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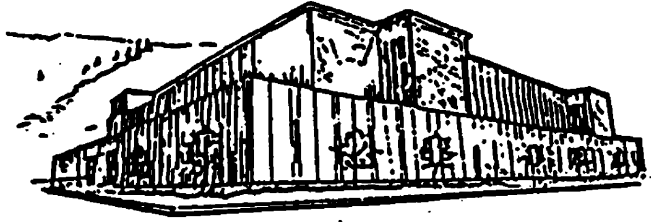
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The Potential Effects of Electric Utility Industry Deregulation on Montana Power Company

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B.S. Montana Tech of The University of Montana, 1988

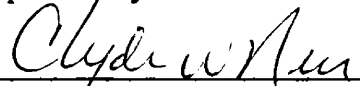
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for the degree of

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1998

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The Potential Effects of Electric Utility Industry Deregulation on Montana Power Company

Director: Dr. Clyde W. Neu 

For years, government officials and utility company management have struggled with the challenge of making electricity consumption in the United States more efficient and less costly to the consumer. To this end, the Public Utility Reform Act of 1978 attempted to introduce competition in the electric utility industry, but only succeeded in rewarding the development of uneconomic power sources. In 1996, the Federal Energy Regulatory Commission (FERC) took another approach with the issuing of Order No. 888, telling the nation's utilities to open up their interstate transmission systems to non-discriminate access. This launched the electric utility industry into the world of competition, with expected savings between \$3.5 and \$5.4 billion per year from increased utilization of existing power plants and technological innovation. The result -- consumers across the nation will be able to choose their electricity supplier, just as they can choose their long distance phone carrier.

Montana Power Company (MPC) has stepped into the arena of competition, in response to Order No. 888. This decision to embrace deregulation will cause MPC to change more dramatically than any previous action in the company's history.

Critical issues facing MPC are: open competition for its customer base; geographic remoteness to larger markets; cost of production that is higher than market prices for energy; continued difficulty in receiving equitable treatment from the Montana Public Service Commission (MPSC) and a utility workforce that is unprepared for competition.

MPC shows strength in several areas that are as equally important in a deregulated environment: non-utility telecommunications, coal and oil & gas divisions that have flourished in the competitive arena; strong financial performance; a recognizable brand and the willingness of management to make tough decisions that will ultimately be the right decision for the shareholder.

One such decision MPC may face is merger with another utility. MPC was analyzed for its strengths, weaknesses, opportunities and threats in relation to several utilities considered potential merger candidates. This study reveals there is potential for consolidation that would make sense for MPC, in light of the changing world brought on by deregulation.

Preface

In early 1996, the issuance of Federal Energy Regulatory Commission (FERC) Order No. 888 set utility deregulation in motion in the United States. FERC told the nation's public utilities to open their transmission lines to non-discriminatory competition, signaling a historic change in the way electricity is sold. Electric utility deregulation is expected to benefit the U.S. consumer and energy industry by billions of dollars each year, increasing utilization of existing generating facilities and lowering electric rates throughout the nation.

This paper will evaluate the changes in the electric utility industry from the viewpoint of Montana Power Company (MPC), an energy company with \$2.8 billion in assets and 1997 revenues of \$1.023 billion. The evaluation of the effect of deregulation on MPC will take part in three sections:

- I. First, an overview of electric utility deregulation, including a discussion on the stranded cost recovery issue and how MPC has chosen to deal with the problems surrounding stranded costs. Also, the first section will address deregulation of the natural gas industry and the changing relationship with State Public Service Commissions across the country.
- II. The second section discusses factors for succeeding in a deregulated market, such as: cost and efficiency, transmission inerties, employee skills, new technologies, regulatory treatments, financial strength and the ability to merge with or acquire other energy companies.
- III. Finally, the third section of this paper will address various impacts of deregulation on MPC and will summarize the results of this study. This

section addresses the new world of competition and changes in the Montana regulatory environment. A MPC company profile, along with a SWOT (strengths, weaknesses, opportunities and threats) analysis is provided.

Also included in this section is a financial analysis of MPC and six utilities determined to be competitors and/or potential merger candidates.

These utilities are: PacifiCorp, Puget Sound Energy, Idaho Power, Washington Water Power (WWP), Pacific Gas & Electric (PG&E) and Edison International.

The hypothesis of this study is that MPC will need to merge with another northwest utility to effectively compete in the deregulated marketplace, because the market will demand increased efficiency and utilization of the former utility's assets. In order to become more efficient, those utilities with more generating capabilities than load (such as MPC) will consolidate with utilities that have more demand than supply. Shareholders and ratepayers will successfully demand the efficiencies of the marketplace, which will result in the market efficiency envisioned by the FERC when Order No. 888 was issued.

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I. Overview of Electric Utility Deregulation

On April 24, 1996, Federal Energy Regulatory Commission Chair Elizabeth A. Moler ordered the nation's public electric utilities to open their transmission lines to competitors, with the goal of expanding the wholesale electricity arena and ultimately lowering electricity prices for all consumers in the country. According to Chairwoman Moler, "Today's actions by the Commission will benefit the industry and consumers to the tune of billions of dollars every year. They will give us an electric industry ready to enter the 21st century. These rules will accelerate competition and bring lower prices and more choice to energy customers." She also stated, "The future is here -- and the future is competition. It is a global trend, and in North America, we are at the forefront in embracing it. There is no turning back."¹

The catalyst to embrace competition came via FERC Order No. 888--the final rule on transmission open access.² It requires public utilities owning, controlling, or operating transmission lines to file nondiscriminatory open access tariffs that offer others the same transmission service the company provides itself. The theory is this type of access to wholesale power will bring lower costs to electric consumers, ensure continued reliability of the electric power industry, and provide open and fair electric transmission services by public utilities. According to Chairwoman Moler, the cost savings expected from these actions are estimated between \$3.8 and \$5.4 billion per year in the United States.¹ It is anticipated the cost savings will arise from increased utilization of existing power plants and from technological innovations that will lead to new, more efficient power production nationwide.

Under FERC Order No. 888, all public utilities that own, control, or operate interstate transmission facilities are required to offer service to others under a pro forma tariff issued by FERC. FERC established the tariff as a guideline for minimum terms and conditions of service expected. These tariffs also must be used by the issuing utility for its own wholesale energy sales and purchases. Since Montana Power Company (MPC) owns transmission facilities, as well as generation and distribution, the utility falls under the direction of FERC Order No. 888 for its wholesale transactions.

Embracing this new direction is MPC Vice-Chairman of the Board and President Bob Gannon. According to Gannon, "Economic history and theory instruct that competitive markets outperform regulated markets where no natural monopoly or (risk of) market failure exists. The introduction of competition in the telecommunications, trucking, gas, and stock brokerage industries demonstrates that competition can provide benefits that regulation cannot. In competitive markets, these benefits reward those who are most efficient and punish those who are least efficient."³ Gannon proposes to first move MPC to competition in the wholesale power market (i.e. large, bulk buyers of electricity, such as municipalities, large manufacturing plants, etc.), then offer full choice to retail/residential customers over the next 4 years. Under this plan, MPC's generation assets would immediately become unregulated and the company would cease to be vertically integrated. When this happens, arms-length, cost-based agreements would be structured between the unregulated generation (supply) division and the regulated (energy services) division. This would allow the production arm of the company the flexibility to compete in the open market for MPC's large industrial loads, the first of

MPC's customer base able to seek a new energy supplier. These are the customers being courted by other energy suppliers, such as neighboring Northwest utilities and stand alone independent power producers who now will be given access to such customers. Likewise, the production arm also will be able to look for potential new customers in other service territories previously untouchable.

At the same time, the majority of MPC's 270,000 residential and small retail customers would continue to see cost-based rates, regulated by the Montana Public Service Commission (MPSC), for the next 4 years. This action protects approximately \$375 million of the \$452 million annual revenue stream of the company see Exhibit 1 (PRC-08, pg. 2, Column B). The other key point of MPC's plan addresses the need for a 5-year transition period, where "stranded costs" would be recovered from the customer base. MPC's proposal anticipates the transition period would start six months after a final MPSC order on restructuring in Montana.

While it was initially the company's intent to seek recovery of its stranded generating costs over a 5-year transition period, discussion at the end of the next section will reveal a change of course for MPC. It is informative to discuss the stranded cost issue from MPC's viewpoint, prior to its decision to go a new direction.

Stranded Costs

Besides opening up the nation's electric utilities to deregulation, Order No. 888 also provides for the full recovery of stranded costs--that is, costs that were prudently incurred to serve wholesale power customers and that could go unrecovered if these customers use open access to move to another supplier. FERC will permit a public

utility to seek recovery of wholesale stranded costs from departing customers via direct assignment of the stranded costs created by each customer's departure. The costs must be verifiable, prudently incurred, and there must have been a reasonable expectation of continuation of electric service on the part of the utility. FERC Order No. 888's stranded cost recovery clause for wholesale power contracts states that recovery is possible only on contracts signed before July 11, 1994. After that date, recovery must be specifically provided for in the contract.

Stranded costs can be incurred in one of two ways:

1. Investment in generating assets with a cost to generate electricity that is out-of-market. Out-of-market costs are defined as those costs incurred by a utility in a regulated environment, where cost recovery was in essence guaranteed as part of the utility franchise, that are now greater than what the market will pay for similar services in a competitive environment. Out-of-market costs for Montana Power are illustrated by Exhibit 2 (RJL-1, Net Hydro & Thermal Out-of-Market Cost).⁴ Under the old regulation, MPC's ratepayers would have been asked to pay for approximately \$58 million more in 1998 generating costs than they would reasonable expect to pay under deregulation.
2. Wholesale power contracts entered into by the utility, normally qualifying facility (QF) contracts that are out-of-market. Qualifying facilities were established through the Public Utility Reform Act of 1978, as an attempt to introduce competition in the electric utility industry. Public utilities were required to purchase all the generation from QFs that chose to locate within the

service territory of the utility. QF generation was sold into the utility transmission grid at the cost of the QF's production, plus a profit. In almost all instances, the QF cost was much higher than the utility's generation cost. An example of the effects of QFs can be seen by reviewing MPC's power supply costs (and their respective delivered KWh's). There are three major components to the company's generation base:

	<u>% of Costs</u>	<u>% of KWh delivered</u>
1. Hydro Facilities	28%	37%
2. QF Contracts	23%	9%
3. Thermal Facilities	49%	54%

Note the effect QFs have on both the cost structure and actual energy supply of the company. This discussion will avoid a lengthy analysis on the previous legislative wisdom of forcing utilities nationwide to purchase power from uneconomic QFs. The percentages above speak to the effect QFs have had on MPC and its ratepayers. Over \$26 million/year has been paid to QFs in the state of Montana. Without an economic incentive to be efficient, QF's have been a detriment to the development of efficient energy in the United States.

The main focus of MPC's Electric Restructuring Informational Filing (Docket No. 96.12.206) and the follow-up Electric Restructuring Transition Plan Filing (Docket D97.7.90), is to assign the existing power supply cost-of-service, that would otherwise be stranded, to the various customer classes. This is a defensive strategy that will collect the company's embedded power supply cost from existing customers through normal

billing and also from customers wishing to exit MPC's system anytime during the four year transition period. An exit fee, based on stranded costs, would be imposed prior to early departure.

The existing generation and transmission assets would be removed from the regulated ratebase and the return on, and return of, these assets through a cost-of-service calculation would be replaced with a cost-based supply contract between the unregulated Energy Supply Division and the regulated Energy Services/Telecommunications Division of Montana Power Company. The term of the contract would coincide with the proposed transition period and would eliminate the company's stranded costs concerns by the end of the four-year transition period.

Exhibit 2, Net Hydro & Thermal Out-of-Market Cost, taken from Mr. John Leland's testimony in the Electric Restructuring Transition Plan Filing, shows graphically the potential hydro and thermal stranded costs if market prices are assumed at a medium market price for delivered power on MPC's system. Mr. Leland is the manager of the Electric Resource Planning and Economic Analysis Department at MPC. As such, his responsibilities include determining MPC customers' future electric resource needs, within the guidelines established by the MPSC. According to Mr. Leland's graph, approximately 1/3 of MPC's power supply cost is out-of-market and therefore would be considered stranded cost if MPC's system opened up to full competition today.

While in the transition period, this structure will make little difference to the typical MPC residential customer, because residential utility rates still will be based on a power supply contract with a cost-of-service basis, not market prices.

The purpose of such a relatively long transition period is to allow for the recovery of stranded costs and give the company some form of protection until a full organizational restructuring of the company can be accomplished. To allow existing MPC customers a choice (albeit an expensive one that effectively eliminates true market choice), MPC proposes a “market access rate” to cover stranded costs and accommodate customers who can and want to enter the competitive marketplace. The direct market access rate would have several components:

- A transition charge based on hydro and thermal out-of-market costs during the transition period.
- A transition charge based on purchase power (QF) contracts out-of-market during the transition period.
- A transition charge to collect approximately \$12.9 million annually on regulatory assets of \$258.2 million.⁵ Regulatory assets are deferred accounting costs that have value because of prior regulatory treatment. These costs were not previously collected in rates at the time the service was provided and include such items as conservation resource acquisition, deferred income taxes, and employee benefits/compensation.
- A Universal Systems Benefit Charge (USBC) to cover the cost of energy conservation/demand-side management, low-income energy assistance programs, development of renewable energy sources, and other research and development costs. The logic behind the USBC is to insure all users pay for certain investments that benefit society as a whole. The belief is a

competitive marketplace would not otherwise provide a revenue pool for such investments. The USBC charge would be non-bypassable, meaning it would be a fixed charge paid by everyone on the system.

Mr. Leland provides extensive testimony on the company's calculations to determine stranded costs for both existing thermal and hydro facilities and wholesale power contracts (see Exhibit 3- Graph 11). The proposed stranded cost recovery rate (shown as the right-downward slanting lines in the transition period) assumes the medium market price. The "wedge" represents the dollar risk to MPC shareholders if the market price falls below the medium forecast. The amount of the wedge from July 1998 to July 2002 is present-valued at approximately \$59 million. Looking from 2002 to 2013, MPC is still at considerable risk, until the medium forecast exceeds the hydro and thermal costs. The total present value dollars at risk during this period are \$346 million. This risk goes up to \$625 million if the low market price forecast proves accurate.

These risks undoubtedly weighed heavily in Bob Gannon's December 9, 1997 announcement of the company's intent to sell MPC's coal-fired and hydroelectric plants. In comments at the annual shareholders meeting in May 1998, Gannon said, "The decision was made because:

- Many of the utilities involved in industry-restructuring and customer choice were involved in processes to sell their generation to resolve state stranded-cost issues.
- As Montana Power looked at the prices being paid for generation, questions were raised about what our assets might bring, and whether we would have stranded costs.

- And the risk-reward nature of the generation business was, and still is, dramatically changing -- with increasing risk being part of the equation.”

“We also had been testing the forward market for electric power supplies,” Gannon said. “We found two things: Price volatility, and low prices. Over the next four to five years, the prices for electricity were coming out at less than our costs of production. We saw that situation as very challenging -- the prospect of incurring tens of millions of dollars of losses for several years, while waiting for the market to turn. As a small player in this consolidating generation market, we believed that it would be too risky in the future for us to stay in this business, and that now is the time to exit.”⁶

This decision has eliminated a lengthy debate with the MPSC and Montana Consumer Council (MCC) over stranded costs and has moved MPC away from a defensive strategic approach to deregulation. However, there will still be opposite views on how much of the sale proceeds will be returned to the ratepayers.

California -- The Bellwether State for Deregulation

The path MPC is currently able to pursue has come about in great measure due to the efforts of not only FERC, but the utilities and the California Public Utility Commission in California. Since 1992, the CPUC has been working toward full retail open access. The state began its efforts to deregulate after the passage of the Federal Energy Policy Act of 1992, which was intended to introduce greater market competition to the energy industry, thereby improving efficiency and reducing rates to customers. On September 24, 1996, Governor Pete Wilson signed into law legislation that would open the state’s electricity market to competition over the next 5 years. However, the timetable was

changed to move California to full (unrestricted) open access effective January 1, 1998.

The law put to an end the practice of a single utility providing all electric service within its service territory, introducing choice and competition to end users, i.e. the retail customers.

California has developed a framework for competition with the establishment of an independent power pool known as the Western Electric Power Exchange (WEPEX).

The function of the WEPEX is to:

- Establish a preferred schedule of generation (supply) offers and demand bids
- Administer transparent and nondiscriminatory bidding protocols
- Establish necessary information links to Independent System Operator (ISO) and market participants

During the original five-year transition period, which is still intact, all generators of electricity (both in state and out-of-state) will sell their power into the WEPEX and transmit power across a statewide ISO transmission grid. All power will be sold into the Exchange until a viable market value has been established for the state's generating assets. Neither the WEPEX or ISO will have financial interest in any source of generation or transmission facilities. The WEPEX will work to match generation (supply) sold into WEPEX with demand bids from utilities, power marketers, and others, ranking generation supply on a least-cost basis. It will serve as a clearinghouse by providing an auction point for hourly or half-hourly price signals aimed at immediate users and long-term investors. The Exchange also determines a preferred schedule of delivery of power to the ISO and serves as load procurer for those California customers

not represented by brokers or marketers. The goal of the WEPEX is to establish a visible spot market, open to all suppliers, both in-state and regionally through the Western System Coordinating Council (WSCC). However, as explained later, California's current transmission pricing does penalize those desiring to enter the WEPEX from outside the state. The WEPEX, WSCC, along with MPC's proposed transmission structure, is discussed in greater detail in the Transmission Intertie section.

Purpose and Result of Deregulation in Natural Gas Transmission

What MPC and the California utilities are pursuing, to enact non-discriminatory open access in the electric industry, has roots in the opening of the nation's natural gas transmission lines in the late 1980's. In the landmark 1988 court case, *Associated Gas Distributors (AGD) vs. FERC*, the issue revolved around whether FERC had the authority to order industry-wide non-discriminatory open access as a remedy to undue discrimination in interstate natural gas transmission services.⁷ Opponents contended that FERC did not have the authority to force a gas transmission company to be a "common carrier" of natural gas for other gas suppliers, as a condition of receiving authorization to transport its own gas across interstate lines.

The Washington D.C. Circuit court affirmed, in fact considered it a responsibility of the FERC, to order the filing of non-discriminatory open access transmission tariffs by any company wanting to transport gas across interstate lines. This was done as a remedy for undue discrimination or anti-competitive behavior. The court found that in most situations, discrimination that precludes transmission access or gives inferior access will

have at least potential anti-competitive effects, because it limits access to markets and therefore limits competition.

Similarly, it is probable that any transmission provision that has anti-competitive effects also would be found to be unduly discriminatory or preferential because the anti-competitive provision would most likely favor the transmission owner over others. The FERC enforces this ruling by denying certification (and therefore permission to transport interstate natural gas) to any company that does not file non-discriminatory open access tariffs with the FERC.

Today's natural gas industry looks quite different than it did in 1978. Natural gas producers are unregulated (except for safety and environmental restrictions), there are a large number of producers (as well as aggregators, brokers, marketers, and others) that compete aggressively to sell commodities. By most indications, performance in the natural gas industry has improved dramatically.

This competition has lowered natural gas prices considerably. According to Kenneth W. Costello and Daniel J. Duann, in their 1996 article, Turning up the Heat in the Natural Gas Industry,⁸ “from 1984 to 1993 wellhead price declined by 24 percent. Natural gas prices have fallen from their mid-1980s levels to the point where retail gas consumers cumulatively saved as much as \$100 billion. During the period 1984 to 1993 the average retail price of natural gas declined by 16 percent.

The pipeline and distribution sectors have experienced significant improvements in productivity as well. During the period 1984 to 1993, for example, labor productivity in

these sectors improved by 24 percent, and operation and maintenance expenses per unit declined by 18 percent.”

One conspicuous outcome since the mid-1980s has been the decline in the retail price of gas for large customers relative to small customers (for example, residential and certain commercial customers). Wellhead gas prices have decreased more during non-winter periods, which disproportionately benefits customers with high load factors (e.g., industrial customers), and the prices of transmission and distribution services have fallen more for large customers, such as industrial and electric utility customers. During the period 1984 to 1993, for example, residential customers benefited from a 12 percent decline in the real price of transmission and distribution services, while industrial and electric utilities enjoyed 63 percent and 55 percent declines, respectively.

Whether the movement of gas rates in this direction reflects an undesirable outcome is debatable. It may simply reflect gas service providers' price discrimination in favor of price-elastic customers. With more competition and regulatory flexibility, providers would be expected to have a greater inclination and ability to price on the basis of market conditions. With large customers having more market choices, it is not surprising that they were able to enjoy larger rate declines. Costello and Duann go on to say, “Overall, the pattern of gas rates has probably improved economic efficiency: it reflects the pressures placed by market forces to reduce the size of cross-subsidies. As of 10 years ago, large customers were subsidizing other customers. The changed pattern of retail rates since that time represents a movement toward cost-based rates. The general impression of industry observers is that industrial customers were subsidizing

other customers. Unlike the cases of the telecommunications and electric power industries, there has been little formal study of this issue.”⁸

In any event, there is a legitimate concern that small retail customers, relative to other gas customers, may have received too few of the benefits from the recent reforms in the natural gas industry. One can argue that this phenomenon is the typical pattern in public utility industries encountering major restructuring—large customers receive most of the benefits during the initial years, while a broader group of customers has to wait longer. The dispersion of benefits across all gas customer groups will necessitate a more broadly competitive retail gas market than what currently exists.

In summary, affirming that FERC had the authority to force natural gas companies to open access to their (pipeline) transmission systems helped set the stage for today’s opening of the nation’s electric transmission systems.

New Relationship with State Public Service Commissions

Change in Scope and Purpose

Traditionally, the federal government concerned itself with regulating the wholesale power market, leaving the regulation of retail power (sale to the ultimate customer) and the energy companies within the state up to the state public service commission. Regulation of retail power within the state included such things as insuring adequate, reliable electric service to all customers at the lowest total cost. Also, state PSC’s were charged with the oversight of the planning, construction and operation of the generation, transmission and distribution systems within the state.

Sorting out which regulatory body will have authority in the future, FERC or the State PSC, is a complex issue. If the goal of FERC Order No. 888 is eventual universal access for all 115-million retail electric customers in the U.S., then the federal government must step into the State's jurisdiction to insure all customers have choice. This causes many state PSC's some concern. Such issues as jurisdiction over the siting of major generation and transmission facilities, fairness to the state's retail customers and the historical retail customer funding of soon-to-be deregulated generating assets are all questions needing to be answered by those structuring the new competitive environment.

In Montana, the MPSC has a great deal of power over utility companies in the state and therefore is understandably concerned over the potential erosion of authority when two of the three major components of MPC (generation and transmission) will fall outside MPSC jurisdiction. This will leave only MPC's distribution function under MPSC control. Generation and transmission will fall under FERC jurisdiction.

For many years the relationship between the MPSC and businesses in the state (both utilities and large utility customers) has been strained. The MPSC is considered by many to be one of the most hostile PSCs in the country. This distinction may come from the fact that the MPSC is an elected body and therefore responds to the consumer class with the greatest vote: residential customers. The successful election battlecry for the politician seeking a term with the MPSC is to promise low residential rates, high rates for "big business" and stiff opposition to any utility company rate filings. While insuring a contented voting constituency, the effect of these political actions has

allowed a cross-subsidy of the residential class that has set up a scenario for other energy sellers now coming into the market to “cherry pick” MPC’s largest customers (see Impact of Deregulation on MPC—The New World of Competition).

The implementation of FERC Order No. 888 sets the stage for this to be played out, as the following scenario suggests. As the cherry picking occurs, the larger customers will exit MPC’s system, leaving the smaller customer classes (residential, small businesses, etc.) to absorb remaining fixed costs. Along with the exodus of the larger customers, residential rates will skyrocket and MPC will become financially unhealthy and increasingly vulnerable to takeover.

Change of Jurisdiction

Drawing the jurisdictional line between FERC and the state regulatory authority becomes an important step in establishing a new working model for open access. This is true not so much for wholesale transactions, because they naturally occur at the higher voltage transmission level and therefore fall under FERC jurisdiction, but for retail transactions that will occur more and more often as the nation opens up to full access for all customers.

In instances of unbundled retail energy delivery, where a low voltage user seeks its own power supply, FERC will defer to recommendations by the state regulatory body as to where the jurisdictional bounty should be drawn, as long as the boundaries follow FERC’s 7-point guideline on the critical question: Where does transmission service end and distribution service begin?

FERC Order No. 888 establishes the seven indicators:⁹

1. Local distribution facilities are normally in close proximity to retail customers
2. Local distribution facilities are primarily radial in character
3. Power flows into local distribution systems; it rarely, if ever, flows out
4. When power enters a local distribution system, it is not reconsigned or transported on to some other market
5. Power entering a local distribution system is consumed in a comparatively restricted geographic area
6. Meters are based at the transmission/local distribution interface to measure flows into the local distribution system
7. Local distribution systems will be reduced voltage

FERC states its intent is to keep state regulatory authority intact, with the state continuing to have authority over local distribution, historical state franchise areas, and state laws governing retail marketing areas of electric utilities. Although disputed by several state regulators in a Fitch research article (see “Ability to stay the same, merge with or acquire other energy companies” section, concerns of Susan F. Clark, Florida PSC Chairwomen),¹⁰ FERC explicitly states in Order No. 888 that it will not affect or encroach upon state authority in such traditional areas as: the authority over local service issues, including reliability of local service; administration of integrated resources planning and utility buy-side and demand-side decisions; authority over utility resource portfolios; generation transmission siting; and authority to impose non-bypassable distribution and retail stranded cost charges.

In Montana, it remains to be seen how the authority of the MPSC will be effected by FERC's new direction with transmission. Since utility customers will no longer be looked upon to pay cost-based rates for generation (while transmission will still be primarily cost-based), the MPSC role will be reduced to looking at whether MPC purchased power (either from itself or others) at an appropriate market price. This will occur instead of scrutinizing every new generation construction or maintenance project the company plans. In the future, if MPC chooses to invest in the reconstruction or upgrade of a dam, the costs of such a project will need to be justified on the value of that resource in the marketplace, not on whether the MPSC will allow the cost of the project into rates. Undoubtedly, MPC will be responding more to FERC than the MPSC on the daily operations of its transmission facilities, leaving the MPSC with oversight of only those items listed above and the daily operations of the distribution function.

II. Factors for MPC Succeeding in a Deregulated Market

Cost and Efficiency

Helping establish a framework for MPC to implement FERC Order No. 888 is Dr. James Falvey, Director of Allocated Costs for Montana Power Company. In prefiled testimony before the MPSC,¹¹ Dr. Falvey explains that to implement the FERC directive, utility costs must be “unbundled” and assigned to customer classes based on cost causation, either embedded or (preferably) marginal cost causation. This is a step MPC and the MPSC have been unwilling to take until now, presumably because of the political power of the residential (voting) customers, who traditionally have enjoyed utility rates lower than the actual cost to serve.

As previously mentioned, traditional MPC rate filings with the MPSC have skewed cost signals to MPC’s customer classes, typically with residential customers being subsidized by large industrial customers. Rate cases are based on average cost of a pre-determined annual test period, which is “normalized” to remove non-typical costs. Dr. Falvey points out there are two problems with such an approach:

1. The cost signal sent to the consumer is based on an averaging of past fixed and incremental costs, not the real cost to serve at a given point in time. According to Falvey, “If cost assignments are not reflective of cost causation, some customers may be consuming (not be consuming) services that are not worth (are worth more than) the costs those services cause. To the extent that the charge is more reflective of cost causation, efficiency improvements will result on an overall societal basis”.

Going further with the cost causation concept leads to marginal pricing, where energy is appropriately priced at the marginal cost of the next kilowatt of power in the trading area or market. The most efficient producer will sell power first at the lowest price (until all the energy from that producer is used up); the marginal cost of the second most efficient producer will establish the price for the next power purchaser, and so on until all energy needs are met. The discussion on how the buying and selling of power under this concept will be accomplished was included in the section “California—The Bellwether State for Deregulation.”

2. MPC spends incredible time capturing information to determine the embedded cost causation of each customer class, ultimately determining an appropriate basis for allocation of the company’s cost for each customer class. This work is effectively undone by a final step – rate design. Rate design is developed by staff at MPC and is the third of three steps performed to develop a rate filing.

After determining the cost of service from the accounting records of the company (step 1) the company then segregates these costs into customer classes based on cost causation (step 2). Rate design (step 3) takes the allocated costs of each customer class and reshuffles them, assigning more costs to be recovered from some classes (usually industrial customers) and relieving other classes by the same amount (usually residential customers). Rate design doesn’t effect the total dollars requested in the rate filing, just the assignment of cost recovery from the various customer classes. The motive for the rate design step is generally political. In effect, what was attempted in the cost allocation determination step is undone by the rate design.

Straightening out this cross-subsidization will allow consumers to make their buying decisions based correct economic signals, unskewed by traditional rate design. Society as a whole will benefit by such a structure because consumers will no longer receive inappropriate cost signals; producers will be forced to become more efficient in order to survive; and resources will be allocated in a way that makes economic sense. The result: customer choice for energy consumption linked to energy production will be available for the first time, bringing about the competition and efficiency envisioned by FERC Chairwoman Moler. Customers will have the opportunity to select their supplier and determine supply cost allocations for themselves. No longer will there be endless MPSC hearings and contentious debates over the allocation and rate recovery of production costs. For the first time, politics will take a back seat to efficient consumption of electricity in the state of Montana.

A costless side benefit of MPC's restructuring for open access will be the barriers put in place that will stop cross-subsidization within the company in the future. MPC's intent is to abandon a vertically-integrated organizational structure. When it does, cross subsidization, caused by past rate designing that hid costs from some rate classes while overcharging others, will be virtually impossible, because under the new corporate structure, discussed more fully in the Company Profile section, the company will be operationally unbundled, with an unregulated supply and transmission arm and a regulated distribution arm.

