with wholesale revenues and have an incredible resource for attracting good clean jobs to Montana." 50

Others were not so enthusiastic. If these properties were too risky for MPC to operate, they asked, how likely was it that the state could profit from them? The Missoulian observed, "MPC is an aggressive and successful operator that can be presumed to know more than most of us when it comes to the electricity business. . . . [MPC] considers the dams undesirable to own -- even though they're bought and paid for. Whoever buys the dams will have to finance the purchase, adding debt service into the risk equation." 51 One legislator pointed out that because of the state's tax exempt status, state ownership would cause an additional \$7 million tax shortfall. Furthermore, opponents of the idea felt that MPC would likely refuse the state's offer, or any offer, to buy the dams alone, apart from the other power plants. 52 Another problem was that the sale's confidentiality provisions

⁴⁹ Charles S. Johnson, "Billings senator proposes state buy MPC dams," <u>IR</u>, 10 January 1998.

⁵⁰ Guest editorial by Bill Ryan, "State should buy what MPC is selling," <u>GFT</u>, 11 January 1998.

^{51 &}lt;u>Missoulian</u> editorial, "Look hard before leaping after Montana Power dams," <u>Missoulian</u>, 25 February 1998.

⁵² This objection applied even more strongly to the City of Helena's idea to bid on Hauser and Holter dams only, which supply about 60% of the electricity in the Helena area. Great Falls and Missoula also considered putting in similar bids. Eve Byron, "Should Helena buy dams?" IR, 3 February 1998. Mike Dennison, "Great Falls looking into buying dam from MPC," GFT, 11 February 1998.

Additionally, given its consistent efforts to privatize many government functions, it is no surprise that the Racicot administration had ideological objections to Senator Sprague's idea.⁵⁴ Finally, in order for the state to offer a bid by the deadline, the legislature would have to meet in special session, identify a source of money, and approve the appropriation.⁵⁵ Senator Sprague himself did not end up voting in favor of either special session.

Letters published in Montana newspapers asked why the state needed to buy the dams at all, which, after all, were paid for by Montana ratepayers. The author of one such letter pointed out that MPC owns neither the floor of the Missouri River nor the water used to spin the turbines. "It's my opinion that the only thing they have for sale is a 100-year-old chunk of concrete on someone else's (Montana's) land."⁵⁶ Representative Raney echoed this comment, noting that "we are the ones who gave them the private property right in the first place and we have a right in that property they are selling. They have a responsibility to us they are not displaying."⁵⁷

And yet while Montanans might not adequately be compensated for their investment, they could well end up paying for future costs associated with the dams. Stuart Lewin of

⁵³ Later, in May, the Montana Public Interest Research Group, the Montana Senior Citizens Association, and Working for Equality and Economic Liberation would file a complaint charging that the sale was being conducted illegally. By excluding some public entities from participating, the secrecy requirements could deprive consumers of an in-state owner that would manage the resources in their interest. The PSC dismissed the complaint. Charles S. Johnson, "Complaint claims MPC sale illegal," <u>IR</u>, 7 May 1998. Charles S. Johnson, "PSC advises against complaint," <u>IR</u>, 16 May 1998.

⁵⁴ At least one letter to the editor agreed, proclaiming, "The purpose of government is to provide Health, Education and Welfare. Generating electrical power should remain with private industry where it belongs." Letter to the editor by Leo G. Walchuk, "Don't buy dams," <u>IR</u>, 23 February 1998.

⁵⁵ Bob Anez, "State purchase of MPC dams gets cool reception from panel," <u>IR</u>, 17 January 1998.

⁵⁶ Letter to the editor by Larry Hannah, "Montanans own dams," <u>GFT</u>, 27 April 1998. Letter to the editor by Paul Tahista, <u>GFT</u>, 7 May 1998. Letter to the editor by Dick Johnson, "Who owns dams now?" <u>GFT</u>, 19 May 1998.

⁵⁷ Michael Babcock, "River users certain of uncertainty in dam sale," <u>GFT</u>, 19 March 1998.

Missouri River Citizens raised concerns about the eventual decommissioning of the dams and reclamation. In his opinion:

Dams mine the river. When dams can no longer be operated profitably someone will have to pay for decommissioning and river reclamation. In Great Falls the problem is exacerbated by toxic sediment washed down from Smelter Hill sitting behind the dams waiting to be released to poison river communities downstream.

He went on to suggest that MPC establish a reclamation fund from the sale proceeds and that the state repossess MPC's water rights without compensation. After all, he reasoned, MPC had been given the water rights for free.⁵⁸

By the end of the polling period when legislators' ballots were due, the Montana Democratic Party, the Montana AFL-CIO, Local 44 of the International Brotherhood of Electrical Workers, the Helena City Commission and the Lewis and Clark County Commission had all endorsed the call for a special session. This is in addition to the "Statement of Support for a Special Session" signed by a coalition of conservationists and consumer advocates (and found in Appendix E).⁵⁹ Sympathetic editorials had also been written by several of the state's major newspapers, with the <u>Great Falls Tribune</u> taking the strongest position.⁶⁰ "Considering the outstanding issues and the potential for harm to the citizens of Montana," the Tribune editorialized on the eve of the session's defeat, "it's hard to escape the conclusion that the governor and the Legislature care more about Montana Power than about Montana people."⁶¹ Representative David Ewer (D-Helena), who had

⁵⁸ Guest editorial by Stuart Lewin, "We must slow down utility deregulation," GFT, 24 May 1998.

⁵⁹ GFT Capitol Bureau, "Liberal groups endorse special session," GFT, 25 February

⁶⁰ Charles S. Johnson, "Unions urge special session on utility deregulation," IR, 4 February 1998. Eve Byron, "City backs special session on dam sale," IR, 24 February 1998. Carolynn Farley, "County backs special session: Commission thinks rush toward deregulation happened too fast for full public debate," IR, 27 February 1998. IR State Bureau, "Demo Party supporting special session," IR, 12 February 1998. GFT editorial, "Deregulation needs airing," GFT, 1 February 1998. GFT editorial, "No shortage of questions," GFT, 1 February 1998. BG editorial, "Prepare for sale of dams," IR, 19 January 1998. BG editorial, "Legislators face tough choices in session call," BG, 3 February 1998. IR editorial, "MPC's big surprise," IR, 11 December 1997. IR editorial, "Dam-sale questions," IR, 25 February 1998.

^{61 &}lt;u>GFT</u> editorial, "Is what's good for MPC good for Montana?" <u>GFT</u>, 2 March 1998.

spearheaded the special session attempt, charged that Republicans "have been blindsided by their own ideology, that regulation is bad and competition is good. What good is competition when your choice is paying higher electrical rates with Company A or higher electric rates with Company B?"62

The first special session attempt ended on March 5, 1998 and yielded a vote of 93 against and 52 for. While this result fell short of the necessary 76 votes, it nonetheless reflected a significant shift in sentiment from the 113-36 vote with which the legislature had embraced SB 390. Those questioning deregulation had succeeded in bringing new voices into the dialogue, and in garnering significant attention in Montana and elsewhere. National media coverage included stories in the <u>Washington Post</u> and on <u>National Public Radio</u>. 63

A week following the conclusion of the first attempt, the transition advisory committee (TAC) hosted a meeting in Helena to address the public's concerns regarding deregulation and the sale. Proponents of deregulation had repeatedly urged opponents to settle their grievances through the TAC.⁶⁴ But union members, environmentalists, low-income advocates and others staged a walk-out of the meeting, claiming that the committee had neither the objectivity nor the authority to adequately address their concerns. They pointed out that all of the legislative members of the committee had voted for SB 390, and that the chairman of the committee had been the primary sponsor. The other members were all either appointed by the governor (who had signed SB 390) or were representatives of constituencies that had supported SB 390. The protesters also argued that the PSC was the appropriate body for such issues because of both its extensive experience and its specific regulatory authority.⁶⁵ By contrast, the TAC's authority is advisory only.

One month later, on April 16, the Governor hosted a "town meeting" that was also heavily criticized. The Governor had announced the informational forum just one hour after

⁶² BG editorial, "Legislators reject special session, poll shows," BG, 28 February 1998.

⁶³ Tom Kenworthy, "In Montana, a Volt Out of the Blue," Washington Post, 4 March 1998. "Morning Edition," National Public Radio, 1 April 1998.

⁶⁴ Guest editorial by Fred Thomas, "Beware of 'stranded costs' before jumping into the MPC dam deal," <u>GFT</u>, 15 February 1998. Charles S. Johnson, "MPC chairman won't debate Rep. David Ewer," <u>IR</u>, 13 February 1998.

^{65 &}lt;u>MCA</u> 69-1-102.

the failure of the first special session attempt (which he opposed) and as a response to "a heightened amount of interest" in the subject.⁶⁶ Representative David Ewer boycotted the meeting and suggested that instead of acting as a "talk-show host," Governor Racicot should defend his support for deregulation⁶⁷ Ewer, who had been the lead opponent to SB 390 in the 1997 legislature, challenged Racicot to a debate as a more appropriate forum. Racicot declined.

The <u>Great Falls Tribune</u> also criticized the town meeting, arguing that "the time to fully discuss a proposal this significant is *before* signing it into law . . . unless all you're attempting to accomplish is public relations." Others objected to the forum's inadequate noticing, inconvenient scheduling (during work hours on a Thursday), and a format which allowed for questions but not comments from the public. On the day of the forum, panelist and MEIC energy consultant Ken Toole (an energy consultant for MEIC), asked the audience how many were there on their own time as ordinary citizens (as opposed to paid professionals). Only eight or nine of approximately 60 raised their hands. Toole responded, "We don't think the public is getting a chance to voice its concerns. A daytime meeting in Helena doesn't cut it."

The second call for a special session was initiated a week later, on April 23. In their letter to the Secretary of State, the petitioning legislators mentioned ongoing issues concerning the sale's effect on taxes, jobs, and water rights. But they also argued that this was not simply a rehash, that compelling new evidence had come to light:

⁶⁶ Mike Dennison, "Racicot wants to hear from public on deregulation," GFT, 7 March 1998.

⁶⁷ George Ochenski, "Montana's deregulation dilemma," <u>High Country News</u>, 27 April 1998.

⁶⁸ GFT editorial, "Deregulation forum: Better late than never," GFT, 10 March 1998.

^{69 &}quot;Backers file two versions of proposed water measure," GFT, 17 April 1998.

^{70 &}quot;Did public really get a voice?" GFT, 17 April 1998.

The risks and uncertainties grow daily. Some recent examples: In February, a consulting engineer estimated that there is a 95% chance Montana electric rates will rise if Montana Power Co. (MPC) sells its generation assets to outside corporations. On April 16, the Governor -- who supported SB 390 and signed it into law -- acknowledged the need to protect the public from the effects of deregulation by supporting the idea of legislation to aggregate small consumers. In March, the Governor's own staff testified that MPC's plan for implementing deregulation would, left unchecked, likely result in an anti-competitive advantage for the company. 71

Nevertheless, MPC's Perry Cole denounced the call as an act of harassment, and tedious. "We've already seen this movie," he quipped.⁷²

The second attempt came a day after the <u>Wall Street Journal</u> reported that Enron Corporation had ceased offering power to residential customers in California. Proponents of the session saw this development as yet further evidence to bolster their case. Elsewhere, deregulation was failing. Three weeks after California had opened its electricity market, less than one percent of the customers had left their incumbent utility.⁷³ Ewer questioned how it was possible for deregulation to work in Montana, if the nation's largest energy marketer was unable to succeed in the nation's largest market (and one with high electricity prices). Senator Fred Thomas (R-Stevensville), who had been the chief sponsor of SB 390, conceded that robust markets for small customers can be slow in coming. "If I can pick between Enron, Montana Power and my local co-op, probably 99 times out of 100 I'm going to go with my local entity." But he also said, "That's not the reason we did Senate Bill 390. We didn't do it to develop vast competition for consumers. We did it to protect consumers from large fixed costs from large industrial users," a quote which many considered a surprising admission.⁷⁴

The second call, ending May 28, 1998, indicated an additional erosion of legislative confidence in deregulation, with 83 votes cast against the session and 58 for it. Although

⁷¹ Letter from legislators to Cooney asking for a special session, 23 April 1998. AP, "Engineer: Electric rates likely to go up with MPC plants sale," <u>IR</u>, 20 February 1998. Charles S. Johnson, "Alliances will lower costs," <u>IR</u>, 17 April 1998. Charles S. Johnson, "Expert: MPC plan may reduce value of plants," <u>IR</u>, 18 March 1998.

⁷² AP, "Deregulation foes again push for special session," <u>BG</u>, 23 April 1998.

⁷³ Kathryn Kranhold, "Enron Scales Back California Power Sales," <u>TheWall Street Journal</u>, 22 April 1998.

⁷⁴ Charles S. Johnson, "Power marketer pulls out of California," <u>IR</u>, 24 April 1998.

special session supporters were disappointed, they were not alone. Since the legislature acquired the ability to call itself into special session in 1972, as part of the new Constitution, no attempt to do so has been successful. Of the seven tries, these two votes represented the second and third closest. While the second attempt garnered more votes than the previous call, it also lost the support of a few legislators and at least one major newspaper. 76

With the legislature having made itself clear with three recorded votes on deregulation -- "three strikes" as some saw it -- citizen groups felt it was time to step up to the plate themselves. Three separate initiatives were drafted dealing with deregulation and MPC's sale: I-138 to repeal SB 390, and I-139 and I-140 to compel the State of Montana (using its power of eminent domain) to acquire the water rights associated with MPC's dams. While all three successfully negotiated the review process and were certified for circulation, none of them ultimately obtained the necessary 19,862 signatures to qualify for the ballot. According to its authors, I-138 was intended to ensure that deregulation of Montana's electric utilities would only proceed if accompanied by clear environmental benefits, strong consumer protections, and ample opportunities for public input. It was not so much a condemnation of deregulation itself as it was a rejection of SB 390. It was also an invitation to try again, but using a better process.

These initiatives became the source of a minor scandal, in which MPC and initiative supporters alike were criticized.⁷⁸ MPC had approached the groups pushing the initiative, tentatively offering to increase its support of universal system benefits programs if they

⁷⁵ Personal telephone conversation with Shannon Stevens, Montana Secretary of State's office, 10 June 1998. Two years later, Ewer attempted to expand a special session called by Governor Racicot to include consideration of issues resulting from MPC's announced sale of its transmission and distribution business. Ewer picked up another three votes (61), but still fell short of the necessary 76. <u>IR</u> State Bureau, "Effort to add MPC sale jurisdiction fails to get votes," <u>IR</u>, 9 May 2000.

⁷⁶ GFT editorial, "Deregulating: Proceed with caution," GFT, 27 April 1998.

⁷⁷ Charles S. Johnson, "Four initiatives qualify for November ballot," IR, 18 July 1998.

⁷⁸ <u>GFT</u> editorial, "Well, well: Look who's trying to buy off opposition," <u>GFT</u>, 5 June 1998. <u>GFT</u> editorial page -- Trib Talk, "Initiative opinions shared by callers," <u>GFT</u>, 9 June 1998.

would agree to drop the initiatives.⁷⁹ Eventually, the talks broke down before any agreement was reached. As it turned out, the initiatives failed to qualify anyway.⁸⁰ MPC's Bob Gannon wrote in a paid advertisement, "Our company had supported a level of 3 percent during the legislative session, and the funding we had discussed would have reflected that level."⁸¹ But by failing to follow through with the proposed increases, even though the initiative threat had disappeared, the company demonstrated that its commitment to that level of funding was rather limited.

