

Service Date: August 28, 1985

DEPARTMENT OF PUBLIC SERVICE REGULATION  
BEFORE THE PUBLIC SERVICE COMMISSION  
OF THE STATE OF MONTANA

\* \* \* \* \*

IN THE MATTER of the Application ) UTILITY DIVISION  
of MONTANA POWER COMPANY for )  
Authority to Establish Increased ) DOCKET NOS. 84.11.71,  
Rates for Electric Service in the ) 84.10.64 & 83.9.67  
State of Montana. Colstrip Unit )  
No. 3 and Related Facilities. ) ORDER NO. 5113b

\* \* \* \* \*

APPEARANCES

FOR THE APPLICANT:

Pamela Merrell, 40 East Broadway, Butte, Montana 59701

John Alke, P.O. Box 1166, Helena, Montana 59601

FOR THE INTERVENORS:

James C. Paine, Montana Consumer Counsel, and John Allen, 34 West Sixth Avenue, Helena, Montana 59620, appearing on behalf of the consuming public of the State of Montana

C. W. Leaphart, Jr., One Last Chance Gulch, Helena, Montana, 59601, appearing on behalf of Champion International and Conoco

Robert C. Rowe, 127 East Main, Missoula, Montana 59801, appearing on behalf of the Montana Low Income Coalition, Butte Community Union, Low Income Group for Humane Treatment of Missoula, Montana Senior Citizens Association, Northern Plains Resource Council, and individual ratepayers

Peggy Verburg, 617 South Higgins, Missoula, Montana 59801, appearing on behalf of District XI Human Resource Council

Donald W. Quander, 175 North 27th Street, Billings, Montana 59101, appearing on behalf of ASARCO, Ideal Basic Industries and Exxon

William H. Coldiron, P.O. Box 581, Helena, Montana 59624, appearing on behalf of the Montana Power Stockholder's Committee

Robert L. Deschamps, III, Missoula County Courthouse, Missoula, Montana 59802, appearing on behalf of Missoula County

FOR THE COMMISSION:

Eileen E. Shore, Staff Counsel Dan Elliott, Administrator, Utility Division Eric Eck, Chief,

## Revenue Requirements

### BEFORE:

Clyde Jarvis, Chairman & Hearing Examiner  
John B. Driscoll, Commissioner  
Howard L. Ellis, Commissioner  
Tom Monahan, Commissioner  
Danny Oberg, Commissioner

### FINDINGS OF FACT PART A GENERAL

1. On November 15, 1984, the Montana Power Company (MPC, the Company or Applicant) filed with the Commission its application for authority to increase rates and charges for electric service. The proposed rates were designed to produce an increase in annual gross operating revenues by \$82,403,684, based on an historic test year ending December 31, 1983, adjusted for known and measurable changes. MPC filed a rate moderation plan which included rate increases in the first four years and rate decreases in the last three years. According to the Applicant, the reason for a rate moderation plan was to meet the Company's financial needs, while avoiding a sharp increase in electric rates. A major portion of the increase is the result of the addition of the coal-fired generating plant, Colstrip 3 and related facilities.
2. On November 20, 1984, the Commission voted to suspend the running of the nine months decision period. This action was taken pursuant to the Commission's general information gathering authority and the failure of the Company to comply with Order No. 5051c, Findings of Fact Nos. 143, 144 and 258 in its filing.
3. Following a commitment by MPC to address the deficiencies, on December 17, 1984, the Commission voted to reconsider action previously taken and to allow the nine month deadline to begin on the original date of November 15, 1984.
4. On December 21, 1984, the Commission issued a Notice of Prehearing Conference.
5. On December 27, 1984, the Commission issued Interim Order No. 5113 which granted an interim increase in the amount of \$21,369,117.
6. On January 16, 1985, the Applicant filed a Motion for Reconsideration of Order No. 5113.