Transmission Interties

MPC's success in the new marketplace depends not only on the ability to compete in a deregulated generation market, but also on the ability to address transmission intertie issues. Transmission interties refer to the physical link(s) between two or more transmission systems. Combining all of the transmission systems together that have interties make up the transmission grid for that region. There are three major transmission grids in the country, which will be discussed in more detail later. MPC is linked primarily to the WSCC transmission grid. As Exhibit 4 indicates, MPC is linked to the major western U.S. markets via a 500 KV line running from Colstrip to Garrison, Montana, leaving the state at Taft. According to an analysis of the California competitive energy markets, completed by LCG Consulting for the California Energy Commission, MPC provides two generation injection points for the WSCC, one at Garrison (listed as Anaconda on the map) and another at Taft.¹²

MPC also has access to the Midwestern markets, though with significantly less capacity, through a 230-270 KV line that converts with an AC-DC-AC tie at Miles City. This line has approximately 200 MW of capacity, which is fully subscribed by the Western Area Power Association (WAPA). According to Bill Pascoe, Vice-President of Transmission Services for MPC, to boost the capability of sending power to the Midwest, approximately 90 miles of transmission facilities would have to be constructed (from Colstrip to Miles City) and significant infrastructure would have to be built on both sides of the intertie.¹³ It's most likely this connection will not be pursued at this time, because of cost constraints. This effectively means MPC will compete only in the WSCC, limiting the opportunities to compete in the Midwest market.

Market reach to the West becomes a key transmission intertie question for MPC. Addressing the distance to substantial markets and what type of penalty MPC would be subjected to in order to serve such markets becomes a critical point to competing outside Montana. Right now, MPC is effectively blocked from incrementally priced competition outside of a close geographic proximity to Montana because of what is known as “pancaked transmission pricing.” While selling MPC’s generating assets will somewhat relieve the issues surrounding moving power outside of the state, it does not completely eliminate the company’s concerns. If pancaked pricing is not eliminated, the sale value of MPC’s generating assets will be harmed. Also, assuming MPC will continue to be active in energy trading, the elimination of pancaking will be just as important to the company as it is to MPC’s competitors.

An example of pancaked transmission pricing is the current prices MPC has to pay to deliver power to California, through the only viable system – the BPA transmission network. Under FERC Order No. 888, MPC must charge itself for transmission access from Colstrip to the BPA interchange at Garrison, Montana (3 mills, for example), then pay BPA 2 mills to transport from Garrison to a second interchange on the BPA system, where another 4 mills is charged. Finally, the California system, WEPEX, has put in place an access charge to come into the California market. This charge is approximately 4 mills. These transmission charges total up to 13 mills on a system where BPA sells generation incrementally at 3 mills during high run-off years. Some would argue the tail is wagging the dog under such a structure.

To further the argument against pancaking and help explain how electricity actually flows through a transmission grid, Jack Berlier, Jr. offers the analogy, “Picture the (transmission) grid as a lake. All around the lake are customers, drawing out water according to their needs. At various points around the same lake are suppliers who add water to the lake to keep the level of the lake constant and to maintain supply for consumers. When a consumer and supplier agree to buy and sell water, water is added to the lake at one end by the supplier and drawn out at the other end by the consumer.

Berlier goes on to say, “Suppose several water suppliers happen to hold title to ‘portions’ of the lake basin. If the current electric transmission pricing practices were applied to our ‘lake’ analogy, these lake basin owners would keep track of each water transaction and charge a fee for passage of water molecules over their portion of the lake. Whenever water was added by a supplier to satisfy the withdrawal by a consumer, the lake basin owners would consult a map of the lake and draw lines between the supplier and the consumer. Any lines that happen to ‘cross’ their parcel of the lake basin would signal a right to charge a ‘transportation’ fee. Lines would overlap from multiple water transactions, causing disputes among property owners about which lines the various transactions actually followed. In reality, of course, the water drawn from one end of the lake contained none of the molecules added at the other end.” Finally, Berlier states, “A much more equitable solution would be to charge a single price for use of the lake basin based on the customer’s volume, which would be distributed among the owners of the lake based on acreage and maintenance costs.”¹⁴ This scenario would

establish a broad market base for utilities to compete based on an underlying point of deregulation: market-driven pricing for generation.

Nationally, according to Berlier, “The development of large markets provides the best possible assurance that no single entity, either seller or buyer, can wield market power over other participants.” Ideally, to establish an open market, there would be three regions in the U.S., defined by the boundaries of the Eastern, Western and Texas ERCOT interconnections. This Western region is known as the WSCC, which was defined earlier as the Western System Coordinating Council. The most significant market in the WSCC is California, followed by the growing Northwest market. The WSCC links regional resources through an extensive network of transmission lines that represent a complex regional system as shown in Exhibit 4. The region encompasses an area of nearly 1.8 million square miles of a highly interconnected transmission network spanning across the western United States from the Canadian to Mexican borders, encompassing the fourteen western states.

Under Berlier’s scenario, MPC would participate in this region and would be able to offer any customer in the region the same transmission rate, regardless of location and number of transmission systems crossed to get from the generation source to the customer. One way to insure each transmission owner would be compensated for the cost of repair and maintenance on their portion of the system would be to have the independent system operator (ISO) collect the transmission fees from all users of the system. The ISO could then pay the transmission owners based on their ratio of the

system's long-run marginal cost to that of the long-run marginal cost for all of the assets under control of the ISO.

However, the current situation does not allow MPC open access to all markets and does not offer a regional transmission rate. For example, MPC currently sells into Los Angeles from the non-regulated Colstrip 4 unit. Half of the generation from Colstrip 4 is under long-term contract to the city of Los Angeles, with a transmission charge of approximately 13 mills. The other half is sold to Puget Sound Power and Light in the Seattle area, with a transmission charge of approximately 7 mills. The 6 mill difference is due to BPA's practices of internal pancaking of transmission rates. For example, if an energy supplier (MPC) wants to sell to Seattle, one rate applies for the Garrison to Seattle leg, usually 2 mills. If MPC wants to sell to California, the Garrison to Seattle leg now costs 4 mills, plus the additional 4 mill charge to gain access from WEPEX at the California border. This action undoubtedly violates the spirit of FERC Order No. 888. It would surprise few in the Northwest electric market if FERC took a stand against the internal pancaking of BPA transmission rates and the WEPEX "border charge" into California.

While a 3-region concept would facilitate the ability to compete in a very large geographic area, it is not the path recommended by William Pascoe, MPC's Vice President of Transmission, nor the path the other utilities in the West seem to be going down. While a 3-region open market may be an ultimate goal for open access in the U.S., it would be very unwieldy to develop all at once. According to Mr. Pascoe, such a system needs to be introduced in a smaller scale, such as the one proposed by MPC.

The MPC proposed system begins with the development of a regional grid. In pre-filed testimony for the Restructuring Informational Filing with the MPSC, Mr. Pascoe indicates MPC supports the formation of a smaller scale regional independent grid operator known as IndeGO. IndeGO would control and operate 22,000 miles of high voltage transmission lines in an eight state area and would offer one rate across the system, effectively eliminating pancaked transmission rates within the region. The eight state region includes: Washington, Idaho, Montana, Wyoming, Utah, Colorado, Oregon and northern Nevada. There are 9 investor owned utilities, 10 public utilities and two government agencies – BPA and WAPA, within IndeGO. There will be eleven pricing zones, which will vary the transmission charge based primarily on load density. A customer in Montana, where there is less load, may pay 4 mills for transmission service vs. a customer in Seattle who will get a 2 mill rate. Pricing based on load density recognizes that the cost of transmission service is primarily fixed, not variable, and therefore appropriately adjusted upward for lower load areas, such as Montana. The most disturbing comment by Mr. Pascoe came when he estimated it would take up to two and a half years to get IndeGO operational, meaning MPC will not be relieved of the burden of pancaked pricing anytime in the near future.

IndeGO's partners in the West will be two other systems: the previously mentioned California system (WEPEX) and Desert Star, which is just now forming. Desert Star includes the Arizona, New Mexico and southern Nevada markets.

While not as far-reaching as Berlier's concept or the California analysis completed by LCG Consulting, the IndeGO plan effectively opens up a large regional area to real

competition and is consistent with the intent of FERC Order No. 889 in that transmission regions would be governed by ISOs, insuring open, non-discriminatory transmission service under a FERC tariff. In addition, Pascoe believes that IndeGO will improve reliability of delivery service both within each company and regionally, through the synergies created by being part of a regional transmission system.¹⁵ Pascoe also mentions that the separation of transmission and wholesale power purchase functions will help eliminate the split focus of the former transmission employee. Previously, a transmission employee had responsibility for both wholesale power transactions as well as the operation of the transmission system. The attention required to execute wholesale power purchases typically would draw the employee away from his or her system operational responsibilities.

Finally, the ability of competitors to come into MPC's market territory and be able to sell in an economically rational manner will assure MPC's customers of competitively priced generation. However, if transmission pancaking continues, these same MPC customers would be unable to receive competitively priced electricity from outside the state.

Employee Skills

Deregulation will not only require efficient production of electricity and transmission pricing that will truly establish a broad market base in which to compete; it will require a fundamental change in the required skills of company employees and management.

In the past, MPC employee and management ability focused primarily on two disciplines: engineering and accounting. The engineers built the regulated assets and the

accountants kept track of the costs to be reported to the MPSC. High employee performance within the utility industry use to mean insuring the lights came on reliably, customer calls were answered promptly (something that can be used for brand equity if in fact the company is “good” to its customers), shareholders received a fair and stable rate of return on their investment, and the company was run in an acceptable manner according to the state public service commission. Targeted improvements for the next year were typically based on some improvement relative to current standard, such as a 10% reduction in O&M costs. Employees wrote the justification for capital projects with little emphasis on economics or business reasoning, instead focusing on insuring a reliable and redundant (safe) system. There was little thought given to competitors outside the system, other than to estimate how much off-system sales might be possible in the coming year, with a goal of buffering the regulatory requirement needed from traditional ratepayers. These were the traits of effective employees and management.

But for the competitive future, whether the utility adopts an offensive or defensive strategy, a new set of performance standards will be required. Emerging non-regulated competitors, unencumbered by the entitlement culture and the comparatively limited marketing and business skills of today’s utility company workforce, will redefine the employee traits of a successful energy company.

According to an article entitled “Building a Winning Electric Utility Organization,” written by Farha, Keough and Silverman, “Tomorrow’s successful energy company employee will have superior marketing, risk management, product development, and alliance management skills, which few utilities have.” The authors continue, “...most

utilities have a weak organizational starting point relative to emerging competitors. And the approaches they typically use to manage organizational change, such as company-wide quality management or reengineering efforts, are unlikely to drive the type of change needed.”¹⁶ The emerging competitors referred to by the authors are not other traditional utilities. They are non-utility generators (NUGs), independent power producers (IPPs), investment banks, even arbitrators and natural gas marketers. Emerging competitors will be companies which are already into successful, competitive businesses.

One company displaying an understanding of the new, competitive world is UtiliCorp United of Kansas City, Missouri. In May 1995, UtiliCorp began marketing its retail products and services under the EnergyOne brand. Since then, the utility has announced several agreements as the sole supplier of natural gas to Service Merchandise Corp. and the gas supplier to the 13,000-member Asian-American Hotel Association. It will be the preferred supplier of electricity to both organizations once retail delivery is permitted. UtiliCorp also has signed a contract to supply EnergyOne billing services to 2,200 branches of Bank of America.¹⁷ The employees who put these deals together did not come from traditional utility backgrounds. They understood and embraced marketing concepts that are foreign to most utility employees right now.

Aggregators and brokers outside the utility industry already are changing the market with their fresh insights, aggressive business tactics and expertise in mass marketing. In generation, for example, the management of an IPP will better understand the level of performance required to keep a formally-regulating generating plant competitive in the

marketplace. Previously, management of the plant was focused on reliability, not competitiveness in the marketplace. Ratepayers were picking up the tab, so the safety net of regulation allowed management to run the facility with less concern for efficiency than the managers of a comparable IPP. In addition, utilities with ineffective marketing strategies will lose their most profitable customers to such non-utility competitors, leaving lower-margin key accounts and a dwindling base of mass accounts once competition reaches the retail sector.

What will be needed at MPC is radical and prompt change to address both the changing environment and needed employee skills. In their article, “Winning in Electricity Generation,” authors Lewis Hashimoto, Paul Jansen and Gerrit van Geyn point to the winners in year 2005 as those who “early on developed strategies that simultaneously recovered existing generation investments while restructuring their asset portfolios and repositioning their plants to compete in the new market. Losers will have spent the time mired in indecision, their strategies ultimately forced upon them by regulators or competitors.”¹⁸ MPC has struggled for the last two years with the question of how to approach the stranded cost recovery issue, keeping management focus diverted from how to effectively develop new employee skills and set a strategy in motion. By making the decision to sell its generating assets, the company can now gain a focus on how to move forward with deregulation.

What is needed to implement an effective aggressive strategy are employees who are able to create significant improvements in operating performance. Targeting some “incremental” reduction in last year’s operating costs will not net the changes needed to

compete in the deregulated environment, especially against emerging competitors who have never operated under regulation.

Farha notes that three areas need the attention of utility management:

- *Setting the right performance aspirations for employees.* Ideally, utility companies should set their performance standards at the same level as today's top companies in other industries. Performance standards will need to be higher than ever before, since many of the new entrants in the energy business are companies who have been successful in a competitive environment: IPPs, investment banks, natural gas marketers and arbitrage opportunists.
- *Knowing the company's starting point.* Assessing the ability of a company to change and knowing where the company needs to begin are critical for the management team of today's electric utility. Having strategic clarity and vision, performance goals that stretch the organization, involved employees, aggressively managed business and production processes, exploitable information technology and a learning environment that increases employee effectiveness are all key components of an effective strategy that cannot be accomplished unless an organization knows its starting point.
- *Building a skill-based and performance-focused organization.* This must first be done by ensuring the CEO communicates the vision and the strategy behind the vision, so that employees understand the direction and how they can contribute. Next, the company should hire nontraditional senior

managers with skills that were not considered important before, like deal structuring and marketing. If a current manager has the right intrinsic skills, but no real experience utilizing such skills for the utility, the CEO must make it a priority to nurture these skills in that manager. Finally, employees and managers must be accountable for the success or failure of the company. Expectations must be met and everyone, including the CEO, must walk the talk. Employees need to be rewarded for thinking innovatively, working in a team setting, and focusing on relationship building with external partners, customers and suppliers.

The new management skills needed to run a successful MPC will not come overnight. One of the biggest challenges will be for employees, especially middle management, to break out of the daily routine of doing things the same old way. Even though MPC employees may attend seminars or be part of in-house training sessions on how to prepare for competition, they will find it very difficult to actually come back to work and change their daily routine. The pressures of their jobs and their daily workload will push the good intentions aside. According to Douglas K. Smith, author of "Take Charge of Change - Ten Principles for Managing People and Performance," it's not an issue of active resistance to change. Rather, roughly 80 percent of employees facing change are neither ready for it nor determined to resist it. They just don't know what to do or what is expected of them.¹⁹ They also don't have, or believe they don't have, the "time" to change. If senior managers do not set an example for employees to follow, the confusion employees feel will turn to resistance.

Smith offers the example of Tandem Computers. In 1993, Tandem needed to make strategic changes in its organization that required the full support of its sales staff. A key change would require a team selling approach, where the salesperson teamed up with software and application employees. The purpose was to offer total business solutions, rather than just selling hardware. So off to a seminar the sales staff went, creating “from/to” charts that identified the working relationships, skills and behaviors needed in the new organization. Upon leaving the seminar, everyone was very excited about what they had learned. But back at their desks, the doubts settled in and the daily pressures forced the seminar charts and ideas into desk drawers. According to Smith, “The employees were not resisting the change, they just felt reluctant about it and they didn’t have enough reasons to do things differently. Good ideas - and strategies that can save the company - go nowhere when people don’t know how to shift from their existing daily routine to the new one on the chart.” MPC runs this risk for at least four reasons:

1. Some employees (however irrationally) hold company management responsible for the change to competition and blame the company for destabilizing their work environment.
2. With the significant downsizing that has occurred in the past year, many employees across the company are witnessing involuntary separations for the first time. The employees that survived the downsizing (for the time being) are disgruntled and untrusting of management.

3. Everyone believes they are very busy, whether the product of their efforts is important or not to a competitive company. They are caught in the inertia of 80+ years of utility mindset.
4. Many employees believe they must continue with business as usual, because competition is something that won't really effect the company for 3-5 years. So on one hand, they resent management for changing their environment and bringing on competition; but on the other, they really don't believe competition is going to directly effect them in the foreseeable future.

A common conversation on the streets of Butte, Montana (MPC's headquarters) is to claim no knowledge about where MPC is headed and to express serious doubts about the safety of anyone's job or the company's future. This is not an environment where employees are plugged into the company's direction and are actively helping to establish a healthy, highly competitive energy company.

Branding Utility Products

Besides the employee issues and skills discussed above, one of the biggest changes for today's utilities will be the need to sell themselves to their customers. Utilities, by tradition, have not had to concern themselves with issues such as customer perception, loyalty, or value of the product in the consumer's eyes. The concern has traditionally been one of reliability, as defined and enforced by the state PSC. While proven reliability can be a positive branding point, utilities also must learn how to develop additional branding strategies that will build value with the customer. One of the more important strategies is building customer loyalty. According to David Aaker, author of

“The Value of Brand Equity,” companies should care a lot about their customer brand loyalty. The value of such loyalty comes from both a predictable sales stream and administrative and marketing cost reductions. It costs significantly less to keep an existing customer than it does to attract a new one.²⁰

For many utilities, this will be the first time considering such things as customer loyalty, or the development of branding strategies. And it will be a critical time to develop a sustainable competitive advantage that competes on factors other than price. As Tom Peters states, “In an increasingly crowded marketplace, fools will compete on price. Winners will find a way to create lasting value in the customer’s mind.”²¹ This creates a real challenge for utility management, since their product (electrons) is difficult to differentiate and the tradition has been to focus on price.

But through difficulty comes creativity, as shown by several utilities in their recent marketing campaigns. First, PG&E has developed the Clean Choice brand, being marketed as “green electricity” in California. Clean Choice offers three different options of renewable power sources: 100%, 50% and 20% power from solar, wind, geothermal, biomass and small hydro sources, with the remainder of the 50% or 80% coming from hydro power. None of the Clean Choice products include power from coal, oil or other fossil fuel, nuclear, wood waste from old growth forests, tire-burning, or solid municipal waste sources. In addition, a portion of the 100% and 50% mixes includes energy from “new renewable” sources – wind, solar, geothermal and other renewable energy plants that will be built in the future, thereby helping to expand the development of environmentally-friendly energy. The Natural Resources Defense Council (NRDC)

has reinforced PG&E's efforts by including these products on its Environmentally Preferred Product list.

Second, Edison International, another California-based company, has adopted a strategy that also focuses on environmental friendliness through product development. In a recently launched advertising campaign, customers in the Los Angeles area can save up to \$150 on a new electric mulching lawnmower that "mows down pollution" through a mower trade-in event. Customers are encouraged to turn in their old polluting gasoline mowers and purchase a new electric mulching mower, which helps reduce gasoline mower air emissions, gasoline storage, oil changes, and noise pollution. In addition, the campaign points out that an electric mulching mower chops the nutrient-rich trimmings into fertilizing mulch, which results in a healthier lawn, less need for watering and no lawn waste to bag and contribute to the landfill.

Finally, many utilities across the U.S., such as the Kansas City-based UtiliCorp mentioned earlier, have hired executives from marketing firms and have gone about differentiating their product by developing a brand name. By developing the EnergyOne brand, under which retail products and services are marketed, Utilicorp has differentiated itself as an energy aggregator; it offers to put individual packages together for its customers based on their particular needs and service requirements. None of these campaigns focus on price or the generic product -- electricity. They focus on new products or services and on differentiating based on the source of the electricity.

Name or brand awareness is also key to successfully branding a company or product. The hometown utility usually will have an advantage in this area, since the regulated customer of yesterday is most likely familiar only with the existing utility. Again assuming the company has done a good job with reliability and customer service, the customer usually will have good feelings about the product and level of service. This gives the local utility two key advantages: the perception of brand quality, via the expectation of reliability, and name awareness.

To be perceived as reliable attaches quality to the product and can be the beginning of positive branding. The company will be able to identify its reliability with its brand, providing a powerful marketing tool to use against competitors. The customer will develop a brand loyalty and have no desire or motivation to talk to other energy providers. This will be an important point for MPC after deregulation, especially with residential customers. It is accepted that MPC has been a reliable utility, a good corporate citizen and one of the largest employers in the state of Montana. Now the company must capitalize on this reputation through an effective branding campaign. Not only will such a campaign cement the company's relationship with its customers, it will show the shareholders that the company has a strong company image and an articulated strategy to address competition. For the shareholder, focusing on short-term financial goals will not be enough to insure the maximization of wealth in the future. MPC's brand image will become equally as important.

New Technologies

To help accomplish the move to a competitive environment in which energy is traded on a level playing field, new technologies are called upon to fulfill FERC's requirement of a real time, electronic information network.

This system is known to MPC as OASIS (Open Access Same-time Information System). The purpose of OASIS (or whatever electronic bulletin board a utility is using) is to provide a medium for the timely distribution of information on the availability and pricing of transmission services in a manner that does not create an advantage for the utility operating the OASIS. To comply with this requirement and insure non-discriminatory access to its transmission system for all wholesale market participants, MPC will lease space on the BPA OASIS and file written standards of conduct (with FERC) to govern its use of the OASIS. MPC began posting information on BPA's OASIS on January 3, 1997.

There is concern that third parties will not receive all pertinent information simultaneously with the OASIS utility. To ease this concern, FERC has ordered that all real-time information concerning transmission networks be recorded and placed in archives, available for audit if a third party files a complaint. FERC indeed may go further with the oversight of electronic bulletin board systems and decide not to wait for complaints, but rather establish routine audits.

A side benefit of the competition spurred by FERC Order No. 888 will be technical innovation in the monitoring of power consumption. Advances that will be needed by customers who have a power supply choice will be time-of-use meters and analytical monitors. Time-of-use meters will become critical in tracking load profiling and

supplier/consumer energy balancing and billing. Today, these meters are cost prohibitive to the average residential customer.

According to MPC's Informational Filing exhibit " 'Load Profiling' a Possible Electric Utility Restructuring Tool," the problem today comes from the existing KWh/KW meters that only provide cumulative billing information for a specified period of time, usually 30 days. Currently, there is no cost-effective way to find out what a customer's power supply needs are in any given hour or day. So an alternative power supplier may be oversupplying or undersupplying MPC's system throughout the billing month, causing MPC to "balance" the system needs with supply on a hourly and daily basis. Since power is sold by the hour and day, there is potential for a significant cost to MPC if the alternative power supplier is shorting the system during a peak (high priced) period. Until technology is capable of placing cost-effective time-of-use meters in residential homes, where metering data can be matched with the customer's alternative power supplier on an hour-by-hour or day-by-day basis, the local utility company will need to be compensated for balancing demand with supply on the system. The utility will "balance" the system by either producing more electricity from its own generation, or purchasing power off the transmission grid, via the independent system operator.

Time-of-use meters also will allow greater flexibility in rate setting in on- and off-peak periods. With technology that can track usage down to the hour, power suppliers will be able to offer power rates that change on a hourly, daily, or monthly basis. If customers are incented to conserve power during high demand periods and conversely shift power

usage to off-peak periods, higher load factors will result in more efficient usage of the power supply systems in the United States.

Analytical monitors will provide the energy supplier with downloaded data from the meter, which can then be combined and analyzed with thousands of other customer load profiles. Utilities of tomorrow will need to be much more knowledgeable about the usage patterns and supply information of their customers.

In reality, because purchasing time-of-use meters will be the customer's (or a courting energy supplier's) responsibility and the cost will be prohibitive until technology catches up, customers will be charged for their usage based on a typical load profile for that customer class. For example, residential customers typically have peak usage during the early morning hours and in the early evening, causing the energy supplier to standby ready to serve at these peak times. Consumption falls off for the rest of the day, creating a low load factor (defined as the percentage of plant capacity being used at any given time). Low load factors mean inefficient use of the resource. Customers in this group will be charged a higher peak-time usage fee, regardless of their individual energy conservation practices. Therefore, customers who conserve will have an incentive to upgrade their meter and receive cheaper rates. Thus, the energy supplier gains a better load factor and society benefits from the more efficient use of generating resources.

Regulatory Treatments

Prior to MPC's decision to offer its generating assets for sale, the company would have considered at length the possible reactions of the MPSC to MPC's Informational Filing.

This may have, in fact, been one of the driving forces in deciding to sell the generating assets of the company. Given past MPSC actions, the company would have good reason to expect that a request to cover transition costs over a phase-in period, as the Informational Filing was seeking, would have been rejected.

In addition, it was predictable that the MCC would resist any action that would disfavor residential customers in the state. It is not known if the MCC believes open competition will benefit the average residential customer. But what can be predicted is resistance, by the MCC, to any attempt to shift costs to the residential class, even if the cost shifting is simply correcting prior flawed rate design signals.

If an official filing had taken place, as structured in the Informational Filing, the company's transition plan would have accomplished at least two significant items for MPC:

- It would have removed MPSC regulatory oversight of MPC's generating assets and launched the company into the competitive energy arena for all the power that could be produced over and above the native load requirements.
- It would have guaranteed the company would recover the majority of its stranded costs (otherwise uncollectable in a competitive marketplace, i.e. transition costs) from its captive ratepayers. This significantly reduced the required market price for incremental sales in the wholesale marketplace. If MPC could sell at the incremental cost of its thermal or hydro units and flow the profits to shareholders (rather than reducing the ratepayers revenue requirement, as is the current case), the company would become stronger

financially and more likely to survive under full competition. Currently, wholesale power sales reduce the revenue required from traditional ratepayers by approximately \$58 million/year.²² Of this amount, \$41 million is earned from out-of-state sales.

The most recent action by MPC, offering its generating assets for sale, effectively limits the need for regulatory oversight of generating costs to simply reviewing a market-based contract for power, either from the unregulated Supply Division or outside third parties. This is assuming, as mentioned earlier, the sale takes place and MPC and the MPSC have reached agreement on how much of the sale proceeds will be returned to the ratepayers and how much will stay with the company and shareholders.

Financial Strength

As already discussed, the future success of a utility in the deregulated world will depend on many factors. The company's ability to control cost and develop efficiencies, utilizing new technologies; transmission interties to desirable markets; the skills of its employees and regulatory treatment from the local PSC will all factor into the success or failure of tomorrow's energy companies. Another factor to consider is the financial strength of the company. How much of the asset base is tied up in generating assets that are now going to have to compete in an open marketplace? If the company is a low-cost producer, financial strength will go up. However, many utilities will be competing against aggressive, independent power producers for the first time and may not in fact be the low-cost producer. In this case, financial strength will be harmed. Also, if the utility in the recent past underwent major generation construction projects, the financial

strength of the company could be seriously harmed by deregulation, since the assets would most likely be considered impaired and of less value to the financial world. In addition, utilities that have financed such projects with debt will feel an additional negative effect from those who value the company in the marketplace, since the bond ratings will undoubtedly slip.

Finally, efficiencies in generation will in large part come from economies of scale, as they did from airline, natural gas and telecommunication deregulation. Relatively small utility companies, such as MPC, will not be able to compete effectively with larger scale operations, especially those closer to large markets. The desire to merge and grow, gain economies of scale, develop resource balancing between seasonal loads and capitalize on large, diverse customer bases will drive many utilities to merge or acquire other companies that can fulfill the new strategic directions being driven by competition.

Ability to stay the same, merge with or acquire other energy companies

Because of the new interest in consolidation in order to survive in the deregulated world, FERC has given significant attention to the questions surrounding utility mergers, as well as the debate concerning functional and operational “disaggregation.” Functional disaggregation occurs with the separation of generation, transmission, and distribution services into individual business units under the same corporate ownership. Operational disaggregation takes the separation one step further, with the corporate divestiture of generation, transmission, and distribution into separate corporate entities.

Disaggregation

As utilities realign for competition, the concerns raised by FERC and state PUCs cover a wide spectrum of issues. At the core is whether or not utilities should be forced into operational disaggregation. On either end of the spectrum are two people overseeing the transition, FERC Commissioner Vickey A. Bailey and Oregon PUC Chairwoman Joan H. Smith.

According to an article written by Steven M. Fetter, FERC Commissioner Vickey A. Bailey believes that for a competitive market to thrive, it must operate as free from government interference as possible. The limited role for government she would allow tracks FERC's activity in its Open Access Notice of Proposed Rulemaking (NOPR), namely the setting of rules to ensure:

- Open access on transmission lines
- A sufficient number of generation competitors
- That buyers and sellers are not allowed to gain advantage from owning both generation and transmission.

Commissioner Bailey suggests that, while divestiture is not necessary to comply with FERC's proposed rules, a corporation might choose to do so as the path of least resistance. Bailey's FERC colleagues, commissioners Massey and Hoecker, echo a willingness to see if functional disaggregation is sufficient to achieve comparability, or fair use of the transmission grid.¹⁹

On the other end of the spectrum is Oregon PUC Chairwomen Joan H. Smith. She believes operational disaggregation is mandatory to insure a competitive environment. According to Fetter, Smith maintains that without divestiture, "there is a continued need

for regulatory oversight to prevent self-dealing abuses.” By demanding divestiture, the stage is set for competitiveness with little regulatory intervention. The need for regulators at either the state or federal level would be minimized and the need of the public to have competitively priced energy would be met by the marketplace rather than by regulation.

Other points to consider are:

- *Whether forcing of companies to divest their assets can stand the test of demonstrable benefits to both wholesale and retail customers.* Raising concerns over this issue is Chairwomen Susan F. Clark - Florida Public Service Commission. She questions the wisdom of forcing the separation of generation and transmission facilities, since the electric industry has historically planned and optimized its generation and transmission facilities as one unit, with instantaneous communication between the system dispatcher and his/her transmission counterpart, to insure system reliability and economics. Redundancy of facilities and staff becomes a concern, as well as the state’s ability to meet the needs of its retail customers when the jurisdiction over two of the three components (generation and transmission) has significantly diminished. According to Clark, “Unlike the natural gas industry, which was disaggregated by the FERC, market-priced and embedded-cost electric generation and transmission facilities cannot be cleanly separated into FERC-regulated wholesale facilities and state-regulated retail facilities. We are concerned that retail ratepayers will be

required to pay for much of the cost of this competitive reform, but that wholesale market participants will reap much of the benefit.”²³ Clark is concerned that state regulators, who are now charged with establishing fair and nondiscriminatory retail electric rates from investor-owned utilities, will lose control over the cost and revenue structure of generation and transmission facilities.

Also, the Florida PSC, (like Montana) has been the sole forum for determining the need for major power plants and transmission facilities.

Would this responsibility be shifted to the federal level? If so, how are the needs and concerns of the state’s residents represented? It is possible that the federal government would protect the wholesale power market at the cost of the state’s retail customers and residents?