The other two initiatives dealt more specifically with MPC's sale. "The worst case," according to MEIC's Ken Toole, would be if the new owner "wrings every electron out of the generators" in order to maximize profits. As discussed above, such a strategy would negatively impact other river users (including ranchers, farmers, anglers, boaters, and cities) by potentially depriving them of sufficient water. Proponents maintained that condemning the water rights and then leasing them back to the owners of the dams would offer the state two principal benefits. First, through the lease agreements, Montanans would have a measure of control over the operation of the dams so that fisheries, irrigators, and recreationists could be protected. Second, the leases would provide a revenue stream to compensate Montanans for the use of their rivers -- an important benefit if those waters were being used as a "free fuel" source to produce cheap power for out-of-state

⁷⁹ Specifically, MPC offered to voluntarily increase its funding to the 3% level the groups had lobbied for at the legislature. The difference (from the 2.4%) amounted to an extra \$7.5 million annually, which was to come from shareholders, not ratepayers.

⁸⁰ Two of the groups -- MEIC and MontPIRG -- had decided to focus their resources on another measure, I-137, to prohibit cyanide-process mining in Montana. I-137 was approved by voters in November, and became law. AP, "Dereg petition falls short," Missoulian, 23 June 1998.

⁸¹ MPC paid advertisement, "Recent News, Fair Questions, Straight Answers," <u>IR</u>, 11 June 1998.

⁸² Bob Anez, "Groups want state to buy dams' water rights," GFT, 4 April 1998.

markets.⁸³ The money could be reinvested in the rivers, to maintain traditional uses and "to mitigate damage caused by dam operation if dam operators fail to do so."⁸⁴

Yet some environmentalists vigorously opposed the idea. Because the water rights associated with the dams are non-consumptive, a corporation's decision to call in junior water rights would actually benefit in-stream flows and aquatic life. Furthermore, they felt that given the recent political climate in Montana, putting the legislature in charge of a significant quantity of water offered little hope for better stewardship. Another major problem with the water rights initiatives was that they had the potential to seriously depress the sale price. As MPC had already pledged to flow any profits from the sale above book value back to ratepayers in the form of reduced stranded cost payments, anything that decreased the sale price could hurt consumers. Finally, in order to cover the loan used to purchase the water rights (estimated to cost up to \$300 million), the lease price would have to be relatively high, which would drive up rates for Montanans as well as outsiders -- unless, of course, the state managed to take back the water rights, "which ultimately belong to it in the first place," for free. For these and other reasons (such as the limited resources that led to the demise of the repealer initiative), the water rights initiatives were ultimately abandoned.

Deregulation Stalls

According to SB 390, July 1, 1998 was supposed to be the most significant benchmark in the path toward deregulation in Montana -- the "date certain" on which at

⁸³ The Montana Constitution clearly specifies that "all surface, underground, flood, and atmospheric waters within the boundaries of the state are the property of the state for the use of its people.") The Constitution of the State of Montana, Article IX, Section 2, Subsection 3.

⁸⁴ Guest editorial by Stuart Lewin, "We must slow down utility deregulation," GFT, 24 May 1998.

⁸⁵ Guest editorial by Bob Gannon, "MPC has a right to sell; legislators shouldn't meddle," GFT, 15 February 1998.

Charles S. Johnson, "MPC: Sale will benefit consumers," IR, 10 January 1998.

⁸⁶ Jim Gransberry, "Water rights for sale," <u>IR</u>, 4 May 1998. <u>GFT</u> editorial, "MPC's dam sale raises a water rights question," <u>GFT</u>, 13 April 1998. Bob Anez, "Groups want state to buy dams' water rights," <u>GFT</u>, 4 April 1998. Guest editorial by Stuart Lewin, "We must slow down utility deregulation," <u>GFT</u>, 24 May 1998.

least some customers were to begin choosing alternative electricity suppliers. In addition to the state's large industrial customers, which were now allowed off the system, pilot programs for small customers were supposed to begin, and all customers were to begin receiving "unbundled" bills itemizing each component separately. Because of the importance of this date, efforts to postpone, "unwind," or derail deregulation all took place in the first half of 1998. Opponents began to accept the law and focus on ways to improve the situation. Bob Anderson of the PSC said, "The bottom line is that our job is to implement the (deregulation law) regardless of our views on its merits. It's our job to protect small customers from the risk (of deregulation). Maybe someday they'll really get meaningful choice (of electricity suppliers) and be better off."87

As it turned out, July 1 came and went and very little happened. Small customers were not in fact able to select an alternate supplier on that day (due to both an absence of competitors and undeveloped pilot programs), and only one large customer signed a contract that day. Again, large industrial customers are defined as those customers with loads greater than 1000 average kilowatts (or 1 average Megawatt).⁸⁸ A list of MPC's 16 industrial customers follows:

⁸⁷ Mike Dennison, "Complex hearings could change how you pay for power," GFT, 28 April 1998.

⁸⁸ Kilowatts and Megawatts are both units of power, which is the rate at which energy is produced or consumed (kilo- means 1,000x, and Mega- means 1,000,000x). Energy, therefore, is power times time. Kilowatt-hours and Megawatt-hours are units of energy. A company that uses energy at an average rate of 1 Megawatt, would use 8,760 Megawatt-hours of energy in a year.

MPC Contract Industrial Customers - 1995

	load (MWH)	÷ 8760 hours =	power (aMW)
Stone Container	416412.7		48
RP Chem	399790.7		46
Montana Resources	330816.5		38
Exxon Refinery	220057.1		25
Conoco Refinery	202465.5		23
Cenex Refinery	118803.8		14
Montana Tunnels	82494.3		9.4
ASARCO	75391.3		8.6
Golden Sunlight Mine	74850.6		8.5
Stimson Lumber	57452		6.6
Louisiana Pacific	54090		6.2
Stillwater Mine	53300		6.1
Western Energy	49743.9		5.7
Holnam, Inc.	44780.7		5.1
Ash Grove Cement	39555.2		4.5
Montana Refinery	29455.6		3.4
Total	2249459.9		257
Average	140591.2		16
Median	75121		8.689

It is interesting to note that in 1995, these sixteen customers used more power than all of MPC's 220,000 residential customers (who collectively use 215 average Megawatts). Even more interesting is that the Columbia Falls Aluminum Company (formerly a direct customer of BPA, but now a Flathead Electric Cooperative customer) uses a staggering 345 Megawatts, more than the combined load of MPC's sixteen biggest customers. 90

Alternatively, a company could still qualify for the July 1 "date certain" if it had multiple accounts, each greater than 300 kilowatts, that added up to a Megawatt.⁹¹ Examples include supermarket and hospital chains, state agencies, and local governments. Altogether, MPC had roughly 75 customers (although many more individual accounts) -- representing about 40% of its load -- that met this standard.⁹² Although most of these

⁸⁹ PSC data cited by Ewer, "Deregulating Public Utility Electric Generation in Montana: A Position Paper." Missing is MPC's contract to serve the roughly 100-MW ASiMI plant in Butte, which is currently under construction.

⁹⁰ Don Schwennesen, "Deregulation doubts: Utility companies scurrying to learn the rules, consumers bracing for skyrocketing rates," <u>Missoulian</u>, 2 October 1996.

⁹¹ MCA 69-8-201.

⁹² Charles S. Johnson, "MPC to raise rates," <u>IR</u>, 2 July 1997. Mike Dennison, "Deregulation makes quiet debut," <u>GFT</u>, 2 July 1998.

large industrial and institutional customers had met with competitive energy suppliers, only Stone Container (a pulp and paper mill near Frenchtown which had been MPC's largest account) switched to a deregulated supplier, albeit MPC's own trading and marketing affiliate. 93 In August, the Holnam cement plant near Trident became the first of MPC's large accounts to completely leave the company, selecting the Illinois-based Illinova Energy Partners. 94

But competition was not being held back by lack of customer interest alone. On the supply side, it seemed to be sputtering as well. Shortly after SB 390 became law, Dave Wheelihan of the Montana Electric Cooperatives' Association had told the Legislative Consumer Committee that 70% of Montana's 26 cooperatives were planning to open their service territories to competition. Despite this initial show of enthusiasm, only two coops, Glacier Electric and Flathead Electric, informed the PSC by the May 1998 deadline that they would not be opting out of competition. In order to compete, these co-ops were required by law to set up for-profit subsidiaries to handle the energy supply business. Flathead formed Energy Northwest, Inc., and Glacier formed Glacier Energy, Inc. Two years after acquiring the opportunity to choose, none of Glacier's customers had switched

⁹³ John Stucke and Charles S. Johnson, "State's largest power users researching costs before switching," <u>IR</u>, 5 July 1998.

⁹⁴ AP, "Cement plant plans to leave MPC for Illinois company," <u>GFT</u>, 12 August 1998. Momentum would later pick up for large customers. By June 1999, it was reported that four or five marketers had signed on 300 of MPC's large customer electric accounts representing 25% of the utility's load. About half of these accounts were large industrial customers. <u>GFT</u> editorial, "Small power users must be protected in deregulation," <u>GFT</u>, 8 June 1999

⁹⁵ Charles S. Johnson, "MPC, cooperatives optimistic, ready for utility deregulation," <u>IR</u>, 24 May 1997.

⁹⁶ MCA 69-8-311.

⁹⁷ MCA 69-8-309.

(Flathead's small customers had to wait until 2000 to qualify for choice). 98 Whereas the co-ops are inclined to interpret this phenomenon in self-congratulatory terms, it also points to a general absence of suppliers, especially for small customers -- the bread and butter of rural electric cooperatives.

MPC Exits Electric Trading and Marketing

In August 1998, MPC dropped another surprise announcement: that the company was withdrawing from the energy commodity business altogether. The MP Trading and Marketing subsidiary was closing its doors to new electricity business, although it would continue dealing in natural gas. Existing contracts, such as those with Stone Container and ASiMI, would either be served or sold to other energy providers. The contract with the California Manufacturers Association would possibly be reconsidered as well. Also put at risk were MP Trading and Marketing's 30 electricity employees. As with the sale announcement, MPC explained its decision in terms of the company's small size (thanks in part to the sale itself), and a high risk market.

One letter to the editor found a certain irony in the language used by MPC's Bob Gannon as reported in a Montana Standard article. In explaining the decision, Gannon was paraphrased as saying, "The electric business is too risky for the relatively small utility. Electric commodity trading and marketing is highly volatile and immature. The market created unacceptable risks." Suddenly, MPC had adopted the rhetoric of deregulation's opponents. The letter then asks, "Could someone explain to me why, with almost the lowest power rates in the country, Montanans are breaking speed records trying to put

⁹⁸ Flathead recently acquired 1 MW of "environmentally preferred power" from BPA to run from October 1999 to September 2001. As the co-op's small customers will not have choice until 2000, this appears to be a case of "green pricing" as well as "green power." (See "Green Power" in Chapter 5.) Customers will choose what percent of their energy they wish to come from these sources and will pay a premium on that portion, which might be as high as 33% extra. Michael Jamison, "Flathead provider offers planet-friendly power," Missoulian, 8 July 1999. MCA 69-8-309. Mike Dennison, "Rural co-ops adopt 'wait and see' attitude," GFT, 6 June 1999. Mike Dennison, "Fear of high prices prevalent early in power restructuring," GFT, 18 May 2000.

⁹⁹ John Stucke, "MPC quitting electricity," IR, 27 August 1998.

individual people and small coops in the position that relative big boys like MPC are running from, by deregulation."

This announcement removed a potential competitor from the playing field, and narrowed what was already a slim pool of providers. But it had some positive aspects as well: All remaining questions concerning affiliate transactions were put to rest. And in the long run, it might help draw energy suppliers otherwise too intimidated by MPC's incumbent advantage. 100

A guest editorial appearing in November commented, "What's surprising is not that energy supply companies are unwilling to serve Montana's small customers, but that MPC is among them. With MPC's decision last August to abandon the energy supply business, and with no licensed suppliers in the state, the situation has further degraded into what might be termed a 'nonopoly,' utterly devoid of the supposed benefits of deregulation." The Great Falls Tribune suggested that readers "put the blame on the Legislature and the administration of Gov. Marc Racicot" when power bills rise; "They're the ones who rushed into this, not knowing where it would lead." 102

Some began to wonder what was next for MPC. Legislative Consumer Committee Chairman Joe Quilici (D-Butte) asked, "Since the restructuring act, we've seen one shoe drop and then the other shoe drop. We're wondering if you're gonna drop anything else. You're not getting out of distribution and transmission, right?" 103 MPC insisted that it would remain true to its name, as both a Montana company and as a power company. It pledged to remain in Butte and to continue performing its regulated electricity transmission, distribution, metering, and billing functions (in addition to its telecommunications, natural

¹⁰⁰ Mike Dennison, "Critics slam company for quitting sale of electricity," GFT, 28 August 1998.

¹⁰¹ Guest editorial by Patrick Judge, "We need consumers' buying co-op," <u>IR</u>, 25 November 1998. With a total absence of energy supply companies, the question of who would serve as the default supplier for small customers became more pressing. See "The Small Customer Buying Cooperative" below. Drummond, "The Small Customer Buying Cooperative," 44.

¹⁰² GFT editorial, "Deregulation out of control," IR 7 September 1998.

¹⁰³ Charles S. Johnson, "MPC exec defends strategy changes," IR, 12 September 1998.

gas, and coal-mining activities). ¹⁰⁴ In fact, according to its November 1997 bill insert, MPC's new logo signifies, in part, the "company's commitment to Montana." ¹⁰⁵ A large paid advertisement in Montana's daily newspapers in March 1998 reiterated the promise. ¹⁰⁶

Pilot Programs

July 1 was also supposed to be the date pilot programs began for the state's smaller customers. Pilot programs, as contemplated by SB 390, were intended to facilitate an orderly transition for these customers from regulation to competition over a four-year period. 107 The year before, MPC had laid out its proposed "load transition schedule" in its transition plan filing. The schedule was as follows (but note that the company would fall significantly short of these targets):

<u>Date</u>	Residential	Commercial	Percent
July 1, 1998	6,800	1500	3
July 1, 2000	22,000	5000	10
July 1, 2001	110,000	25000	50
July 1, 2002	220,000	50000	100108

In some other states, pilots were treated more as an experiment than as a firm transition. The pilots were a trial run that would supply information about deregulation before the state committed to it. While Montana's pilots are also supposed to gather information, this information is intended more for correcting the process than evaluating deregulation itself. In March 1998, MPC announced that pilots would begin on November 2, glossing over the

¹⁰⁴ In the end, these promises were not kept. In March 2000 the company announced it would sell its remaining regulated electricity assets. Guest editorial by Dean Conklin, "Service, rather than supply," IR, 14 September 1998. See also, Mike Dennison, "Critics slam company for quitting sale of electricity," GFT, 28 August 1998.

¹⁰⁵ Montana Power Company, "Take a look at our new look!" Montana Energy, November 1997.

¹⁰⁶ Montana Power Company Chairman, President, and Chief Executive Officer Bob Gannon, "Montana Power: we're staying in Montana," IR, 24 March 1998.

107 MCA 69-8-104

¹⁰⁸ P. R. Corcoran of Montana Power Company, "Docket No. D97.7.90: Electric Restructuring Transition Plan Filing," 1 July 1997, pp. PRC 31-32.

delay by promising an accelerated transition schedule under which all customers would have choice by April 2000. The revised schedule set out the following maximum targets:

<u>Date</u>	Residential	Commercial	Percent
November 1998	11,000	2,500	5
June 1999	22,000	5,000	10
July 1999	44,000	10,000	20
August 1999	66,000	15,000	30
September 1999	88,000	20,000	40
October 1999	110,000	25,000	50
November 1999	132,000	30,000	60
December 1999	154,000	35,000	70
January 2000	176,000	40,000	80
February 2000	198,000	45,000	90
March 2000	220,000	50,000	100109

This schedule was contained in MPC's revised transition plan filing, and was approved by the PSC in June 1998. 110 Here again, the schedule was never adhered to.