7. On January 18, 1985, pursuant to proper notice, a prehearing conference was held.
8. On January 23, 1985, the Commission issued a Procedural Order.
9. On January 28, 1985, the Commission issued Order No. 5113a. That Order denied MPC's request to implement the proposed rate moderation plan. The request to accrue carrying charges for Colstrip 3 was approved.
10. On February 20, 1985, the Applicant and the Montana Consumer Counsel filed a stipulation that the capital structure and rate of return for MPC for the purpose of this proceeding be the same as that approved by the Commission in Order No. 5051c, Docket No. 83.9.67.
11. On February 26, 1985, the District XI Human Resource Council, Northern Plains Resource Council, Missoula County, Montana Low Income Coalition, et al. filed a position statement endorsing the stipulation on capital structure and rate of return. The Commission voted to adopt the stipulation during the public hearing by a vote of 4-1.
12. On April 22, 1985, Champion International and Conoco filed a Motion to Strike the first ten pages of the prefiled direct testimony of Thomas M. Power, witness for District XI Human Resource Council. The reason for the Motion to Strike was that the testimony was outside the scope of the proceedings in this Docket. On April 25, 1985, a similar Motion to Strike was filed by MPC. The Commission voted to grant the Motion to Strike the first ten pages of Dr. Power's testimony during the public hearing by the vote of 5-0.
13. On May 7, 1985, the Commission issued a Notice of Public Hearing in Docket No. 84.11.71.
14. On May 29 through June 10, 1985, pursuant to the Notice of Public Hearing, a hearing was held in the Old Supreme Court Chambers in the State Capital Building, Helena, Montana. The Commission also held satellite hearings from May 16 to June 13, 1985, in Roundup, Lewistown, Malta, Glasgow, Valier, Conrad, Havre, Fort Benton, Chinook, Billings, Hardin, Missoula, Bozeman, Helena, Choteau, Great Falls, Stanford, Harlowtown, White Sulphur Springs, Whitehall, Boulder and Butte.
15. On July 9, 1985, the Commission issued Interim Order No. 5051j. This Order applied to

Docket Nos. 83.9.67 and 84.11.71. This second Interim Order authorized MPC to increase rates on an interim basis by \$13.6 million per year. The total interim relief granted in this Docket is, therefore, \$35 million.

16. In the course of the proceedings, this Docket was consolidated with Docket Nos. 84.10.64 and 83.9.67. This order is intended to address issues in Docket Nos. 84.11.71 and 83.9.67. A separate final order will be issued in Docket No. 84.10.64.

17. The Montana Consumer Counsel (MCC) has participated in this Docket on behalf of electric utility consumers since the inception of these proceedings.

#### PART B RATE OF RETURN

18. The Commission adopts the stipulation of MPC and MCC that the capital structure and rate of return for MPC for the purpose of this proceeding be the same as that approved by the Commission in Order No. 5051c, Docket No. 83.9.67, that is:

Description	Ratio	Cost	Weighted Cost
Long-Term Debt	54.62%	10.33%	5.64
Preferred Stock	8.06	8.52	.69
Common Stock	37.32	14.25	5.32
	100.00%		11.65%

#### PART C RATE BASE

19. William Slaughter, a witness for MPC, presented testimony and exhibits which supported the Applicant's requested rate base. In its original filing, the Applicant requested a total electric utility rate base in the amount of \$792,762,358. This represented a 13 month average rate base as of December 31, : 1983, adjusted for known and measurable changes. Colstrip 3 and related facilities totaled \$319,038,873 in the 1983 test year.

20. In rebuttal testimony MPC revised the rate base. The amount of the electric utility rate base in William Slaughter's revised Exhibit WBS-3 is \$778,090,205.

21. Based upon an analysis of loads and resources, as subsequently discussed, the

Commission finds that Colstrip 3 and related facilities are actually used and useful for customers in Montana and should, therefore, be included in the electric utility's rate base.

22. MCC Witness Albert Clark recommended two adjustments to the revised Company rate base. The first adjustment related to a reduction in regulatory commission expense in the amount of \$30,000. Clark recommended that this amount, associated with the Kerr relicensing fee, be capitalized because this amount is related to a specific plant and, as part of the cost of maintaining the license, is appropriately capitalized (Exh. 28, p. 17). The Commission agrees with Clark that a relicensing fee is a cost which should be recovered over the life of the license. The Commission finds that rate base should be increased by \$30,000 to reflect the Kerr relicensing cost.