- *If a stand-alone generation company can attract the necessary capital to build new production facilities.* Or, as suggested by Ohio’s PUC Chairman Craig A. Glazer, “is the industry structure a natural monopoly where only a few ‘megaplayers’ will be able to attract the capital needed to build new plants?”²⁴
- *If system reliability will be compromised by the potential breakup of corporations.* Glazer cautions that while the theory of disaggregation makes sense from an economic and perhaps societal view, it may not make sense from an engineering point of view. He states that we should look back and remember why the electric utility industry was structured as a vertically

integrated system. “Electrons listen the laws of physics and not the laws of any governing body. The system was built as an integrated one, since this was the most efficient means, from an engineering point of view, to deliver these vital electrons to customers distant from the power plants that generate them.” Glazer poses the question, “Can the system operate fully disaggregated where no single entity has operational control over the vital parts of the system?”⁹

This raises a follow-up question: does the current effort to make the market more efficient cause the physical operation of the production and transmission facilities to become less efficient? If so, what is the net gain to society? State and federal regulators need to consider these critical questions when setting the direction for electric industry deregulation.

MPC has restructured the corporation to accomplish functional disaggregation, establishing two divisions -- Energy Supply Division and Energy and Communication Services Division, along with realigning transmission services into the Energy and Communication Services Division. According to Mr. Pascoe, “Functional unbundling is apparent in MPC’s new organizational structure. Prior to this reorganization, MPC generation and transmission (G&T) activities were combined in a single business unit. Now generation is part of MPC’s Energy Supply Division and transmission is part of MPC’s Energy and Communications Services Division. In addition, we have divided our formerly integrated control center activities to comply with the functional unbundling concept. Staff at our Systems Operations Control Center (SOCC), which is

part of the Energy and Communications Services Division, are now responsible for operating the transmission system and for maintaining overall system reliability. Former SOCC staff responsible for economic dispatch of MPC's generating plants and for wholesale power transactions are now part of the Energy Supply Division and have been relocated to a 'trading floor' environment in another MPC facility."²⁵

Mergers

While a great deal of attention has been given to whether or not corporations should be forced to disaggregate, equal regulatory attention has been paid to questions raised by potential mergers in this new competitive environment. FERC Commissioner Massey states "a merger which is truly 'consistent with the public interest' must not have a deleterious effect on competition."²⁶ He indicates that FERC and state regulators should be cautious in approving mergers that allow a concentration of generation assets, while favoring mergers that create regional transmission grids. There has been little merger activity so far to support the idea that companies are actively pursuing mergers for the purpose of developing regional transmission grids, or avoiding mergers that concentrate generating assets.

In the past, mergers were analyzed by regulators based on each merger's impact on costs. Because rates were cost-based, cost savings due to the merger were the key determining factor in approving the merger. To the extent there were cost savings, these savings could be passed on to consumers through rate reductions. Moving to a competitive environment where rates will be set by the supply and demand of the market changes the focus of regulators. Now, mergers can have an undesirable result,

from a societal view, if the generation function is inappropriately concentrated, thus restricting competition. Future evaluations of mergers will need to be based upon thorough analysis of the impact the merger will have on market power and competition.

From the company's viewpoint, mergers can be difficult and disadvantageous, given many conflicting (and sometimes competing) regulatory views, from FERC vs. state jurisdiction to varying state regulatory policies and philosophies.

An example of an attempted utility merger that ultimately was abandoned because of regulatory confusion is the Washington Water Power (WWP) of Washington and Sierra Pacific Resources of Nevada merger proposed on June 27, 1994. The merger was abandoned in June 1996.

In WWP's July 8, 1996 SEC 8-K filing, the company gave the following explanation for canceling the merger:

“On June 28, 1996, the Board of Directors of The Washington Water Power Company (“Company”) terminated the Agreement and Plan of Reorganization and Merger, dated as of June 27, 1994 (the "Merger Agreement"), by and among the Company, Sierra Pacific Resources, a Nevada corporation ("SPR"), Sierra Pacific Power Company, a Nevada corporation and a wholly-owned subsidiary of SPR ("SPPC") and Altus Corporation, a Nevada corporation and a wholly-owned subsidiary of the Company ("Altus"), which would have provided for the merger of the Company, SPR and SPPC with and into Altus. The Board of directors noted the significant disparity in views among the Federal Energy Regulatory Commission (the "FERC"), as reflected in the position of its Staff,

and the state regulatory commissions having primary jurisdiction over the companies. The FERC was concerned with wholesale markets at the national level. Each state commission, on the other hand, was concerned with the interests of retail customers in its particular jurisdiction. The Board concluded that there was little chance of obtaining approval of the proposed merger from each of the regulatory commissions having jurisdiction, on terms consistent with the regulatory principles adopted by the companies and satisfactory to each other commission.

In addition, the Board concluded that even if the proposed merger were consummated, Altus would be subject to significant continuing risk of inconsistent regulation, with the stockholders of Altus bearing the financial consequences of such inconsistency.”²⁷

While mergers will undoubtedly occur, as deregulation goes forward and markets become less defined by geography and state boundaries, the concerns of regulators about unhealthy concentration of generating assets, and the concerns of company’s about inconsistent treatment from multiple jurisdictions, will need to be resolved to the satisfaction of all parties.

III. IMPACT OF DEREGULATION ON MPC

The New World of Competition

In order to contemplate the effects of deregulation on MPC, there needs to be an assessment of how the company has responded to competition up until this point. MPC has not seen itself as a leader in setting the off-system pricing for the region, rather a taker of available market price. Unfortunately, in normal or high run-off years, the price-setter in the Northwest has been the BPA, which has a very small incremental cost to produce from its hydro facilities, plus a tax free status as a governmental agency. In addition, BPA owns a large portion of the 500 KV transmission system between Montana and major West Coast markets, with rights to set transmission prices that could perhaps discriminate against their competitors (in the world before deregulation). With these advantages, the BPA has been able to suppress wholesale power rates in the Northwest for many years, effectively dominating the marketplace to the exclusion of all others. This has left MPC with little financial incentive to offer its excess generation into the marketplace.

With deregulation, MPC will have the first real opportunity to compete in a marketplace where eventually there will be numerous competitors and relative ease of entry. As pointed out by Dr. Shephard in his pre-filed testimony before the MPSC, “competition is usually not fully effective when there is dominance by one firm or a tight oligopoly with only two or three firms holding nearly all the market. The deregulated market will usually need to evolve past these types so as to contain numerous strong competitors.”²⁸

Deregulation will open this door for MPC, and for those competitors that will seek MPC's customers, without the market-surpressing influence of BPA.

As previously mentioned, MPC has in the past penalized its large industrial customers, by increasing rates above the true cost of service, so these customers could subsidize rates charged to the residential class. With the implementation of FERC Order No. 888, MPC's large industrial customers will be able to shop for the most competitive energy supplier. And these new energy suppliers are waiting in the wings to serve in an open marketplace that is dictated by price rather than legislation and monopoly power.

The new world of competition for MPC will first result in these large industrial customers, which make up approximately one-half of the utility's regulated revenue stream, being able to seek new power suppliers. With this high of an exposure to load loss, MPC must either take quick action to correct the overcharge of rates to the large industrial class, or embrace deregulation and attempt to replace lost revenue with new opportunities presented by deregulation. Either way, MPC's large industrial customers will be the first to experience deregulation, followed by commercial customers and then finally residential customers. A schedule of how MPC proposes to transition to a competitive environment is presented in the next section.

If MPC is not successful in restructuring the company to immediately address the effects of deregulation, the company stands to lose one of its largest revenue classes and will not be positioned to take advantage of the opportunities brought on by open competition.

Changes in the Montana Regulatory and Legislative Environment

To bring about FERC mandate to open transmission systems nationwide, states must take action to undo the regulated environment. To this end, on Tuesday, April 15, 1997, the Montana legislature passed into law the Electric Restructuring and Customer Choice law, authorizing the restructuring of the state's electric utility industry. Montana is the second western state, behind California, to pass legislation that will put into effect deregulation at the state level.

The focus of the Montana legislation includes:

- calling for customer choice of supplier as soon as July 1, 1998, but no later than July 1, 2002
- a two-year rate freeze on customer rates
- an additional two-year rate freeze on the energy component of bills for residential and commercial customers
- provisions for recovery of utilities' stranded costs

According to the law, actual recovery of the stranded costs a utility may incur will be determined by the MPSC after a review of the stranded costs and the utility's efforts to mitigate such costs. As previously mentioned, MPC has changed direction and will not be seeking the recovery of stranded costs. Rather, the company has chosen to sell its generating assets on the open market, effectively eliminating stranded generating costs, which was the bulk of MPC's stranded cost recovery request. This change has undoubtedly simplified the cost recovery issue for MPC and the State.

To begin deregulation, MPC filed a transition plan with the MPSC on July 2, 1997. MPC's plan calls for customer choice to be available to the company's 75-100 largest

customers by July 1, 1998 (these customers consume approximately 40 percent of the company's electricity). The next layer allowed choice would be approximately 10% of the residential and small commercial customers, who could seek alternative suppliers by July, 2000. Half of the remaining customers would be allowed to exit MPC's generation by July, 2001, with the remaining customers going to full choice by July, 2002. In the near term, the company proposes to establish pilot programs to help develop the administrative functions related to choice.

In addition to the schedule for transition, other items under consideration by the MPSC include: establishing a cost-based contract between MPC's Supply (unregulated) and Energy Services (regulated) Divisions for customers who do not have a viable choice during the transition period; establishment of a USBC, earlier defined as a Universal System Benefit Charge, to provide for conservation research and low-income assistance; potential changes in MPC's organizational structure; and standards of conduct for the utility in a competitive environment.

With these actions of the Montana legislature and MPSC, Montana is headed down the path of becoming an early entrant into the new competitive marketplace of the WSCC.

Company Profile

Company Establishment and Structure

MPC came into existence 1912, beginning as a small regional electric company. From the original electric business, supported primarily by hydro operations, Montana Power expanded into natural gas service in 1931, and in 1951 became the first major utility in the United States to import natural gas from Canada. As possible hydroelectric sites

became more scarce, Montana Power acquired coal reserves in eastern Montana in 1959, and began its surface mining ventures in 1968, expanding to Texas lignite fields in 1985. The non-utility ventures also included oil and natural gas businesses. Telecommunications - required to link one of the nation's most wide-spread electric transmission operations - became a commercial venture in 1984. In 1988, the company began its independent power operation to manage long-term contracts for the non-utility sale of electricity from Colstrip Unit 4, and to invest in non-utility generating plants.²⁹ The following provides a description of the major components of MPC's operations.

Utility Electric Operations

MPC's Utility Electric System extends through the western two-thirds of Montana. Generating capability is provided by four coal-fired thermal generation units, with total net capability available to the Utility of 683,000 kW, and 12 hydroelectric projects and one storage dam, with total net median water capability of 474,400 kW. The thermal units are

- (1) Colstrip Unit 3, which has a net capability of 740,000 kW, of which the Company owns 222,000 kW;
- (2) Colstrip Units 1 and 2, with a combined net capability of 614,000 kW, of which the Utility owns 307,000 kW, and;
- (3) the wholly-owned 154,000 kW Corette Plant. Western Energy, a subsidiary of MPC, supplies all of the Colstrip coal requirements under long-term contracts. The Corette Plant is supplied under a short-term contract from a non-MPC Wyoming mine. Reliability of service is enhanced by the location of

hydroelectric generation on two separate watersheds with different precipitation characteristics and by various sources of thermal generation.

In addition to the Utility's hydroelectric and thermal resources, it currently receives electricity through 18 contracts totaling 353,300 kW of firm winter peak capacity. These contracts vary in type, size, seller and ending dates. Again, the generating plants at Colstrip, plus the hydroelectric operations currently are for sale.

At December 31, 1997, the Utility owned and operated 6,889 miles of transmission lines and 15,639 miles of distribution lines. Transmission lines are high voltage lines that move power across a system (i.e. from Colstrip to various substations on the MPC system, or to BPA's transmission system) while distribution lines deliver low voltage power to the ultimate end user (i.e. from the substation to the residential house).

Natural Gas Utility Operations

The Utility currently produces minimal amounts of natural gas from fields in southern Montana and Wyoming. The Utility transferred almost all of its natural gas production properties in the United States and all of its Canadian natural gas production properties to an unregulated subsidiary on November 1, 1997, as a result of the Company's natural gas restructuring filing with the PSC. All of the Utility's natural gas customers are served from its 2,104 miles of transmission system and 3,451 miles of distribution mains, which extends through the western two-thirds of Montana. System reliability is enhanced by four natural gas storage fields which enable the Utility to store natural gas in excess of system load requirements during the summer for delivery during winter periods of peak demand.

Non-Utility Oil & Gas Properties

As mentioned above, the Non-Utility operations include the transfer of almost all of the production properties from the Utility operations in 1997. Also in 1997, the company completed two major acquisitions, purchasing Vessels Energy's oil and gas assets in Colorado's Denver-Julesburg (D-J) Basin and a natural gas processing and fractionating plant near MPC's existing Fort Lupton, Colorado plant. This purchase allows the company to enter the fractionated liquids business in the Denver area.

Currently, MPC owns or leases over 1,000 producing gas wells and 185 producing oil wells, in addition to owning and operating an 800-mile gas-gathering system in Alberta and the western United States. The Non-Utility Oil & Gas operations of MPC can expect to grow over the next several years, as evidenced by plans to spend up to \$56 million in 1998 for exploration, acquisition and development of oil and gas properties. The Non-Utility Oil & Gas operations of the company are a significant part of MPC's continued growth and diversification strategy.

Independent Power Properties

MPC's Independent Power Operations (IPO) develop, acquire, operate and maintain, and manage facilities and resources to provide electricity and other energy-related services. Colstrip 4 Lease Management Division sells the Company's 222 megawatt share of Colstrip Unit 4 generation principally to the Los Angeles Department of Water and Power and to Puget Sound Energy, Inc. under contracts with a term through December 29, 2010. The Colstrip 4 leasehold interest and its related assets and

liabilities and contract obligations are intended to be sold with the regulated electric generating facilities and power purchase contracts.

The IPO, through Continental Energy Services (CES), an MPC non-regulated subsidiary, develops and invests in power projects, and currently holds ownership interests in seven operating, natural gas fired projects located in Texas, New York, Washington and the United Kingdom, one heavy oil-fired project located in Jamaica and one gas-fired independent power project under construction in Pakistan. CES, through a wholly-owned subsidiary, is the managing general partner of a 255 MW project located in Texas. In addition, CES is participating with others in the development of a coal-fired project in India and an 800 MW gas-fired project in Texas. The interests in these projects are not being offered for sale with the regulated electric generating facilities.

Finally, CES holds a 50% interest in North American Energy Services Company, which provides energy-related support services including the operation and maintenance of power plants. The interest in North America is not being offered for sale at this time.

Telecommunications Properties

MPC seems to be focusing most heavily on growing its telecommunications properties. Currently, Touch America has a 3,000-mile fiber optic network covering a seven-state region extending from Seattle, Washington to St. Paul, Minnesota and from Denver, Colorado to the Canadian border. Touch America continues to expand its network capacity. An additional 1,620 miles of fiber network being built will widen Touch America's service territory to 11 states. In January 1997, the Company acquired 12 licenses in 12 marketing areas between Minneapolis, Minnesota and Seattle,

Washington along the route of the fiber optic network, which presents an opportunity for wireless telephone service in that region.³⁰ These licenses allow larger volumes of traffic via a wider band widths and also allow the by-pass of local wired service. Touch America will begin beta testing the by-pass of US West copper wire in 1999. If successful, this new technology will open up local service to Touch America, a significant new field for the company.

Diverse Resource Base

As described above, the company has a diverse resource base that would have provided a competitive advantage in the deregulated marketplace, if the stranded cost recovery issues were not overwhelming. The coal-fired plants at Colstrip serve to balance hydroelectric availability, which (as mentioned earlier) are spread between two drainages, furthering the company's ability to efficiently operate its generation facilities. The balancing capabilities of MPC's generating assets, via coal-fired/hydroelectric and separate drainage for the hydro operations, will add to the value of the assets for sale.

The 6,900 miles of transmission lines in the state provides the backbone of the transmission system between Colstrip and the West Coast market. MPC's system has interconnections to five major transmission systems located in the Western Systems Coordinating Council (WSCC) area, as well as one relatively small interconnection to a system that connects with the Mid-Continent Area Power Pool (MAPP) region. With these interconnections, the Montana Power Company electric transmission system is strategically located to allow for the purchase and delivery of power in diverse markets

-- from the Pacific Northwest, to the desert Southwest and California, to the Colorado area, and to a limited extent, the MAPP region.

Not to be forgotten in evaluating the diversity of MPC's resource base are the two areas of the company that can offer more to the customer than just electricity. The natural gas and telecommunication properties give the company an opportunity to provide one-stop shopping for many types of customers. An example of this is provided in the SWOT analysis section discussion on the California Manufacturing Association.

Customer Loads & Relationships

Service Area and Sales

The Utility's service territory comprises 107,600 square miles or approximately 73% of Montana. Within its service territory, 86% of the state's population resides. MPC serves approximately 603,000 residents, or 80% of the population within the service territory. Additionally, energy is provided to cooperatives that serve approximately 76,000 residents.

Dominant factors in Montana's economy are agriculture and livestock, which together constitute Montana's largest industry. Other factors are tourism and recreation, coal and metals mining, oil and natural gas production, and the forest products industry, which includes the production of pulp and paper, plywood and lumber.

Electric service is provided to 191 communities, the rural areas surrounding them and Yellowstone National Park, and natural gas service is provided to 109 communities. Firm electric power is sold at wholesale to two rural electric cooperatives.

In addition, the company also sells discounted power to California manufacturers and other out-of-state purchasers, such as to the city of Los Angeles and competing utilities in the WSCC. Natural gas is sold at wholesale to distribution companies in Great Falls, Cut Bank, Shelby, Kevin, Sweetgrass and Sunburst, Montana. Additional gas purchases are made by out-of-state brokers, who move MPC gas as far away as Texas and Southern California.

Cost of Service

MPC's cost of service, which determines the revenue requirement requested by the company, is made up of two major components:

- Operating expenses, such as: purchased power expense, operating and maintenance costs of the generating plants, as well as the transmission and distribution facilities, administrative and general expenses, depreciation/amortization and income taxes. These costs are captured on the company's books and records and are "normalized" as part of the rate filing, to eliminate any one-time or abnormal charges in the company's books. MPC's cost of service, before the calculation for a return on rate base, added up to \$352.9 million for the 12 months ended December 31, 1995, per Exhibit 5 (column Y, row 56). If this amount is collected through rates, the company will just breakeven on its operating costs.

- A return on rate base, which covers the cost of debt financing and compensates the equity owners for their investment. The return on rate base is calculated by taking the weighted average cost of capital for the utility times the electric utility rate base of the company. The rate base is primarily made up of capital investments made by the utility, which amounted to \$1.063 billion as of December 31, 1995. The weighted cost of capital for MPC's December 31, 1995 rate filing was 9.59%, creating a requested return on rate base of \$102.1 million.

The requested return on rate base is added to the cost of service calculation above to create the company's revenue requirement request for the December 31, 1995 test period filing.

With the revenue requirements typically granted to MPC (which have been at times significantly less than the requested revenue requirement), the company has traditionally been considered a low cost provider of electricity, in comparison to other utilities in the western United States. As Exhibit 6 shows, MPC's rates for its large commercial and small industrial customers rank second lowest, next to rates in Boise, Idaho (which is served by Idaho Power).

Residential rates rank 5th of the eleven utilities compared. The residential class rates, even though large industrial customers have subsidized them, are not as low priced as other utilities in the West. This is primarily due to the lack of a significant population base in Montana to absorb the fixed capital costs of distributing power to a large geographic service area. This also causes the small commercial customers to pay the 5th highest rates, by comparison.

As previously mentioned, MPC's large industrial customers have felt the effects of MPC's rate design methodology, as shown by the difference between small industrial, which has the second lowest rates and large industrial, which come in 4th in its category. Without conducting a cost of service study, it can only be hypothesized that MPC's large industrial customers would most probably pay the 2nd lowest rates if true cost-of-service rate making were applied.

Labor Force

At December 31, 1997, the Company and its subsidiaries employed 2,903 persons, including 385 employees at the jointly owned Colstrip Units 1-4. Over 500 employees work at the generating facilities now for sale.

Of the 2,903 persons, 1,038 are members of collective bargaining units consisting of 16 unions. Current union contracts will expire at various times during the next 4 years, with 14 contracts expiring in 1998.

Corporate Culture

MPC's corporate culture is changing, probably more now than anytime in the past. The catalyst for this change can only be speculated, but people familiar with the company attribute the change to two major factors: deregulation and a new style of leadership.

Deregulation spawned the restructuring of the company into two divisions, Energy Supply and Energy and Services/Telecommunications. This action further led to the creation of the Shared Administrative Services function. With these changes came an assignment of officers to each of these three key areas. All of these changes combine to help the company culturally in several ways: having an officer in charge of all aspects

of supply or all aspects of energy services (distribution) or shared administrative services has enhanced the coordination of employee efforts in their respective areas and has improved the focus of each division.

The reorganization has also reduced the “us vs. them” culture previously seen between Entech (the company’s non-utility arm) and MPC’s, in addition to eliminating the redundant work being done by Entech and MPC’s duplicated administrative departments. For example, collapsing duplicate tax, human resource, accounting and auditing departments into one department for each area has not only saved money, but has put employees together who previously may have had little contact with each other. In short, the reorganization of MPC has helped eliminate former walls between Entech and MPC employees.

Other evidence of cultural change is the pay structure changes and promotion opportunities. Until recently, employees received pay raises and promotions based primarily on longevity with the company. The exception to this has always been the compensation plan for Touch America, which has for years been tied to the financial success of Touch America.

Not too long ago, offering an incentive program to employees that were directly responsible for the success (or failure) of the oil and gas trading programs was dismissed as a bad idea. It was believed that if this were done for one group of employees, others would feel slighted. These were the same employees who were being courted by large oil companies who used employee compensation incentive programs that rewarded performance on the job. The main reason there was not an exodus from

MPC and Entech is because the workforce is primarily Butte-born people who prefer not to leave their hometown.

While compensation plans are not public knowledge, it is known that incentive plans today are much more common at MPC. Employee expectations are being redefined to reward productive actions and behaviors. Thinking innovatively, working in teams and going the extra mile for a customer are all becoming part of the employee appraisal system.

It will take a frustratingly long time for the majority of the workforce to understand and support the cultural change that is taking place. But if this new culture can be instilled in everyone from the mailroom on up, the workforce will become part of the success of the company.

One of the hardest cultural changes for MPC will be getting employees to break out of their daily routine long enough to evaluate whether or not that routine is adding any value to the new company. It cannot be left up to management to go around to every employee and evaluate every task against the new yardstick. So employees must be coached and trained to see their jobs in a new light and be rewarded for improving or revamping processes critical to the success of the new organization. This is much easier said than done, because no employee wants to believe what he/she has been doing is or will be of no value, or may be a job that can be eliminated.

A new culture of learning also is important. If the previous skill sets of the employees are based in traditional utility operations, then they will be of little value to the new company, especially after the sale of the generating assets. Bringing in new people who

have experience in aggressive marketing, deal structuring, actively managing processes and exploiting information technology will set a standard for others to follow. Perhaps this was MPC's thought behind the recent hiring of a new Vice President of Marketing.

Strengths, Weaknesses, Opportunities and Threats in Relationship to a Deregulated Market

THE BUILDING OF A STRATEGY

Evaluating Strengths, Weaknesses, Opportunities and Threats in the New Marketplace

An analysis of MPC's strengths, weaknesses, opportunities and threats (SWOT) in the new marketplace is critical to evaluating the potential effects of deregulation on the company. In a deregulated environment, it will be important to know MPC's distinctive competencies and to match them to the new opportunities and risks presented by deregulation. A SWOT analysis answers these competency and opportunity questions. Ideally, this analysis becomes a building block in establishing a corporate strategy that will exploit both MPC's strengths and market opportunities. Likewise, such an analysis is necessary to assess weaknesses and new threats in the marketplace, with the goal of either addressing the weakness with an improvement plan or mitigating the threats by a new course of action.

When an industry goes through major changes, the framework in which it operates must be evaluated and reassessed by the standards now relevant in the "new" industry. According to Michael Porter, "The framework for viewing strengths and weaknesses illuminate two fundamentally different types: structural and implementational."³¹ Structural strengths and weaknesses are determined by the characteristics of the

industry, while implementational strengths and weaknesses are determined by employee and management ability to execute the strategy.

Structural Strengths and Weaknesses

Traditionally, MPC, as well as the rest of the electric utility industry, has based its structural strengths on reliability of service and the guarantee of cost recovery (plus a return on rate base) via ratepayers. This had been done with the promise of a regulatory barrier against the entry of local competition, to protect both the ratepayer and the utility investor. While the promise of cost recovery was not always kept by the Montana PSC, the structural framework of cost recovery and utility franchise kept MPC's investors satisfied for many decades and allowed enough return on rate base for the company to continue providing reliable service to the ratepayers of Montana.

In contrast, a deregulated environment means new structural strengths and weaknesses will be established for the industry. The main structural focus will be on competitively marketing energy in both current and new geographic regions. Reliability of service will still be important, but it will not be the only consideration. The ability of a utility to cost effectively implement technological advances, such as time-of-use meters and analytical monitors, will factor into the consumer's decision making. New power supplies will be developed on a much smaller scale, because of technological advances that already have taken place in generation and the access to other under-utilized plants within the transmission grid. Utility companies increasing will use contracted firms to build and manage power plants. The dependence on regulatory approval, to determine if and when a power plant gets built, will be gone. Instead, energy can and will be traded by firms

that do not own one kilowatt of electricity. The actual production of the energy will take a back seat to coordinating delivery across several transmission grids, ultimately providing power to a consumer several states away.

The real challenge for MPC will come from determining the *relevant* structural components for the new energy supply industry and reassessing its employee base in light of the need for new skills and capabilities. The company must move away from the temptation to prepare for competition by downsizing and cost-cutting. Instead, a marketing mindset must be instilled and information systems must be installed to support those who need the information to make marketing decisions.

Implementational Strengths and Weaknesses

Implementational strengths and weaknesses are identified by the ability of the company to *implement* its strategy. A company without the right skill set in its employees and managers will not be able to implement new strategy, let alone survive in a competitive world. Competition has caused a shift in what is now considered the right skills for utility personnel, with authority and accountability being shifted away from senior corporate management, toward those operating the power plants, transmission system and trading floor. Operating managers are beginning to have “bottom-line” responsibilities for the first time. This is characteristic of the management style of one of the biggest emerging competitors in the energy business -- NUGs, previously defined as Non-Utility Generators.³² Utilities are discovering that plants can be run more efficiently, with fewer employees. Many jobs previously done by company employees can be outsourced (at a substantial savings) to third-party personnel, especially ancillary

services such as accounting and tax preparation. Utilities also have discovered that distracting management time on services that can just as easily be accomplished by an unaffiliated professional firm frees up senior management to concentrate on growing the business. Similar to NUGs, utilities will likely see outsourcing firms as an indispensable resource of the future.

Strategy

Business strategy typically will be targeted at one of four *strategic areas* -- differentiation, technology, cost, or service.³³

It will be important for MPC to establish a strategy that answers the question "Which strategic area should the company compete in?" The choice may be determined by selecting the existing area that involves the best trade-off between profit potential and cost to compete, or by selecting an entirely new strategic area. With deregulation changing the way the company plans for the future, now would be the time to consider Porter's caution that while a low cost position *within* a strategic area may well be critical, a focus on low cost position overall is not necessarily important or the only way to compete. In fact, becoming the low cost producer in a competitive environment may involve unacceptable sacrifices in one of the other strategic areas. Customers will tolerate higher rates from an energy supplier that provides exceptional service or has a new technology to offer, as long as the price is not so high as to induce the customer to give up on the better service or new technology. The customer's choice also may hinge on loyalty developed through effective branding programs.

Thinking in such terms is new for MPC. Traditionally, the focus has been on reliable, utility-type service and justifiable (to the PSC) operating costs and capital investments.

MPC Strengths

MPC has a competitive advantage over a utility that has solely operated as a vertically integrated company, as well as skills and knowledge of the employees in the non-regulated side of the business.

Entech, formed in 1982, has owned and operated the non-utility assets of the corporation, including coal mines, oil and gas fields in Canada and the U.S., telecommunications and an unregulated power producer, Continental Energy Services.

Continental Energy Services (CES) is a wholly-owned subsidiary of MPC. Beginning operations in 1988, CES has been in the energy marketing game through its role as an investor in unregulated power generation plants in the U.S. and abroad. Led by Dick Cromer, who now serves as the Vice-President of MPC's newly formed Energy Supply Division, CES has gained some of the necessary experience for the deregulated generation business. While CES's actual depth of knowledge in the deregulated market is still in question, the existence and experience of this company is definitely a strength for MPC.

In addition to CES, another strength is in the telecommunications division, headed by Mike Meldahl. While a very small part of the corporation in both asset base and revenue, the telecommunication division holds the promise of growth and possesses critical marketing skills. In 1997, Touch America contributed 6% to the corporation's

earning before interest and taxes (EBIT), a figure expected to grow significantly as Touch America aggressively expands its fiber optic network over the next year.

The telecommunication division of MPC is made up of two subsidiaries -- Touch America (formally TRI Touch America) and Tetragenics. Touch America (TA) is a long distance telecommunications provider with service from Seattle to Minneapolis. Even smaller revenues are generated by TA's sister company -- Tetragenics, the automated systems arm of MPC. Tetragenics expertise lies in developing and maintaining automated hydro facility systems. Although formally incorporated in 1982, Tetragenics began in 1972 when some engineers at MPC used a computer to automate a power plant. Their efforts helped start Tetragenics. Since then, the company has become an innovator and leader in the hydroelectric and data acquisition systems, pioneering one of the first efforts to use a computer to control a hydroelectric power plant successfully. Tetragenics employees know firsthand the effects of no revenue contracts in the door -- no jobs. The company went through a relatively large layoff in 1985 because there was no work. This is an unusual event for an employee attached to MPC, or any other utility for that matter, giving the surviving employees and management a glimpse of life in an unprotected industry.