In September 1998, MPC sent out to its customers a brochure entitled, "Exploring the New Frontier of Energy Choices." The brochure described the changes expected to occur under deregulation and gave customers a chance to be an "early explorer of this new energy frontier." The brochure also had a reply card that customers could fill out to "receive details on how you may choose a supplier as soon as this November." In November, MPC reported "a good response to the recent mailing." But some customers found that responding to the card failed to bring any response. The company in fact had very little to report regarding the development of choice. MPC's November bill insert reported, "As of mid-October, the list of licensed suppliers was fairly sparse, but that's expected to change over time." The statement was more honest than telling customers, "A variety of electric and natural gas suppliers are registered with the PSC to do business in the state of Montana," as the company had the previous March. The latter statement was incorrect in terms of the residential customers to whom it was sent.

¹⁰⁹ Charles S. Johnson, "MPC offers electricity provider choice early, "IR, 25 March 1998.

¹¹⁰ Charles S. Johnson, "PSC approves MPC transition order," IR, 19 June 1998.

¹¹¹ Montana Power Co., "Customer choice update," Montana Energy, November 1998.

¹¹² Montana Power Co., "Electric and natural gas restructuring questions answered," March 1998.

In October, Energy West (formed out of the Great Falls Gas Co. in partnership with the Washington Water Power subsidiary, Avista Energy) announced it would become the first competitive electricity supplier to serve small customers in Montana (in MPC's and Flathead Electric Cooperative's service territories). 113 MPC's Deb Young put the news in perspective, conceding that it was still "going to take awhile for markets to develop." Indeed, by the end of November there was still little evidence of a pilot program. 114 The PSC's web page contained only a short statement saying, "Sorry, we currently have no suppliers available for display providing electric power to residential and small business customers."115 It was not until the first of the year (1999) that Energy West Resources had its license in place and was ready to serve residential customers. And it was not until June that the first residential customer actually signed. Several different products were offered, including options for locally generated power, for bill consolidation (ability to pay for electricity, cable television, water, etc. all at once), and for "green" power. While the PSC had issued a rule requiring suppliers to substantiate their claims, there were no specific disclosure guidelines or standards defining "green" power. 116 Energy West defined "green" as having no coal or nuclear energy sources behind it. Instead, their power was derived from hydro, solar, and wind. 117 As of September 1, however, they had filed no information with the PSC to substantiate this claim (although they may still have had no customers in that category.)¹¹⁸ A spokesperson for the company described the difficulties of trying to compete against the regulated rate, which is both low and secure (being protected by the rate moratorium and the buyback provision discussed below). He called the situation "quasi-competition" because of the artificially low rate that people were

¹¹³ James E. Larcombe, "Falls company makes power move," GFT, 24 June 1997.

¹¹⁴ Karl Puckett, "Gas utility plugs into electricity," GFT, 2 October 1998.

¹¹⁵ http://www.psc.mt.gov/scripts/elecLicense/EleclicenseSearchresidential.asp

¹¹⁶ PSC Docket No. L-98.10.5-RUL, RULE IX, "CLAIMS MADE IN MARKETING ELECTRICITY OR NATURAL GAS," 23 November 1998.

¹¹⁷ Karl Puckett, "Gas utility plugs into electricity," GFT, 2 October 1998.

¹¹⁸ Personal telephone conversation with Will Rosquist, PSC, 1 September 1999.

allowed to return to if dissatisfied with their choice. Energy West attempted to mitigate this effect by offering only products with year-long contracts. 119

In April, Energy West began providing power to 23 Montana cities for their municipal operations. The power, obtained on the wholesale market from Idaho, was slightly cheaper than the regulated rate. 120 But more than a year after MPC's pilot was supposed to begin, only a handful of its small customers had chosen to change to their only alternative, Energy West. One problem faced by suppliers was the difficulty in purchasing power in anything less than 15-Megawatt blocks (which is enough power for 15,000 homes). Energy West negotiated this hurdle by "piggybacking" its small customers onto its commercial accounts, serving them with excess power originally purchased for its bigger customers. 121 (As an update, by May of 2000, midway through the transition period, only around 2000 of MPC's 280,000 small customers had switched which is less than 1%. Again, the argument was made that Montana's low prices were responsible. In other words, whereas competition was once promised to bring about lower prices, it is now described as only being able to exist in an environment where prices are higher, which is of dubious benefit to consumers. 122)

Unbundling

Another delay making it difficult for homeowners and other small consumers to select an alternative electricity supplier had to do with the format of bills. In order for customers to make informed choices, they first need to know what portion of their bill is currently designated for energy supply. SB 390 required bills to be "unbundled," which means they must be itemized to reveal the various component charges. At a minimum, electricity bills must list:

Personal telephone conversation with Jim Morin, Energy West, 2 September 1999. 120 Mike Dennison, "Great Falls, Havre, other cities save on new electricity contract," GFT, 16 April 1999.

¹²¹ Mike Dennison, "Energy 'choice' working for business and suppliers: Residential customers waiting, but it's still not certain they won't pay more," <u>GFT</u>, 6 June 1999.

122 Mike Dennison, "Fear of high prices prevalent early in power restructuring," <u>GFT</u>, 18 May 2000.

- (a) distribution and transmission charges;
- (b) electricity supply charges;
- (c) competitive transition charges; and
- (d) universal system benefits charge. 123

MPC's July 1999 bill insert contained a sample bill for an average residential customer using 750 kilowatt-hours of electricity each month. Such a customer was paying a \$48.21 bill, including a \$4.20 customer charge and \$44.01 in undifferentiated charges for everything else. The equivalent unbundled bill was as follows:

supply	\$20.07
transmission	\$5.58
distribution service charge	\$4.20
distribution energy charge	\$17.36
USBC	\$1.00
Total	\$48.21 124

The insert pointed out that competition could potentially create savings in energy supply charges (which represent 42% of the bill). However, because the cost of delivering power depends upon where it is coming from, transmission charges can also be affected by the choice of supplier. The unbundling of bills was supposed to occur prior to the launching of pilot programs in July 1998. MPC's insert promised unbundled bills beginning in August 1999. The August bill insert apologized that "because of some unresolved issues, the implementation of our new billing system was delayed." The September bill was in fact unbundled.

Transition Plan Filing

Other delays plagued the implementation of Montana's deregulation law. One criticism that had been launched in the wake of MPC's generation sale was that it would disrupt the PSC's review of MPC's transition plan. 127 SB 390 specified that before

¹²³ MCA 69-8-409.

¹²⁴ Competitive transition charges may also be included in bills once the PSC issues its final order on MPC's transition plan. See the next section below.

¹²⁵ Elizabeth Wing Spooner, "'Unbundled' billing helps you see where your payment goes: August billing statement 'unbundles' services," Montana Energy, July 1999.

¹²⁶ Elizabeth Wing Spooner, "Unbundled bill update," Montana Energy, Aug./Sept. 1999.

¹²⁷ Bob Anez, "MPC sale tangled in deregulation," <u>IR</u>, 20 December 1997. <u>IR</u> state bureau, "Demo Party supporting special session," <u>IR</u>, 12 February 1998.

offering its customers choice, a utility must submit to the PSC a plan outlining the details of its proposed transition to a competitive electricity market. ¹²⁸ Despite the high level of specificity contained in SB 390, many questions regarding deregulation remained. The transition plan process afforded an opportunity to resolve them. For example, should the distribution utility or the energy supply company be in charge of metering and billing, or should these functions themselves be deregulated? Is the four-year rate moratorium provided by SB 390 (MCA 69-8-211) a cap (allowing rates to go down, but just not up) or a freeze (which keeps rates constant even if market prices go down)? ¹²⁹ Who should be the designated default supplier for customers who either have no choice, or have "chosen not to choose" by the end of the transition period? ¹³⁰

Each utility planning on entering the competitive arena must submit such a filing. But because of the sale, the PSC was unable to complete the review of MPC's filing (conducted as a contested case proceeding under the Montana Administrative Procedure Act) before the effective date of deregulation, July 1, 1998. The PSC decided to split the filing into two tiers. Tier 1 issues were those deemed necessary to be in place before July 1, when large customers began choosing suppliers (including a method to track stranded costs until a final determination is made as to their amount), as well as issues related to small customer pilot programs. Issues left unaddressed by Tier 1, and issues that could not be resolved until the sale was completed (such as the final determination of stranded costs)

^{128 &}lt;u>MCA</u> 69-8-202.

¹²⁹ MCA 69-8-203.

¹³⁰ Mike Dennison, "Complex hearings could change how you pay for power," GFT, 28 April 1998.

were relegated to Tier 2.¹³¹ The PSC issued its order on Tier 1 on June 23, 1998 and was expected to rule on Tier 2 by August 2000.¹³²

The commission also held a hearing addressing the universal system benefits (USB) issues in October 1998. On December 23, it issued a rate tariff order allowing the universal system benefits charge (USBC) to begin being collected on January 1, 1999 as required by SB 390. The PSC issued another order allocating the USB funds on February 2, 1999, and yet another on May 11, giving further specificity to the low income allocations. These allocations, which pertain to 1999 only, are shown in the following table:

Public Purpose Category	Allocation Amount	Allocation Percent			
Conservation	\$4,303,838	50%			
(Large Customer Rebate 2,500,000)					
(Local Conservation 1,803,838)	,				
Market Transformation	\$1,132,209	13%			
(NEEA 370,000)					
(Montana 762,209)					
Low-Income	\$1,785,818	21%			
(Bill Assistance 885,818)	, ,				
(Weatherization 480,000)					
(Renewable Projects100,000)					
(Energy Share 220,000)					
(Outreach100,000)					
Renewable Resources	\$1,112,750	13%			
Research & Development	\$225,000	3%			
Total	\$8,559,615	100%133			

These percentages track fairly closely to those originally proposed by MPC in its 1997 transition plan filing (see figure 1, page 19).

¹³¹ That large customers were allowed to leave the system even before a final determination of stranded costs was made gave some vindication to those who had argued for a simple, exit fee approach.

¹³² Personal telephone conversation with Will Rosquist, PSC staff, 27 August 1999. The procedural schedule was subsequently suspended due to a dispute between MPC and the PSC over the determination of stranded costs from qualifying facility contracts. Tier 2 issues are on hold pending a ruling on this matter by the Montana Supreme Court. A hearing is scheduled for October 24, 2000. Personal telephone conversation with Will Rosquist, PSC staff, 21 August 2000. Mike Dennison, "'stranded costs' dispute headed to high court," GFT, 24 June 2000. At the time of this writing, the determination of PacifiCorp's stranded costs was a matter of continuing controversy. The PSC felt the company owed its customers \$55 million in negative stranded costs, whereas the company felt it was entitled to \$18 - \$56 million in positive stranded costs. IR State Bureau, "PSC: PacifiCorp owes consumers money," IR, 4 August 1999.

¹³³ NEEA is the National Energy Efficiency Alliance. PSC, Order No. 5986g, 2 February 1999. PSC, Order No. 5986i, 11 May 1999.

Customer Protection and Information Disclosure Rules

The PSC took a similar approach with respect to its rulemaking responsibilities under SB 390.¹³⁴ After a number of hearings, the commission split its draft rules into two parts. The six "Electricity Supplier Licensing and Reporting" rules (38.5.8001 - 38.5.8006, Administrative Rules of Montana), effective July 17, 1998, were issued nearly in time for the official start date of deregulation, while the seven draft customer protection and information disclosure rules were postponed. While consumer advocates objected to this delay out of principle, as a practical matter, small customers were still a long way from needing protections from competitive energy suppliers. However, environmentalists were particularly disturbed by the omission of the rule regarding, "Disclosure of Source of Energy and Emissions," which had survived three rounds of comments before inexplicably vanishing. The rule was held out by environmentalists as a glimmer of hope for securing a fundamental environmental benefit from restructuring -- the ability of customers to support renewable energy by purchasing "green" power.

Unlike some states, Montana's deregulation law has no specific guidelines for the disclosure of environmental information. The PSC does, however, have general rulemaking authority under SB 390.136 The "legislative findings and policy" section of the law asserts that "the public interest requires the continued protection of customers through . . . provision of information to consumers regarding electricity supply service." 137 Furthermore, the Collaborative on Customer Education and Pilot Programs (convened by MPC as part of its transition plan filing) called for "meaningful, complete, and accurate disclosure and labeling by a supplier of its generation sources and environmental impacts as required by the MPSC." 138

¹³⁴ MCA title 69, chapter 8, part 4.

^{135 &}lt;u>ARM</u> 38.5.8006 was later replaced with rule 38.5.6004. <u>Montana Administrative</u> Register, 1233 - 1258 & 1929, Issue 11, 3 June 1999.

¹³⁶ MCA 69-8-403.

¹³⁷ MCA 69-8-102.

¹³⁸ Gerald Mueller (Facilitator), letter from the Collaborative on Customer Education and Pilot Programs to Dave Fisher, Chairman, Montana Public Service Commission, 30 December 1997.

In addition to arguing that the commission had overstepped both the bounds of its authority and the intent of SB 390, opponents to the draft rule (mostly utilities) attacked it as unnecessary, burdensome, and impractical. Furthermore, they warned it could drive away companies and stifle competition. The commission wrote a strong response in defense of its rule:

Economic theory, sound public policy and . . . (SB 390) strongly support the draft disclosure and labeling requirements. According to economic theory, complete consumer information is a fundamental prerequisite for properly functioning competitive markets and efficient consumption decisions . . . consumers want and need the type of information the draft disclosure and labeling requirements would provide . . . To suggest that disclosure and labeling are inconsistent with the intent of SB 390 is to suggest that the legislature intended to create a market environment in which small consumers are ill equipped to participate and do not have complete information necessary for meaningful supply choices and protection from market abuses. 139

Utilities also claimed that tracking the sources of their electricity is simply unfeasible. Supporters of disclosure refuted this argument by pointing to successful experiences in other states and the ability of companies to keep track of other kinds of financial transactions. ¹⁴⁰ DEQ argued that disclosure information should only be required of companies that make claims regarding the environmental characteristics of their power. Environmentalists disagreed, arguing that "limiting disclosure requirements to companies purporting to sell green power is like limiting nutrition labeling to products claiming to be nutritious." ¹⁴¹

Universal disclosure requirements would benefit consumers not only in a restructured world, but also in a regulated one (with or without utility "green pricing" programs). On this point, the PSC observed that "electricity consumption decisions involve more than choosing a supplier; relevant decisions also include when and how much to consume, which appliances to buy and whether to use products that are substitutes for

¹³⁹ Some cynical observers might suggest that that was indeed the intent of the legislature. PSC, "Request for Comments on Revised Draft Electric Restructuring Rules and Natural Gas and Electric Customer Protection and Information Rules," 20 March 1998.

¹⁴⁰ Adam Serchuk and Alan Miller, "A Message from the Renewable Energy Policy Project," forward to REPP Issue Brief # 5, 15 January 1997.

^{141 &}quot;Knowledge is Power for Utility Customers," <u>Down to Earth: A membership publication of the Montana Environmental Information Center</u>, February 1998.

electricity, including demand-side management measures."¹⁴² Like many other environmental strategies, disclosure can be applied and has value independent of competition, but may achieve greater significance in a market-based system.

The Montana Power Company Energy Services Division (MPES) took up a strong stance against the PSC's draft rule. First, MPES disputed the contention that sound economic theory demands disclosure and labeling (especially for all suppliers), asserting instead that this kind of information would be delivered by the market (as any other commodity) to those willing to pay for it. On the other hand, MPES argued:

There is no reason to provide information to those that do not value it, unless the provision of that information is costless. Producing and verifying this information is not costless. . . the choice of cleaner power need not be accompanied by increasing the costs for all; this is a matter of consumer choice, not a religious crusade. No more so than in any other area, this is not the place to demand a single faith; those willing to pay for the information can pay; those not willing to pay, need not pay. Nothing is lost in leaving the outcome up to the market. 143

Second, MPES felt that this rule betrayed a bias in the Commission, a "total willingness to continue to prefer a command system to market solutions" in spite of SB 390's "stated preference for markets and consumer choice over administrative commands." MPES, which clearly shared this latter preference, proceeded to elaborate on its philosophy of markets: "The strength of the workings of the market is that it can cater to several different behavioral niches, whereas a centralized command structure usually results in a one-size-fits-all approach...one information standard for all consumers whether they want it or not." 144

The PSC's position was that "because markets generally do a poor job of providing consumers with standardized or uniform information, establishing disclosure and labeling rules is an appropriate role for the public sector." 145 Environmentalists wondered how the

¹⁴² PSC, "Request for Comments on Revised Draft Electric Restructuring Rules and Natural Gas and Electric Customer Protection and Information Rules," 20 March 1998.