23. The second rate base adjustment proposed by Clark was a reduction of \$909,040 to remove an allowance for cash working capital. In his prefiled direct testimony Clark set out the ways in which working capital may be derived:

There are three generally accepted methods used to determine the cash working capital requirement for a regulated utility. They are the balance sheet method, the formula method, and the lead-lag method (Exh. 28, p. 27).

24. Clark did not agree with the Company that property tax expense is paid when the expense is incurred. Changing this assumption would, by itself, eliminate the Company's claimed cash working capital requirement. In addition, Clark noted that wages and salaries are not paid on a daily basis but are paid sometime after the expense is incurred. State income taxes are a source of working capital which is not reflected in the formula. Finally, according to Clark, the formula used by the Company in this case does not reflect the source of cash working capital provided by the postpayment of interest expense and preferred stock dividends. MCC recommended that the Commission consider ordering the Company to complete a lead-lag study to be included in its next rate case.

25. In his rebuttal testimony, MPC witness Slaughter, noted that the source of the formula used by the Company in this and past cases was the late George F. Hess. Hess was the MCC's expert witness for a number of cases. Slaughter argued that to disallow cash working capital which has been calculated in accordance with the MCC sponsored Hess formula would be

inappropriate. During the hearing, Slaughter testified that the cost to perform a lead-lag study is in the range of \$30,000 to \$60,000 (TR 458).

26. The Commission finds that MPC calculated the working capital amount in this Docket in a manner which is consistent with the formula devised by MCC in Docket No. 6348. MCC now seeks to change from the formula method to the lead-lag method. No cost benefit analysis was performed by MCC to support the need for a lead-lag study. Instead, MCC made an attempt to identify deficiencies with the formula method, which was developed by an MCC witness in prior cases. There was no attempt to indicate items not included in the current formula which would show an increase in the working capital requirement. Clark himself acknowledged that a lead-lag study might result in either an increase or a decrease in the working capital allowance. The Commission is concerned with the ongoing regulatory expense which would be created by the use of lead-lag studies.

The formula method used by the Company, in the view of this Commission is a responsible and fair method to determine working capital. The proposed adjustment to eliminate cash working capital is rejected by the Commission. The Commission is satisfied with the formula method.

27. The net result of all other operating and maintenance expense adjustments is a reduction in working capital of \$54,853.

28. Pursuant to the findings in the loads and resources section of this Order, the Commission finds that the Bird plant should remain in the rate base. Adding the Bird plant increases rate base by \$1,906,772.

29. In Docket 83.9.67 the Commission issued Accounting Order No. 5051a. That Order provided that MPC could accrue interest at 11.61 percent from January 10, 1984, to the date of the Commission's final order in the Docket. As a result of the decision rendered by Judge Sullivan, the date of the final order in Docket 83.9.67 is August 29, 1985. This carrying charge is to be added to rate base and recovered over the life of the plant. This adjustment results in an increase in rate base of \$54,230,959.

30. As a result of the preceding findings, the Commission finds the rate base to be \$834,203,083.

PART D  
REVENUE REQUIREMENTS  
Loads and Resources

31. The Commission has before it in this case MPC's request to rate base a major new generating resource, the Colstrip 3 plant. Colstrip 3 construction commenced during the fall of 1979 and became commercially operable January 10, 1984. It was the subject of lengthy hearings during 1984 in Docket 83.9.67. Order 5051c, issued August 3, 1984, concluded that, based on test year energy requirements, Colstrip 3 was not actually used and useful in serving Montana ratepayers. MPC appealed various sections of Order 5051c to the District Court. On June 17, 1985, Judge Mark A. Sullivan reversed substantial portions of Order 5051c and remanded it to the Commission. Rather than rehearing or reconsidering Order No. 5051c from Docket No. 83.9.67, the Commission believes this order satisfies the court's order. This is possible because

the Commission has essentially the same question before it here as it did in Docket No. 83.9.67.