For many years, the telecommunication division's employees have known how to be lean and mean in the marketplace. The future of the division depended on cost saving measures, strong marketing skills and a customer service focus. While the average employee at Entech (where Touch America formerly resided) was in typical corporate mode, not particularly aware of the cost of doing business or where the next revenue

dollar for the company was coming from, TA employees were trying to figure out how they could get by with less expense. Also, marketing was, and still is, in the blood of TA employees, reinforced by a pay system tied to company performance. For these reasons, the telecommunication division of MPC is positioned for competition and can be counted as a strength of MPC.

According to strategic research from Frost and Sullivan on U.S. strategies for utilities in telecommunications, the Telecommunications Act of 1996 presents new opportunities for utilities to leverage their customer base and valuable rights-of-way by offering bundled telecommunication and electric services, a package that is expected to be very popular according to the authors. This structure leads to a competitive advantage in that the utility already has established an extensive customer base, a reputation for providing reliable, high quality service and has a billing mechanism already in place. In addition, the telecommunications industry expected to grow at a compound annual growth rate of 7%, compared with a stagnant 1.1% growth for the electric power industry for the forecast period 1996-2003.³⁴ MPC is well positioned to bundle telecommunications and electric service and to be a seasoned participant in the high growth telecommunications industry.

The coal operations of the company also can be considered a real strength for the deregulated future for two reasons:

1. The coal business has become very competitive over the last decade, with the Powder River Basin over-supply, lower taxes on coal mined and inexpensive overburden removal costs. MPC's Western Energy mine in

Colstrip has had to compete with the Powder River Basin (PRB) supply in the Midwestern market, requiring cost-cutting and strategy planning indicative of a competitive company.

MPC's other coal mine, Northwestern Resources Co. (NWR) in Jewett, Texas, also has had to respond to increasing pressure from the PRB. NWR, a mine-mouth operation for Houston Light & Power's (HL&P) Limestone Plants, just recently has come under the pressure of litigation by HL&P. HL&P is attempting to break its life-of-mine contract with NWR, in the hopes of capitalizing on the cheaper PRB coal. NWR must prove to a jury that it runs an efficient, cost-effective operation and has done no harm to HL&P. The mine's plans for demonstrating a cost-effective future are equally as important as its past performance. This is another indication of the competitive nature of coal mining and a demonstration of the skill set within the company. A mine previously considered captive now has to prove it is a cost-efficient, competitive operation.

2. The contract administration department and management at Western Energy has established relationships over the years with utilities, energy analysts, governmental agencies and non-utility power producers throughout the United States. These connections have proven valuable in establishing joint ventures in both coal and plant operations over the past several years. For example, Western Syncoal (WSC) was formed through a joint-venture between Northern States Power and Western Energy with the purpose of

commercializing a clean coal technology product. This \$60 million capital investment project was 50% funded by the Department of Energy, with on-going funding of the operation for a five-year period. This project would most likely not have been done without the relationships developed by Western Energy personnel.

MPC's ability to further build customer loyalty will be a critical part of the new structure and strategy. Customer loyalty becomes a valuable marketing tool for companies going through deregulation. This is consistent with what has happened with the deregulation of the telecommunication industry. In telecommunications, effort is now put on added service features, loyalty to one company ("come home to AT&T") and low rates that can easily be understood. The focus is on marketing service to the consumer, and the message is the company will take care of the consumer, making their life easier.

MPC has consistently shown itself to be concerned about its customers, by such examples as: being responsive to service calls, offering free pilot lighting in the fall, promoting low-income energy assistance programs, hiring and training staff to handle large industrial and retail accounts individually and being a good corporate citizen in the communities which it operates. MPC can capitalize on the good name of the company and its management's known integrity, where a handshake is all it takes to make a deal. This type of company integrity is of high value in the California market, where MPC hopes to grow.

In developing new markets in California (to be discussed further in the Opportunities section) the company also can capitalize on the positive association with the state of Montana. Californians have long been attracted to Montana, which has been a marketing tool for company personnel now located in Los Angeles. In addition, the fact that MPC has no nuclear power plants and is at least partially a hydro-based utility (green energy) creates significant appeal to consumers in California. Of course, the company's ability to capitalize on MPC's resource base changes with the sale of MPC's generating assets.

MPC is to be applauded for hiring a non-utility marketing Vice-President. In 1997, W. S. Dee, 57, was elected Vice President, Marketing. He had been employed previously as policy teacher and consultant with Leo Burnett, Inc., an advertising agency, from 1993 to 1996. Also, he had served as Chief Executive Officer and owner of W. S. Dee - Omega Beverages, a beverage manufacturing company, from 1991 to 1992. Mr. Dee brings a fresh, competitive perspective to the traditional MPC utility.

Finally, the energy trading floor environment, operational for over a year now and led by senior management with expertise in oil and gas trading is a strength for MPC.

MPC Weaknesses

As previously mentioned, MPC's relatively small operations and customer base, located in the remote state of Montana, are a weakness. Unless IndeGO, the regional transmission grid, is established, MPC will continue to face restricted access to the large West Coast markets. This will occur because of the pancaked transmission pricing previously discussed, especially when attempting to transport electricity across BPA's

system. In addition, the power flow from Montana to the West Coast will be tied more to the physical flow of electricity across numerous systems, instead of the concept discussed previously, where the system is like a lake (see the Transmission Intertie section) and the actual movement of one company's power through of the system is less important than the replenishment of the "lake."

Competing with BPA on price is another weakness for MPC. During high run-off years, the BPA has enough hydro generating capacity to restrict the operations at Colstrip, due to the inability of MPC to economically dispatch the power plants. Since there is no strong intertie into the Midwestern markets, MPC has no choice but to idle the plants during these periods. This has occurred many times in the past several years, due to run-off conditions favoring BPA. Again, this is a weakness that will go away with the sale of the generating assets. In fact, perhaps MPC will be able to negotiate a favorable supply contract with BPA, instead of trying to compete with them.

While MPC has some parts of the company with employees who have experience with competition (telecommunications, coal, oil and gas and the energy trading floor), the majority of MPC's 2,900 employees only have a utility background. These employees, along with their managers and officers, will have to be coached to change their focus and convinced that they cannot continue with business as usual.

Another weakness of MPC is the centralized decision-making, where most decisions are made in Butte, Montana. This is in contrast to an emerging competitor, the NUG (previously identified as a Non-Utility Generator), where decisions and accountability are pushed down to the operations level. MPC's decision-making structure has created a

disconnection between corporate and the operations, with little cross training between the two.

While the skill set of trading floor can be accurately counted as a strength of the company, it also may be a weaknesses in that the depth and experience in this area may not be good enough to compete with the Enron's of the world.

From a financial perspective, MPC shows weakness from the lease obligation associated with Colstrip 4. According to a Duff & Phelps credit rating report, "Debt to capital is at an acceptable level; however, the lease obligation associated with Colstrip Unit 4 creates an off-balance-sheet debt-like obligation. If the lease were on-balance-sheet, it would weaken leverage significantly."

Also, Duff & Phelps note that MPC has higher business risk than a regulated utility due to its diversified businesses (coal, gas exploration and production, independent power, telecommunications and energy trading). As a result MPC requires stronger financial measures to offset the cash flow volatility associated with its diversified businesses.³⁵

Opportunities for MPC

Opportunities in the marketplace are many for MPC. A key opportunity comes from the company's approach to marketing its ability to "bundle" service for the customer, under a one stop shopping approach. Examples of these services include billing, metering, demand-side management, usage analysis, electric asset maintenance, power quality expertise, not to mention the customer's telecommunications needs.

The fact that MPC could offer these services was a key advantage that help land a recent contract between MPC and the California Manufacturing Association (CMA).

MPC was exclusively endorsed by the CMA to assist its members with their energy decisions. MPC will provide comprehensive energy services, including energy supply and energy management products and services to qualified CMA members. The CMA has agreed to endorse and promote such products and services to its members. The membership of the CMA is the target market for MPC in California. The approximate 1,000 members of CMA represent an estimated 8 million megawatt hours of electric use annually.

The fact that MPC is selling its generating resource base, that has been underutilized by the native Montana load and hindered by unfair competition from BPA, is an opportunity for the company to redeploy its assets into more productive ventures.

MPC has developed good relationships with most of its customers over the years. Residential customers know the company provides reliable service and is prompt to restore power when there is an outage. As the marketing from “outside” companies begins, MPC will be able to effectively counter the competition with an approach that focuses on MPC being a Montana-based company with a continued commitment to its customers. For the last several years, small commercial accounts have received attention from MPC employees who are specially trained and specifically assigned to that customer’s account. MPC’s relationship with large industrial accounts is not as positive, mostly because of the higher pricing MPC has offered to these customers over the past decade (the cross-subsidization issue discussed earlier).

MPC can use Tetragenics expertise to develop needed technology. Given Tetragenics’ expertise in developing dam monitoring devices, it seems a logical assumption that the

technical skills developed by staff and management may be useful in applying the emerging technology of affordable time-of-use meters and analytical monitors.

Threats to MPC

The greatest external threat to MPC comes from timing. The saying “timing is everything” certainly is applicable in the electric energy market today. A new marketplace is rapidly opening, and those first in the door will establish relationships and secure contracts that will be lucrative and much harder to get two or three years down the road. Companies must either be on the offense in the beginning or will be defending their dwindling customer base in a short period of time.

Therefore, MPC’s biggest threat comes from cherry-picking of large customers before the company is ready to compete in a deregulated market. This can happen in many ways: by not selling the company’s generating assets for at or near the asking price; by not coming to a satisfactory resolution on the distribution of the sale proceeds between ratepayers and the company, and therefore staying tied up in MPSC hearings for a long period of time; taking the anticipated two years to form IndeGO., if formed at all, leaving MPC with pancaked transmission rates during the interim; or, intervention by State officials trying to either stop the implementation of deregulation in the state or gain control over the sale of the generating assets.

Another main threat is that the best employees will be courted by other companies, especially trading floor employees. Potential new employers are other companies starting up a trading floor or other function related to deregulation, or existing competitive companies who are gearing up for the expanding deregulated market. A

good example of this is the recent departure of Frank Rotondi, President & CEO of the MPC subsidiary charged with trading and marketing of electricity and gas. Mr. Rotondi has been hired by Shell Oil, to head up the establishment of a trading floor. He leaves behind a long career at MPC that recently led him to an officer position and the opportunity to work on implementing deregulation.

Other threats MPC must resolve are the issues surrounding its out-of-market contracts. These contracts involve not only sales of electricity, but also the long-term coal contract with HL&P, mentioned earlier. These contracts have vague clauses potentially allowing repudiation if certain indexes are exceeded. One such index, on an energy sale contract between MPC (seller) and another utility (buyer) is tied to market price, leaving the door open for endless court battles over whether the company can force the buyer to stay in a contract with out-of-market pricing. These types of contractual disputes not only detract management, they give MPC a bad reputation in the marketplace.

Another external force that threatens MPC's success in deregulation is the MPSC. MPC and the MPSC must quickly come to agreement on issues critical to the implementation of deregulation. Examples of issues that must be resolved are how much money will be refunded to the ratepayers if MPC sells off any of its assets (as mentioned earlier); the establishment of an equitable contract price for electricity between MPC's deregulated Supply Division and regulated Energy Services Division, for those customers staying with MPC after choice is available; the allowance of expenses associated with the new corporate structure (especially for shared services between the new divisions).

Finally, an external threat for any company today is a hostile takeover attempt. Hostile takeovers are generally difficult in the utility world, since the distribution of stock is held among a widely dispersed population of shareholders and there is a long wait for regulatory approval. However, arbitrage investment opportunists that are active in the marketplace today should not be ignored by MPC. The multiple state regulations in the U.S. have created isolated and protected electricity markets, with a resulting wide variation in prices. These variations set up arbitrage opportunities, where companies like Louis Dreyfus come into the market and change traditional utility thinking about energy deal-making. According to an article in Forbes, “Shortly after the 1992 Energy Policy Act was passed, Louis Dreyfus Electric Power Inc. became one of the first non-utilities to receive a license from FERC to market power. Permit in hand, Louis Dreyfus made its first sale to San Diego Gas & Electric later that year, a one-year contract to deliver 50 megawatts per hour at 2.5 cent per MWh, which was about 20% below SDG&E’s cheapest alternative. As a principal in the transaction, Louis Dreyfus could either commission a utility to generate the power or buy it from members of the WSPP. Louis Dreyfus sold the power to SDG&E and then met its obligation by buying the power from members of the pool.”

The article goes on to say, “The deal took the industry by surprise. ‘The role of the merchant was very difficult for them to understand,’ says Paul Addis, a former grain trader who helped steer Louis Dreyfus into electricity. ‘They didn’t see our smokestacks, and they kept thinking there must be some trick.’ The trick was arbitrage. Evening out prices by buying where it is cheap and selling where it is dear.”³⁶ Not only

does arbitrage even out pricing, it takes advantage of the opportunities created by operating at less than optimal levels. When an arbitrageur sees inefficiency, he/she goes in and make it efficient. If MPC is not ran effectively and is not aggressive in its energy trading activities, arbitrage companies like Louis Dreyfus could be considered a threat to MPC.

Exposure to Load Loss

How many customers are capable of switching

MPC's electrical restructuring informational filing, filed with the MPSC in December 1996, stated MPC's 269,000 residential customers must qualify to leave MPC's system under a load transition schedule. The schedule placed a cap on the number of kilowatt hours, and hence customers, who could exit the system during the transition period. According to the Informational Filing proposed Electric Tariff DMA-1 (see attached Exhibit 7), the Residential Customer Choice Program would be limited to: 3,000 customers until June 30, 2000; 25,000 customers from July 1, 2000 to June 30, 2002; finally full power supply choice on July 1, 2002. This proposal was considered by most to be a defensive strategy, designed to protect MPC from competition for as long as possible.

However, on July 2, 1997, after the passage of Montana's new Electric Restructuring and Customer Choice law, the company revised its transition schedule to speed up open access for Montana consumers (see Changes in the Montana Regulatory and Legislative Environment).

This proposed 4-year transition plan, where all customers will have choice starting on July 1, 2002, assumes the following: there will be adequate solutions for billing and metering of small customers; reciprocity will be in place with neighboring states that have opened their systems; and political problems are not overwhelming. If any of problems arise in these areas, the transition period will most likely be extended.

Stock and Financial Performance

This section will evaluate the stock and financial performance of the seven utilities considered being either competitors of MPC or potential merger/acquisition candidates. These utilities are: PacifiCorp, Puget Sound Energy, Idaho Power, Washington Water Power (WWP), Pacific Gas & Electric (PG&E) and Edison International. A detailed description of each company follows in the Potential Merger/Acquisition Candidates section, along with an assessment of company strategies in relation to deregulation, and how these strategies might blend or enhance MPC's position in the marketplace.

Three key measurements will be defined, then analyzed, to assess company valuation (Price to Earnings ratio), management effectiveness (Return on Equity) and financial strength (Debt to Equity ratio).

In addition, Exhibit 8 shows the stock performance of the seven companies over the past five years. All companies, except PG&E, have experienced an upward trend in stock prices, even though risk for the utility industry has significantly increased. The trend in stock price is measured by the EMA, or exponential moving average over the past 5 years. The EMA calculation takes the simple moving average (which is calculated by adding the closing prices for the 20 quarters being analyzed and dividing

by 20) and places more weight on recent prices by applying a percentage of the most recent quarter's closing price to the prior quarter's moving average. Overall, stock prices for all seven companies have trended up over the past two years, during each company's establishment of strategies to address deregulation.

All companies have outperformed the Dow Jones Western U.S. Electric Utilities Index on annualized total return, except Puget Sound Energy and PG&E (see Exhibit 9):

<u>Company</u>	<u>5 Year Return*</u>
MPC	12.73
PacifiCorp	9.28
Puget Sound Energy	6.90
Idaho Power	9.16
WWP	9.94
PG&E	5.64
Edison Intl.	9.54

Industry Index
7.96
Equity Market Index
22.81

* 5 year annualized return (expressed in percent)

The increased risk for the utility industry (as measured by the Dow Jones Western U.S. Electric Utilities Index vs. the Dow Jones Equity Market Index) shows the relatively poor performance of the utility industry in the equity market over the past five years,

with the western utility industry recording an annualized return of 7.96%, against an annualized equity market index of 22.81%. Therefore, while stock values for the seven companies are trending upward, charts showing the Five-Year Total Return for each company, compared to the DJ Equity Market Index, are well below equity market standards (see Exhibit 9).

Finally, Exhibits 10 and 11 provide December 31st fiscal year end 1995, 1996 and 1997 comparative income statements, and fiscal year end 1996 and 1997 balance sheets.

Company Valuation

Ratios such as Price to Earnings, Price to Book and Price to Sales are measures of the value of a company's shares in the marketplace. Therefore, they are a general indication of the company's value in the marketplace, via the stock price on a given date. For purposes of this paper, the Price to Earnings (P/E) ratio is used as the measuring tool to determine company valuation for the seven utilities.

Price to Earnings Ratio

The P/E ratio shows the amount investors are willing to pay for each dollar of corporate earnings. The calculation used in Exhibit 12 was made by dividing the closing stock price on March 31, 1998 by the sum of the trailing four quarters of EPS (earnings per share). The industry average P/E ratio of 16.30 is based on a comparison against the Dow Jones Western U.S. Electric Utility index.³⁷

Management Effectiveness

Financial ratios, such as return on assets and return on equity, evaluate management's effectiveness by looking at the organization's operating success and failure through an

accounting period and associating the income earned with the amount of resources utilized. Return on equity (ROE) will be analyzed to determine management effectiveness.

Return on Equity

ROE is a measure of the company's profitability, as expressed in a percentage. Exhibit 13 shows the calculation for each company, based on the trailing four quarters of net income (from total operations) divided by the common equity figure from the March 1997 10-Q filing.

Financial Strength

The financial strength of a company is typically determined by evaluating company solvency. For this reason, debt capacity ratios are used to judge solvency. These ratios are of primary importance to long-term creditors who have an obvious concern regarding the receipt of interest and the repayment of amounts borrowed. Debt ratios, in general, reveal the effect of financial leverage or the solvency of the company. The debt to equity ratio will be used to evaluate financial strength of the seven companies.

Debt to Equity Ratio

The Debt to Equity ratio measures a company's financial strength by evaluating debt capacity and utilization. It is an expression of the relationship between financial resources provided from creditors and those provided by equity owners, measuring the relative risk assumed by each class of provider and the degree of protection provided by equity owners for creditors. The Debt to Equity ratios in Exhibit 14 are calculated by taking long-term debt divided by common equity from the March 31, 1998 10-Q filings.

Besides the three financial measures mentioned above, it is worth noting that all seven utilities have included a discussion in their fiscal year end 12/31/97 annual reports on the potential impact if the utility operations are required to apply FASB Statement No. 101 – “Regulated Enterprises – Accounting for the Discontinuation of Application of FASB NO. 71”.

Statement No. 71 requires the Company to defer certain costs that would otherwise be charged to expense, if it is probable that future rates will permit recovery of such costs. These costs create what is known as regulatory assets. Accounting for regulatory assets under Statement No. 71 is appropriate as long as: rates are established by or subject to approval by independent, third-party regulators; rates are designed to recover the specific enterprise's cost-of-service; in view of demand for service, it is reasonable to assume that rates set at levels that will recover costs can be charged to and collected from customers. Adoption of Statement No. 101 would require the write-off of regulatory assets and liabilities related to those operations not meeting Statement No. 71, highlighting the increased shareholder and creditor risk in the utility industry as a whole.

Analysis of the P/E ratio, ROE, and debt to equity ratio mentioned above, for MPC and the six utilities considered as merger or acquisition candidates, is as follows:

MPC

P/E ratio

As Exhibit 12 shows, MPC's shareholders are slightly more willing (then the typical utility stockholder) to pay for corporate earnings, with a P/E ratio of

17.60. This ratio has been driven down in the last two quarters, via strong financial performance in the 4th quarter 1997, where EPS shot from \$.28/share the previous quarter to \$.93/share at 12/31/97, without an equal increase in stock price. This effect was countered by an unusually high stock price at 3/31/98, which boosted MPC's P/E ratio.

It is reasonable to assume that MPC will continue to outperform the industry on the P/E ratio, due to the diversity of the company (telecommunications, oil & gas, energy trading, etc.) and the sale of generation assets, both viewed as positive by stock market analysts.

Stock prices for the past several years has ranged around \$20/share. However, the stock prices in the past year have significantly outperformed market expectation, with a 52-week high of \$38.50 (see Exhibit 8). Speculation has credited the jump with the settlement of long-disputed contracts with Puget Sound Energy, along with the proposed sale of the company's generating assets and the company's strategy to grow in telecommunications.

Return on Equity

MPC's 11.5% ROE is virtually the same as the industry average of 11.6%, indicating acceptable profitability for the common equity investment employed. An evaluation of the consolidated net income EPS shows a shift over the past three years away from utility operations, toward non-utility earnings. This is most likely indicative of the coming years, given deregulation and the expected growth of the telecommunications division:

	<u>1997</u>	<u>1996</u>	<u>1995</u>
Utility Operations	\$1.08	\$1.13	\$1.22
Non-utility Operations	<u>\$1.21</u>	<u>\$0.90</u>	<u>\$(.30)</u>
Consolidated Net Income	\$2.29	\$2.03	\$0.90

Debt to Equity ratio

At a .65 debt to equity ratio, MPC is at only 46.8% of the industry average of 1.39. This indicates that the company is leveraged significantly less than other companies in the industry and would be in a position to either acquire additional assets through debt financing or raise significant cash if the need arose. This ratio could decrease even further with the sale of the company's generating assets, assuming the company would pay off some existing debt with the proceeds.

However, one adjustment that needs to be considered when evaluating MPC's debt to equity ratio is the off balance sheet long term lease obligation with Colstrip Unit #4. If this obligation were on the balance sheet, it would weaken the company's leverage significantly.³²

In summary, MPC is currently in a stable financial position. The P/E ratio and ROE indicate that the company's effort to embrace deregulation, an admittedly riskier line of business, has been received favorably by the investment community. Stock performance, in particular over the past two years, has been very strong. The financial outlook is positive for the company. However, as mentioned above, the Debt to Equity ratio is actually higher than it appears on

the balance sheet, due to the off balance sheet lease obligation with Colstrip #4. Analysts caution that this item would significantly weaken MPC's leverage if it were on the balance sheet.

PacifiCorp

P/E ratio

PacifiCorp's P/E ratio is being driven down by the volatility of the company. This volatility is brought on by the attempted acquisition of the Energy Group, the largest electric utility in England. The effects of this attempted acquisition are discussed in more detail in the following Potential Merger/Acquisition Candidates section.

PacifiCorp's P/E ratio was negatively impacted by a 4th quarter sell-off of several subsidiaries, namely Pacific Telcom on December 1, 1997; Pacific Generation on November 5, 1997 and TPC (the gas gathering and processing subsidiary) on December 1, 1997, which raised earnings without a corresponding increase in stock price.

In 1997, PacifiCorp generated \$1.8 billion in cash (excluding \$370 million in income tax liability) from the sale of assets with a carrying value of \$822 million. The primary contributor to the \$454 million in income from discontinued operations in 1997 was the sale of Pacific Telcom, with a net gain of \$365 million.

The sale of these assets had a significant effect on the 4-quarter EPS average:

<u>Quarter ending</u>	<u>EPS</u>
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June 30, 1997	\$.30
Sept. 30, 1997	\$.23
Dec. 31, 1997	\$1.29
Mar. 31, 1998	(\$.07)

PacifiCorp's net income from continuing operations decreased 49% to \$205.4 million in the 4th quarter 1997. This continued dismal performance is also revealed in the first quarter 1998 EPS figure. Performance from continuing operations will continue to be lower than industry averages, until the merger issued is settled.

PacifiCorp's P/E ratio can be expected to improve significantly once the 4th quarter 1997 boost from asset sales is removed from the calculation, assuming the stock market will still be willing to pay \$23-\$26 per share. Stock prices continue to show an upward trend over the past five years (see Exhibit 8), despite a recent drop from \$24+/share in 4th quarter 1997 to \$22/share in 2nd quarter 1998.

Return on Equity

PacifiCorp's current 12.8% ROE is being shored up by the sell-off of assets, previously mentioned. Taking away the 4th quarter 1997 \$454 million in net income from discontinued operations would decrease the 1997 ROE to 4.3%, approximately 1/3 of the industry average of 11.6%. PacifiCorp shareholders may be gambling that poor short-term performance will pay off by positioning

the company as a leading global distributor and merchant energy company, thus providing a long-term ROE that will outperform the industry.

Debt to Equity ratio

PacifiCorp's Debt to Equity ratio at 12/31/97 was 1.04, measured against an industry average of 1.39. The effects of the company's attempted acquisition of Energy Group is not yet showing on the balance sheet. However, credit rating companies are cautioning that the proposed \$3.8 billion in assumed debt and lease obligation associated with the acquisition will materially increase consolidated debt leverage and weaken credit protection measures.³⁴

In summary, PacifiCorp's attempted acquisition of Energy Group has, at least on a short-term basis, harmed the financial position of the company. However, shareholders seem to be willing to tolerate the low financial performance for the now.

Puget Sound Energy

P/E ratio

Puget's P/E ratio is slightly below industry average, at 15.70. This ratio shows high potential for improvement, assuming Puget has placed itself in a strategic growth position with the February 1997 merger of Washington Energy Company and its subsidiary Washington Natural Gas Company. The merger called for each share of Washington stock to be exchanged for .86 share of Puget. At the merger date, holders of Puget's and Washington's common stock held approximately 75% and 25% respectively, of the aggregate number of

outstanding shares of the merged company's common stock. Additional stock price growth potential comes from the April 1998 energy-marketing and trading agreement between Puget and Duke Energy, which is discussed in more detail in the Potential Merger/Acquisition Candidates section. Analysts should view both the acquisition and marketing agreement favorably, giving the potential for an improved stock price and P/E ratio.

The P/E ratio is positively effected by 1997 net income from continued operations, which fell 25% to \$108.4 million (although revenues rose 2% to \$1.68 billion) without a corresponding decrease in stock price. Part of the net income decline is due to \$55.8 million in merger-related costs and the buyout of several expensive gas purchase contracts, both non-reoccurring expenses that the stock market has not penalized. Another positive effect on the P/E ratio results from stock prices being strong over the past year, with a continued growth trend expected (see Exhibit 8).

Return on Equity

Puget, as with MPC, is at 99.1% of the industry average ROE, recording 11.5% at fiscal year end 12/31/97. Prospects for future improvement of ROE are good, with the one-time merger and gas contract buyout costs already absorbed and the Washington Energy merger and Duke Energy marketing agreement in place for the future.

Debt to Equity ratio

As with MPC and PacifiCorp, Puget's debt to equity ratio is below industry average, at 1.01. Further, a review of Puget's balance sheet over the last two years shows that the debt to equity ratio has remained consistently below industry average. The company should be able to leverage its relatively low debt position, if additional mergers or acquisition possibilities are pursued.

In summary, Puget, like MPC, is financially sound and is viewed positively by the market. Ratios indicate the company is stable and could continue to acquire or merge if such action was consistent with the company's strategy.

Idaho Power

P/E ratio

Idaho Power also has a P/E ratio slightly below industry average, at 15.20. EPS has remained relatively stable over the preceding four quarters, as has the stock price.

Idaho is a very stable company, with little fluctuation in net income over the prior three years. Stock prices have grown significantly since 1994, from a low of \$23+/share to a June 1998 price of \$34+/share (see Exhibit 8).

The prospects for Idaho are positive, with investments in solar energy and increased sales from new activity in the wholesale trading market. In fiscal year 1997, revenues rose 29% to \$748.5 million, primarily from the new trading activity focus of the company.

The prospects for Idaho's P/E ratio should be good, with continued growth in trading and the development of new solar technology (discussed in more detail

in the Potential Merger/Acquisition Candidates section) fueling a steady climb in the stock price.

Return on Equity

Idaho's ROE climbed to 109% above the industry average at 12.70% at March 31, 1998. The higher than industry performance over the past two years was fueled by a 1st quarter 1998 net income of \$29.5 million, up \$9 million over the previous quarter. First quarter revenues increased by \$21 million, mostly in new trading revenues, with only an \$8 million increase in associated operation expenses. The company is not infusing additional equity at this time. The prospects for continued growth in energy trading revenues is high, thus the ROE should continue an upward trend.

Debt to Equity ratio

Like the other utilities analyzed so far, Idaho has a low debt to equity ratio. At 1.04, the ratio is 75% of the industry average of 1.39. There has been little fluctuation in company's debt load over the past two years. The under-utilization of leverage could allow Idaho to secure additional debt, to perhaps grow its new solar technology investments or develop new energy efficiency technologies. Idaho's growth potential will be discussed more in the Potential Merger/Acquisition Candidates section.

In summary, all indicators point to a healthy, growing Idaho Power. The company has the capacity to raise additional capital for new technology development, if it chooses. The revenue stream shows good promise, from

increased trading activities. Stock prices should continue to climb, as the company develops new solar technology while taking a defensive strategy toward deregulation (which is discussed in more detail in the next section).

Washington Water Power

P/E ratio

WWP has the poorest P/E ratio performance of the seven utilities analyzed, with a ratio of 10.90. One possible reason WWP cannot attract more money for its stock is the volatility of the EPS over the past two years. EPS has ranged from \$.12/share in June 1996 to \$.83/share in June 1997. Fiscal year 1997 revenues rose 38% to \$1.30 billion, while net income applicable to common rose 45% to \$109.4 million. The revenues reflect higher transmission revenues due to increased wholesale electric sales.

WWP is considered a conservative company, with modest growth predictions and a stand against deregulation. In a time of market uncertainty, being conservative may be penalized. This is perhaps another reason the P/E ratio is held below industry average.

Return on Equity

Conversely, WWP's ROE outperforms the industry with a return of 15.4%, 132.8% of the industry average. Coupled with the P/E ratio, there is an indication that recent higher than average earnings for WWP have driven both ratios (increasing the P/E denominator and ROE numerator without a corresponding increase in stock or equity over the short term).

Looking at WWP's net income from operations for the past several years shows that 1997 earnings were 38% higher than 1996. Some of this improvement comes from two new unregulated energy and marketing service subsidiaries – Advantage, Inc. and Avista Energy Inc.. More than likely, the market has not had enough time, or not enough inclination, to move the stock price up more than from approximately 19+/share in 1996 to \$22+/share in 1998. For the future, WWP's ROE should moderate if the company continues to record earnings at the 1997 level.

Debt to Equity ratio

Finally, WWP's debt to equity ratio is below industry average, at a ratio of .96. As mentioned with the previous utilities that have below average debt to equity ratios, WWP has the capability to secure funding, if the company chooses to grow through a strategic acquisition or development of an existing business segment.