¹⁴³ Montana Power Energy Services Division, "Comments on Revised Draft Rules," PSC Docket No. L-97.8.6.-RUL, 9 April 1998.

¹⁴⁴ Montana Power Energy Services Division, "Comments on Revised Draft Rules," PSC Docket no. L-97.8.6.-RUL, 9 April 1998.

¹⁴⁵ PSC, "Request for Comments on Revised Draft Electric Restructuring Rules and Natural Gas and Electric Customer Protection and Information Rules," 20 March 1998.

company reconciled its explanation with the general failure of markets to deal with externalities. Despite the "workings of the market," the social and environmental costs of the electric utility industry have been paid for by society at large "whether they want it or not." Environmentalists resented such fervent opposition from an entity which, as a regulated distribution utility, would not even be affected by this rule.

Although the original disclosure rule appears to have been all but abandoned, the commission has been working with other states in the Northwest region to develop consistent standards and requirements. As of November 2000, the disclosure rules have yet to be issued.

The Sale Conclusion

As noted, the effective date for deregulation and the first day of the transition period, July 1, 1998, proved to be something of a flop. But as it turned out, the first of July was a significant day for Montana's co-ops, as they learned that their bid to become the next owners of MPC's power plants had been rejected. Dave Wheelihan, general manager of the Montana Electric Cooperatives' Association, expressed dismay, "Obviously we're surprised and a little disappointed that (MPC) didn't want to negotiate with the only Montana-based distribution system in the state." With the co-ops out of the picture, the chances for MPC's successor to be "someone local to love and hate" (in the words of Commissioner Anderson) became vanishingly small.

In November 1998, speculation came to an end, when Pennsylvania Power and Light Global, based in Fairfax, Virginia, became Montana's newest corporate neighbor and the owner of 16 Montana power plants. The sale price of roughly \$988 million (about 1.5 times book) was regarded somewhat favorably. Bob Anderson of the PSC expressed measured enthusiasm, "I'm a little underwhelmed with the price. It's a decent price, a

¹⁴⁶ Personal telephone conversation with Will Rosquist, PSC, 27 August 1999.

¹⁴⁷ Mike Dennison, "State co-ops out of bidding for plants," <u>GFT</u>, 7 July 1998. <u>GFT</u> editorial, "Unfamiliar ownership likely," <u>GFT</u>, 11 July 1998.

reasonable price, but not a great price." ¹⁴⁸ It would, however, allow MPC to recover the \$550 million book value of the plants as well as an estimated \$50 million in transaction costs. ¹⁴⁹ The remainder would be applied to MPC's stranded costs, which the company had estimated to be over \$800 million. Sale proceeds could potentially eliminate all \$150 million in stranded "regulatory assets" (such as MPC's past investments in customer conservation projects). Additionally, the proceeds would help reduce some of the \$500 million in above-market qualifying facility contracts (which, to MPC's dismay, were not transferred in the sale). ¹⁵⁰ Finally, the last category of stranded costs -- MPC's proposal for \$160 million in out-of-market power coming from its generation plants -- was largely mooted by the sale, as MPC only retained a fraction of its former assets (such as the 3 MW Milltown dam which PP&L refused to bid on, presumably because of its low generating capacity and large environmental liability). ¹⁵¹ Transferred in the sale were the following properties:

¹⁴⁸ Mike Dennison, "MPC sells for \$1 billion," <u>GFT</u>, 3 November 1998. The sale price was later reported as \$759 million, with the possibility of an additional \$97 - \$117 million for the Colstrip interests. Charles S. Johnson, "MPC to sell all remaining energy assets," <u>IR</u>, 29 March 2000.

¹⁴⁹ This figure, which includes \$10 million in legal fees, was also challenged. One intervener pointed out that it would take a lawyer 20 years of full-time work at \$250 an hour to rack up that amount. Charles S. Johnson, "Hearing expert witnesses question MPC plan," Montana Standard, 18 March 1998.

¹⁵⁰ Mike Dennison, "MPC sells for \$1 billion," GFT, 3 November 1998.

¹⁵¹ Charles S. Johnson, "Montana Power must now determine 'stranded costs'," Missoulian, 4 November 1998. While there was still no final determination of stranded costs by the PSC, at the time of this writing MPC was proposing \$425 million to be recovered from its customers. AP, "Montana Power says co-ops, other customers owe 'stranded costs,'" GFT, 5 May 2000. Sherry Devlin, "PP&L excludes troubled Milltown Dam," IR, 3 November 1998.

Coal Fired Properties J.E. Corette Colstrip Unit 1 Colstrip Unit 2 Colstrip Unit 3* Colstrip Unit 4* * Transferred in the sale w	Capacity 163 MW 333 MW 333 MW 805 MW 805 MW as MPC's partia	Location Billings Colstrip Colstrip Colstrip Colstrip Colstrip	Date Built 1968 1975 1976 1984 1986
Hydro Properties Thompson Falls Dam Kerr Dam Madison River Dam (and Hebgen storage) Hauser Dam Holter Dam Black Eagle Dam Rainbow Dam Cochrane Dam Ryan Dam Morony Dam Mystic Dam	86 MW 189 MW 9 MW 17 MW 50 MW 18 MW 35 MW 54 MW 60 MW 48 MW	Clark Fork River Flathead River Madison River Missouri River East Rosebud	1915 1938 1906 1907 1918 1927 1910 1958 1915 1930 1925

While MPC only had partial interests in Colstrip units 1 and 2, PP&L acquired full ownership through other transactions. PP&L also took over several of MPC's power purchase and supply contracts, but did not buy the 3-MW Milltown Dam on the Clark Fork River or 15 qualifying facility contracts totaling 101 MW.¹⁵²

While little was known about the four-year-old PP&L Global, its older and larger sister company, PP&L, Inc. (based in Allentown and serving 1.2 million Pennsylvania customers) had a longer track record. Environmentalists were wary, because of PP&L's ownership of some of the nation's most polluting coal-fired plants as well as some nuclear power plants. They also had nearly \$100,000 in environmental penalties in 1997 (which is, however, less than MPC's fines in 1993 and 1994). 153 PP&L has operations in ten foreign countries, and has a five year goal of owning 20,000 Megawatts of generating capacity. 154

^{152 &}lt;u>Missoulian</u> State Bureau, "Assets bought by PP&L Global," <u>Missoulian</u>, 4 November 1998. "Montana Power: A \$988 million deal," <u>GFT</u>, 3 November 1998.

¹⁵³ AP, "MPC buyer has no clear track record," GFT, 9 November 1998.

¹⁵⁴ http://www.pplweb.com/

One aspect of the sale important to local consumers was MPC's buyback provision, guaranteeing access to power from the plants through the 4-year transition period at a cost of 2.1 cents per kilowatt hour. This provision had been controversial, as some felt that it would depress the sale price to the detriment of consumers (leaving them with more stranded costs). MPC had argued the opposite, that the buyback would enhance the value by giving the new owners a guaranteed market to sell into. 155 Furthermore, the company argued that with the direct buyback, consumers would save money over what they might get on the market. This way, there would be no middle-men power marketers to take a cut. 156 But because of the rate moratorium, it was really the company, not the consumer, that was at risk. Without a guaranteed source of relatively low-cost power, the company may have had a difficult time meeting the rate moratorium and could have lost millions of dollars selling power more cheaply than they could buy it. 157

Of greater concern to Montana's consumers was PP&L's stated desire to sign lucrative contracts with out-of-state industrial customers, and to sell power to Montana residences only indirectly, through a retailer. One environmentalist lamented, "Montana's low-cost power and the profits from its sale will flow out-of-state, while the environmental and social impacts stay at home -- an undesirable consequence of deregulation only heightened by the sale." 158

As for workers, the sale agreement included protection for employees against layoffs. PP&L, itself a "union shop" whose workers belong to the International Brotherhood of Electrical Workers (as do MPC's employees), promised to continue providing the same benefits package. ¹⁵⁹ The company offered similar assurances

¹⁵⁵ Mike Dennison, "Top adviser to Racicot warns MPC sale could hurt consumers," GFT, 19 March 1998.

¹⁵⁶ Charles S. Johnson, "MPC defends proposal, questions critics' claims," <u>BG</u>, 21 April 1998.

¹⁵⁷ MPC's initial interest and support of the Small Customer Buying Cooperative idea discussed below, may have had something to do with this phenomenon.

¹⁵⁸ Guest editorial by Patrick Judge, "We need consumers' buying co-op," <u>IR</u>, 25 November 1998.

¹⁵⁹ Erin P. Billings and Diana Setterberg, "New company foresees no work force changes," IR, 3 November 1998.

regarding its newly acquired riverfront properties, claiming to "have every intention of managing those properties as they have been managed." 160 Other benefits for Montanans of the high sale price potentially included a higher tax valuation on these properties and a better credit rating for MPC (which could save consumers money by lowering the company's cost of doing business). 161

The <u>Independent Record</u> was pleased that the sale brought in 1.5 times book value, but was also concerned about the long-term implications of deregulation: "Given the uncertainty, we're glad to note that plans by the City of Helena to try to become a supplier of electricity to area residents still are in the works. The city might not be able to play with the boys who throw billion-dollar power-generation deals around, but at least we know its interests would involve the welfare of local consumers rather than the zillion shareholders of some huge outside company." 162

Conflicting reactions came from two elected officials. David Ewer felt that the relatively high sale price underscored the value of what Montanans were losing: "Today Montanans no longer control their electric power supply. Today over 300,000 Montanans face an uncertain future for obtaining electricity. Republicans let this happen." Fellow Democrat Danny Oberg of the PSC, however, had a different take: "Today is one of those milestone days in history. The era of the utility monopoly is gasping its last breaths and we stand at what I believe is an open door ushering in refreshing air of market prices and competition for the hearts and pocketbooks of consumers." 163

The sale conclusion inspired the following eulogy, excerpted from a letter to the editor in the <u>Missoulian</u>:

¹⁶⁰ IR Staff, "Land management should stay the same," IR, 3 November 1998.

^{161 &}lt;u>Gazette</u> State Bureau, "Many fear sale means higher rates in future," <u>BG</u>, 4 November 1998. Mike Dennison, "MPC sells for \$1 billion," <u>GFT</u>, 3 November 1998.

¹⁶² IR editorial, "MPC sale good, for now," IR, 4 November 1998.

¹⁶³ Mike Dennison, "MPC sells for \$1 billion," <u>GFT</u>, 3 November 1998. Charles S. Johnson, "MPC inks deal," <u>IR</u>, 3 November 1998.

Can you believe it? The Montana Power Co. has cashed in its chips. Took the money and ran. There was a time when that event would have triggered a parade with a brass band. But the only responses you seem to hear, if you hear any at all, are along the lines of, "Now what are they up to?" or "I guess they know something we don't know," or maybe "Good riddance!"

So they're both gone now, the Anaconda Co. and MPC, the twin titans who

ruled supreme for -- what? -- a century; vanished without a trace.

Well, that's not entirely true. They left their trash. There's Milltown and Butte. Have you seen that gargantuan open pit in the heart of Butte? It's like something out of Dante's Inferno. It'll be there forever. Can you imagine a company with the power and arrogance to order a city to move over, we're gonna dig us a hole here? Who could have imagined 40 years ago that those two blood brothers could have been eliminated by anything short of armed rebellion? But there you have it -- they're gone, swept away by the winds of change. 164

MPC, meanwhile, reminded Montanans of its continued presence, and its continued commitment to remain a Montana company of the same name. 165

The Small Customer Buying Cooperative

Background

One of the key questions debated in the PSC's review of MPC's transition plan was that of default supplier. SB 390 specifies, "If a customer has not chosen an electricity supplier by the end of the transition period, a public utility shall propose a method . . . for assigning that customer to an electricity supplier." ¹⁶⁶ Because the PSC has the authority to approve, modify, or deny the plan, some parties argued that the PSC should force MPC to continue to serve as the default supplier, whether or not it wanted to exit the energy supply business. 167 Others felt that forcing the default supplier role on a reluctant company would have negative repercussions for customers. Transferring the role to PP&L Global could involve a serious rate increase, owing to its need to recover the price it paid for

¹⁶⁴ Letter to the editor by Robert D. Robinson, "Good riddance to twin titans," Missoulian, 19 November 1998.

¹⁶⁵ Mike Dennison, "Critics slam company for quitting sale of electricity," GFT, 28 August 1998.

¹⁶⁶ MCA 69-8-203.

¹⁶⁷ MCA 69-8-202. Drummond, "The Small Customer Buying Cooperative," 34-35. 208

MPC's facilities, which was one-and-a-half times book.¹⁶⁸ Another proposal was to solicit bids from companies to serve in the default supplier role. But as one observer pointed out, it is certainly possible that few if any companies would be interested. And if they were, "there is no guarantee that these customers will actually be served at least cost, only that they will be served by the least cost supplier among those who bid."¹⁶⁹

Another idea, and the one MPC proposed in its 1997 filing, was for proportional allocation. For example, if three competitive electricity companies had picked up customers during the transition period, the remaining customers would be assigned to those three companies in proportion to the market share they had captured. MPC argued that this would encourage companies to aggressively court customers. Customers, however, would not necessarily appreciate being shuttled off to an unknown company. Detractors of the idea also feared that this arrangement would give MPC's marketing arm an enormous advantage. They felt that, because of "name recognition, 'customer inertia' and MPC's potential control of the customer education process," the company's energy supply arm would pick up an artificially high percentage of customers that switch during the transition period. 170 And at the end of the transition period, this percentage would mean that hundreds of thousands of customers would automatically be transferred to MP Trading and Marketingm giving it a near monopoly (and an unregulated one at that). But the news that MPC was exiting the energy supply business went a long way toward resolving this issue. Still, if few suppliers were to show up during the transition period (which seems fairly likely), a similar concentration of power could result with other companies. In fact, as we saw above, more than two years into the transition period Montana has only two licensed alternative suppliers for residential customers. According to this system, if no other competitors were to arrive, all of MPC's former customers would be transferred to this

single entity. 171 Another problem was that low-income customers "could face a widely 168 Charles S. Johnson, "Power to Montana: New co-op hopes to supply electricity to state after MPC bows out in 2002," IR, 24 October 1999.

¹⁶⁹ Drummond, "The Small Customer Buying Cooperative," 33.

¹⁷⁰ Drummond, "The Small Customer Buying Cooperative," 32.

¹⁷¹ If this were indeed the case, the PSC would presumably extend the transition period for up to two years. At that time, if there was still no competition, the legislature would presumably take action.

disparate array of prices and policies, depending upon which competitor they were assigned to . . . causing considerable inequity." 172

Another drawback of MPC's proposal (and of deregulation itself) would occur if a limited number of suppliers did materialize for this customer class. Once customers left MPC, they would forever be "disaggregated," left to fend for themselves with little market clout. The challenge, then, was to find a way for small customers to continue negotiating from a position of strength, using their collective load to make them a viable presence in the market. Joining together with other customers to increase buying power is known as aggregation. This is an altogether different situation than everyone choosing the same supplier out of an absence of alternatives (in which case customers are acting independently, have no bargaining power, and are together only as a matter of circumstance).