32. An important portion of Judge Sullivan's order specified that the Commission must "consider the electric utility's need to have sufficient generating capacity to meet capacity and energy requirements imposed on it by the utility's customers, together with its reserve obligation, and must consider the utility's obligation to anticipate its customers capacity and energy requirements into the reasonably foreseeable future." (Montana Power Company v. Montana Public Service Commission, Cause No. 84-C-388, Conclusion of Law No. 9.)

33. The Commission finds that the methodology used in rate basing the Montana-Dakota Utilities Company's Coyote generating plant meets the criteria specified by Judge Sullivan: "the Commission believes that before an investment is included in rate base the Company must show: 1) that the investments were prudent, and 2) that the property invested in will be used and useful during the time rates will be in effect." (Finding 18, Order 4799c, Docket 81.1.2). The Commission, based upon this reasoning, did not make a prudency finding in Docket 81.1.2 with respect to disallowed plant. It determined the portion of Coyote to be included in rate base as actually used and useful by looking at peak requirements during the time rates would be in effect. It presumed that portion of Coyote to be prudently constructed, since no explicit prudent examination was made and no evidence suggested that there were imprudent expenditures. The Commission will use this criteria to determine the used and usefulness of Colstrip 3 in this case. This approach is consistent with former Commission cases as well as meeting, coincidentally the terms of Judge Sullivan's order. It is the approach adopted by the majority of commissions who have considered new plant additions to rate base.

34. Aside from MPC's request for Colstrip 3 rate base treatment, two other intervenors address the question: John Duffield, Missoula County's witness, and Albert Clark, MCC's witness.

35. In response to a direction by the Commission in Order No. 5051c, MPC performed a life cycle cost study (LCCS). The purpose of the request was to examine Colstrip 3's costs over its life, with other reasonably available alternatives. Although such an approach was discussed in general terms in the previous docket, no study was presented. Therefore, the Commission did not rely on a life cycle approach in reaching its conclusions contained in that order.

36. In this docket, for the first time, the Commission was presented both with actual life cycle

cost studies, as well as analysis as to their usefulness for determining whether a new utility plant is actually used and useful.

37. MPC generally criticized the use of any LCCS to determine whether a new plant should be rate based. The Company's position was that such an analysis was appropriate at the planning stage when decisions were being made by the utility about what resource should be acquired to meet future energy demands. However, according to MPC, to use such an analysis when construction is complete and a plant is operating, ignores a utility's obligation to serve and removes the incentive for a utility to acquire least cost resources. (Exh. 24, p. 3) According to MPC witness Richard F. Cromer, such an after-the-fact determination only assesses penalties while providing no rewards. Cromer concludes that if such an analysis is adopted, "a utility would take only the risk of investing in resources when are available for service immediately and, thereby, least-cost resource options may be foregone. (Exh. 24, p. 5)

38. Missoula County's witness, John Duffield, proposed an alternative LCCS. While MPC's LCCS showed Colstrip 3 to be the least cost resource available to meet load, Duffield's study suggested that, today, several other sources of power were available at less cost. This conclusion resulted in three alternative recommendations: 1) Further study what the actual life cycle costs -are while, in the meantime, delaying any rate base decision; 2) Deny Colstrip 3-related investment of any rate base treatment; 3) Make a rate base "offer" that would reflect the least cost resource available, rather than Colstrip 3's actual cost. The first recommendation reflected Duffield's frank acknowledgment that he had not had time to do a thorough and independent life cycle cost study.

39. In its briefs, MPC claimed that the Commission is legally barred from adopting the life cycle cost approach suggested by Duffield, in view of Judge Mark Sullivan's decision, which is discussed in other portions of this order. In response, Missoula County claims that, unlike the decision reversed by Judge Sullivan, Duffield's testimony suggests a method of valuation, rather than a used an useful determination. According to Missoula County, therefore, the Sullivan decision does not preclude adoption of any of Duffield's recommendations.

40. The Commission agrees that the Sullivan decision does not preclude adoption of Duffield's testimony. In contrast to Order No. 5051c, which made certain specific adjustments and adopted a test year approach (specifically criticized and rejected by Duffield), Duffield's recommendations

in this case are based on an entirely different rationale.