In summary, WWP is a conservative company that does not achieve the stock price its recent performance warrants. However, the two new subsidiaries mentioned above, while inherently riskier, may provide adequate growth to warrant better stock prices for the company. The company does have debt capacity to grow.

PG&E

P/E ratio

PG&E has the strongest P/E ratio of the seven utilities analyzed, at 19.90. The company has been able to hold or increase its stock price over the past four quarters, even with volatile EPS's that range from \$.62/share in September 1997 to \$.22/share in December 1997. For fiscal year 1997, revenues rose 60% to \$15.4 billion. Net income fell 1% to \$716 million. Revenues reflect a \$4.52 billion rise in unregulated energy commodities and services revenue due to recent acquisitions. Earnings lagged due to low margins on unregulated activity and higher depreciation. The lower earnings, without a corresponding drop in stock price, has (perhaps temporarily) boosted the P/E ratio.

Stock prices have held above \$29/share for the last three quarters, but are significantly below the \$35+/share price from five years ago (see Exhibit 8).

As mentioned in detail later, PG&E is divesting itself of its electric generation plants in Northern California and is aggressively growing its electric and information management services and its environmentally-friendly electric supply options. The stock market is responding favorably to PG&E's strategy to grow into a national energy company, as indicated by their strong P/E ratio and improved stock performance this past year.

Return on Equity

PG&E's ROE is not as impressive as its P/E ratio, with a ROE at 8.7%, which is 75.7% of the industry average. The major influence on PG&E's March 31, 1998 ROE is the dismal performance in the 4th quarter 1997. Operating revenues declined because of a 10 percent electric rate reduction provided to residential

and small commercial customers and due to changes in regulatory adjustment mechanisms resulting from electric industry restructuring. Both of these changes drove earnings and ROE down. During the last quarter of 1997, the electric rate reduction decreased operating revenues by approximately \$100 million.

Debt to Equity ratio

PG&E is leveraged at approximately the industry average, with a debt to equity ratio of 1.32, compared to the industry average of 1.39. This ratio has gone up significantly in the past year, after PG&E bought a portfolio of electric generating assets and power supply contracts from the New England Electric System (NEES) for \$1.59 billion. Financing requirements totaled approximately \$1.75 billion, of which approximately \$1.25 billion were funded through debt. However, plans are underway for PG&E to sell off its non-nuclear generating facilities in California, which will free up significant amounts of cash, most likely lowering the debt to equity ratio, positioning PG&E to make further debt-funded acquisitions, if it chooses to do so in the future.

In summary, PG&E is in a transition period that is reflecting in a slightly negative way on its income statement. A rate reduction order in the core market has squeezed utility revenues. New business is just beginning to form, as discussed in the next section. The net income over the past five years has declined from a high of \$1.34 billion to \$716 million in 1997. Also, PG&E's total return performance has lagged slightly behind the annualized industry

growth index for the same time period. These are all indications that PG&E needs to be successful in their new ventures in order to maintain its strong P/E ratio and continue growing the company's value in the stock market.

Edison International

P/E ratio

Edison's P/E ratio is the closest to industry average, at 16.90. The company responded to new competition by selling several of its generating plants and investing in new technology associated with the electric-vehicle market. Current earnings are being pressed downward by the accelerated depreciation of Edison's nuclear investments and the termination costs associated with its above-market fixed-rate QF purchased power contracts. The company will benefit in the long term from these write-offs, which should continue to boost the stock price as well as the EPS. Edison's stock price has done very well in the past three years (see Exhibit 8).

Another factor effecting the P/E ratio is outstanding stock, which has fallen from 440 million shares in June 1996 to 366 million in March 1998, through a stock repurchase plan. The company intends to continue the repurchase of stock, which will likewise continue to lower the P/E ratio. However, stock analysts will more than likely view the company positively, compensating for the pressure from the stock repurchase program.

Return on Equity

Edison's ROE is at 13.1%, compared to the industry average of 11.6%. Again, as with the P/E ratio, Edison's stock repurchase program will effect the ROE calculation, by decreasing the denominator and therefore increasing the ROE.

As previously discussed in Branding Utility Products section, the company is poising itself for competition, through the development of the electric vehicle market and other non-utility ventures. These investments, through the utilization of cash generated by the sale of power plants in California, should allow the ROE to stay above industry average for the foreseeable future, assuming the new ventures generate more net income than the generating station investments. Given that today power sells cheaper on the open market than it can be produced from a traditional generating station, the assumption that the new investments should generate more return should be correct.

Debt to Equity ratio

Finally, Edison's debt to equity is 1.66, or 119.4% of industry average. Again, the repurchase of stock will effect this measure, in a negative way, by lowering the proportion of equity to debt. In addition to shrinking equity, Edison also increased long-term debt by over \$1.3 billion from 1996 to 1997. This increase was driven by the issuance of \$2.5 billion in rate reduction notes in December 1997, prompted by the move to deregulation in California and the attempt by Edison to remain whole during the transition period. The rate reduction notes reflect the Edison's right to be paid a specified amount from a non-bypassable tariff levied on residential and small commercial customers (i.e. transition

costs). Edison used the proceeds from the note sales to retire debt and equity securities.

In summary, Edison is a strong company, with an accepted growth strategy and diversification in non-utility arenas. Earnings per share and net income are strong, as indicated by above average price to earnings and return on equity measures. Stock prices have continued to climb over the past two years, doubling from a low of \$15/share in June 1996 to \$30 1/2/share in April 1998 (see Exhibit 8). Capitalizing on the company's right to collect transition costs, by issuing \$2.5 billion in rate reduction notes, has jumped the company's debt, but not to unacceptable levels.

Summary

This section has recapped the stock and financial performance of the seven utilities being evaluated by measuring stock performance, company valuation, management effectiveness and financial strength. In addition, each utility and the western U.S. utility industry were evaluated against the Dow Jones equity market for five-year total return.

While all companies are attempting to grow their enterprises through non-utility activities, some are proving more successful, with less risk. MPC, Puget and Edison Intl. are strong companies, with acceptable financial measures and strategies to diversify into non-utility businesses. PG&E has lost ground in the past several years, as its core market has eroded and rate reduction measures have taken a toll on operating revenues. Idaho Power and WWP are conservative companies, which do not embrace deregulation. Idaho's performance in the stock market has been better than WWP's,

most likely due to the potential for development of its solar energy technology. PacifiCorp may ultimately be successful in growing shareholder value through the acquisition of Energy Group, but its current financial condition is jeopardized by this activity.

The next section will discuss each of the seven companies in more detail.

Potential Merger Candidates/Competitors

The following companies were chosen as potential merger candidates or direct competitors of MPC, based on either geographic proximity to MPC; a prior relationship with MPC; or by an industry analyst selection. Specifically, PacifiCorp, Puget Sound Energy, PG&E and WWP are partners in the Colstrip power plants. Idaho Power is a geographic neighbor to MPC. Finally, PG&E and Edison Intl. are listed as top competitors of MPC by the Hoovers On-line internet service.

This section will describe each competitor, its strategy and how that strategy may fit with MPC.

PacifiCorp

PacifiCorp, one of the lowest-cost electricity producers in the United States, is a multinational energy company with 1.4 million retail electric customers in the western United States and 550,000 customers in the State of Victoria, Australia. PacifiCorp, which has more than 10,000 megawatts of generation capacity, also is the largest investor-owned bulk power marketer in the western U.S. and is an active electricity and gas marketer in the eastern U.S.. The company's strategy is to focus on utility

operations and therefore is selling its natural gas pipeline and processing systems and some of its generation units.

PacifiCorp has a foreign growth strategy that includes acquiring the largest electric utility in England, Energy Group. The attempted acquisition of Energy Group, the parent company of Eastern Electricity PLC and Peabody Coal, has been stalled by a rival bid from Texas Utilities. PacifiCorp's latest bid is for \$6.6 billion in cash and \$4.1 billion in assumed debt and lease obligations. PacifiCorp plans to fund the acquisition largely with debt and the sale of non-core assets. According to a Duff & Phelps report, the new debt will materially increase the company's consolidated debt leverage and weaken credit protection measures. Therefore, the ratings for PacifiCorp bonds have been downgraded and are on a rating watch.³⁸

A merger with or (more likely) acquisition of MPC by PacifiCorp would not make sense at this time, if PacifiCorp is successful in the acquisition of Energy Group. The company will presumably not be in a position to merge or acquire any other companies in the foreseeable future, given the debt load assumed. In addition, PacifiCorp is seeking to grow in the international market, becoming a leading global distribution and merchant energy company that creates operating synergies, with a diversified geographic presence in the U.S., Australia and England. There is little in this strategy to support the blending of MPC and PacifiCorp through acquisition or merger, except the two areas mentioned below, which most likely would not be compelling enough to argue for consolidation of the two companies:

- One area of possible merger consideration is MPC's non-regulated energy company, CES, which has ownership and operating interests in several power projects in the United Kingdom. Depending on the needs of the combined PacifiCorp/Energy Group, these projects could prove useful as energy resources or operating expertise.
- Another consideration is the potential for a coal operation merger between PacifiCorp and MPC. Assuming PacifiCorp is successful with the Energy Group acquisition, Peabody Coal will become part of the corporation. Peabody is the world's largest private producer of coal. If PacifiCorp intends to grow its coal operations, a merger with MPC's coal holdings, listed as one of the top ten producers in the U.S., would make sense.

However, as previously mentioned, it is unlikely either company would seek a merger or acquisition.

Puget Sound Energy

Puget seeks to build on the strengths of its efficient electric distribution and transmission system to become a leading provider of energy and related services to homes and businesses in the Pacific Northwest. To prepare for a more competitive business environment, Puget has committed itself to being a low cost supplier of electricity, by reducing costs, work force reductions, facility consolidations and reductions in capital budgets. Puget intends to pursue opportunities for improved operating efficiencies and productivity, including possible restructuring of its power supply resources and contracts.

Generation owned by Puget includes a 50/50 ownership with Montana Power of the twin-333 megawatt (MW) Colstrip Units 1&2 and a 25% interest in the twin-805 MW Colstrip Units 3 & 4. In addition, Puget purchases 94 MW from MPC's leased-back interest in Colstrip Unit 4. Besides the interest in the Colstrip plants, Puget owns little generation, instead meeting electrical demand through purchase power contracts.

In addition to its electrical operations, Puget is now the largest gas utility in the Pacific Northwest. The company achieved this status (as mentioned earlier) by acquiring Washington Energy Company and its subsidiary Washington Natural Gas Company in February 1997. Besides its own production, the company purchases a blended portfolio of long-term firm, short-term firm, and spot gas supplies from major and independent producers and gas marketers in the U.S. and Canada.

Also, Puget is actively pursuing opportunities to become a provider of new high value services such as wireless automated meter-based services and geographic information systems to utility customers and other utilities.

A recent development is the announced agreement between Puget and Duke Energy Trading and Marketing of Houston, Texas. The two companies have agreed to coordinate their energy-marketing and trading activities in 14 western states and British Columbia. Based in Salt Lake City, the combined energy trading activities of the two companies will focus on power marketing and trading business in the WSCC region. According to Duke, "Puget's power-asset position in energy trading and its expertise in this region will bolster our operations. The new capabilities created by this expanded relationship effectively integrates with the power plants Duke Energy is purchasing

from Pacific Gas & Electric.”³⁹ Through this new relationship, Puget will now participate in an energy-trading business many times the size of its former trading activities.

How this partnership will effect a potential merger with or acquisition of MPC depends on whether Duke and Puget would see advantages to further expanding a combined presence in the region and whether MPC’s trading floor expertise is seen as a valued asset.

A merger or acquisition between MPC and Puget would have made more sense before the decision by MPC to sell off its generating assets. The growing customer base in the Pacific Northwest (the fastest growing region in the nation), coupled with the generating assets of MPC, would have created a company of significant size, with diverse electric generating resources (both purchased and owned).

Merging the two companies could still make sense from an energy services standpoint, to gain economies of scale and efficiencies (consolidating administrative functions, energy trading activities, etc.) and gaining some seasonal load variations between Montana and the West Coast. Also worth considering is the experience these two companies have with each other, via the common ownership at Colstrip. Each company knows the other’s corporate culture and can assess the ability to blend the two companies. In addition, Puget and MPC have worked together recently to resolve longstanding contractual disputes over Puget’s Colstrip Unit 4 purchase power contract and the coal contract pricing between Western Energy and the Colstrip units. These

settlements clear the way for a more harmonious relationship between the two companies.

Finally, a consolidation is viable when considering other parts of the two companies from a strategic point of view. One such area could be the combining of MPC's and Puget's gas operations. As stated earlier, Puget is the largest gas utility in the Pacific Northwest, with large owned gas supplies and purchased gas contracts. MPC, which also has its own production and storage fields, could combine with Puget to capitalize on the spot market by increasing production when market prices are high and inject its production into storage when market prices are low, saving the gas for the future. This would cushion both MPC's and Puget's exposure to market volatility, in addition to giving MPC a much larger market to sell into on the West Coast.

Given MPC's expansion plans in its oil and gas operations, evidenced by the \$56 million acquisition exploration and development budget for 1998, and its expertise in oil and gas trading, it appears MPC is positioning itself to be a bigger player in Western U.S. gas operations. Puget and MPC together may make a lot of sense from a gas utility standpoint and from the desire of both companies to develop or utilize new technologies to serve the customer, via either telecommunications or technological advances in metering, geographic information systems, or other technology-based advances. Finally, MPC's fiber optic reach into Seattle and Puget's large customer base become a natural fit for Puget and MPC's telecommunications arm.

With MPC being approximately 60% of the size of Puget, it would make sense for Puget to pursue an acquisition of MPC, if a consolidation were to occur. Or, both companies could agree to a merger. It is unlikely that MPC would acquire Puget.

Idaho Power

Idaho Power Company is an electric utility engaged in the generation, purchase, transmission, distribution and sale of electric energy in an approximate 20,000-square-mile area in southern Idaho, eastern Oregon and northern Nevada, with an estimated population of 754,000 people. The company's results of operations, like those of other utilities in the Northwest, can be significantly affected by changing weather, precipitation and streamflow conditions. Idaho Power relies heavily on hydroelectric power for its generating needs and is one of the nation's few investor-owned utilities with a predominantly hydro base.

Idaho Power describes itself as the country's leader in photovoltaic (solar) research and project implementation, with a subsidiary, Applied Power Corporation (APC) being North America's most experienced photovoltaic system provider. Idaho Power Resources Corporation (IPRC), another subsidiary, focuses on exploring renewable energy technology, infrastructure development, and the related opportunities associated with communications technology and energy efficiency. Idaho Power's strategy is to maintain its existing resource base, continue to expand and eventually commercialize its solar technology and approach deregulation with a defensive strategy, as discussed in a February 26, 1998 letter withdrawing its participation in IndeGO. According to Kip W. Runyan, Vice President of Delivery for Idaho Power, "The State of Idaho is facing the

prospects of electric industry restructuring and retail competition with considerable apprehension. Idaho electric rates are already among the lowest in the country and many people are concerned that restructuring will only bring higher prices and more problems to our state. This is the subject of current debate in both regulatory and legislative reforms with our state. We do not believe it to be appropriate for Idaho Power to take what would be perceived as a major step down the road to restructuring prior to the conclusion of this debate.⁴⁰

With this stance, it is unlikely Idaho Power would be interested in a merger with MPC, which embraces deregulation. Given that Idaho Power and MPC are approximately of equal size, it is possible that MPC could utilize the cash generated by the sale of its generating assets, as well as its under-utilized debt capacity, to acquire Idaho Power. But this move would not be consistent with MPC's strategy to grow in the California markets. In addition, while both companies express an interest in growing through new technology, Idaho's solar technology and MPC's telecommunications technology development do not create any natural synergies. Therefore, it is unlikely, MPC and Idaho would consolidate.

Washington Water Power

The Washington Water Power Company (WWP) operates in the electric and natural gas utility businesses. The company employs 1,467 people in its utility operations and approximately 1,751 people in its majority-owned non-regulated businesses (energy and non-energy). WWP provides electricity and natural gas distribution and transmission services in a 26,000 square mile area in eastern Washington and Northern Idaho with a

population of approximately 825,000 and also provides natural gas service in a 4,000 square mile area in northeast and southwest Oregon and in the South Lake Tahoe region of California, with the population in these areas approximating 495,000. WWP's corporate headquarters are in Spokane, Washington, which serves as the Inland Northwest's center for manufacturing, transportation, health care, education, communication, agricultural and service businesses.

Since 1996, WWP has reorganized its operations and purports to take advantage of the changes in the business environment and to proactively respond to regulatory and structural changes in the industry. Although WWP states that the restructuring reinforces a commitment to and advocacy of utility industry deregulation, the decision to withdraw from the FERC filing creating IndeGO indicates the company is taking a defensive strategy towards deregulation. The reason for the withdrawal from IndeGO is amplified by the 4 diagrams of electric rates in the U.S. (see Exhibit 15). WWP's retail rates are among the lowest in the nation. Therefore, the company has little incentive to embrace deregulation.

According to Standard & Poor's evaluation of WWP, "the company has an above average business profile along with an adequate financial profile. The strong business position reflects WWP's low-risk hydroelectric operations, very competitive electric rates, and minimal rate needs. Financial parameters are expected to modestly improve, given the company's manageable capital program and annual electric retail sales growth, projected at about 1.7%. These factors should allow the cash flow interest coverage to stay around 3.5 times and funds from operations to average total debt to

approximately 20%.”⁴¹ However, S&P cautions that WWP’s new energy services and energy marketing arms are of increasing concern given their inherently riskier business profiles. Overall, WWP’s outlook is stable. As previously mentioned, the P/E ratio may be adversely affected by the conservative stand on deregulation, in spite of the positive comments by industry analysts.

As with Idaho Power, a strategy to consolidate MPC with WWP would not make sense at this time, because of WWP’s and MPC’s opposite responses to deregulation. WWP withdrew its support of IndeGO for the same reason as Idaho Power, to protect some of the lowest utility rates in the nation. While MPC may be interested in securing low-cost generation to grow its market share in California, it is unlikely the company would want to sell off its own generating facilities, then turn around and purchase basically the same asset base in a company approximately the same size as MPC.

Pacific Gas & Electric

PG&E is the nation’s second largest publicly owned electric and gas utility. It serves almost 4.5 million electric customers and 3.7 million gas customers in Northern and Central California. Because of deregulation, the company is moving away from being a power supplier and toward being a power and gas distributor. Therefore, PG&E is divesting itself of its fossil-fuel power plants. Also, as previously mentioned, PG&E is promoting the Clean Choice line of environmentally-friendly electric supply options, which will correspond with the sale of its fossil-fuel power plants.

MPC is considered by some analysts to be a direct competitor of PG&E in the California markets.⁴² This is probably due to MPC’s aggressive marketing plan in

PG&E's traditional service territory. However, it seems unlikely that MPC would prove a real threat to PG&E, given the difference in size between the two companies (PG&E is approximately 11 times the size of MPC) and PG&E's already successful efforts of its marketing arm, PG&E Energy Services.

PG&E Energy Services has won several major energy supplier contracts in California. To date, Energy Services has entered into long-term power agreements that in total represent more than \$1 billion in revenue and has opened offices in Atlanta, Baltimore, Bethesda, Boulder, Charlotte, Chicago, Columbia, S.C., Houston, Little Rock, Costa Mesa, New York, Oakland, Philadelphia, Phoenix, Pittsburgh, Portland, San Jose, Stockton and Tulsa. Testimonials state that Energy Services is a successful bidder because of guaranteed energy savings, long-term solutions based on the specific needs of the customer, and the ability to provide comprehensive billing and information management services. PG&E recently announced that it had entered into a landmark agreement with Safeway, Inc. to provide electricity and energy information management to all 400 Safeway and Von supermarkets, major office complexes, and 12 support facilities throughout California.

There's little support for a merger or acquisition between PG&E and MPC, with PG&E's strategy to become a nationwide power and gas distributor. There is not enough consumer base in Montana to justify the investment, nor enough gas distribution capacity.

Edison International

Edison International is the parent company of Southern Cal Edison, the #2 US electric utility in number of customers (4.2 million). SCE has responded to competition by selling several of its power plants and investing in subsidiaries that are in non-traditional arenas. The company supports new technology in California by supplying charging equipment for the electric-vehicle market in the state and is divested into unrelated fields such as public housing, industrial parks and financing companies. Edison Capital, an investment subsidiary, is a provider of capital and financial services for energy and infrastructure projects domestically and abroad. Its investments include interests in nuclear power, cogeneration, electric transmission, waste-to-energy, hydroelectric, transportation, telecommunications, and affordable housing facilities. Edison is diversified in many arenas, besides those mentioned above.

In addition, Edison is striving to develop creative solutions to energy needs by building strategic alliances. Edison EV, a subsidiary, is engaged in the business of providing services related to electric vehicles, including the distribution and installation of electric vehicle charging equipment. Edison EV has supplemented its existing alliances with General Motors and Saturn Corporation by forming ties to American Honda Motor Company, Toyota Motor Sales, Ford Motor Company, and to additional electric vehicle charging manufacturers, to serve electric vehicle customers nationwide.⁴³

Edison International is also considered by some analysts to be a direct competitor to MPC. However, as with PG&E (the other company considered to be a direct competitor of MPC), the competition would be akin to a David and Goliath match. Edison is over 9

times the size of MPC. Analysts may believe there is a competitor relationship because of MPC's aggressive marketing program in Edison's backyard.

Edison could decide that MPC would make sense to acquire for any or all of the following reasons: MPC is developing a successful marketing program for California; MPC has expertise in new growth areas, such as telecommunications, which may appeal to Edison's desire to further diversify; MPC is recognized as a top competitor of Edison; MPC, like Edison, has chosen to sell off its generating assets, concentrating in energy services/trading and new technologies; MPC will have available cash from the sale of its generating assets, which could be used to lower Edison's debt position.

IV. Conclusion

As it has for many utilities across the nation, the issuance of FERC Order No. 888 has caused the most dramatic changes ever made at the Montana Power Company. To let go of the traditional reliance on guaranteed rate recovery and launch into opening up the company's electric customer base to competition, as well as diving into energy trading and marketing in states far away, has been a giant step for MPC.

But even more dramatic was the company's decision to sell its generating assets. As mentioned earlier, Bob Gannon has seen the future of electric deregulation for the vertically-integrated MPC. It encompasses price volatility and low prices, especially in electric generation. Gannon believed MPC could not withstand the tens of millions of dollars of losses it would undoubtedly incur before prices stabilized in the marketplace and the company's stranded cost issues with the MPSC were resolved. So the company decided to sell its generating assets and change its focus, concentrating on electric distribution, oil and gas production, energy trading and telecommunications. Unfortunately, the sale price will be adversely effected by the failure to form a regional transmission grid (IndeGO), which would have eliminated the "pancaking" of transmission prices between Montana generating stations and major West Coast markets.

MPC's strategic direction is not significantly different than the hypothesis of this paper, which stated that MPC would be unable to continue as a vertically-integrated utility, because of the new demands for efficiency in the deregulated marketplace. It was

believed (in the hypothesis) that MPC was not large enough to compete effectively, nor did it have an adequate customer base to hold onto its position in the Montana electricity market. Therefore, the conclusion of the hypothesis was that MPC would have to merge with another Northwest utility in order to survive in the deregulated world. While it is still very possible and viable for MPC to merge with another Northwest utility, the merger would happen for different reasons than anticipated at the start of this study.

By selling off its generating assets, MPC has effectively nullified the need to survive by merging with another utility. By removing the need to achieve a balance between MPC's large, diverse resource base and a market with a large number of customers, MPC has given itself some breathing room to assess the future from a strategic (rather than survival) viewpoint. MPC will become a buyer of electricity in the open market, a strategic direction taken by several of the companies evaluated, such as Pacific Gas & Electric and Edison International.

In addition, the sale will generate a large amount of cash for MPC's energy trading and telecommunication businesses and will remove the need for a long, drawn-out battle with the MPSC over stranded cost recovery. This will help position the company in the areas it has chosen to compete in, such as energy trading and the bundling of energy services in California.

As mentioned briefly above, MPC may still chose to merge with another utility, even though the risks posed by deregulation will be minimized by the sale of its generating assets. A compelling reason for merger in today's deregulated world may be to

capitalize on combined strengths, minimize weaknesses and develop strategic alliances in the marketplace. For the first time, company's can look at how their consolidated efforts can improve services, advance technological breakthroughs and reach markets previously inaccessible to traditional utilities.

For these reasons, MPC should look closely at a merger with Puget Sound Energy. Puget and MPC have dealt with each other for many years, through the joint ownership of the Colstrip plants. Although the relationship has been strained at times, with court battles and binding arbitration over a variety of issues, the two management teams know each other and are familiar with each other's company cultures. The recent settlement of several long-standing disputes between the two companies should allow for a more cordial relationship.

Further, the strategic direction of the two companies would blend well. Puget has become the largest gas utility in the Pacific Northwest, with the acquisition of Washington Natural Gas. MPC has stated that it intends to stay in the oil and gas business, where it has over 40 years of expertise in oil and gas operations, in both the U.S. and Canada (where Puget has gas properties). Puget could draw on MPC's expertise and could conceivably utilize MPC's gas storage facilities and production for some seasonal load balancing and spot market opportunities.

Both companies are focusing on development of high value services, such as automated meter-based data retrieval and geographic information systems. With MPC's expertise in automated dam monitoring equipment, as developed by its subsidiary Tetragenics, and the company's telecommunications experience, a joint effort between MPC and

Puget could potentially achieve more in technological advancement than either company could do alone.

The recent agreement between Puget and Duke Energy Trading, where the two companies have agreed to coordinate energy marketing and trading activities in 14 western states and British Columbia, would enable MPC to market energy much more effectively than its current stand alone, relatively young trading floor. The expertise gained by an association with a large trading company (such as Duke), would help insure MPC's survival in this new, cutthroat arena.

Consolidation of administrative functions would create savings almost immediately for the merged company, although it would require some time to blend the two corporate cultures. With Puget being about half again as large as MPC, in terms of revenue and assets, it's assumed the corporate headquarters would reside at Puget's offices in Bellevue, Washington.

Finally, and probably most important from a strategic viewpoint, is MPC's fiber optic reach into the Seattle area. Puget's large customer base would provide MPC's Touch America with access to a large West Coast market that it currently does not have viable access to. With Touch America's proven track record of high quality customer service at a low price, this market development could prove significant for both companies.

In summary, MPC has begun the steps to survive in a deregulated world, by undoing its vertical integration. The next step, to insure the company's survival, may be to merge with Puget Sound Energy. The hypothesis stated that MPC would need to merge or acquire another Northwest utility in order to compete (or even survive) after

deregulation. While the path may vary slightly with the sale of MPC's generating assets, the outcome MPC should be heading toward confirms this hypothesis. Merging with Puget would make the most sense for the future of the Montana Power Company.

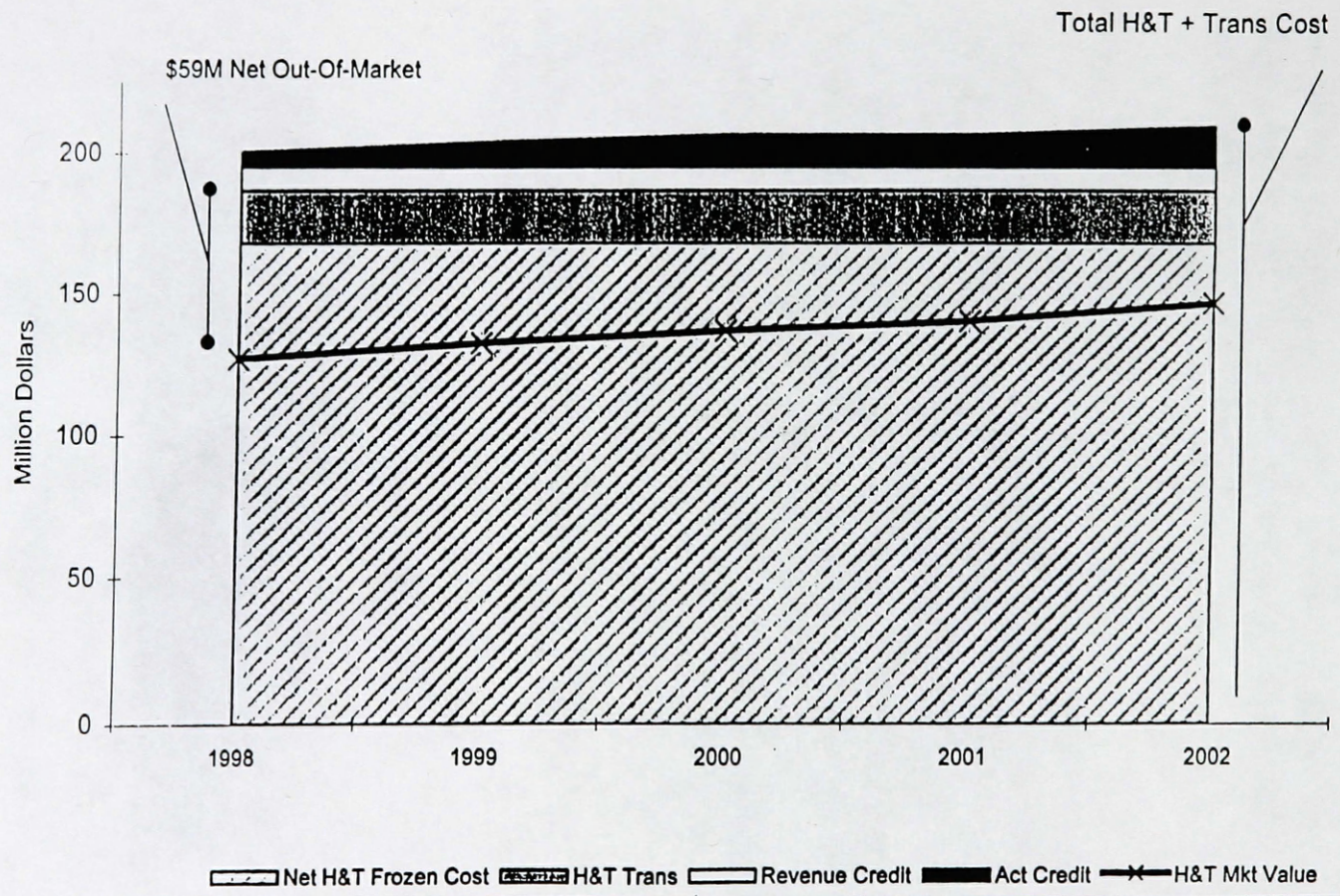
Exhibits

**Exhibit __ (PRC-08)
1995 Test Period Revenues**

THE MONTANA POWER COMPANY
 ELECTRIC UTILITY
 OPTIONAL FILING RULES REVENUES AT CURRENT BASE RATES
 SUMMARY TOTALS
 TEST PERIOD ENDED DECEMBER 1995

	(A)	(B)
1		
2		TOTAL
3		
4		
5	RESIDENTIAL	121,404,916
6	GENERAL SERVICE - 1	151,534,348
7	GENERAL SERVICE - 2	88,030,644
8	IRRIGATION	4,929,344
9	LIGHTING SERVICE	9,167,395
10		-----
11	SUBTOTAL RATE SCHEDULES	375,066,647
12		
13	AMORTIZATIONS	0
14		
15	UNBILLED	0
16		-----
17	TOTAL RATE SCHEDULES	375,066,647
18		
19		
20	MISSION VALLEY POWER	1,343,161
21		
22	REC RESALE	17,281,350
23		
24	CUT-OF-STATE SALES	44,907,573
25		
26	MISCELLANEOUS	10,377,046
27		-----
28	TOTAL SYSTEM EXCLUDING YNP	448,975,777
29		
30	YELLOWSTONE NATIONAL PARK	2,887,225
31		-----
32	TOTAL SYSTEM	451,863,002

Graph 3 Net Hydro & Thermal Out-Of-Market Cost

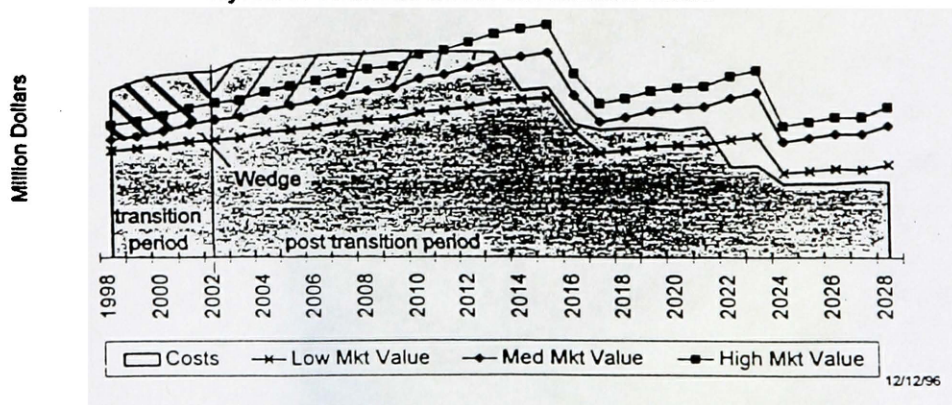


with MPC's power-supply. Leaving early does not authorize a reduction in a customer's CTC-SC obligation because of their choice. All customers must be held accountable for their share of the CTC-SC.