One solution to this problem, recently adopted by Oregon in its deregulation law, is called the "portfolio model," or "dereg lite." In many ways the portfolio model is a compromise between a regulated monopoly system and a fully deregulated direct access model. While small customers continue to buy electrical energy through their utility, they have a short menu of options to choose from (such as market-based, green, and locallyproduced power). Supply can still be deregulated, but the utility goes to market on behalf of its customers, which remain aggregated. Because it has such a large load, it can negotiate better prices. Customers are spared the confusion of sorting out multiple offers from multiple companies and do not have to wonder whether their supplier is a reputable firm. Instead, consumers delegate these tasks to the utility, with its considerable expertise. This model recognizes that while the market may well be mature enough to support direct access for large customers, benefits may be hard to find for smaller customers. Here again, a legislative solution is not required, only a willing utility. In Washington, which has no deregulation law, this model has been in place at the Grant County Public Utility District since the fall of 1997. Clark Public Utilities, another public utility district, has a pilot program with similar elements. 173

¹⁷² Drummond, "The Small Customer Buying Cooperative," 33.

¹⁷³ Guest editorial by Steve Johnson, "Electric Power: Will competition cut rates?" Seattle Post-Intelligencer, 31 May 1998.

But Montana would decide to try a somewhat different solution, to "do what we here in the rural West have always done when confronted with our own lack of market power . . . form a co-op." 174 For some time now, Montana's cooperatives have described themselves as the "original aggregators." While the analogy is somewhat less than perfect, the co-ops have performed a similar function -- collectively serving customers who otherwise would have difficulty finding an electricity provider. 175 While co-ops are nothing new, applying the model to the former customers of an investor-owned utility is.

Out of this notion grew a proposal for a "Small Customer Buying Cooperative" (SCBC) to act as the default provider for customers who either have no choice (or no good choices) or who "choose not to choose." At the end of the transition period, these customers would automatically be transferred to the SCBC. Like any other co-op, the SCBC would be a non-profit, cost-based, consumer-owned entity. 176 Decision-making would be highly democratic, conducted by a board of directors elected by the co-op's customer-members. Like other "public power" entities, the co-op would have access to low-cost capital. 177

But this cooperative would differ from others in several important respects. First, it would be comprised only of small customers (remember that the state's largest energy user -- the Columbia Falls Aluminum Company -- is a member of the Flathead Electric Cooperative). Second, it would deal only in the energy commodity business, leaving transmission and distribution to MPC's regulated poles and wires business. Third, it would be predominantly comprised of city-dwellers.

Discussions concerning the co-op grew out of comments given by NRDC's Ralph Cavanagh at the governor's April 16 town meeting (discussed earlier). According to

¹⁷⁴ Guest editorial by Ken Toole, "Co-op may be best chance for consumers," <u>IR</u>, 13 January 1999. The cooperative form has been successful in supplying a wide range of low-cost products and services from electricity, gas, propane, and telephone service to banking, insurance, housing, food, and agricultural services. Drummond, "The Small Customer Buying Cooperative," 13-14.

¹⁷⁵ Guest opinion by Gary Wiens, "Joining forces to buy electricity not exactly a new idea," GFT, 30 April 1998.

¹⁷⁶ AP, "Co-op idea sees power in numbers," Missoulian, 13 October 1998.

¹⁷⁷ Drummond, "The Small Customer Buying Cooperative," 20.

Cavanagh, "what we're going to get, if we do this right, is the most potent residential buying enterprise in the nation." 178 While similar co-ops have formed in California and New York, it was thought that a co-op consisting of MPC's former customers would be the largest in the nation. 179 But for some time there had been growing support for the notion that Montana's small customers were going to have to work together if they wanted to share in the benefits of deregulation. In its own transition plan filed just two months after SB 390 became law, MPC testified, "[A]s customer choice is implemented, aggregation of smaller customers is likely to be needed to produce increased buying power to achieve sufficient electricity supply savings." 180 In the months following, various proposals for joining customers together were circulated, by both the private sector (marketers and brokers) and the public sector (counties and cities). Such efforts, including the specific proposal for the SCBC, were well received by most observers. 181 In April 1998, a Great Falls Tribune editorial found it "clear that some sort of aggregation of demand stands the best chance of helping consumers," and in October, the Tribune wrote that the SCBC would be a "natural fit" for the "great big sparsely populated area" known as Montana. 182

An informal committee developed to explore the idea further. Involved in the talks were NRDC, MEIC, the Human Resource Development Council, the Northwest Power Planning Council, DEQ, BPA, and others. ¹⁸³ The co-ops were intrigued as well. Shortly after the governor's meeting, a MECA official wrote,

¹⁷⁸ Mike Dennison, "Is buyers' co-op the answer for small consumers? Open market leaves many questions," GFT, 7 June 1999.

¹⁷⁹ Personal conversation with Bill Drummond, Western Montana G & T, September 1999.

¹⁸⁰ P. R. Corcoran, "Docket No. D97.7.90: Electric Restructuring Transition Plan Filing," 1 July 1997, p. PRC 22.

¹⁸¹ GFT editorial, "Giving consumers collective clout," 21 November 1997. <u>BG</u> editorial, "Montanans must band together to buy electrical power," <u>BG</u>, 21 April 1998.

^{182 &}lt;u>GFT</u> editorial, "Montanans will need buying power to buy power," <u>GFT</u>, 22 April 1998. <u>GFT</u> editorial, "Statewide electric co-op for city folks a good idea," <u>GFT</u>, 15 October 1998. <u>GFT</u> editorial, "Small power users must be protected in deregulation," <u>GFT</u>, 8 June 1999.

¹⁸³ Charles S. Johnson, "Groups consider forming big co-op to buy power for small customers," IR, 10 May 1998.

Montana's electric cooperatives would be more than happy to work with any city in helping form a cooperative to serve their residents' electricity needs. And if there exist any regulatory or statutory impediments to forming electric power purchasing co-ops within cities, then let's get rid of them.

Nothing should stand in the way of letting Montana's residential and small commercial customers benefit from the same opportunities already enjoyed by their rural Montana counterparts. 184

While these comments pertain more to the formation of municipal utility cooperatives than "one big buying co-op," they clearly reveal excitement about the possibility of expanding the cooperative movement into urban areas.

MPC and the administration also showed tentative interest in the SCBC. Both felt that while it may have an important role to play as a temporary safety net, the SCBC should be constrained in a number of ways to prevent it from interfering with an emerging market. If the SCBC were too attractive, they reasoned, it would become a "supercompetitor," killing competition in its cradle. Public interest advocates resented the idea that MPC had pushed its deregulation plan on Montana and that it would then try to hem in subsequent citizen efforts to protect themselves. Some further resented having to figure out a way to "reaggregate" what, prior to deregulation, had always been aggregated. MEIC's Ken Toole responded as follows:

In theory they are right. If no one shows up to sell us power each of us can just offer to pay more and more. Eventually, when the price is high enough, suppliers will decide it's profitable to serve small customers in Montana. Whoopee!! That's competition! 186

In other words, competition is an implausible prospect to begin with, and consumers can either be subject to an unregulated monopoly or part of a publicly-owned, democratic body working on their behalf. As a non-profit, customer-owned and directed entity, the SCBC posed no threat of monopolist behavior. Supporters therefore had no problem with its having 100% market share. Furthermore, if the SCBC could come into existence with few

¹⁸⁴ Guest opinion by Gary Wiens, "Joining forces to buy electricity not exactly a new idea," GFT, 30 April 1998.

¹⁸⁵ AP, "Co-op idea sees power in numbers," <u>Missoulian</u>, 13 October 1998. Mike Dennison, "Is buyers' co-op the answer for small consumers? Open market leaves many questions," <u>GFT</u>, 7 June 1999.

¹⁸⁶ Guest editorial by Ken Toole, "Co-op may be best chance for consumers," <u>IR</u>, 13 January 1999.

external constraints, it could have more members, a larger load, and greater opportunities for achieving energy supply cost savings. According to Bill Drummond, author of a feasibility study for the SCBC:

Economies of scale refer to the reduction in average costs or increase in average benefits experienced by all existing SCBC customers when a new customer is added to the system. The higher the fixed costs associated with the SCBC, the greater the economies of scale. Although minimizing the SCBC's fixed costs appears prudent, some fixed costs are inevitable. . . . The more SCBC customers and kilowatt-hours over which these fixed costs can be spread, the lower the average cost. 187

For a time it looked as if the company itself would have a strong economic stake in the SCBC. Under SB 390, the utility has the responsibility to continue providing electricity supply service for the duration of the transition period. And in doing so, it must meet the terms of the rate moratorium. Had the sale of its generating assets not included a buyback provision, the company could have been forced to buy power on the market more expensive than the rate moratorium, potentially causing millions of dollars of losses for the company. 188

The 1999 Legislature

These discussions and efforts culminated in the passage of SB 406, the "Electricity Buying Cooperative Act," during the 1999 legislature. The bill authorized the creation of buying cooperatives for the residential and small commercial customers of investor-owned distribution utilities (with average monthly power demands of less than 100 kilowatts). The introduction to the bill stated that in addition to the consumer benefits of greater economies of scale and enhanced administrative efficiency, buying cooperatives could also provide new opportunities to power marketers which would help facilitate wholesale competition. Finally, it was hoped that such cooperatives would qualify as BPA preference customers (for the portions of their loads that lie west of the Continental Divide -- about 1/3 of MPC's load) with superior access to Columbia River power at the lowest possible rate. ¹⁸⁹

¹⁸⁷ Drummond, "The Small Customer Buying Cooperative," 21.

¹⁸⁸ Guest editorial by Tom Power, "Deregulation leads to pack of unintended consequences," GFT, 14 June 1998.

¹⁸⁹ Drummond, "The Small Customer Buying Cooperative," 38.

The final buying cooperative legislation was something of a compromise between the two camps described above. 190 On the one hand, public interest advocates were pleased that a buying cooperative:

- could exist in perpetuity, ¹⁹¹
- could sell excess power on the wholesale market in order to balance loads, 192
- would be exempt from excise and income taxes, 193
- could offer alternate electricity supply products such as green power, and 194
- would be open to "those customers not being served by a competitive supplier." 195

This last provision is important, in that it leaves the door open to those who "choose not to choose" as well as those who have no choice. This would allow the co-op to offer benefits to a much larger base of customers, and would enable it to access more affordable electricity because of its larger load.

On the other hand, the buying cooperative was prohibited from:

- offering more than two choices, a standard product and a green product,
- enrolling customers in a contractual term of service,
- offering discounts below its PSC-approved rates, 196

¹⁹⁰ The "Electricity Buying Cooperative Act" is found at MCA 35-19-101.

¹⁹¹ The law does direct the TAC to review the "need for continued default supplier service" and make recommendations to the 2001 legislature. Unlike with SB 390's USB provisions, however, there is no automatic sunset. If competitive markets do indeed develop, default supplier status (and PSC regulation) could be lifted from the co-op and it could compete with other suppliers.

¹⁹² MCA 35-19-201.

¹⁹³ And because the co-op cannot own generation or transmission facilities, it would have little taxable property. MCA 35-19-108.

¹⁹⁴ MCA 69-8-416. As with Oregon's portfolio model, offering a number of products would give customers at least some "choice." This would expand the SCBC's appeal and broaden its customer base. With a greater number and diversity of customers, the SCBC would be a stronger entity -- some would argue too strong. But supporters of the SCBC worried about its ability to survive if composed entirely of customers with little means, small loads, and poor credit histories. Drummond, "The Small Customer Buying Cooperative," 11.

¹⁹⁵ MCA 69-8-201.

¹⁹⁶ MCA 69-8-416.

- selling anything other than electrical energy including DSM services, ¹⁹⁷
- competing for or serving customers that reside out of state, and
- owning any generation or distribution facilities. 198

Once incorporated, an electricity buying cooperative would still have to apply for and receive a default supplier license and be designated as such by the PSC. In its role as default supplier, the co-op would be subject to regulation by the commission. In this way, "the SCBC would be a hybrid between the existing unregulated electric cooperatives and a fully regulated IOU." 199 Furthermore, the commission can revoke the default status which would revert back to the distribution utility unless reassigned to another entity. The buying cooperative also has an obligation to serve all eligible customers who wish to belong until the commission declares the existence of workable competition for small customers. 200 While the law directed the commission to issue default supplier licensing rules by December 1, 1999, that process is on hold pending the outcome of MPC's distribution system sale. In August 1999, the Montana Electricity Buying Cooperative (MEBC) filed its papers of incorporation, desiring to become the default provider for MPC's service territory. 201

BPA's "Standards of Service" Rules

One of the first potential snags encountered by would-be buying co-ops following the passage of SB 406 was the hoped-for access to BPA power. Shortly after the session, the bill's primary sponsor and Senate Minority Leader Steve Doherty (D-Great Falls) described BPA power as "an incredibly valuable resource, because it's cheap and

¹⁹⁷ The co-op would be allowed to form a subsidiary to offer such services.

¹⁹⁸ MCA 35-19-202. This provision was meant to allay MPC's fears that the co-op could someday pose a threat to its distribution business. But it also gives the co-op greater flexibility in obtaining power from the market and finding the best deals. Besides minimizing fixed costs, being free of power plant ownership also lowers the risk of acquiring stranded assets of its own. Drummond, "The Small Customer Buying Cooperative," 16.

¹⁹⁹ Drummond, "The Small Customer Buying Cooperative," 42.

²⁰⁰ MCA 69-8-403.

²⁰¹ AP, "Power co-op incorporates," IR, 28 August 1999.

reliable."²⁰² Unfortunately, it also happened to be in fierce demand. According to Gail Kuntz, BPA's Montana liaison, "virtually every type of BPA customer is looking for more benefits than the federal system can provide from its limited supply."²⁰³ As it turns out, many of the potential competitors are other Montanans. In addition to existing co-ops, some local governments are interested in obtaining power and potentially serving as default suppliers in their own jurisdictions (as evidenced by Helena's new municipal electric utility).²⁰⁴ The 1997 legislature passed another bill, HB 211, allowing them to do so if their customers belong to an IOU and if the PSC grants its approval.²⁰⁵ Despite some rivalry between proposals for a single default supplier (the buying co-op idea) and multiple default suppliers (as forwarded by the Montana League of Cities and Towns), the legislature left the door open to both approaches.²⁰⁶

MEIC's Graden Oehlerich commented, "There's a limited pool of cheap preference power, and those that have it are protective of their right to it. Right now, we have an idea and a fledgling organization. . . . BPA should serve a co-op like this. But will it come from other publics' part of the pie? Some have had a hard time with this." 207 Kuntz predicted that the new co-op would likely get significantly less than the 110 average Megawatts it

²⁰² Mike Dennison, "MPC, others trying to reserve cheap BPA power for small customers," <u>GFT</u>, 7 June 1998. With competition and the entrance of unknown power marketers, reliability will become increasingly valued. In a climate open to "fly-by-night" operations, BPA will appear extremely attractive. Rob Chaney, "Missoula starts process to be 'default provider' of electricity," <u>Missoulian</u>, 11 June 1999.

²⁰³ Guest editorial by Gail Kuntz, "BPA will mitigate, but can't prevent rate increases for MPC customers," <u>Missoulian</u>, 1 August 1999.

²⁰⁴ <u>GFT</u> editorial, "Giving consumers collective clout," 21 November 1997. <u>BG</u> editorial, "Montanans must band together to buy electrical power," <u>BG</u>, 21 April 1998.

²⁰⁵ MCA 69-8-203.

²⁰⁶ Mike Dennison, "Legislation offers MPC's minor-league customers electricity alternatives," GFT, 18 February 1999.