41. As will be discussed subsequently, the Commission, while rejecting MPC's argument that the law precludes adoption of any of Duffield's recommendations, finds that, in view of the evidence, to adopt them for purposes of answering the question of whether Colstrip 3 should be given rate base treatment, would be inappropriate. This is the first case where the Commission has been presented with a thorough discussion of the use of life cycle cost studies in determining whether a utility investment should be rate based. Based on the evidence, it should not be used for the Colstrip 3 investment. Whether new and different evidence in future cases involving different plant additions to rate base demonstrate that this approach should be adopted will be determined in those cases. From a philosophic view, the Commission continues to find that the concept has considerable merit, and puts MPC on notice that such an analysis will be seriously considered for future generating plant additions.

42. Missoula County (MC, Direct Testimony of John Duffield, Exh. 32) submitted testimony which (1) examined alternative rate base policies, (2) provided a life cycle cost study (LCCS) leading to three specific rate base recommendations, and (3) examined MPC's proposed rate moderation plan.

43. The first issue addressed by Duffield was the distinction between a prudence standard and an actually used and useful standard. Two factors entered into this discussion: who bears the investment risk and who makes the investment decision. Both factors relate to the institutional setting. With public ownership, the consumer makes the investment decision and appropriately bears the investment risk. With private ownership, responsibility for the investment decision properly lies with the private investor. As such, it is essential that the investor, as opposed to the consumer, bear the risk associated with the investment. Duffield concluded that a prudence standard is appropriate only in a public ownership setting. The appropriate criteria for a private ownership setting is whether the investment is actually used and useful (Exh. 32, pp. 2-6).

44. The second issue Duffield addressed is the distinction between a test-year and a life cycle used and useful determination. According to Duffield, while a test year approach might be appropriate in a deregulated market, the rate of return constraint found in a regulated market would result in the systematic imposition of losses to the investor with this approach. That is, in a deregulated market, the investor will realize a return over the life of the investment that reflects an average of annual losses and annual profits.(1) The result is a life cycle return that accurately

reflects life cycle benefits (revenues) and life cycle costs. In the institutional setting at hand (i.e. a regulated private utility), however, a rate of return ceiling limits annual profits. The resulting life cycle average return necessarily and systematically produces an economic loss over the life of the investment. The life cycle return under the test year annual rate of return constraint also has serious implications with respect to optimal planning, according to Duffield. Under these circumstances, a rational firm would probably ignore long term economies of scale and focus exclusively on short term, less efficient, planning horizons (Exh. 32 p. 5) that the utility realizes.

45. Given the institutional setting found in Docket No. 84.11.71 -- a regulated private utility -- Duffield proposed that the Commission adopt a used-and-useful-over-the-life-cycle rate base policy. Only by providing the investor, with a life cycle return which includes a level of risk (cost) reflecting responsibility for the investment decision can the Commission minimize (1) a tendency to suboptimize (creation of excess capacity due to insufficient exposure to risk) and (2) the systematic imposition of losses (Exh. 32, p 6).(2)

46. Duffield used MPC's LCCS in his examination of life cycle costs. Duffield made numerous adjustments to the MPC LCCS. Based on those adjustments, he offered an alternative calculation.(3) Both MPC and Duffield compared the 1985-2020 stream of revenue requirements resulting from the Colstrip 3 investment with a "least cost" alternative. Duffield's "least cost" alternative was short-term surplus purchases from BPA for 1985-1995, BPA If purchase for the western one-third of MPC's load and a new coal-fired steam generation plant for the eastern two-thirds of MPC's load for the 1996-2020 period.(4) Duffield concluded that the least cost alternative results in an \$11 to \$111 million(5) discounted present value (1985) cost advantage when compared to Colstrip 3, depending on the amount of transmission investment included with Colstrip 3 (Exh. 32, p. 7). These results led Duffield to three rate base recommendations. In order of preference they are:

- a. Defer a decision, pending further examination of life cycle costs;
- b. Deny rate basing of Colstrip 3;
- c. Rate base Colstrip 3 with a \$50 to \$100 million reduction in present value revenue requirement (Exh. 32, p. 17).