CTC-SC Risk

- Q. Is it appropriate to say that retail customers will pay for 100 percent of the CTC-SC and MPC will pay 0 percent during the transition period?**
- A. No, because the statement implies certainty. The statement will be true only if the power-supply costs and market forecast used in the CTC-SC calculation turn out exactly as predicted. If the actual market prices are lower or the resource costs are higher than forecast, the CTC-SC will under collect out-of-market costs. Likewise, the CTC-SC will over collect the out-of-market costs if the market price is higher or the resource costs are lower than forecast. After the transition period, MPC's power-supply will be sold at market prices without protection to MPC investors.**
- Q. Do you have an example of the CTC-SC dollar risk for the three market price forecasts?**

**Graph 11
Hydro & Thermal Costs vs. Market Value**



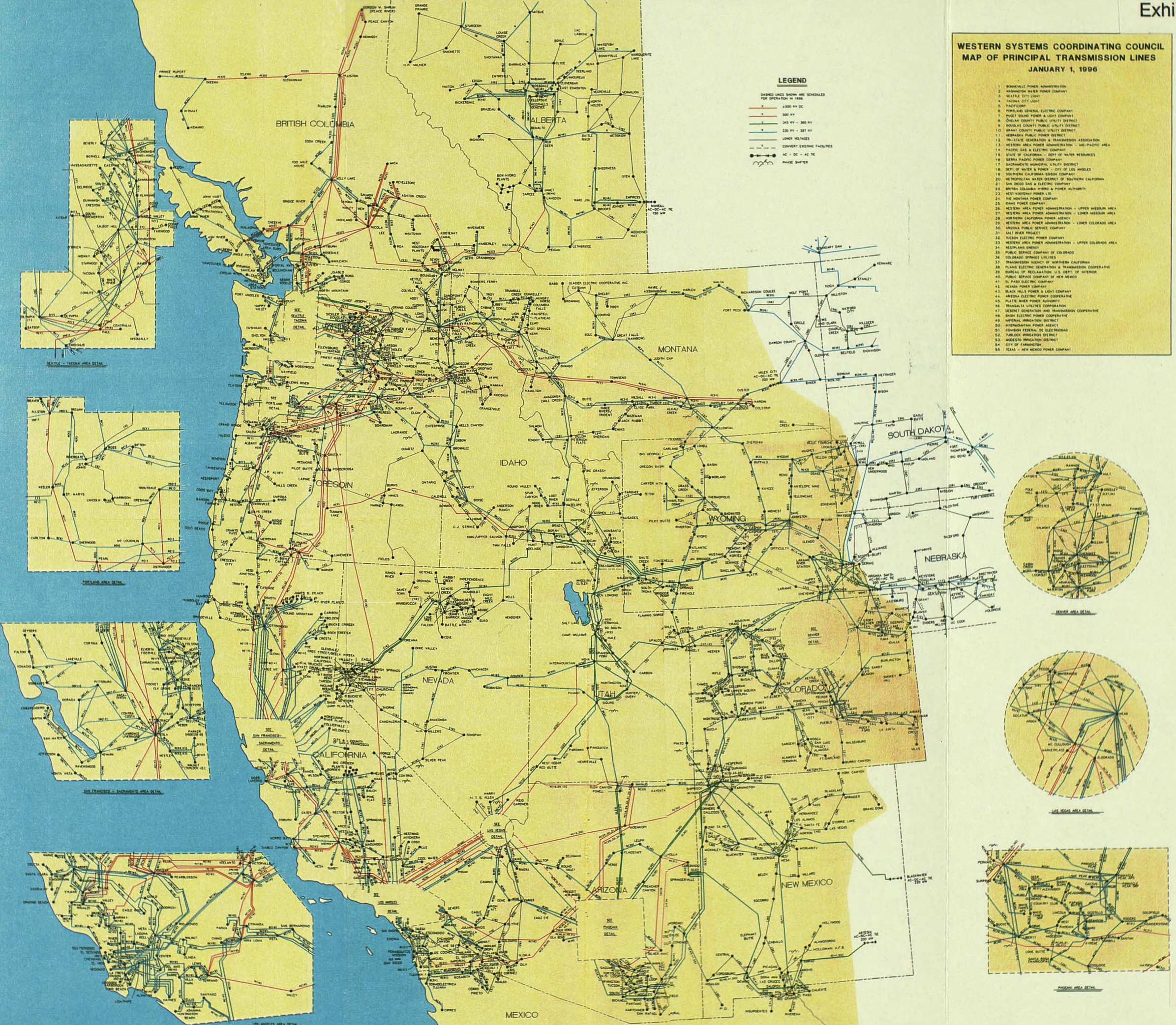
WESTERN SYSTEMS COORDINATING COUNCIL MAP OF PRINCIPAL TRANSMISSION LINES JANUARY 1, 1956

LEGEND

DASHED LINES SHOW ARE SCHEDULED FOR OPERATION IN 1956

- 500 KV DC
- 500 KV
- 345 KV - 360 KV
- 230 KV - 267 KV
- LOWER VOLTAGES
- CONVERT EXISTING FACILITIES
- AC - DC - AC
- PHASE SHIFTER

- 1 BROWNVILLE POWER ADMINISTRATION
- 2 WASHINGTON WATER POWER COMPANY
- 3 SEATTLE CITY LIGHT
- 4 TACOMA CITY LIGHT
- 5 PACIFICORP
- 6 PORTLAND GENERAL ELECTRIC COMPANY
- 7 PORTLAND POWER & LIGHT COMPANY
- 8 OREGON COUNTY PUBLIC UTILITY DISTRICT
- 9 WASHINGTON COUNTY PUBLIC UTILITY DISTRICT
- 10 GRANT COUNTY PUBLIC UTILITY DISTRICT
- 11 NEBRASKA PUBLIC POWER DISTRICT
- 12 INTERSTATE GENERATION & TRANSMISSION ASSOCIATION
- 13 WESTERN AREA POWER ADMINISTRATION - MID-PACIFIC AREA
- 14 PACIFIC GAS & ELECTRIC COMPANY
- 15 STATE OF CALIFORNIA - DEPT. OF WATER RESOURCES
- 16 SIERRA PACIFIC POWER COMPANY
- 17 SACRAMENTO MUNICIPAL UTILITY DISTRICT
- 18 DEPT. OF WATER & POWER - CITY OF LOS ANGELES
- 19 SOUTHERN CALIFORNIA Edison COMPANY
- 20 METROPOLITAN WATER DISTRICT OF SOUTHERN CALIFORNIA
- 21 SAN DIEGO GAS & ELECTRIC COMPANY
- 22 BRITISH COLUMBIA HYDRO & POWER AUTHORITY
- 23 WEST KENTWAH POWER CO
- 24 THE MONTANA POWER CO
- 25 GRAND POWER COMPANY
- 26 WESTERN AREA POWER ADMINISTRATION - UPPER MISSOURI AREA
- 27 WESTERN AREA POWER ADMINISTRATION - LOWER MISSOURI AREA
- 28 NORTHERN CALIFORNIA POWER AGENCY
- 29 WESTERN AREA POWER ADMINISTRATION - LOWER COLORADO AREA
- 30 ARIZONA PUBLIC SERVICE COMPANY
- 31 SALT RIVER PROJECT
- 32 TUCSON ELECTRIC POWER COMPANY
- 33 WESTERN AREA POWER ADMINISTRATION - UPPER COLORADO AREA
- 34 WESTPLAINS ENERGY
- 35 PUBLIC SERVICE COMPANY OF COLORADO
- 36 COLORADO SPRINGS UTILITIES
- 37 TRANSMISSION AGENCY OF NORTHERN CALIFORNIA
- 38 PLAINS ELECTRIC GENERATION & TRANSMISSION COOPERATIVE
- 39 BUREAU OF RECLAMATION, U.S. DEPT. OF INTERIOR
- 40 PUBLIC SERVICE COMPANY OF NEW MEXICO
- 41 EL PASO ELECTRIC COMPANY
- 42 GRAND POWER COMPANY
- 43 BLACK HILLS POWER & LIGHT COMPANY
- 44 ARIZONA ELECTRIC POWER COOPERATIVE
- 45 PLATEAU POWER AUTHORITY
- 46 TRANSALTA UTILITIES CORPORATION
- 47 DECENT GENERATION AND TRANSMISSION COOPERATIVE
- 48 BASH ELECTRIC POWER COOPERATIVE
- 49 IMPERIAL IRRIGATION DISTRICT
- 50 INTERMOUNTAIN POWER AGENCY
- 51 COMBINED FEDERAL DE ELECTRICIAD
- 52 TULLOCH IRRIGATION DISTRICT
- 53 WOODS TO IRRIGATION DISTRICT
- 54 CITY OF FARGO, NORTH DAKOTA
- 55 TEXAS - NEW MEXICO POWER COMPANY



	(iii)	(iv)	(v)	(vi)	(vii)
	WORKING CAPITAL ADJUSTMENT	INCOME TAX ADJUSTMENTS	INTEREST SYNCH. ADJUSTMENT	STANDARD CASE TOTAL ADJUSTMENTS	STANDARD CASE TEST PERIOD # PRESENT RATES
1 REVENUES					
2 RATE CHANGE REVENUES	\$0	\$0	\$0	\$20,457,840	\$375,066,647
3 REG. REVENUE	0	0	0	1,086,071	17,281,350
4 MISSOURI VALLEY POWER	0	0	0	49,188	1,343,161
5 OTHER SALES	0	0	0	2,519,557	46,907,573
6 MISCELLANEOUS REVENUES	0	0	0	(264,961)	10,377,046
7 GROSS REVENUES (LINE 2 THRU 6)	\$0	\$0	\$0	\$23,847,675	\$448,975,777
8					
9 COST OF SERVICE					
10 PURCHASED POWER (INCLUDING SYSTEM DISPATCH)	\$0	\$0	\$0	(\$15,224,448)	\$65,116,441
11 PURCHASED POWER (CONSERVATION)	0	0	0	543,960	4,062,356
12 STEAM OPERATION - FUEL COST	0	0	0	11,079,241	32,658,962
13 STEAM OPERATION - EXCLUDING FUEL COST	0	0	0	(54,761)	9,073,093
14 STEAM MAINTENANCE	0	0	0	837,656	13,916,146
15 AMORTIZATION OF NON-COMBUSTIBLE MATERIALS	0	0	0	0	193,970
16 HYDRO OPERATION	0	0	0	680,980	18,096,125
17 HYDRO MAINTENANCE	0	0	0	53,355	1,928,097
18 OTHER GENERATION OPERATING	0	0	0	0	0
19 OTHER GENERATION MAINTENANCE	0	0	0	0	0
20 TRANSMISSION MAINTENANCE	0	0	0	111,904	4,939,058
21 DISTRIBUTION MAINTENANCE	0	0	0	68,617	2,787,764
22 DISTRIBUTION OPERATION	0	0	0	278,859	10,265,558
23 DISTRIBUTION MAINTENANCE	0	0	0	283,514	9,404,112
24 DISTRIBUTION MAINTENANCE	0	0	0	209,172	8,440,961
25 DISTRIBUTION MAINTENANCE	0	0	0	29,045	1,920,342
26 SALES EXPENSE	0	0	0	(112,622)	983,004
27 AMORTIZATION OF PROP. & INV. (CORRECT)	0	0	0	0	39,350
28 AMORTIZATION OF PROP. & INV. (HAUSER)	0	0	0	(121,400)	0
29 AMORTIZATION OF COSTS OF CARRYING CHARGE	0	0	0	0	1,030,744
30 AMORTIZATION OF ENERGY TAX SETTLEMENT	0	0	0	601,709	0
31 AMORTIZATION OF OTHER YEARS' PLAN	0	0	0	0	(\$71,038)
32 AMORTIZATION OF RECIPROCAL SHARING AGREEMENT	0	0	0	171,251	0
33 AMORTIZATION OF IMA/MAPA BILLING ADJUSTMENT	0	0	0	(483,655)	(1,450,965)
34 AMORTIZATION OF MICHIGAN BILLING ADJUSTMENT	0	0	0	545,928	505,928
35 ADMINISTRATIVE AND GENERAL EXPENSE	0	0	0	11,106,110	31,581,371
36 TOTAL COST OF SERVICE (LINE 10 THRU 35)	\$0	\$0	\$0	(\$1,604,945)	\$215,793,378
37					
38 DEPRECIATION	\$0	\$0	\$0	\$8,048,045	\$47,476,019
39 AMORTIZATION OF COMPUTER SOFTWARE COSTS	0	0	0	9,528	720,945
40 AMORTIZATION OF RFR LICENSE COST	0	0	0	0	25,194
41 AMORTIZATION OF RFR WILDLIFE STUDY	0	0	0	6,159	56,256
42 AMORTIZATION OF WILLIAMS LICENSE COSTS	0	0	0	0	24,043
43 AMORTIZATION OF RAFFLESNAPE/RPA 230 KV LINE	0	0	0	0	28,942
44 AMORTIZATION OF RFR MITIGATION COSTS	0	0	0	41,050	41,050
45 AMORTIZATION OF PLANT ACQ. ADJ. - MILWAUKEE LINE	0	0	0	0	94,914
46 AMORTIZATION OF HDSC/ERC PLANT DIFFERENCE	0	0	0	(96,769)	296,967
47 AMORTIZATION OF INVESTMENT TAX CREDIT - NET	0	(5)	0	(5)	(1,506,692)
48 PROV. FOR DEF. INCOME TAXES - TOTAL (OFFICE ATTACHED)	0	(423,067)	0	871,506	7,421,992
49 TAXES OTHER THAN INCOME TAXES	0	0	0	2,056,243	45,194,525
50 CORPORATE ENVIRONMENTAL TAX	0	(63,298)	642	(43,271)	120,641
51 INCOME TAXES - FEDERAL - U.S.	0	(450,820)	187,331	5,390,680	30,751,385
52 INCOME TAXES - MICHIGAN CORPORATION LICENSE	0	(191,725)	38,743	816,398	6,359,917
53 INCOME TAXES - OTHER STATES	0	(300)	0	(300)	0
54 SUBTOTAL (LINE 38 THRU 53)	\$0	(\$1,129,215)	\$226,716	\$17,100,064	\$137,106,894
55					
56 TOTAL COST OF SERVICE (LINE 36 + 54)	\$0	(\$1,329,215)	\$226,716	\$15,495,119	\$352,900,272
57					
58 NETILITY OPERATING INCOME (LINE 1 - 56)	\$0	\$1,329,215	(\$226,716)	\$8,352,556	\$96,075,505
59					
60 ELECTRIC UTILITY RATE BASE	(\$840,729)	\$0	\$0	(\$6,641,174)	\$1,057,307,608
61 RATE OF RETURN (LINES 58) (LINE 58 / 60)					9.09%
62					
63 REQUIRED REVENUE TO BEAR	(\$126,336)	(\$2,201,152)	\$375,417	(\$14,078,044)	(\$469,361)

Comparison of MPC rates (as represented by Missoula) with other selected rates (by city)

Exhibit 6

City	Type of Service*				
	Residential	Small Commercial	Large Commercial	Small Industrial	Large Industrial
Missoula, Montana (MPC)	\$ 60.19	\$ 142.00	\$ 7,482.00	\$ 17,566.00	\$ 97,051.00
Boise, Idaho	\$ 49.60	\$ 89.00	\$ 5,162.00	\$ 11,039.00	\$ 64,308.00
Spokane, Washington	\$ 46.53	\$ 103.00	\$ 7,725.00	\$ 19,195.00	\$ 84,517.00
Bellevue, Washington	\$ 55.58	\$ 101.00	\$ 8,848.00	\$ 18,321.00	\$ 95,690.00
Portland, Oregon	\$ 56.54	\$ 99.00	\$ 7,615.00	\$ 17,592.00	\$ 103,125.00
San Francisco, Calif.	\$ 127.18	\$ 231.00	\$ 18,537.00	\$ 41,622.00	\$ 195,288.00
Long Beach, Calif.	\$ 136.33	\$ 191.00	\$ 22,205.00	\$ 49,032.00	\$ 272,018.00
San Diego, Calif.	\$ 121.21	\$ 182.00	\$ 19,577.00	\$ 44,070.00	\$ 222,454.00
Reno, Nevada	\$ 87.93	\$ 135.00	\$ 10,992.00	\$ 27,427.00	\$ 155,407.00
Phoenix, Arizona	\$ 98.69	\$ 193.00	\$ 12,651.00	\$ 28,799.00	\$ 142,218.00
Denver, Colorado	\$ 72.35	\$ 104.00	\$ 9,416.00	\$ 20,785.00	\$ 111,813.00
Ranking					
Missoula, Montana (MPC)	5	7	2	2	4
Boise, Idaho	2	1	1	1	1
Spokane, Washington	1	4	4	5	2
Bellevue, Washington	3	3	5	4	3
Portland, Oregon	4	2	3	3	5
San Francisco, Calif.	10	11	9	9	9
Long Beach, Calif.	11	9	11	11	11
San Diego, Calif.	9	8	10	10	10
Reno, Nevada	7	6	7	7	8
Phoenix, Arizona	8	10	8	8	7
Denver, Colorado	6	5	6	6	6

* Residential rates = monthly cost for 1,000 kWh energy
 Small Commercial = monthly cost for 12kW demand and 1,500 kWh energy
 Large Commercial = monthly cost for 500 kW demand and 150,000 kWh energy
 Small Industrial = monthly cost for 1,000 kW demand and 400,000 kWh energy
 Large Industrial = monthly cost for 5,000 kW demand and 2,500,000 kWh energy

Exhibit __ (PRC-01)
Direct Market Access Rate Schedule

ELECTRIC TARIFF

Exhibit 7 Pg. 2 of 2



Canceling _____

Sheet No. 99.9

Sheet No. 99.9

Schedule No. DMA-1

DIRECT MARKET ACCESS SERVICE

Applicability: Applicable to Customers electing to purchase supply from Registered Power Suppliers for the period July 1, 1998 through June 30, 2002, subject to the following transition schedule:

July 1, 1998 to June 30, 2000

Residential Rate Class

Residential Customer Choice Program limited to 3,000 Residential customers (100% of individual loads).

General Service Primary & Secondary (GS-1) Irrigation Rate Classes

Commercial Customer Choice Program limited up to 1,000 GS-1 and Irrigation Customers (100% of individual loads) but not to exceed 56,000,000 kWh(s) per year.

General Service Substation & Transmission (GS-2)

One-third (1/3rd) of each customer's total load factored power supply loads, in MWh, as reflected in the Utility's 1995 Test Period in Docket No. 96._____

July 1, 2000 to June 30, 2002

Residential Rate Class

Residential Customer Choice Program limited to 25,000 Residential customers (100% of individual loads).

GS-1 Irrigation Rate Classes

Commercial Customer Choice Program limited up to 5,000 GS-1 and Irrigation Customers (100% of individual loads) but not to exceed 280,000,000 kWh(s) per year.

GS-2

Two-thirds (2/3rds) of each customer's total load factored power supply loads, in MWh, as reflected in the Utility's 1995 Test Period in Docket No. 96._____

July 1, 2002

Full power supply choice for retail sales.

RATES: Net Monthly Bill:

Access Rate:

Standard Rate Schedule

R-1	All kWh @	\$0.02688
GS-1	All kWh @	\$0.02035
GS-2	All kWh @	\$0.00340
IS-1	All kWh @	\$0.02601
L-1	All kWh @	\$0.14293

Plus:

Transmission Service & Ancillary Services

Billing for Transmission Service and for Ancillary Services provided hereunder shall be in accordance with the provisions of the Montana Power Company - Services Division's (Utility) Open Access Transmission Tariff, on file with Federal Energy Regulatory Commission (FERC).

(continued)

ISSUED BY: Perry J. Cole

TITLE: Vice President

TARIFF LETTER NO.:

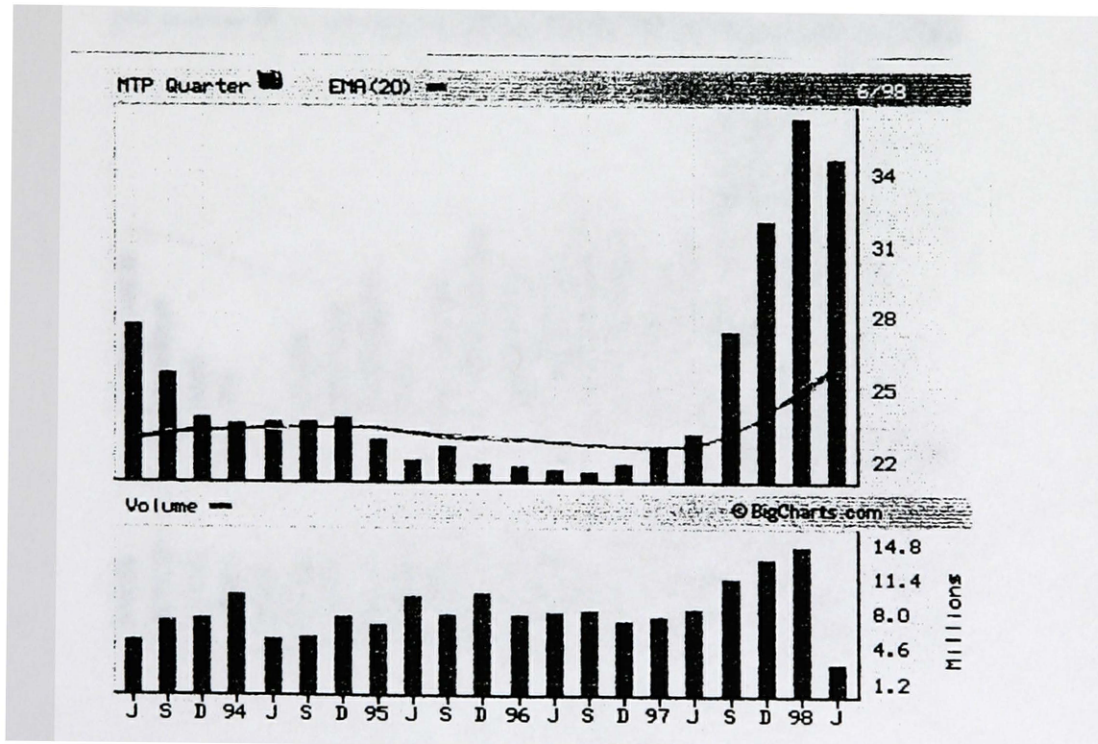
EFFECTIVE:

APPROVED:

Public Service Commission of Montana

The Montana Power Company

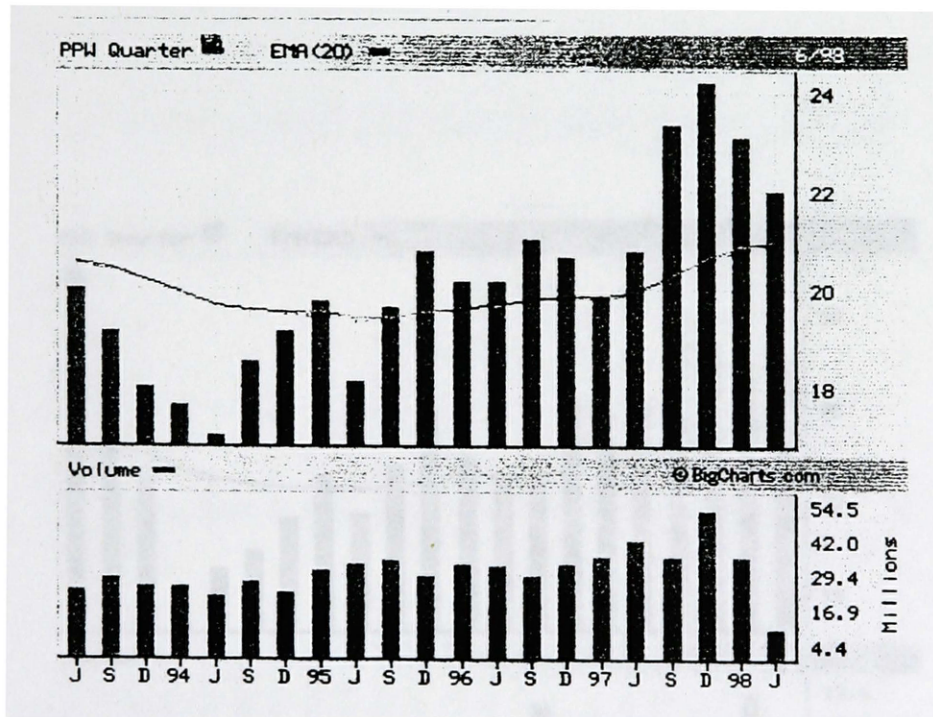
Five Year Stock Performance & Volume
(June 1994-June 1998, by quarter)



Source: Wall Street Journal Interactive Edition
 Company Breifing Books

PacifiCorp

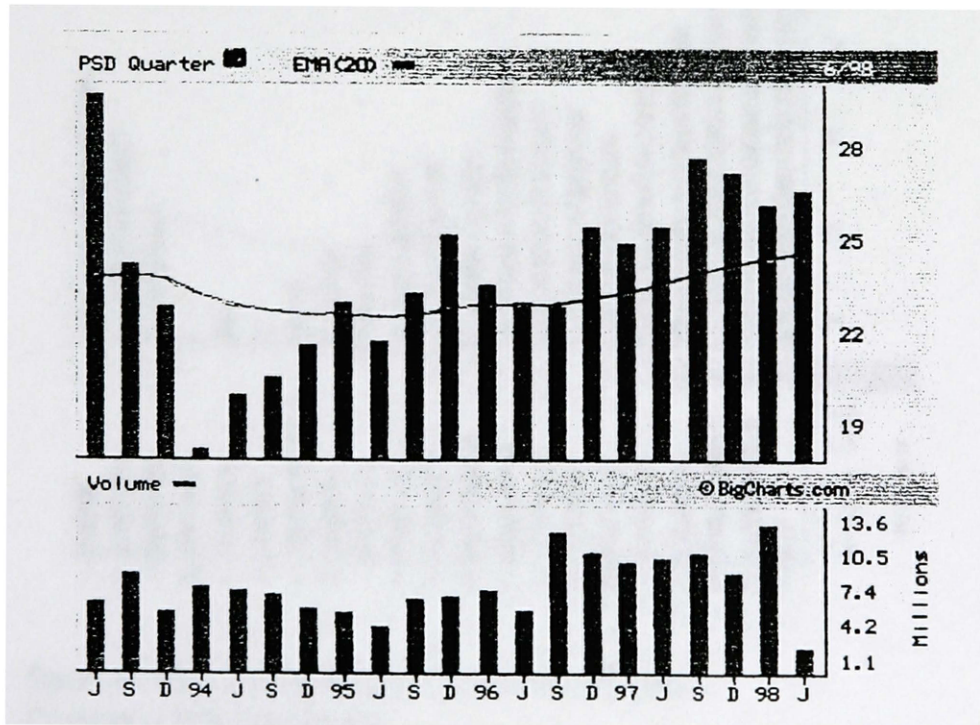
Five Year Stock Performance & Volume
(June 1994-June 1998, by quarter)