²⁰⁷ Angela Becker-Dippman, "Efforts Underway to Form Montana Small Customer Buying Co-op," <u>Clearing Up</u> (Energy NewsData Corporation), No. 886, 12 July 1999, 8.

desired.²⁰⁸ But Montanans pointed out that the amount requested was only about 1% of BPA's production. Surely, they argued, this was a reasonable request from a state that produces more BPA power than it consumes.²⁰⁹

Beyond simple competition, buying co-ops (and municipals) face another important obstacle to accessing this power. Endeavoring to prevent a flood of marketers qualifying for preference power, BPA issued rules which require power line ownership as a condition for access. Unfortunately, these rules eliminate legitimate public power entities as well. MPC's vice-president for energy services wrote in an guest editorial, "We believe that providing preference power to a PSC-selected default supplier -- whether a buyers' co-operative or a municipality, whether it owns distribution wires or not -- is entirely consistent with the letter and the spirit of the laws governing BPA.... BPA has chosen to use its guidelines, which are in conflict with its laws, to control the allocation of a limited supply of power." Although MPC had no direct interest, the company said it was willing to fight for that power (by urging BPA to change its rules) as a show of support for its distribution system customers.²¹⁰ In the past, the company had been antagonistic toward some aggregation efforts, making such a stance a welcome change.²¹¹ Governor Racicot also supported the co-op's attempt to secure BPA preference power.²¹²

Plenty of details remain in the effort to create such a co-op in Montana. Central to the strategy is enlisting the unequivocal support of other Montana co-ops, which remain somewhat ambivalent. Some, for example, would prefer existing co-ops to actively sign up such customers before the end of the transition period in order to encourage a competitive

²⁰⁸ MPC's 231,000 residential customers have a total energy load of 248 average Megawatts (aMW). Additionally, 33,000 small commercial customers (with loads under 25 kilowatts) add another 30 aMW. Drummond, "The Small Customer Buying Cooperative," 9. Guest editorial by Gail Kuntz, "BPA will mitigate, but can't prevent rate increases for MPC customers," Missoulian, 1 August 1999.

²⁰⁹ Mike Dennison, "Is buyers' co-op the answer for small consumers? Open market leaves many questions," <u>GFT</u>, 7 June 1999.

²¹⁰ Guest editorial by Jack Haffey, "Deregulation not to blame in BPA exclusion of coop," <u>GFT</u>, 8 August 1999.

²¹¹ GFT editorial, "Giving consumers collective clout," GFT, 21 November 1997.

²¹² Johnson, Charles S., "Power to Montana: New co-op hopes to supply electricity to state after MPC bows out in 2002," <u>IR</u>, 24 October 1999.

market and reduce the need for a default supplier.²¹³ But proponents of the buying cooperative have a powerful argument: "Just as cooperatives were established in the 1930s to bring power to areas investor-owned utilities refused to serve, buying cooperatives are a mechanism to provide service at cost to those abandoned by their current IOU supplier. The economic and political strength of having virtually every residential and small commercial electric consumer in Montana served by a cooperative would be remarkable."²¹⁴

Things, however, could begin to move rapidly, especially if MPC were to exit the default supplier business prior to the end of the transition period. The company (or its successor) could give the co-op a tremendous boost by transferring its customers and power supply contracts (including, presumably, the PP&L power buyback) prior to 2002. The earlier the co-op is certain of its load, the easier it will be to purchase power. If this were to happen, the co-op would presumably need to meet the rate moratorium.

The 56th Montana Legislative Assembly - Other Bills

HB 337 -- Universal System Benefits

In addition to the Electricity Buying Cooperative Act," the 1999 legislature passed several other bills pertaining to electric utility deregulation. HB 337 made changes to SB 390's universal system benefits provisions and added sections specifying the administration of those funds. One important change allowed the funding amount of 2.4% to track annual utility revenues. SB 390 had established and frozen the funding level at 2.4% of 1995 revenues. Environmentalists were pleased that as utility profits rise, USB funds will rise proportionally. The drawback, of course, is that if utility profits decline, so will USB funds. But as RNP's Rachel Shimshak notes, this would probably be a sign that people are conserving on their own, so either way you have a win-win situation. The bill also

²¹³ Mike Dennison, "State electricity co-op directors want to study new rural options," GFT, 16 July 1999.

²¹⁴ Personal conversation with Bill Drummond, Western Montana G & T, 23 August 2000.

²¹⁵ Personal telephone conversation with Rachel Shimshak, RNP, 7 September 1999. 219

established two universal system benefits funds that would be paid into when large customers and utilities fail to spend their full obligation internally. The bill designated the state Department of Public Health and Human Services as the fund administrator for low-income bill assistance moneys, and the Department of Environmental Quality as the responsible party for the other fund (which would be used for all other public purposes). Challenges to credits claimed by utilities and large customers would be reviewed by the Department of Revenue, which has the power to disallow them. Credits, however, are presumed valid until challenged and do not require preapproval. 217

SB 409 -- Net Metering

"Renewables are the means to get us off of fossil fuels and net metering gives us the incentive . . . the power is clean, dispersed, and dependable." Such was the testimony of Mary Hamilton, owner of the Missoula retail store "Solar Plexus," in the hearings on SB 409, the bill which became Montana's net metering law in 1999. As described in Chapter 5, net metering is an incentive for grid-connected homeowners and businesses to become "self-generators" of renewable power. Any excess power that a customer produces (using solar, wind, or small hydro energy sources) flows back to the grid, offsetting the amount of energy purchased from the utility. Montana's law, sponsored by Senator Jon Ellingson (D-Missoula), limits the generating capacity to 50 kilowatts. At the end of the billing period (usually a month), if the customer has put more power onto the grid than he or she has taken from it, he or she will receive a credit on the next bill which will offset new usage. At the end of each calendar year, all unused credits are forfeited. For states like Montana, the ability to carry credits for a full year is valuable in that it allows customers to offset their high winter energy bills with the excess they produce in summer months. As some have described it, net metering gives customers the opportunity to use the electrical grid as a battery -- "storing" the power during months of plenty, and then drawing on it during times of scarcity. Placing additional power on the grid during off-peak summer months

²¹⁶ MCA 69-8-412.

²¹⁷ MCA 69-8-414.

may not be the ideal situation from the utility's perspective, but the effect will likely be a small one for some time to come.²¹⁸

While net metering can eliminate a customer's variable energy charge, he or she is still responsible for the fixed monthly customer charge (see Chapter 5 for a discussion of these terms). It is estimated that net metering can save up to \$15 per month for a residential solar generator, and \$70 per month for a wind turbine on a farm. Montana's law is also attractive because of its simplicity. The bill allows for continued use of the standard kilowatt-hour meters already installed in the homes and businesses of most small customers. Such meters are already reversible: they already accurately measure both positive and negative energy flows by spinning forward or backward respectively. The bill's fiscal note attested that there would be no significant financial impacts for state or local government. SB 409 was codified as part of the deregulation law and took effect on July 1, 1999.

HB 174 -- Revise Taxation of Utilities

The 1999 legislature also passed a bill addressing what the <u>Great Falls Tribune</u> called "Electricity deregulation's unintended consequence number 174 -- having to rewrite the way the state taxes electric companies." 220 In particular, the bill changed the tax classification of electrical generating properties from the 12% rate to 6%. The bill was supported by PP&L Global which argued that the 12% rate, the highest in Montana, would make it difficult for them to compete with out-of-state generators that pay lower taxes. Together, centrally assessed electric, gas, and telephone utilities typically produce about 25% of the state's property tax revenue. 221 In the past, under regulation, utilities were able

²¹⁸ And by moving into a regional power market, through deregulation, the system is shifting from a winter-peaking one to a summer-peaking one, because of the massive California air-conditioning load.

²¹⁹ AP, "Lawmaker proposes credit for those generating power at their own home," <u>IR</u>, 11 February 1998.

^{220 &}lt;u>GFT</u> editorial, "PP&L treated fairly in bill; now it's Montanans' turn," <u>GFT</u>, 2 April 1999.

^{221 &}lt;u>Tribune</u> Capitol Bureau, "Utility industry next to tackle Legislature for tax break," <u>GFT</u>, 6 December 1998.

to pass that tax through to the consumer. But with deregulation, consumers could simply opt to buy power from an out-of-state company not taxed as heavily.

Legislative action was needed because of confusion over whether or not the reclassification would happen automatically with the sale (that is, whether the properties would automatically cease to be considered centrally assessed). And, of course, legislation was also needed to help replace lost funds. As discussed earlier in this chapter (under "The Sale Announcement"), property tax reclassification could deliver significant blows to certain Montana counties. But because PP&L purchased MPC's properties for 1.6 times book value, the actual tax loss would have been more like 20% than 50%, because the properties would have a higher valuation.²²² In its final form, after a long, complicated, and contentious legislative battle, HB 174 included a wholesale electric transactions (WET) tax that was expected to make up about \$3.5 million of the \$5 million to \$6 million annual shortfall. 223 Finally, a one-time capital gains tax on MPC's income from the sale could be as high as \$30 million. MPC officials warn, however, that they are looking at ways to reduce or eliminate their capital gains tax liability. The WET tax was expected to affect the average residential consumer by only a few dollars per year. Exempt from the WET are coop customers and the ASiMI plant (which would have paid approximately \$88,000 per year).224

Conclusion

In many ways, the course of deregulation has been set in Montana. Efforts to reconsider the dramatic changes enacted by SB 390 have failed to accomplish their primary goal in stopping or slowing the move to deregulate. There is, however, a considerably higher awareness of the issues surrounding deregulation. Politically, the issue has moved to center stage in Montana, figuring prominently in primary and general election campaigns

222 "PP&L Montana: Treat us like any other business," GFT, 2 April 1999.

Mike Dennison, "Electricity consumers get a break: House committee endorses compromise utility-tax revision," <u>GFT</u>, 27 March 1999. See also Mike Dennison, "Buyer of MPC plants gives dinner for panel nearing key tax vote," <u>GFT</u>, 10 March 1999, and <u>IR</u> editorial, "Lobbying strays too far," <u>IR</u>, 11 March 1999.

²²⁴ Mike Dennison, "Electricity consumers get a break: House committee endorses compromise utility-tax revision," <u>GFT</u>, 27 March 1999.

and providing a nucleus around which a broad public-interest alliance is coalescing. Senior citizens, low-income citizens, environmentalists, consumer advocates, labor, farmers, small business, and women's groups have all raised their voices. While the 1999 legislature ironed out some of deregulation's wrinkles, answering many of the questions that had been lingering since 1997, much work remains before small customers and the environment will realize benefits. Important decisions remain to be made: the PSC is yet to issue its default supplier rules, environmental disclosure rules, and final ruling on the Tier 2 transition plan issues. While citizen activists can play an important role in such forums, there is little they can do to influence the ultimate level of competition afforded small customers. Only time will reveal the eventual landscape of power providers and products available to ordinary Montanans.

²²⁵ Montana Food Distributors Association, "Should we unplug S.B. 390?" The Montana Food Distributor, May 1998, 9.

CHAPTER 7 CONCLUSION

From the beginning, the process of restructuring Montana's electric utility industry has been complex, chaotic, and controversial. Unexpected developments have demonstrated time and again that predicting the course of deregulation under the Big Sky is a highly speculative venture. And yet many of the basic issues originally identified by opponents to SB 390 remain of critical concern. Certainly the importance of the process, grounded in both the magnitude of the changes being implemented and the economic and environmental significance of the industry itself, cannot be disputed. Transforming the historic system of regulated monopoly electric utilities into a competitive energy supply market is a daunting prospect. Montana's electricity customers and the state's natural and political landscapes are bound to be affected noticeably.

SB 390 was passed by the Montana legislature in 1997 amid substantial opposition from consumer, environmental, low-income, senior citizen, and other public interest groups. The intent, ostensibly, was to provide all electricity customers freedom to choose the electricity suppliers and products that best meet their needs. Increased efficiencies and competitive pressures would provide savings to consumers and spur innovation. The bill was also promoted as a way of protecting small customers from inheriting the large industrial customers' share of the system's unpaid (stranded) fixed costs. But opponents argued that these benefits depended largely on the development of viable markets for Montana's small residential and commercial customers, a prospect which they saw as unlikely given the state's sparse population and rural character. Montanans already enjoyed low-cost electricity, and there was little evidence to support the contention that consumers were "clamoring for choice." Instead, opponents charged that SB 390 had more to do with the stranded cost packages utilities stood to profit from, and access to low cost power for

large industrial customers. Ironically, three years later, even those goals have gone largely unfulfilled. Just months after the passage of the deregulation bill, it became clear that MPC likely would not receive the kind of stranded cost package (nor the tax savings) it wanted, a development which may have played a role in precipitating the sale of MPC's generation assets. And by 2000, it was clear that even the large industrial customers would universally benefit from the competitive markets they had so enthusiastically pursued.

The Sale of Montana Power Company

In general, little about deregulation has unfolded according to plan. In addition to the absence of markets offering affordable prices and innovative services, major unforeseen developments have slowed things considerably. Montana Power Company shocked the state with its decisions to sell its generating facilities (December 1997), to abandon power marketing (August 1998), and to sell its distribution system and other energy holdings (March 2000).² The power plant sale was a major turning point, in that it vividly illustrated many of the implications of deregulation. The level of awareness and concern increased rapidly as each new potential impact came to light. Deregulation was no longer some theoretical, arcane concept, but a major policy shift with real world consequences. Property taxes, employment, water rights, recreation, and the future of Montana's low cost power were all discussed. The subsequent sale of the transmission and distribution business rekindled some of the same questions: How would the proceeds of the sale (which includes properties of \$1 billion book value) be divided between shareholders and ratepayers?³

¹ Unlike for other customers, it appeared that large industrials would indeed recognize price savings because of real competition for their attractive loads. Lower cost power is available in the other Northwest states, and large customers were thought to be in a position to command it.

² In a related development, MPC sold its non-regulated oil and natural gas properties to PanCanadian Petroleum Limited of Calgary in late August 2000. Mike Dennison, "MPC to sell properties to Canada oil giant: Petroleum and gas wells going for \$475 million," GFT, 29 August 2000.

³ MPC's Bob Gannon argued that at the completion of the sale, there will be "no customers of Montana Power left to distribute any proceeds to." Charles S. Johnson, "State says customers should share in profits," <u>IR</u>, 30 March 2000. <u>IR</u> editorial, "MPC's dose of Catch 22," <u>IR</u>, 31 March 2000. <u>IR</u> editorial page "Question of the Week" responses, "MPC profits: No middle ground," <u>IR</u>, 10 April 2000. Jan Falstad, "MPC chief: Money from sale should go to investors," <u>IR</u>, 11 April 2000.

What would happen to the employment and tax base of Butte, Montana, a community forever recovering from its historic boom-and-bust mining economy?⁴ What sort of commitment to Montana would the new owners have?⁵ What sort of jurisdiction would the PSC have to oversee the sale?⁶ Consumer advocates, including Attorney General Joe Mazurek, were concerned that MPC would sell its assets above book, keep all the proceeds, and leave Montana electric customers to face rate increases to cover the new owner's greater-than-book investment.⁷

The <u>Great Falls Tribune</u> gave the company the following epitaph:

Well, the days of "what's good for Montana Power is good for Montana" are over -- if they ever existed. The company built by Montana ratepayers probably won't even exist in a year or two.

When you remove the warm cloak of summer symphony concerts, high school sports telecasts and conservation easements, you are left with a corporate giant that is cashing in its legacy -- and its relationship with its customers -- to chase the telecommunications rainbow.⁸

Summer 2000 Power Market Crisis

Another unforeseen development occurred in the Summer of 2000, when large customers that had gone to market-based rates (with the expectation of saving money) saw

⁴ Karl Puckett, "Employees uncertain; MPC promises fairness," <u>GFT</u>, 29 March 2000. Barbara Laboe, "Butte jobs hinge on MPC deal: Butte lost 30% of its job base in the 80's mining crash; could the city handle another 844 job losses if MPC moves out?" <u>IR</u>, 3 April 2000.

⁵ IR State Bureau, "Baucus to meet with MPC chair," IR, 31 March 2000.

on many other ways, the distribution sale mirrored the generation sale, with a similar list of potential bidders, a call for consideration by the legislature in a special session, etc. Charles S. Johnson, "Ready for a fight: PSC commissioners say they have some jurisdiction over MPC sale; power company says no way," IR, 5 April 2000. Diane Cochrane, "Butte to bid on MPC," IR, 8 April 2000. Mike Dennison, "Is consumer protected in MPC sale?" GFT, 23 April 2000. Mike Dennison, "PSC wants voice on MPC sale at special session," GFT, 25 April 2000. Roberta Forsell Stauffer, "Legislators call for adding MPC to session," IR, 26 April 2000. Charles S. Johnson, "PSC says it has say in MPC sale," IR, 28 April 2000. Mike Dennison, "PSC: Law change needed to monitor MPC sale," GFT, 28 April 2000. Mike Dennison, "State's lack of control over MPC sale rare: All other states in region monitor utility property deals," GFT, 2 May 2000. Charles S. Johnson, "Officials: Montana Power sale may wind up in court," IR, 21 May 2000.

⁷ <u>IR</u> State Bureau, "Politicians: Use session to talk about Montana power sale issues," <u>IR</u>, 5 April 2000. <u>BG</u> editorial, "Lots at stake with MPC move," <u>BG</u>, 3 April 2000.

⁸ GFT editorial, "Can we head off more unintended consequences?" GFT, 7 May 2000.

prices suddenly double, triple, or go even higher (20-fold in the case of Montana Resources, the Butte mining company that was forced to close its doors and lay off 322 workers). Record wholesale prices in excess of \$1000 a Megawatt-hour were paid in the Pacific Northwest (up from the usual \$20). The manager for a Great Falls hospital that took a serious hit in its electricity bills considered it, "one of those cases where it truly is, be careful what you wish for." 11

Proponents of deregulation maintained that current high prices were part of a normal and temporary fluctuation, and that in the end customers would save money. The price volatility, according to Governor Racicot, could quite possibly be just a "shaking out" of the new market. MPC's Pat Corcoran went further, perceiving the "vibrant activity in the electricity market" as evidence that the new system was working. 12 Corcoran argued that such prices would encourage new players to get involved in power production, thereby

⁹ Mike Dennison, "Regulation still means low rates for most: Customers in Idaho, Washington paying less," <u>GFT</u>, 10 July 2000. AP, "Butte mining operation shuts down: Company cites rising electricity price," <u>IR</u>, 30 June 2000. John Stucke, "Last worker walks out of Butte copper mine," <u>IR</u>, 11 July 2000. John Stucke, "Power surges: Industry feels early pains of electric deregulation," <u>Missoulian</u>, 9 July 2000. The closure of Montana Resources also meant that water treatment activities were halted, doubling the rate at which contaminated water enters the Berkeley Pit. AP, "More contaminated water flows into pit with closure of Montana Resources," IR, 15 July 2000.

¹⁰ AP, "Utilities scrambling for power: Last week's power shortage that hindered the Northwest calling attention to region's potential for major blackout," <u>IR</u>, 3 July 2000.

¹¹ Mike Dennison, "Energy costs hit hard, for some: Gamble sours for those who bet early on deregulation," GFT, 9 July 2000. It should be noted, however, that according to Don Quander of the Large Customer Group, "Not a single company thinks the solution is restructuring deregulation." Deregulation proponents argue that the high prices are not permanent and point to other contributing factors such as hot weather; drought; power plants temporarily out of commission; growing demand from increased population, use of electronic devices, and regional power exchanges; and unscrupulous power marketers gaming the system. Strategies that have been used to insulate businesses from such adverse effects include long-term power contracts, and "hedging" the risks by putting together power portfolios of variable risk. John Stucke, "Power surges: Industry feels early pains of electric deregulation," Missoulian, 9 July 2000. Mike Dennison, "State's industries bemoan jump in power prices: Racicot hopes market will shake out," GFT, 6 July 2000.

¹² Mike Dennison, "State's industries bemoan jump in power prices: Racicot hopes market will shake out," <u>GFT</u>, 6 July 2000. John Stucke, "Power surges: Industry feels early pains of electric deregulation," <u>Missoulian</u>, 9 July 2000.

increasing competition and benefiting consumers.¹³ Ron Perry of Commercial Energy in Cut Bank echoed this sentiment in an opinion editorial: "All deregulation does is provide the proper price signal to the marketplace that there is a severe need for building additional generation capacity." He went on to suggest that Montana should "offer financial or legislative support to develop additional generating capacity so that we could mitigate some of these price fluctuations."¹⁴

Apologists thus attempted to steer attention away from Montana's deregulation law and its role in exposing customers to the volatility of regional markets. Instead they criticized environmentalists for having obstructed power plant development. An even more unlikely scapegoat turned out to be a fish -- the Columbia River salmon which use water that might otherwise have boosted BPA's power production. Jim Morin of the Great Falls-based Energy West Resources asked, "Are people being put out of work because a bunch of fish aren't coming down the river? If BPA could ramp back up (its power production), this (shortage) could be diminished significantly." BPA was also criticized for selling much-needed power to California, partly as a result of the regional exchange discussed at the end of Chapter 4, and partly because of increased demand placed by Californians as a result of their experiment with deregulation.

Naturally, environmentalists had a different view of the situation. That the Pacific Northwest has not built major new power plants in the past 10 years despite population growth and increasing energy demand was seen by them as a tribute to the success of conservation efforts. ¹⁶ They argued that additional "conservation power plants" can and should be built in the region and that doing so is a preferable strategy to rampant fossil fuel plant development. Next in line in priority (as recognized by the 1980 Pacific Northwest

¹³ Mike Dennison, "MPC pushed deregulation -- So, what does it say now?" GFT, 9 July 2000.

¹⁴ Guest editorial by Ronald L. Perry, president of Commercial Energy in Cut Bank, "Deregulation not always easy, but it will prove to be right," <u>GFT</u>, 9 July 2000.

¹⁵ Mike Dennison, "As regional prices spike, some point fingers at BPA," GFT, 10 July 2000.

¹⁶ AP, "Utilities scrambling for power," <u>IR</u>, 3 July 2000. Nationally, in recent years electricity demand has been growing about 2% to 3% annually. AP, "Competition-driven industry could make electrical power unreliable, observers worry," <u>GFT</u>, 6 July 2000.

Power Planning and Conservation Act) should be new renewable energy projects. According to one article, the alternatives are not all that attractive, environmentally or economically:

... private companies have been slow to build new power plants because they can't be sure market prices will justify the costs. New hydropower projects are out because of environmental impact. Nuclear plants are too expensive and risky.

The technology of choice is the "combustion turbine," an oversized jet engine fueled by natural gas that generates electricity instead of thrust. But there are only two turbine manufacturers and both have more orders than they can fill right away. And environmentalists complain that the turbines burn fossil fuel and emit carbon dioxide. . . . As many as a dozen gas-fired turbines are planned across the region. Some have been stalled by community opposition, others by fluctuating power prices. ¹⁷

Montana should resist renewed pressure to become the "boiler room of the nation," whereby the state would export its low cost energy resources to the benefit of out-of-state markets and to the profit of out-of-state energy companies while retaining the social and environmental impacts locally.

Impacts on Small Customers and the Environment

Serious questions remain concerning the impact of high wholesale prices on Montana's small customers when the rate freeze expires at the end of the transition period in July 2002.¹⁸ The first half of the rate moratorium expired on June 30, 2000, and MPC did promptly request rate increases -- one for increased costs associated with energy delivery, and one for increasing power-supply costs (which may be allowable under the rate moratorium only because of a rate cut the previous year).¹⁹ The environmental impact of rate increases is mixed, and extends beyond the potential development of new power plants and the potential threat to fish-friendly management practices. On one hand, cost-induced

¹⁷ AP, "Utilities scrambling for power," IR, 3 July 2000.

¹⁸ Mike Dennison, "Fear of high prices prevalent early in power restructuring," <u>GFT</u>, 18 May 2000. Defenders of deregulation remind us that such rate increases would only impact the energy supply portion (about 25% they say) of the bill. For example, a family that pays \$50 a month would pay \$62.50 if rates doubled, not \$100. Opinion editorial by Senator Fred Thomas and Representative Joe Quilici, "TAC leadership answers some questions about deregulation," <u>GFT</u>, 24 August 2000.

¹⁹ Charles S. Johnson, "MPC requests rate hike," <u>IR</u>, 12 August 2000. AP, "MPC submits another rate increase request," <u>GFT</u>, 26 August 2000.

conservation may increase household energy efficiency and increase the cost-effectiveness of conservation and renewable energy as resource options. Yet on the other hand, customers will be less willing and able to fund such programs (although the programs themselves would require less assistance). Other potential impacts abound. At a town meeting on electric deregulation in Butte, irrigators warned that dramatically increased power costs would likely lead them to abandon farming in favor of subdividing their land. In Trident, the Holnam cement plant (which was the second industrial load to sign a competitive electricity supply contract) recently proposed burning tires (to the horror of environmentalists) -- a move which was likely motivated, at least partly, by a desire to reduce its skyrocketing energy costs.

In addition to being exposed to high and volatile market rates, deregulation may affect small customers in more insidious ways. Without workable competition, and without the protections of the PSC, homeowners and small businesses could face uncontrolled rate increases, diminished customer service, compromised environmental programs, and decreased safety and reliability. The summer of 2000 did more than illustrate the risk of price increases, by underscoring reliability as a serious concern. California and the Northeast also faced fairly severe power shortages which prompted Congressional action toward creating a new organization to oversee and ensure the reliability of the nation's power grids (replacing the current system of voluntary compliance). Closer to home, the Northwest Power Planning Council predicted higher-than-normal odds for blackouts in the region over the next four years.

The Future

The story is far from over. In a sense, it has yet to begin. Competition and customer choice remain essentially unavailable for virtually all of Montana's small customers, residential and commercial alike. More than three years after the passage of SB 390, residential and small commercial customers have yet to experience, to any meaningful

²⁰ AP, "Hot spell could pull plug on nation's electricity: Feds worry power industry not keeping up with country's electric needs," <u>IR</u>, 6 July 2000.

²¹ AP, "Utilities scrambling for power: Last week's power shortage that hindered the Northwest calling attention to region's potential for major blackout," IR, 3 July 2000.

extent, the principle benefits they were promised by the architects of deregulation. At the end of October 2000, the PSC web page listed only two alternative electricity suppliers licensed to serve these customers (Energy West Resources and Glacier Energy, Inc.), although apparently Commercial Energy and the City of Missoula have also successfully negotiated the licensing process. At the time of this writing, Energy West was the only entity to have signed any customers. But in another surprise development, that company returned all its small customers to the regulated system with the rationale that it simply could not provide them with affordable power.²² While more than half of MPC's large industrial load (although not necessarily half of the number of large industrial customers) has gone to other suppliers, competition at the wholesale level has not developed as expected either. According to Jim Stromberg of CFAC, "For the entire West Coast, we do not have a competitive (wholesale) market. It's a very thinly traded market with just a couple of big players."²³

As the 2001 legislative session approaches, it appears that issues surrounding Montana's electric utility deregulation law will remain center stage. It is likely that a select committee will form to handle the raft of bills certain to materialize pertaining to the issue. Already, draft requests have been submitted ranging from an all-out repeal to various mechanisms aimed at reclaiming for Montanans some benefit of Montana's native low-cost generation for the residents of the state. It is not unlikely that the legislature will in this or future sessions radically rework the model of how utilities should be structured to best deliver benefits to the vast majority of Montana's electrical customers. Other bills pertaining to related issues are already in the hopper. Multiple draft requests have been made to further loosen permitting requirements of new electrical generating facilities. Environmentalists are concerned that panic-driven development and rampant speculation will again lead us into a cycle of overbuilding with all its attendant inefficiencies. Some observers suggest an attitude of caution, whereby we carefully scrutinize deficits and look for creative and conservative remedies (load shaping, demand side management, etc.) where

²² Mike Dennison, "Company gives deregulated gas customers a break: Energy West puts hundreds back on cost-control system," <u>GFT</u>, 6 October 2000.

²³ Mike Dennison, "Fear of high prices prevalent early in power restructuring," <u>GFT</u>, 18 May 2000.

shortages truly exist.²⁴ Many of the conditions which led to the constricted electricity market in the Summer of 2000 are temporary in nature, and do not necessarily warrant a rush to build new capacity.

With the 2000 elections, Montanans opted to retain Republican control of the governor's office and the legislature. And for the first time in a quarter century, Republicans took control of the Public Service Commission. While the two commissioners who had dissented from the PSC's endorsement of SB 390 in 1997 remain, the other three members are all former legislators who had voted for SB 390.

Nevertheless, progressive energy activists in Montana hope to build upon the successes of the 1999 legislature, and have reason to believe they may do so. Support for deregulation is far more tenuous than four years ago. Conservatives and liberals alike acknowledge that deregulation has not yet produced the kind of benefits originally envisioned, and that in fact it has created a number of unforeseen and undesirable outcomes. At a minimum, the schedule by which small customers are moved into a "competitive" environment will be slowed. The PSC is poised to exercise its power to extend the deadline by which small customers must choose an alternate supplier by two years. The legislature may well make further extensions. Also encouraging is the recent recommendation by the transition advisory committee to extend the universal system benefits program by two years. Furthermore, the PSC appears very close to issuing strong rules requiring environmental disclosure and labeling of power supply products. Finally, the Montana Electricity Buying Cooperative continues to gather momentum in its effort to become the default supplier for MPC's residential and small business customers.

At the close of the millennium, Montana's energy future remains hazy. But what is clear is that advocates for progressive energy policy will continue to play an important role in shaping discussions and moving the debate toward the interests of Montana's citizens and natural environment. The struggle over energy issues remains a defining one for the

²⁴ Such an approach seems especially appropriate in Montana, where we export approximately 40% of the power we generate. Alan Davis, DEQ, "Electricity in Montana -- an Overview," T.A.C. Report, November 1997. Current deficits are a characteristic of regional markets, rather than Montana. Montana is simply participating in those markets to a greater degree as a result of the move toward competitive electricity markets. Personal telephone conversation with Pat Dawson, 24 November 2000.

state, but it is one in which public interest advocates have a solid place, a proven record, and reason for optimism.

APPENDIX A MEIC FACTSHEET

SENATE BILL 390 - ELECTRIC DEREGULATION

Who benefits - Residential customers or industry? (by MEIC)

Some Opponents to SB 390 Some Supporters of SB 390

Montana Senior Citizens Association Montana Power Co.

Montana Public Interest Research Group Montana-Dakota Utilities Co.

Montana People's Action Montana Chamber of Commerce

Montana Low-Income Coalition Montana's Electric Cooperatives

Montana Alliance for Progressive Policy Large Customer Group

Montana Environmental Information Center Montana Wood Products Association

Northern Plains Resource Council Montana Taxpayers Association

Montana Association of Churches Columbia Falls Aluminum Company

Montana Trial Lawyers Association Montana Refining Company

Natural Resources Defense Council Washington Corporation

Montana Women's Lobby ASARCO

Montana Farmers Union Stone Container Corporation

Montana Retail Association Conoco

Montana Audubon Bonneville Power Administration

Montana Chapter of the Sierra Club Washington Water Power

Northwest Conservation Act Coalition Puget Sound Energy

Renewable Northwest Project Portland General Electric

Working for Equality and Economic Liberation D.A. Davidson, Inc.

Although other supporters included the Montana Public Service Commission (3 - 2 vote), the Montana Consumer Council, the Human Resource Development Council Association, Montana Energy Share, and the Montana Department of Environmental Quality, there were no member-based, public-interest groups who supported the legislation.