Source: Wall Street Journal Interactive Edition
 Company Breifing Books

Puget Sound Power & Light Company

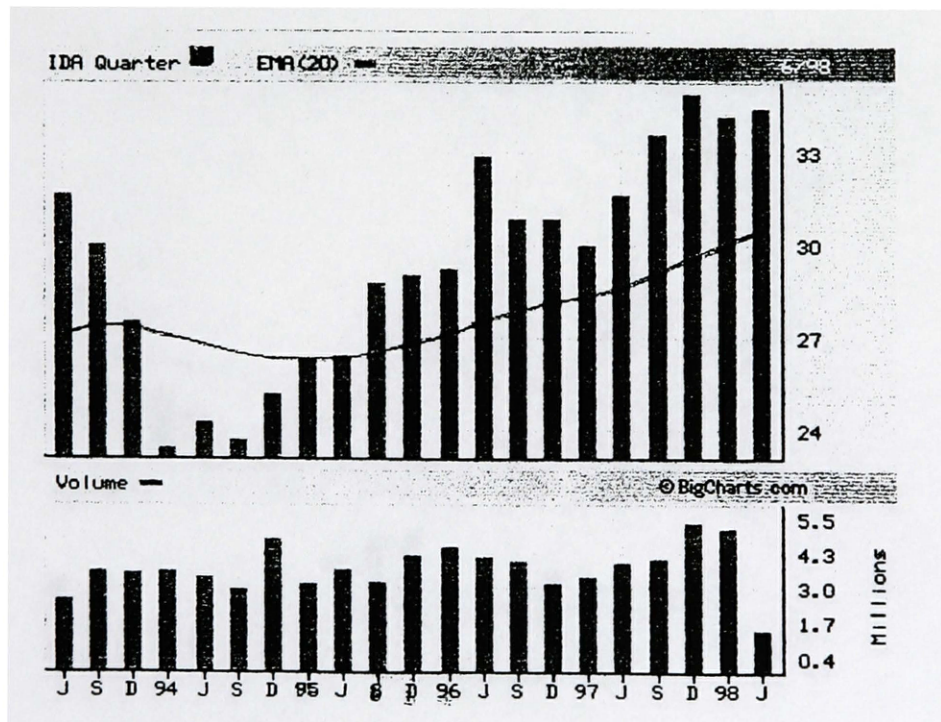
Five Year Stock Performance & Volume (June 1994-June 1998, by quarter)



Source: Wall Street Journal Interactive Edition
Company Briefing Books

Idaho Power Company

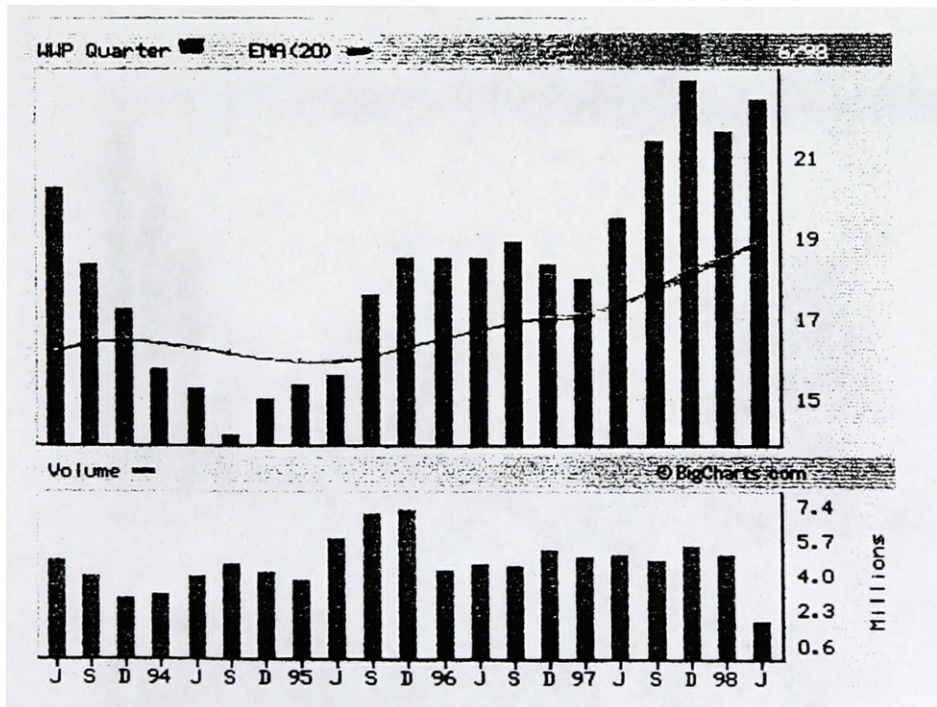
Five Year Stock Performance & Volume
(June 1994-June 1998, by quarter)



Source: Wall Street Journal Interactive Edition
 Company Breifing Books

The Washington Water Power Company

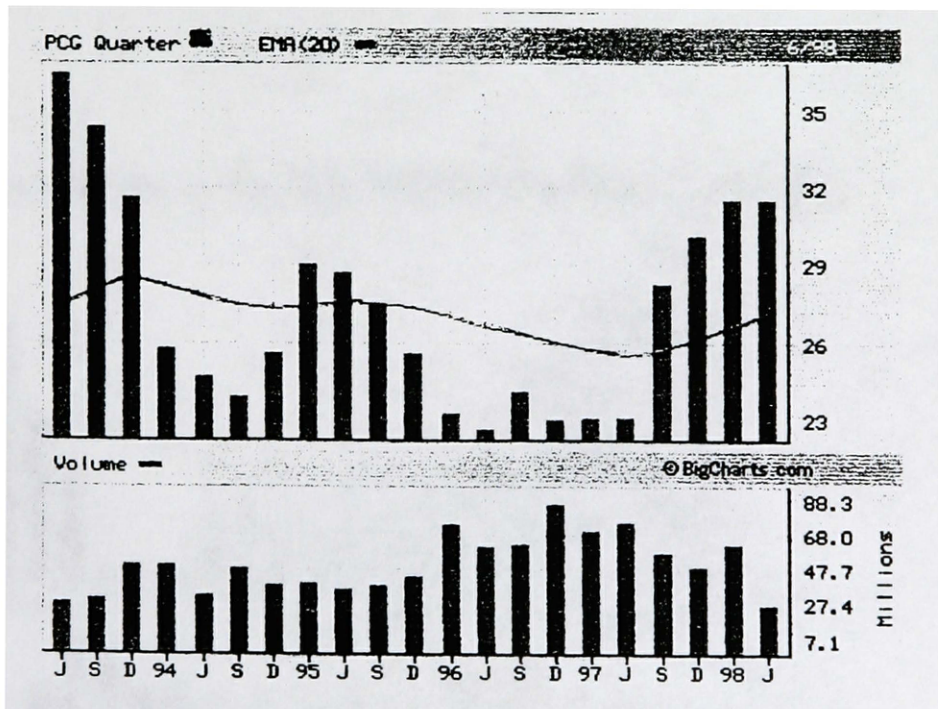
Five Year Stock Performance & Volume (June 1994-June 1998, by quarter)



Source: Wall Street Journal Interactive Edition
Company Breifing Books

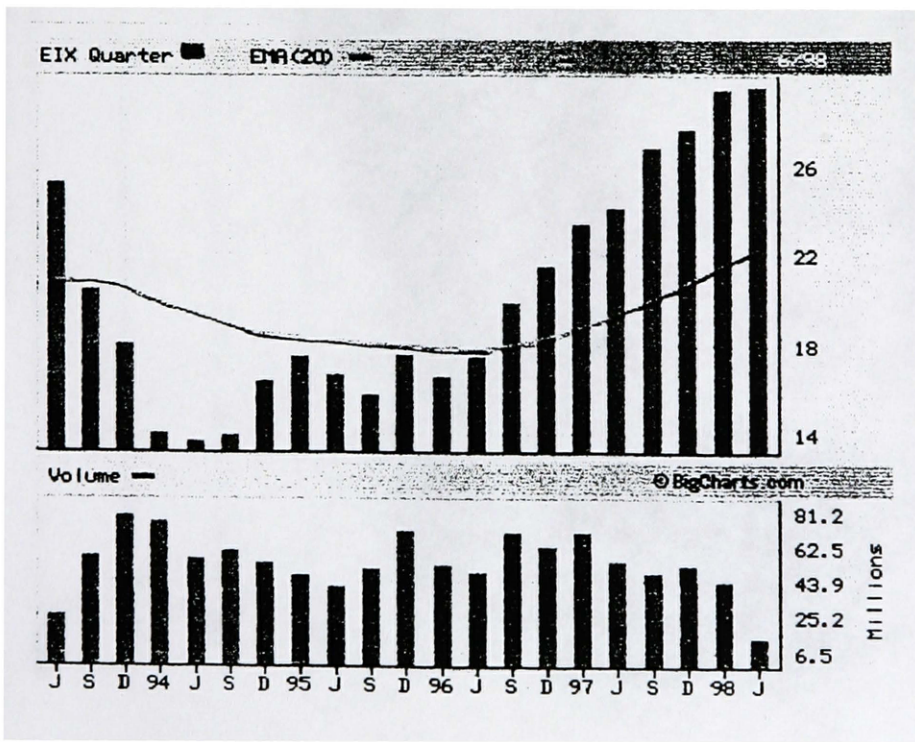
Pacific Gas and Electric Company

Five Year Stock Performance & Volume
(June 1994-June 1998, by quarter)



Edison International

Five Year Stock Performance & Volume
(June 1994-June 1998, by quarter)



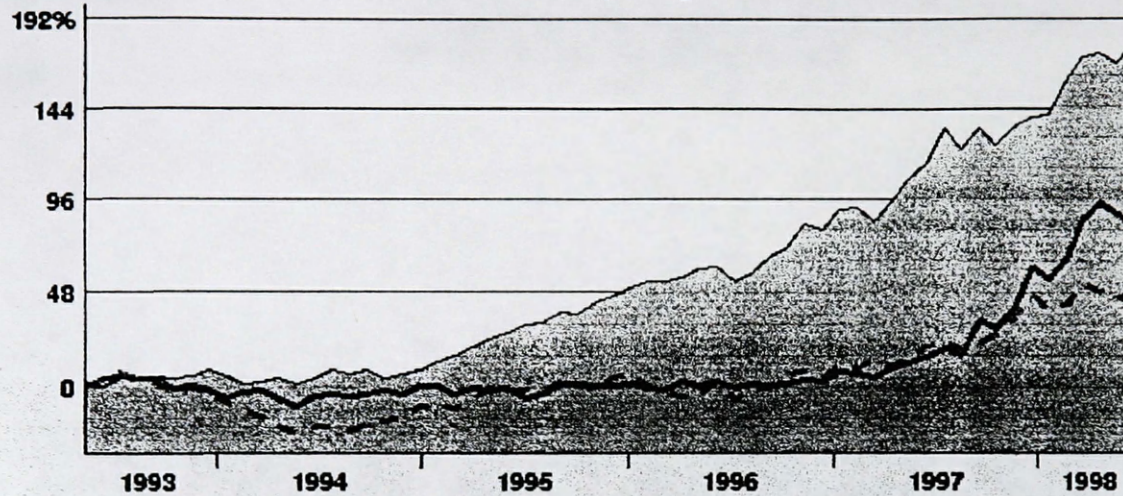
Montana Power Co.

Symbol: MTP

Five-Year Total Return

(cumulative, monthly through June 26, 1998)

— MTP
 - - DJ West. U.S. Ele. Util.
 ■ DJ Equity Market Index



Performance During Past	Stock (MTP)		Industry Index		Market Index	
	actual	annualized	actual	annualized	actual	annualized
3 Months	(2.91)	—	(3.36)	—	2.79	—
6 Months	11.13	—	0.30	—	16.51	—
Year-to-Date	11.57	—	0.30	—	16.51	—
12 Months	58.56	58.56	22.05	22.05	29.38	29.38
2 Years	83.19	35.35	44.51	20.21	72.96	31.51
5 Years	82.07	12.73	46.63	7.96	179.37	22.81

All figures in percent.

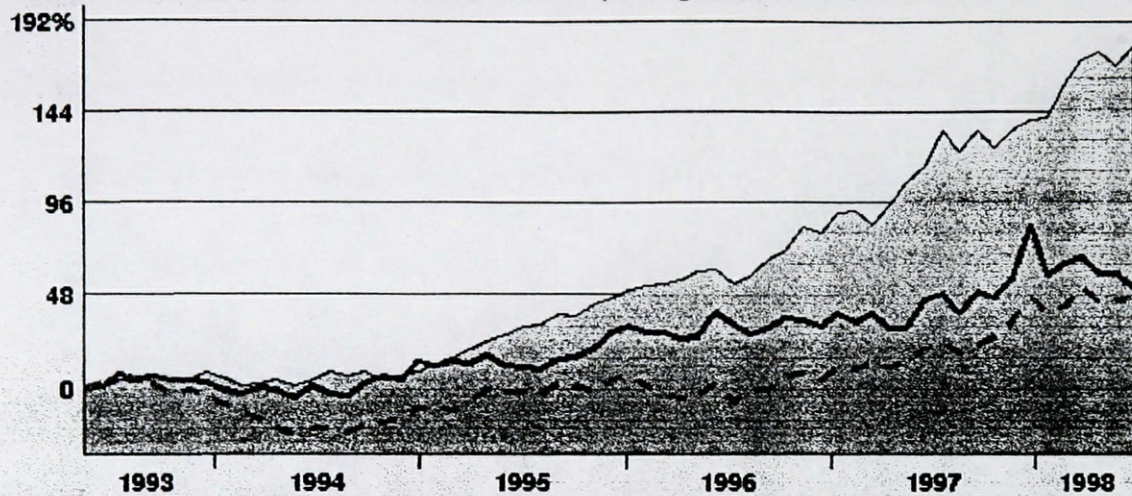
Total Return: All cash distributions and capital changes are taken into consideration in the calculation of total return. Cash distributions are considered reinvested as of the Ex-dividend date.

Source: IDD Information Services

Pacificorp
Symbol: PPW

Five-Year Total Return
(cumulative, monthly through June 26, 1998)

— PPW
- - DJ West. U.S. Ele. Util.
□ DJ Equity Market Index



Performance During Part	Stock (PPW)		Industry Index		Market Index	
	actual	annualized	actual	annualized	actual	annualized
2 Months	(7.05)	—	(3.36)	—	2.79	—
6 Months	(16.48)	—	0.30	—	16.51	—
Year-to-Date	(17.63)	—	0.30	—	16.51	—
12 Months	5.37	5.37	22.05	22.05	29.38	29.38
2 Years	12.30	5.97	44.51	20.21	72.96	31.51
5 Years	55.86	9.28	46.63	7.96	179.37	22.81

All figures in percent.




Total Return: All cash distributions and capital changes are taken into consideration in the calculation of total return. Cash distributions are considered reinvested as of the Ex-dividend date.

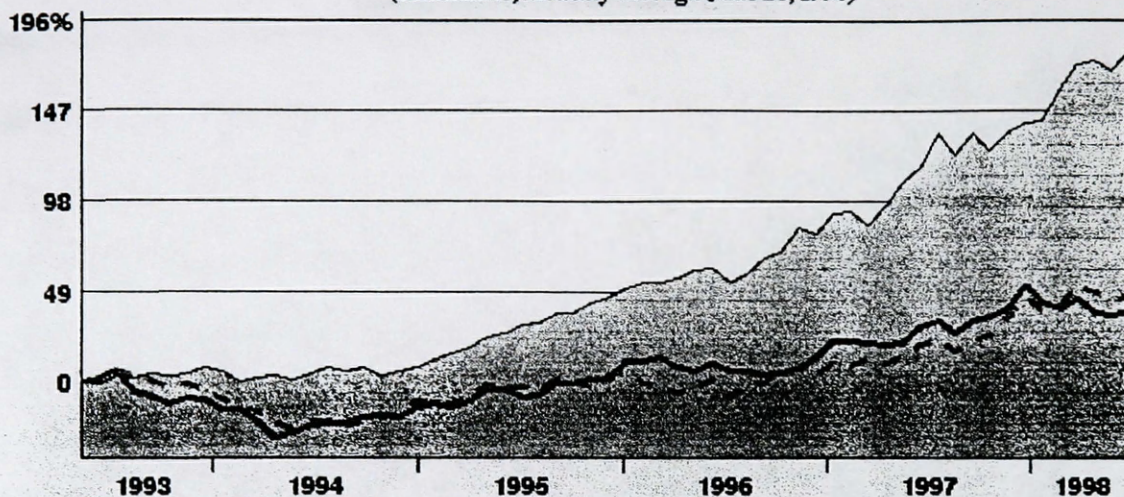
Source: IDD Information Services

Puget Sound Energy Inc.

Symbol: PSD

Five-Year Total Return (cumulative, monthly through June 26, 1998)

 PSD
 DJ West. U.S. Ele. Util.
 DJ Equity Market Index



Performance During Part	Stock (PSD)		Industry Index		Market Index	
	actual	annualized	actual	annualized	actual	annualized
3 Months	(2.46)	—	(3.36)	—	2.79	—
6 Months	(7.57)	—	0.30	—	16.51	—
Year-to-Date	(9.10)	—	0.30	—	16.51	—
12 Months	7.70	7.70	22.05	22.05	29.38	29.38
2 Years	29.94	13.99	44.51	20.21	72.96	31.51
5 Years	39.59	6.90	46.63	7.96	179.37	22.81

All figures in percent.

Total Return: All cash distributions and capital changes are taken into consideration in the calculation of total return. Cash distributions are considered reinvested as of the Ex-dividend date.

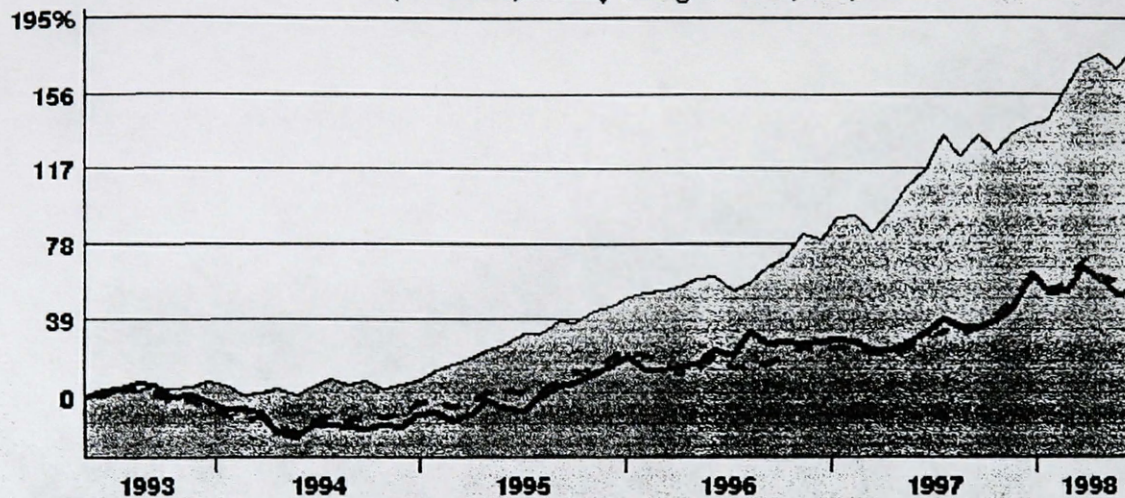
Source: IDD Information Services

Idaho Power Co.

Symbol: IDA

Five-Year Total Return (cumulative, monthly through June 26, 1998)

— IDA
 - - DJ Ctl. U.S. Ele. Util.
 ■ DJ Equity Market Index



Performance During Part:	Stock (IDA)		Industry Index		Market Index	
	actual	annualized	actual	annualized	actual	annualized
3 Months	(5.72)	—	(3.37)	—	2.79	—
6 Months	(3.19)	—	1.82	—	16.51	—
Year-to-Date	(5.92)	—	1.82	—	16.51	—
12 Months	17.81	17.81	27.39	27.39	29.38	29.38
2 Years	29.70	13.89	36.16	16.69	72.96	31.51
5 Years	55.01	9.16	63.60	10.35	179.37	22.81

All figures in percent.

Total Return: All cash distributions and capital changes are taken into consideration in the calculation of total return. Cash distributions are considered reinvested as of the Ex-dividend date.

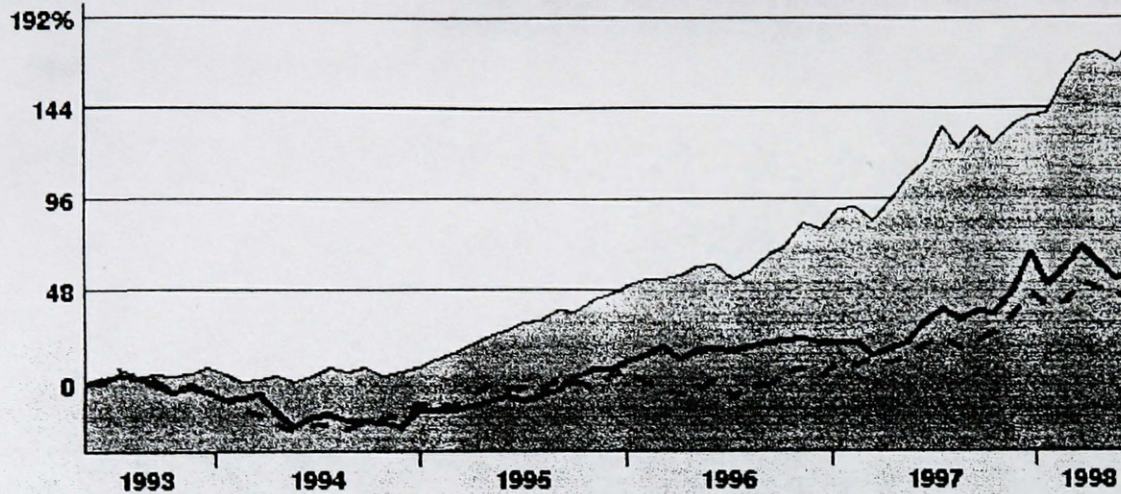
Source: IDD Information Services

Washington Water Power Co.

Symbol: WWP

— WWP
 - - DJ West. U.S. Ele. Util.
 ■ DJ Equity Market Index

Five-Year Total Return (cumulative, monthly through June 26, 1998)



Performance During Part	Stock (WWP)		Industry Index		Market Index	
	Annualized	Cumulative	Annualized	Cumulative	Annualized	Cumulative
3 Months	(6.39)	—	(3.36)	—	2.79	—
6 Months	(4.63)	—	0.30	—	16.51	—
Year-to-Date	(5.12)	—	0.30	—	16.51	—
12 Months	25.97	25.97	22.05	22.05	29.38	29.38
2 Years	38.20	17.56	44.51	20.21	72.96	31.51
5 Years	60.62	9.94	46.63	7.96	179.37	22.81

All figures in percent.

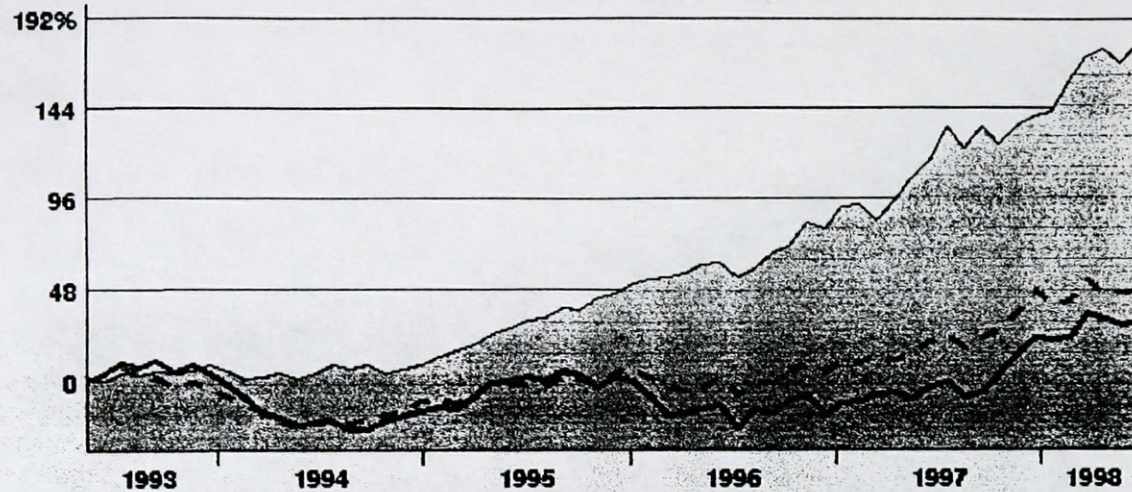
Total Return: All cash distributions and capital changes are taken into consideration in the calculation of total return. Cash distributions are considered reinvested as of the Ex-dividend date.

Source: IDD Information Services

Pg&E Corp.
 Symbol: PCG

Five-Year Total Return
 (cumulative, monthly through June 26, 1998)

— PCG
 - - DJ West. U.S. Ele. Util.
 □ DJ Equity Market Index



Performance During Part	Stock (PCG)		Industry Index		Market Index	
	actual	annualized	actual	annualized	actual	annualized
3 Months	(2.17)	—	(3.36)	—	2.79	—
6 Months	6.78	—	0.30	—	16.51	—
Year-to-Date	6.12	—	0.30	—	16.51	—
12 Months	37.53	37.53	22.05	22.05	29.38	29.38
2 Years	55.61	24.74	44.51	20.21	72.96	31.51
5 Years	31.54	5.64	46.63	7.96	179.37	22.81

All figures in percent.

Total Return: All cash distributions and capital changes are taken into consideration in the calculation of total return. Cash distributions are considered reinvested as of the Ex-dividend date.

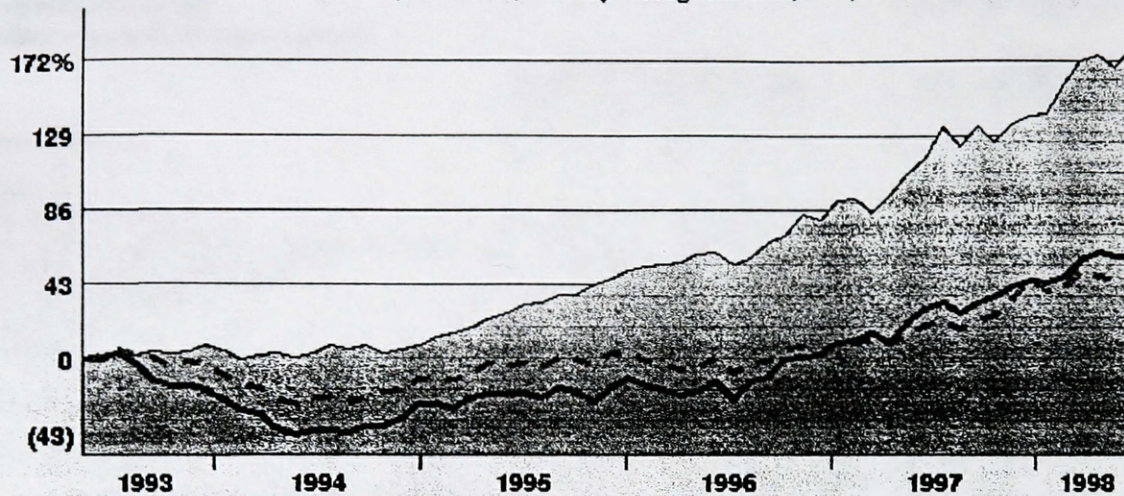
Source: IDD Information Services

Edison International

Symbol: EIX

Five-Year Total Return (cumulative, monthly through June 26, 1998)

— EIX
 - - DJ West. U.S. Ele. Util.
 ■ DJ Equity Market Index



Performance During Past:	Stock (EIX)		Industry Index		Market Index	
	actual	annualized	actual	annualized	actual	annualized
3 Months	0.05	—	(3.36)	—	2.79	—
6 Months	11.24	—	0.30	—	16.51	—
Year-to-Date	9.47	—	0.30	—	16.51	—
12 Months	22.57	22.57	22.05	22.05	29.38	29.38
2 Years	89.89	37.80	44.51	20.21	72.96	31.51
5 Years	57.73	9.54	46.63	7.96	179.37	22.81

All figures in percent.

Total Return: All cash distributions and capital changes are taken into consideration in the calculation of total return. Cash distributions are considered reinvested as of the Ex-dividend date.