Montana Power Co.'s Lobbying Resources - 55th Legislative Session

Total contributions to 87 legislative candidates in 1996: \$7,875 (more than any other PAC)

Registered lobbyists: 18 (more than any other non-governmental entity)

Lobbying expenditures: \$132,490 (more than any other entity)

[235]

APPENDIX B

STATE ELECTRICITY PRICES, DEREGULATION STATUS, AND ENVIRONMENTAL POLICIES

(System Benefits Charge, Net Metering, Renewable Portfolio Standard, & Environmental Disclosure)

1995 Price data was found on-line at: http://www.eia.doe.gov/cneaf/electricity/esr/t12.txt

2000 Deregulation status was found on-line at: http://www.eia.doe.gov/cneaf/electricity/chg_str/regmap.html

2000 State Environmental Policies Status found on-line at:
http://www.ucsusa.org/energy/update.statepolicy.html
(note: environmental policies not necessarily enacted as part of dereg law)

50 states + DC Washington	1995	residential	price	(cents/kWh)		eg legis	lation	SBC		RPS	DISCLOSU
				5	•				X		
Idaho				5.3	*				Х		
Oregon				5,5			1999	Х	Х		X
Kentucky -				5.6							
Tennessee				5.9							
Montana				6.1			1997	X	X		-
Wyoming				6.1							
North Dakota				6.2	•				X		
Nebraska				6.4	÷						
West Virginia				6.5			2000				
Alabama				6.7							
Indiana				6.7					X		
Oklahoma				6.8			1997		Х		
Utah				6.9							
Mississippi				7							
Wisconsin				7				Х	X	X.	
Nevada				7.1			1997			X	X
South Dakota				7.1							
Minnesota				7.2				Х	X	X	
Louisiana				7.3							
Missouri				7.3					,		
Colorado				7.4					X		
South Carolina				7.5							
District of Columbia				7.6	-		2000			•	
Texas				7.7			1999		х	X	х
Florida				7.8							
Georgia				7.8							
Virginia				7.8	•		1998		Х		
Kansas				7.9			1.5 3.5	•	*** ** *		
Arkansas				8			1999		-	-	
North Carolina				8.1			1.5.5.5.5				•
lowa				8.2					X	X	
Michigan				8.3	-		2000		.7 *.		
Maryland				8.4			1999		x		X
Ohio				8.6			1999		X		x
New Mexico				8.9			1999		X		X
Arizona				9.1			1998	^	X		^
Delaware				9.1	•		1999		X		
Pennsylvania				9.7			1996	Y	x	X	
•				10.4			1997		X		Y
Illinois							1,337	^	X		. X .
Vermont				10.5					.^		
Alaska				11.2			1007	v	v	 V	v
Massachusetts				11.3			1997		X,		X
Rhode Island				11.5			1996		X		X
California				11.6			1996		X		X
Connecticut				12			1998				X
New Jersey				12			1999	Х	Х		X
Maine				12.5			1997		Х	X,	X
Hawaii				13.3							
New Hampshire				13.5			1996		X	-	
New York				13.9	regulatory		1996		X		X.
U.S. Average				8.6	Totals:	25		13	3 30	10	 -

APPENDIX C DEREGULATION TIMELINE

1879	Edison invents light bulb
1882	Edison's Pearl Street Station is generating power
1907	States begin to regulate electric utilities
1912	Montana Power Company formed by Anaconda Company executives
1935	Regulation broadened - Public Utilities Holding Company Act & Federal Power Act
1939	Co-ops form in MT under the Rural Electric and Telephone Cooperative Act
1978	Public Utilities Regulatory Policy Act & other federal decisions begin to restructure the industry by allowing new players in the generation market
1980	Pacific Northwest Electric Power Planning and Conservation Act
1992	Energy Policy Act (EPAct) requires fair and open access to transmission
<u>1995</u> Jul 17	PSC begins inquiry into the Restructuring of MT's Electric Utility Industry
<u>1996</u> Jan 31 - 2/1	PSC roundtable discussions on restructuring
Apr 24	Federal Energy Regulatory Commission issues Orders 888 & 889 implementing EPAct and opening access to transmission grids
May 21	PSC issues its "Electric Restructuring Principles"
Nov 6	At a Missoula hearing on the Comprehensive Review of the Northwest Energy System, 104 of 130 present urge strong support for public purposes
Dec 12	Final report of the Comprehensive Review of the Northwest Energy System
<u>1997</u> Feb	Competitive rates for ASiMI approved by PSC
Feb 26	Transmittal deadline - 55th MT Legislature

Mar 8	SB 390 (Electric Utility Restructuring and Customer Choice Act) introduced
Apr 18	SB 390 passed by legislature - total vote: 113 - 36
Apr 21	Gov. Racicot signs SB 224, weakening the Major Facility Siting Act
May 2	SB 390 signed by Governor Racicot and takes effect
Jul 1	MPC and PacifiCorp submit transition plans to the PSC Racicot misses deadline to appoint an environmental member to the TAC
Aug 13	PSC orders MPC to revise its transition plan
Sep 25	DOE report predicts price increases for the Pacific Northwest under dereg
Nov 7	MPC announces \$200 million/yr. power contract with Calif. Manufacturers
Nov 21-23	MSU-Billings poll finds 56% of Montanans willing to pay higher electric rates to fund improved emission controls at power plants; 36% unwilling
Dec 9	MPC announces intention to sell all of its generation assets
Dec 16-18	Lee Newspapers poll: 46% of Montanans favor deregulation, 32% oppose
<u>1998</u> Jan 30	First special session call initiated
Feb 18	Black & Veatch says MPC sale to outside firms 95% likely to increase rates
Feb 26	MEIC wins lawsuit opening special session ballots up for public inspection
Mar 5	1st call for a special legislative session on electric deregulation fails: 52 - 93
Mar 13	MEIC, labor, seniors, low-income stage "walk out" of TAC meeting
Apr 16	Gov.'s forum on restructuring - less than 10 of 60 attendees are lay citizens Discussions begin concerning Small Customer Buying Cooperative
Apr 23	Second special session call initiated
Apr 29	Helena hearing on MPC transition plan - Dereg opponents rally to the theme: "Don't Let the Fat Cats Treat Us Like Lab Rats!"
May 1	Co-op "opt out" deadline - only Flathead & Glacier (of 26) "opt in"
May 5	MontPIRG, MT Senior Citizens Association, and Working for Equality & Economic Liberation challenge legality of MPC's sale process
May 6	Missoula hearing on MPC plan - 1760 signatures for "an equitable, affordable & clean energy future" presented by MEIC
	MontPIRG questions legality of MPC ads under I-125

May 7	Commissioner of Political Practices, Ed Argenbright, rules MPC ads legal Consultant predicts rate increases for Montana under deregulation
May 15	PSC dismisses MontPIRG complaint
May 20	I-138 to repeal electric deregulation certified for signature collection
May 21	I-139 & I-140 to acquire MPC's water rights certified
May 28	2nd call for a special session on electric deregulation fails: 58 - 83
Jun 1	Helena creates municipal utility
June 3	Talks between MPC & public interest community break down
Jun 3-7	MT Democratic Party poll: 52% think dereg. will hurt Montana, 26% help
Jun 19	Initiatives 138, 139, & 140 addressing deregulation issues fail to qualify
Jun 22	Non-binding bids submitted for MPC's generation facilities
Jun 24	PSC issues final order on the "tier one" portions of MPC's transition plan
Jul 1	Large customers allowed to choose their energy supply companies Stone Container Corp. chooses Montana Power Trading and Marketing Co. Rate moratorium begins Unbundling of bills supposed to occur, but does not PSC supposed to issue final order, but does not (process slowed by sale) Four year "Transition Period" begins Pilot programs supposed to begin, but do not
Jul 2	MPC narrows list of potential buyers to roughly 6 MT co-ops are rejected
Jul 9	PacifiCorp announces intent to sell operations in MT & CA
Aug 8	MPC inaugural Summer Symphony
Aug 10	Holnam Inc. cement plant chooses Illinois-based Illinova
Aug 26	MPC withdraws from power marketing altogether
Sep 21-23	Lee Newspapers poll: 42% favor deregulation, 21% oppose 25% expect bill's to decrease, 15% increase, & 49% to stay about the same 29% disapprove of MPC's sale, 27% approve
Nov. 2	PP&L is announced as the successful bidder for MPC's generation assets
<u>1999</u> Jan 1	Universal System Benefits Program begins Composite Power announces plans to build four mine-mouth 500 MW coal fired generation plants south of Red Lodge

Apr 16	SB 409 authorizing net metering signed by Governor Racicot
May 5	SB 406 authorizing the formation of small customer buying cooperatives signed by Governor Racicot
Jun 17	FERC approves MPC sale to PP&L
Aug 5	Montana Electricity Buying Cooperative incorporates
Dec 22	BPA denies MEBC preference power rates
2000	MPC subsidiary Continental Energy Services proposes the "The Silverboy Generation Project" which involves plans to build a 230 MW natural gas combustion turbine plant in Butte (later increased to 500 MW)
Mar 23	MEBC petitions 9th U.S. Circuit Court of Appeals to review BPA decision
Mar 28	MPC announces sale of remaining energy-related assets
Jun 29	Montana Resources shuts down due to high market prices for electricity
Jun 30	Rate moratorium on power <u>bills</u> ends (distribution rates no longer capped)
Jul 1	Rate freeze on power supply portion of customers' bills begins
Sep 21	Approximate date that Energy West notified their new residential and small business electricity and gas customers that it was returning them to the regulated system because of high prices
Oct 2	MPC announces the sale of its distribution system to NorthWestern Corp. of Sioux Falls, South Dakota, for \$1.1 billion
2002 May 1 Jul 1	PSC decision on whether transition period is extended for small customers Transition period ends - all IOU customers supposed to have choice Rate freeze ends IOUs can no longer collect generation-related stranded costs Montana-Dakotas Utility (MDU) transition plan filing due Co-op customers must have choice unless the co-op has "opted out" or there is no competition
2003 Jul 1	Universal System Benefits Program funding terminates, unless renewed
<u>2004</u> Jul 1	End of extended transition period for investor-owned utility customers MDU transition plan filing deadline (if extended)
<u>2006</u> Jun 30	All MDU customers must have choice

APPENDIX D

EXPLORING THE CONSERVATION-CONSUMER ALLIANCE 1

During the electric deregulation debate, MEIC has been an advocate not only for environmental concerns, but also for consumer interests. In response to Montana Power Co.'s "Sweetheart Deal for Industry" (SB 390, the bill which became Montana's electric deregulation law), MEIC unveiled its "C.A.R.E. plan for Montana." C.A.R.E. is MEIC's vision of a Clean, Affordable, Reliable, and Efficient energy future. While "clean" and "efficient" are values any environmentalist can appreciate, why does MEIC "care" about affordable and reliable power? Why has MEIC suddenly donned the cap of consumer advocate?

Some would contend that by playing this role MEIC has performed a disservice to the environment. Shouldn't we be working for more expensive power to get people to use less of it?

The explanation involves an acknowledgment that environmental issues seldom exist independent of broader issues of social justice. Whether we should be for or against more expensive power depends on two questions -- "more expensive power for whom?" and "more expensive power for what?"

Under Montana's deregulation law, large industrial customers will obtain cheaper electricity, while small customers are likely to pay more. Montana Power Co.'s 16 contract industrial customers (like Exxon, Stone Container, ASARCO, and Golden Sunlight mine) use more power than its 230,000 residential customers. One gluttonous business (Columbia Falls Aluminum Company) uses more power than those 16 industrial customers combined! Driving up prices for residential customers while large industrial users go on a shopping spree is a poor strategy for saving energy.

¹ Patrick Judge, "Exploring the Conservation-Consumer Alliance," <u>Inside MEIC: A Special Publication for our Patrons and Pledges</u>, Spring 1998. Reprinted with permission from MEIC.

In some instances, MEIC does argue for more expensive power. MEIC supports incorporating the full cost of generating and transporting electricity into its price. The "total social cost" of the electricity industry includes not only construction, maintenance, fuel, and employment costs, but also the currently "externalized" costs of environmental degradation and impacts to public health. These costs should be paid for by electricity customers in proportion to the amount they use.

MEIC also argues for increased rates to fund conservation, renewable energy, and low-income programs. While additional funding for these programs may lead to increased rates, it also leads to decreased bills, and bills are what people pay. For example, although conservation programs increase the price of energy (slightly), these same programs allow you to buy sufficiently less of it so that you save money on your bills. Likewise, although renewable energy may cost a little extra up-front, in the long run it out-competes conventional power both in terms of operating costs (free fuel!) and externalized costs. Combined with low-income assistance, these investments provide an effective and socially-conscious way of achieving environmental goals.

Consumer and environmental objectives can be pursued hand-in-hand. Responsible consumer advocacy involves more than just looking out for consumers' pocketbooks -- it demands that we motivate people to use their purchasing power for environmentally and socially constructive ends. This will be our challenge as Montana moves closer to a deregulated electricity industry.

APPENDIX E

STATEMENT OF SUPPORT FOR A SPECIAL SESSION TO RECONSIDER ELECTRIC DEREGULATION IN MONTANA

Statement of Support for a Special Session to Reconsider Electric Deregulation in Montana

The 1997 Montana Legislature passed Senate Bill 390, the "Electric Utility Industry Restructuring and Customer Choice Act." Governor Marc Racicot signed the bill into law. As evidenced by Montana Power Co.'s recent announcement that its generation assets are for sale, the law has far reaching implications for consumers and the environment, and deserves further consideration.

- Montana was the first state with low-cost power to deregulate its electric utilities, and remains the lowest cost state to have done so. With the sixth cheapest residential energy prices, it is unlikely that Montanans will see any savings. The U.S. Department of Energy predicts deregulation will result in a 28% price increase by the year 2000 for residents of the Pacific Northwest. A typical household can expect to pay an extra \$200 each year. No other state in the Northwest has taken this risky step.
- SB 390 fails to ensure that viable competition exists before exposing customers to deregulation. Montana's low population and rural character may make it unattractive to energy providers. Consequently, Montana's residential customers and main street businesses may have little or no "choice" of power companies. Nor will they have the protection historically offered by the Public Service Commission.
- Other states that have deregulated their electric utilities are now struggling with citizen disapproval and disinterest, meager competition, and delayed access to "choice." Deregulation of other industries, such as telecommunications and airlines, has failed to deliver many of the benefits promised to consumers, especially in rural areas.
- SB 390 inadequately funds low-income bill assistance and weatherization, energy conservation, and renewable energy. A 1996 regional agreement signed by the governors of the four Northwest states recommended that more than 3% of utility retail sales be set aside for these programs. Instead, SB 390 allocates a scant 2.4% that terminates after only four years. Qualifiers and exemptions further weaken this minimal commitment.
- SB 390 inadequately addresses the environmental and social consequences of the electric utility industry. While other states have required a certain percentage of their energy to be derived from renewable sources and have implemented incentives for consumer generated power as part of their electric restructuring laws, Montana did not.
- SB 390 was introduced late in the session and was pushed through the legislature by the utilities and their large industrial customers. Not a single member-based, public interest group supported the legislation -- more than a dozen opposed it.
- Montanans deserve a better opportunity to study and prepare for electric deregulation before abandoning our present system. A special session is the only way to secure that opportunity.

These concerns, voiced since the beginning of the deregulation debate, have never been adequately addressed. The impending sale of Montana Power Co.'s power plants magnifies many of these concerns and raises additional questions, such as how a change in ownership will impact fisheries, water quality, and recreation. Therefore, the undersigned

organizations and businesses urge the members of the Montana Legislature to vote FOR a special session to reconsider and potentially postpone the deregulation of electric utilities in Montana.

Montana Environmental Information Center

Montana Chapter of the Sierra Club

Missoula Urban Demonstration Project

Women's Opportunity and Resource Development

Montana Senior Citizens' Association

Solar Plexus

Women's Voices for the Earth

Montana Audubon

Montana Chapter of Trout Unlimited

Northwest Energy Coalition

Montana Public Interest Research Group

Working for Equality and Economic Liberation

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