Source: IDD Information Services

Statement of Income
(\$ Millions, except per share amount)

Exhibit 10 Page 1 of 4

	Montana Power Co.			PacifiCorp		
	1997	1996	1995	1997	1996	1995
Operating Revenues	\$ 1,024	\$ 973	\$ 953	\$ 6,278	\$ 3,804	\$ 2,807
Expenses:						
Operations & Maintenance	\$ 492	\$ 450	\$ 488	\$ 4,394	\$ 1,949	\$ 1,292
Administrative & General (where information was provided)	\$ 124	\$ 113	\$ 104	\$ 335	\$ 245	\$ 187
Depreciation, Depletion & Amortization	\$ 95	\$ 86	\$ 85	\$ 477	\$ 424	\$ 334
Taxes Other Than Income	\$ 96	\$ 88	\$ 90	\$ 100	\$ 99	\$ 104
Special Charges			\$ 74	\$ 170		
Total Expenses	\$ 807	\$ 737	\$ 841	\$ 5,476	\$ 2,717	\$ 1,917
Income from Operations	\$ 217	\$ 236	\$ 112	\$ 802	\$ 1,087	\$ 890
Interest Expense/Other	\$ 26	\$ 44	\$ 33	\$ 468	\$ 420	\$ 297
Income from Continuing Operations (before income taxes)	\$ 191	\$ 192	\$ 79	\$ 334	\$ 667	\$ 593
Income Tax Expense	\$ 62	\$ 72	\$ 22	\$ 110	\$ 236	\$ 192
Income from Continuing Operations	\$ 129	\$ 120	\$ 57	\$ 224	\$ 431	\$ 401
Discontinued Operations	\$ -	\$ -	\$ -	\$ 438	\$ 75	\$ 103
Net Income	\$ 129	\$ 120	\$ 57	\$ 662	\$ 506	\$ 504
Preferred Dividends	\$ 4	\$ 8	\$ 7	\$ 23	\$ 30	\$ 39
Net Income Available for Common	\$ 125	\$ 112	\$ 50	\$ 639	\$ 476	\$ 465
EPS—Common Stock	\$ 2.29	\$ 2.03	\$ 0.92	\$ 2.16	\$ 1.62	\$ 1.64

Statement of Income
(\$ Millions, except per share amount)

Exhibit 10 Page 2 of 4

	Puget Sound Energy			Idaho Power		
	1997	1996	1995	1997	1996	1995
Operating Revenues	\$ 1,677	\$ 1,649	\$ 1,631	\$ 749	\$ 578	\$ 546
Expenses:						
Operations & Maintenance	\$ 1,015	\$ 920	\$ 949	\$ 333	\$ 168	\$ 154
Administrative & General (where information was provided)	\$ 21	\$ 32	\$ 29	\$ 138	\$ 133	\$ 127
Depreciation, Depletion & Amortization	\$ 162	\$ 144	\$ 141	\$ 72	\$ 70	\$ 67
Taxes Other Than Income	\$ 160	\$ 156	\$ 151	\$ 21	\$ 21	\$ 23
Special Charges	\$ 56	\$ 5	\$ -			
Total Expenses	\$ 1,414	\$ 1,257	\$ 1,270	\$ 564	\$ 392	\$ 371
Income from Operations	\$ 263	\$ 392	\$ 361	\$ 185	\$ 186	\$ 175
Interest Expense/Other	\$ 90	\$ 117	\$ 142	\$ 46	\$ 44	\$ 41
Income from Continuing Operations (before income taxes)	\$ 173	\$ 275	\$ 219	\$ 139	\$ 142	\$ 134
Income Tax Expense	\$ 48	\$ 107	\$ 92	\$ 46	\$ 52	\$ 48
Income from Continuing Operations	\$ 125	\$ 168	\$ 127	\$ 93	\$ 90	\$ 86
Discontinued Operations	\$ (3)	\$ (2)	\$ (27)	\$ -	\$ -	\$ -
Net Income	\$ 122	\$ 166	\$ 100	\$ 93	\$ 90	\$ 86
Preferred Dividends	\$ 17	\$ 22	\$ 22	\$ 5	\$ 7	\$ 8
Net Income Available for Common	\$ 105	\$ 144	\$ 78	\$ 88	\$ 83	\$ 78
EPS--Common Stock	\$ 1.25	\$ 1.70	\$ 0.94	\$ 2.32	\$ 2.21	\$ 2.10

Statement of Income
(\$ Millions, except per share amount)

Exhibit 10 Page 3 of 4

	WWP			PG&E		
	1997	1996	1995	1997	1996	1995
Operating Revenues	\$ 1,302	\$ 945	\$ 755	\$ 15,400	\$ 9,810	\$ 9,622
Expenses:						
Operations & Maintenance	\$ 896	\$ 560	\$ 388	\$ 11,783	\$ 6,492	\$ 5,499
Administrative & General (where information was provided)	\$ 97	\$ 77	\$ 62			
Depreciation, Depletion & Amortization	\$ 70	\$ 72	\$ 68	\$ 1,889	\$ 1,222	\$ 1,360
Taxes Other Than Income	\$ 50	\$ 49	\$ 47			
Special Charges						
Total Expenses	\$ 1,113	\$ 758	\$ 565	\$ 13,672	\$ 7,714	\$ 6,859
Income from Operations	\$ 189	\$ 187	\$ 190	\$ 1,728	\$ 1,896	\$ 2,763
Interest Expense/Other	\$ 14	\$ 54	\$ 50	\$ 464	\$ 645	\$ 599
Income from Continuing Operations (before income taxes)	\$ 175	\$ 133	\$ 140	\$ 1,264	\$ 1,251	\$ 2,164
Income Tax Expense	\$ 61	\$ 50	\$ 53	\$ 548	\$ 555	\$ 895
Income from Continuing Operations	\$ 114	\$ 83	\$ 87	\$ 716	\$ 696	\$ 1,269
Discontinued Operations	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Net Income	\$ 114	\$ 83	\$ 87	\$ 716	\$ 696	\$ 1,269
Preferred Dividends	\$ 5	\$ 8	\$ 9	\$ -	\$ -	\$ -
Net Income Available for Common	\$ 109	\$ 75	\$ 78	\$ 716	\$ 696	\$ 1,269
EPS--Common Stock	\$ 1.96	\$ 1.35	\$ 1.41	\$ 1.75	\$ 1.75	\$ 2.99

Statement of Income
(\$ Millions, except per share amount)

Exhibit 10 Page 4 of 4

	Edison International		
	<u>1997</u>	<u>1996</u>	<u>1995</u>
Operating Revenues	\$ 9,235	\$ 8,545	\$ 8,405
Expenses:			
Operations & Maintenance	\$ 5,704	\$ 5,134	\$ 5,276
Administrative & General (where information was provided)	\$ -	\$ -	\$ -
Depreciation, Depletion & Amortization	\$ 1,362	\$ 1,173	\$ 1,014
Taxes Other Than Income	\$ 134	\$ 197	\$ 210
Special Charges	\$ 56	\$ 88	\$ 45
Total Expenses	<u>\$ 7,256</u>	<u>\$ 6,592</u>	<u>\$ 6,545</u>
Income from Operations	\$ 1,979	\$ 1,953	\$ 1,860
Interest Expense/Other	\$ 742	\$ 673	\$ 593
Income from Continuing Operations (before income taxes)	\$ 1,237	\$ 1,280	\$ 1,267
Income Tax Expense	\$ 537	\$ 563	\$ 528
Income from Continuing Operations	\$ 700	\$ 717	\$ 739
Discontinued Operations			
Net Income	\$ 700	\$ 717	\$ 739
Preferred Dividends			
Net Income Available for Common	\$ 700	\$ 717	\$ 739
EPS--Common Stock	\$ 1.75	\$ 1.64	\$ 1.66

Balance Sheet
(\$ Millions)

Exhibit 11 Page 1 of 4

	<u>Montana Power Co.</u>		<u>PacifiCorp</u>	
	1997	1996	1997	1996
Assets				
Current Assets				
Cash & Cash Equivalents	\$ 17	\$ 32	\$ 741	\$ 8
Short-term investments			\$ -	\$ -
Accounts Receivable	\$ 127	\$ 142	\$ 920	\$ 621
Net Assets of Discontinued Operations			\$ 272	\$ 780
Inventories & Prepayments	\$ 89	\$ 88	\$ 194	\$ 181
Other Current Assets	\$ 11	\$ 11	\$ 55	\$ 72
Total Current Assets	\$ 244	\$ 273	\$ 2,182	\$ 1,662
Property, Plant & Equipment	\$ 2,997	\$ 2,903	\$ 13,313	\$ 13,130
Accumulated Depreciation	\$ 946	\$ 961	\$ 4,242	\$ 3,862
Net Property, Plant & Equipment	\$ 2,051	\$ 1,942	\$ 9,070	\$ 9,267
Other Non-current Assets	\$ 506	\$ 483	\$ 2,628	\$ 2,883
Total Non-current Assets	\$ 2,557	\$ 2,425	\$ 11,698	\$ 12,150
Total Assets	\$ 2,801	\$ 2,698	\$ 13,880	\$ 13,812
Liabilities and Equity				
Current Liabilities				
Short-term borrowings	\$ 134	\$ 105	\$ 189	\$ 684
Current portion of Long-term debt	\$ 82	\$ 69	\$ 366	\$ 220
Accounts Payable	\$ 115	\$ 97	\$ 631	\$ 478
Accrued Taxes	\$ 52	\$ 53	\$ 701	\$ 291
Other current liabilities	\$ 35	\$ 41	\$ 219	\$ 84
Total Current Liabilities	\$ 418	\$ 365	\$ 2,106	\$ 1,755
Long-term debt	\$ 653	\$ 633	\$ 4,415	\$ 4,829
Deferred Income Taxes	\$ 340	\$ 333	\$ 1,676	\$ 1,801
Deferred Tax Credits	\$ 35	\$ 44	\$ 135	\$ 143
Other Non-current Liabilities	\$ 222	\$ 229	\$ 646	\$ 728
Total Non-current Liabilities	\$ 1,250	\$ 1,239	\$ 6,872	\$ 7,502
Stockholder Equity				
Preferred Stock	\$ 123	\$ 123	\$ 582	\$ 523
Common Stock	\$ 695	\$ 692	\$ 3,274	\$ 3,237
Retained Earnings	\$ 315	\$ 279	\$ 1,047	\$ 796
Total Stockholder Equity	\$ 1,133	\$ 1,094	\$ 4,903	\$ 4,556
Total Liabilities & Stockholder Equity	\$ 2,801	\$ 2,698	\$ 13,880	\$ 13,812

Balance Sheet
(\$ Millions)

Exhibit 11 Page 2 of 4

	<u>Puget Sound Energy</u>		<u>Idaho Power</u>	
	1997	1996	1997	1996
Assets				
Current Assets				
Cash & Cash Equivalents	\$ 8	\$ 4	\$ 7	\$ 8
Short-term investments				
Accounts Receivable	\$ 158	\$ 159	\$ 123	\$ 51
Net Assets of Discontinued Operations				
Inventories & Prepayments	\$ 59	\$ 72	\$ 54	\$ 57
Other Current Assets	\$ 123	\$ 142	\$ 33	\$ 28
Total Current Assets	\$ 348	\$ 377	\$ 217	\$ 144
Property, Plant & Equipment	\$ 5,144	\$ 4,890	\$ 2,711	\$ 2,619
Accumulated Depreciation	\$ 1,613	\$ 1,493	\$ 942	\$ 887
Net Property, Plant & Equipment	\$ 3,531	\$ 3,397	\$ 1,769	\$ 1,732
Other Non-current Assets	\$ 615	\$ 453	\$ 420	\$ 420
Total Non-current Assets	\$ 4,146	\$ 3,850	\$ 2,189	\$ 2,152
Total Assets	\$ 4,494	\$ 4,227	\$ 2,406	\$ 2,296
Liabilities and Equity				
Current Liabilities				
Short-term borrowings	\$ 373	\$ 298	\$ 58	\$ 54
Current portion of Long-term debt	\$ 51	\$ 100	\$ 30	\$ -
Accounts Payable	\$ 117	\$ 96	\$ 112	\$ 36
Accrued Taxes	\$ 74	\$ 57	\$ 24	\$ 17
Other current liabilities	\$ 76	\$ 149	\$ 35	\$ 33
Total Current Liabilities	\$ 691	\$ 700	\$ 259	\$ 140
Long-term debt	\$ 1,412	\$ 1,166	\$ 704	\$ 739
Deferred Income Taxes	\$ 629	\$ 587	\$ 424	\$ 412
Deferred Tax Credits	\$ 130	\$ 94	\$ 70	\$ 71
Other Non-current Liabilities			\$ 131	\$ 132
Total Non-current Liabilities	\$ 2,171	\$ 1,847	\$ 1,329	\$ 1,354
Stockholder Equity				
Preferred Stock	\$ 273	\$ 303	\$ 107	\$ 107
Common Stock	\$ 1,312	\$ 1,292	\$ 452	\$ 452
Retained Earnings	\$ 47	\$ 85	\$ 259	\$ 243
Total Stockholder Equity	\$ 1,632	\$ 1,680	\$ 818	\$ 802
Total Liabilities & Stockholder Equity	\$ 4,494	\$ 4,227	\$ 2,406	\$ 2,296

Balance Sheet
(\$ Millions)

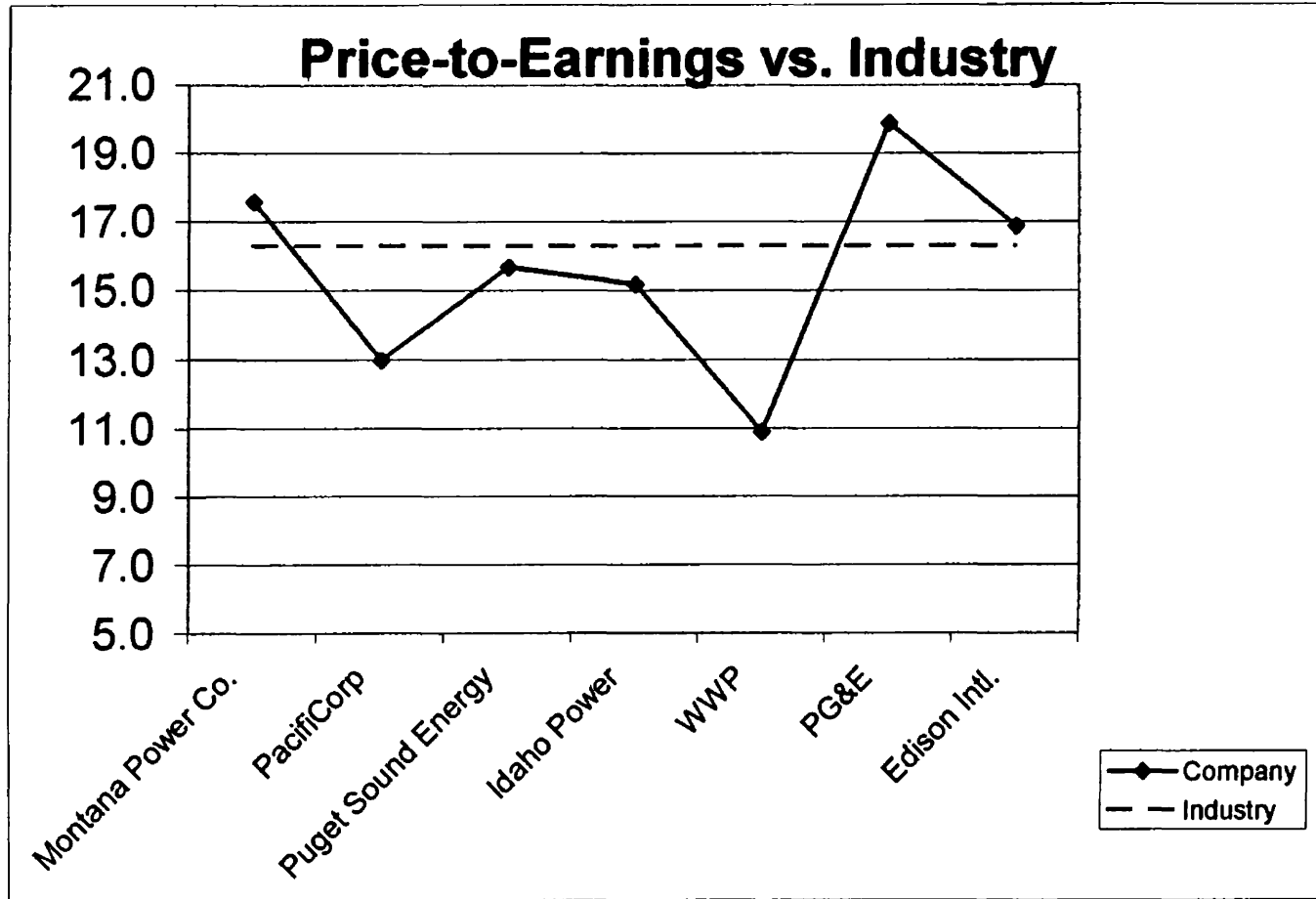
Exhibit 11 Page 3 of 4

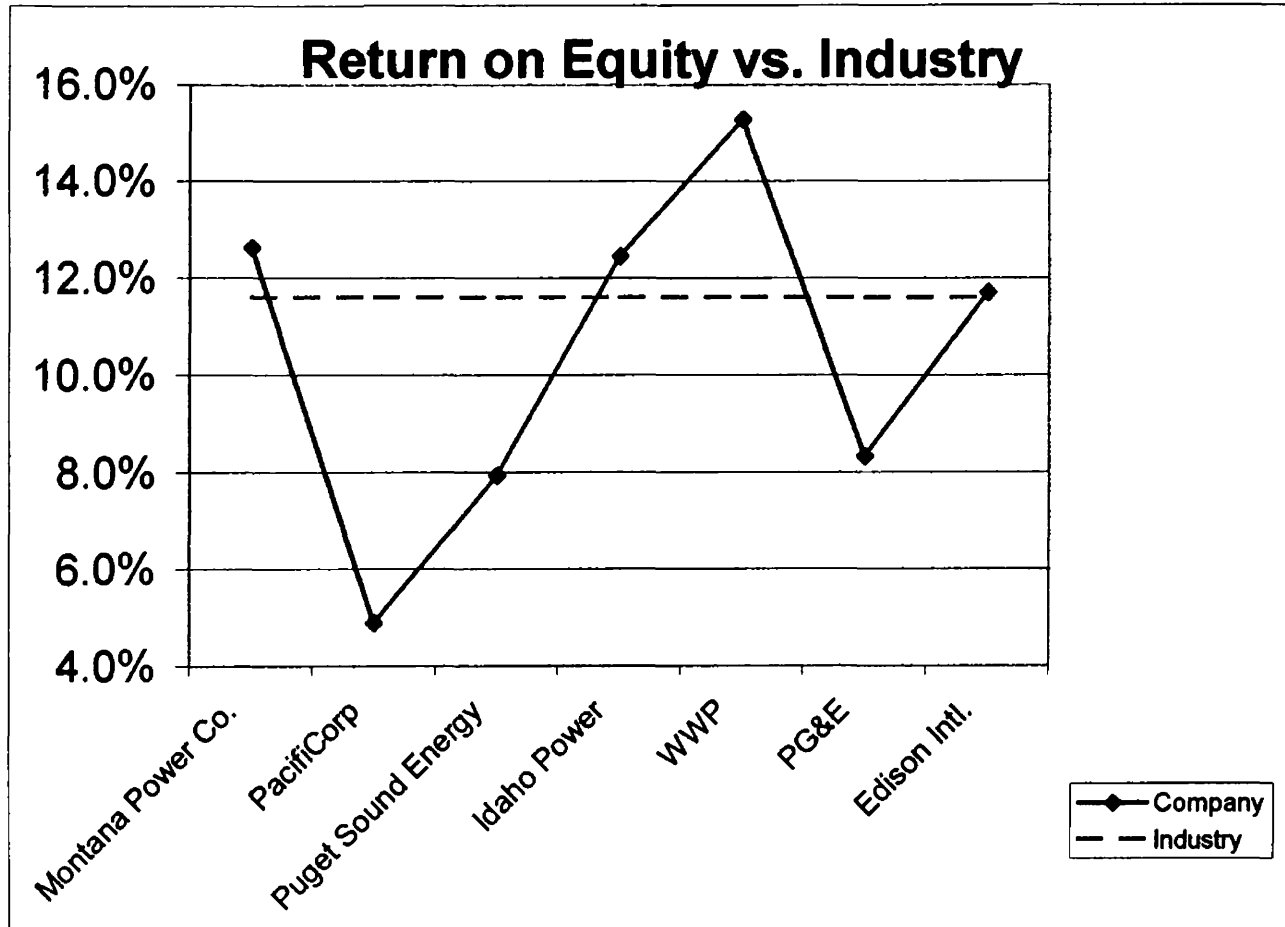
	WWP		PG&E	
	1997	1996	1997	1996
Assets				
Current Assets				
Cash & Cash Equivalents	\$ 31	\$ 8	\$ 237	\$ 131
Short-term investments	\$ 23	\$ 20	\$ 1,160	\$ 13
Accounts Receivable	\$ 177	\$ 149	\$ 3,002	\$ 1,983
Net Assets of Discontinued Operations				
Inventories & Prepayments	\$ 70	\$ 52	\$ 626	\$ 584
Other Current Assets	\$ 76		\$ -	\$ -
Total Current Assets	\$ 377	\$ 229	\$ 5,025	\$ 2,711
Property, Plant & Equipment	\$ 2,276	\$ 2,140	\$ 36,513	\$ 33,310
Accumulated Depreciation	\$ 635	\$ 592	\$ 16,041	\$ 14,302
Net Property, Plant & Equipment	\$ 1,641	\$ 1,548	\$ 20,472	\$ 19,008
Other Non-current Assets	\$ 394	\$ 401	\$ 5,060	\$ 4,518
Total Non-current Assets	\$ 2,035	\$ 1,949	\$ 25,532	\$ 23,526
Total Assets	\$ 2,412	\$ 2,178	\$ 30,557	\$ 26,237
Liabilities and Equity				
Current Liabilities				
Short-term borrowings	\$ -	\$ -	\$ 103	\$ 681
Current portion of Long-term debt	\$ -	\$ -	\$ 784	\$ 210
Accounts Payable	\$ 154	\$ 95	\$ 2,132	\$ 1,426
Accrued Taxes	\$ 36	\$ 37	\$ 226	\$ 310
Other current liabilities	\$ 149	\$ 71	\$ 739	\$ 653
Total Current Liabilities	\$ 339	\$ 203	\$ 3,984	\$ 3,280
Long-term debt	\$ 762	\$ 765	\$ 10,435	\$ 7,770
Deferred Income Taxes	\$ 353	\$ 313	\$ 4,029	\$ 3,941
Deferred Tax Credits	\$ 17	\$ 43	\$ 339	\$ 380
Other Non-current Liabilities	\$ 36	\$ 28	\$ 2,034	\$ 1,663
Total Non-current Liabilities	\$ 1,168	\$ 1,149	\$ 16,837	\$ 13,754
Stockholder Equity				
Preferred Stock	\$ 155	\$ 115	\$ 839	\$ 839
Common Stock	\$ 577	\$ 580	\$ 6,366	\$ 5,728
Retained Earnings	\$ 173	\$ 131	\$ 2,531	\$ 2,636
Total Stockholder Equity	\$ 905	\$ 826	\$ 9,736	\$ 9,203
Total Liabilities & Stockholder Equity	\$ 2,412	\$ 2,178	\$ 30,557	\$ 26,237

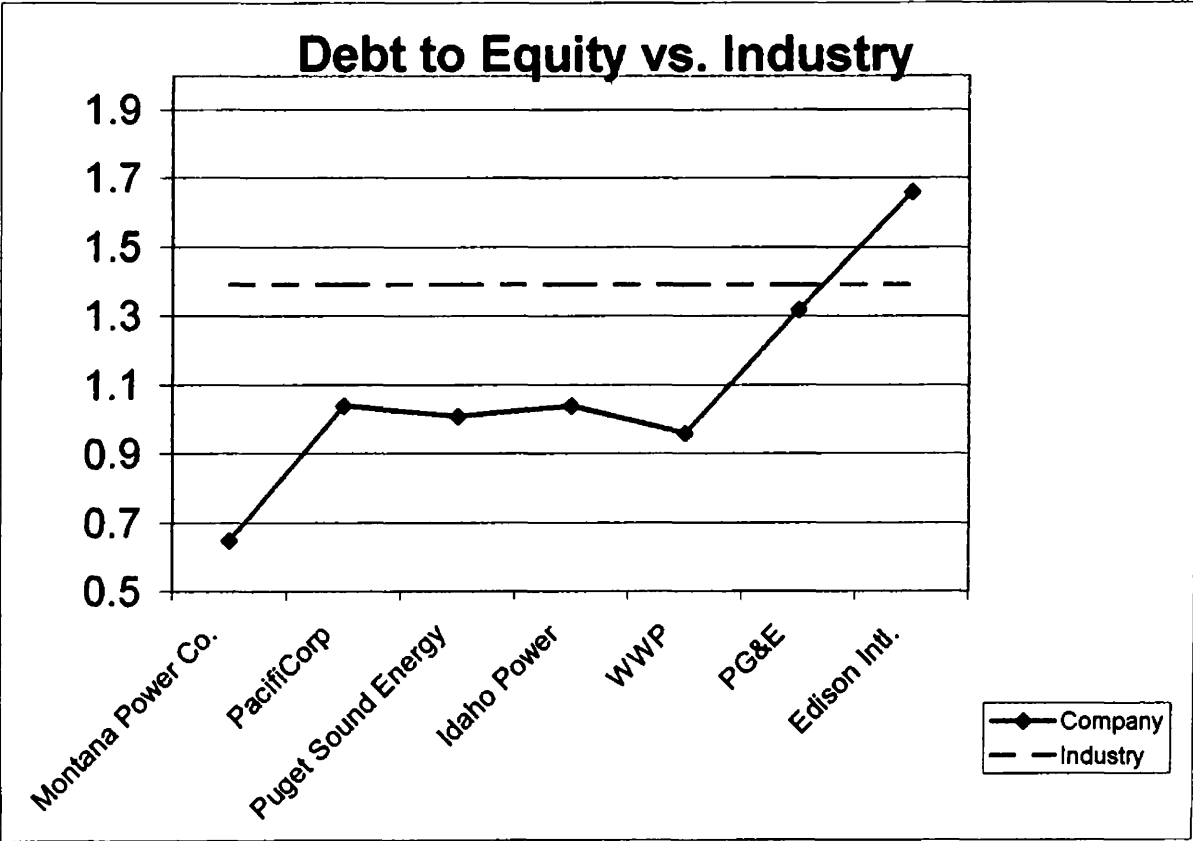
Balance Sheet
(\$ Millions)

Exhibit 11 Page 4 of 4

	Edison Intl.	
	1997	1996
Assets		
Current Assets		
Cash & Cash Equivalents	\$ 1,907	\$ 897
Short-term investments		
Accounts Receivable	\$ 1,077	\$ 1,095
Net Assets of Discontinued Operations		
Inventories & Prepayments	\$ 297	\$ 340
Other Current Assets	\$ 316	\$ 240
Total Current Assets	\$ 3,597	\$ 2,572
Property, Plant & Equipment	\$ 19,087	\$ 19,575
Accumulated Depreciation	\$ 4,970	\$ 4,302
Net Property, Plant & Equipment	\$ 14,117	\$ 15,273
Other Non-current Assets	\$ 7,387	\$ 6,714
Total Non-current Assets	\$ 21,504	\$ 21,987
Total Assets	\$ 25,101	\$ 24,559
Liabilities and Equity		
Current Liabilities		
Short-term borrowings	\$ 330	\$ 397
Current portion of Long-term debt	\$ 868	\$ 592
Accounts Payable	\$ 441	\$ 438
Accrued Taxes	\$ 577	\$ 530
Other current liabilities	\$ 1,512	\$ 1,481
Total Current Liabilities	\$ 3,728	\$ 3,438
Long-term debt	\$ 8,871	\$ 7,475
Deferred Income Taxes	\$ 4,085	\$ 4,283
Deferred Tax Credits	\$ 351	\$ 372
Other Non-current Liabilities	\$ 1,930	\$ 1,885
Total Non-current Liabilities	\$ 15,237	\$ 14,015
Stockholder Equity		
Preferred Stock	\$ 609	\$ 709
Common Stock	\$ 2,351	\$ 2,644
Retained Earnings	\$ 3,176	\$ 3,753
Total Stockholder Equity	\$ 6,136	\$ 7,106
Total Liabilities & Stockholder Equity	\$ 25,101	\$ 24,559



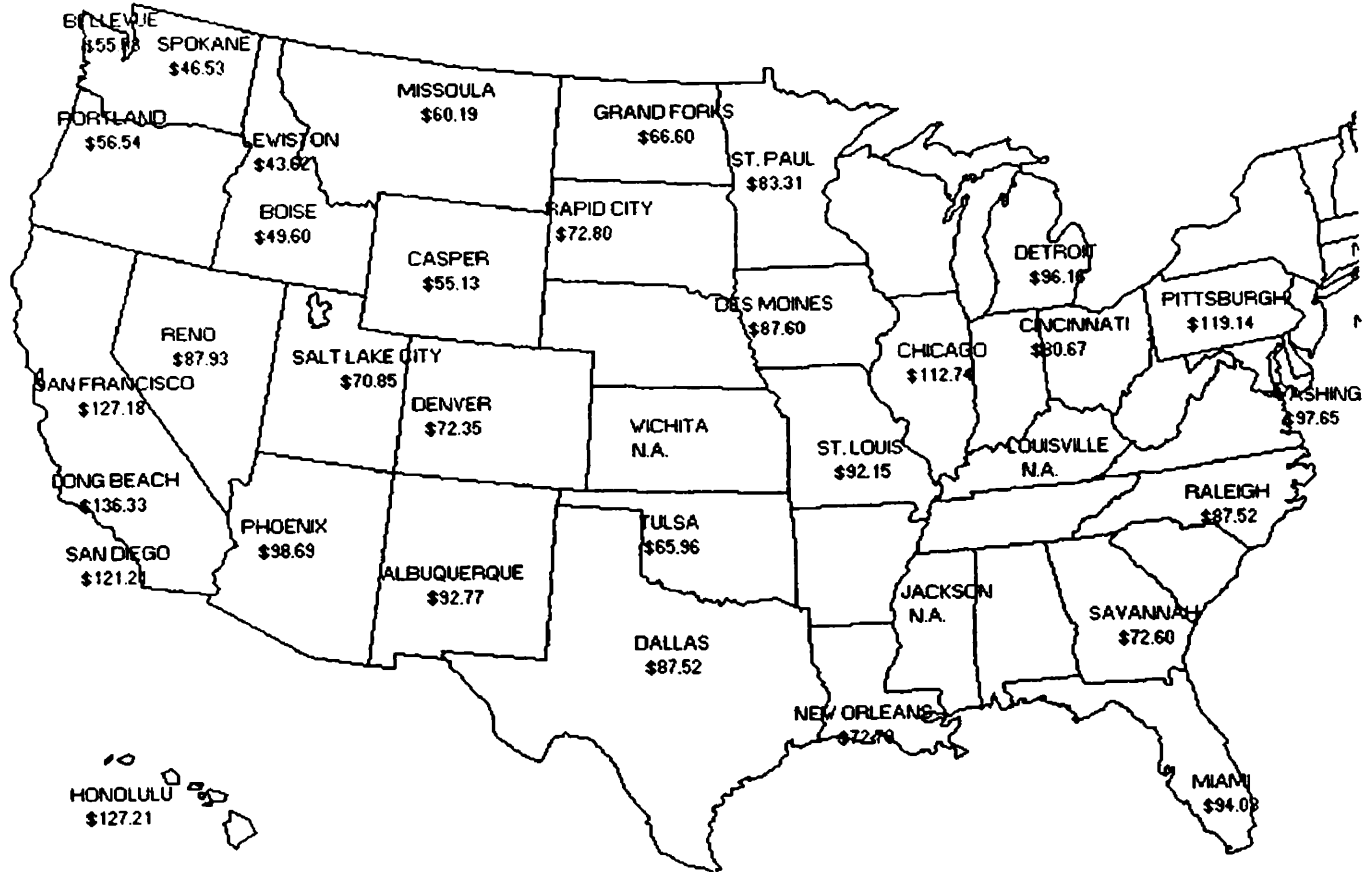




Residential Electric Service

Monthly Cost for 1,000 kWh

As of July 1, 1997



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Exhibit 15

Pg. 1 of 4

Source: Idaho Power Company News Update, Internet retrieval

Small Commercial Electric Service
 Monthly Cost for 12 kW and 1,500 kWh
 As of July 1, 1997



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Exhibit 15 Pg. 2 of 4

Source: Idaho Power Company News Update, Internet retrieval

Medium Commercial Electric Service
 Monthly Cost for 100 kW and 30,000 kWh
 As of July 1, 1997



159

Source: Idaho Power Company News Update, Internet retrieval

Large Commercial Electric Service

Monthly Cost for 500 kW and 150,000 kWh

As of July 1, 1997



160

Source: Idaho Power Company News Update, Internet retrieval

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