47. The Commission rejects Duffield's first recommendation. The Colstrip 3 issue has been before the Commission for almost two years and has consumed very substantial resources in

the process. The plant began commercial operation in December, 1984 and "further study" would further delay a final ruling until, at least, the fall of 1986. MPC is entitled to a ruling on its proposal. Most important, however, is the need to establish rate base policy now for purposes of future investments. That is, competent energy planning requires the timely development of a stable rate base policy.

48. Duffield's second and third recommendations represent distinctly different rate base policies. Although both recommendations flow from his LCCS, the second recommendation is an all or nothing approach while the third is a valuation approach.

49. The second recommendation concludes that the costs of Colstrip 3 are greater than the benefits, and, therefore, Colstrip 3 should not be ratebased. Conversely, if the benefits are greater than the costs then the plant would be rate based at original cost (TR 910). The third recommendation, essentially, is that the benefits of Colstrip 3 are less than the (original) costs of Colstrip 3 and, therefore, Colstrip 3 should be rate based at a value less than the original cost. If the benefits were found to be greater than the costs, then Colstrip 3 would be rate based at original cost with (possibly) a rate of return bonus (TR 926).

50. The Commission rejects the second recommendation. The second recommendation, effectively (and unlike the third recommendation), represents a policy which decides which energy resources are to be developed. This is an apparent misapplication of the life cycle cost analysis. The choice of which energy resources are to be developed should be based on a comparison of incremental economic costs -- not an after-the-fact comparison of sunk costs with (alternative) incremental costs. To abandon a nearly completed plant because a new one might be constructed at less cost is economically irrational and a waste of resources. It is, therefore, not sound regulatory policy, according to this record. (6)

51. A second flaw in the policy inherent in the second recommendation is that it lacks consideration of the relative value of the costs and benefits. Certainly at some "rate base offer," Colstrip 3 becomes the "least cost" resource from the ratepayer's point of view. However, the second recommendation ignores whether Colstrip 3 was substantially more costly or barely more costly, and instead requires the development of additional energy resources without consideration of incremental costs.(7)

52. Unlike the resource choice found in the second recommendation, the third recommendation uses the LCCS to obtain a measure of the value or usefulness, of the sunk capital investment. That is, the third recommendation does not make a choice between resources, but instead establishes the fair market value, or usefulness, of the capital investment being considered.

53. For two reasons, the Commission finds that the third recommendation should also be rejected. The first reason, in view of the evidence presented here, is the original cost law which, for better or worse, has generally established a conventional rate base valuation method. Investors realize an average return on total assets. The total assets result from many individual investments. Constraining the return to original cost on those investments at the high end but providing fair market value (Duffield's third recommendation) on those at the low end seems to result in the same systematic losses that Duffield himself believes is unfair (TR 925-926).

54. The second reason for rejecting the third recommendation is Duffield's LCCS. It is the difficulty in getting a good grasp on the LCCS that leads Duffield to prefer his first and second (TR 907) recommendations over his third recommendation.

55. In examining the LCCS issue, the Commission concludes that it would not be too difficult to arrive at results going either way. Two factors alone -- transmission costs and off system sales revenues -- account for \$170 million in present value revenue requirement. The off system sales question (TR 908) could swing the results by \$70 million away from rate basing of Colstrip 3. The transmission question (TR 949) could swing \$100 million toward rate basing of Colstrip 3. The conclusion is that there is no conclusion. The studies offered in this docket are not sufficiently detailed or reliable to ascertain with any confidence a fair market value, even if the Commission chose to ignore the systematic losses and adopt the fair market value rate base offer.

56. Duffield himself said about any life cycle cost study, "Boy Well, you'd have to be optimistic to say it's [accuracy is] better than 50 percent, I think. I think there's some real slack there." (TR 967)

57. Duffield offered other qualifications to his own LCCS:

Q. If you were to conclude that the alternatives that you are suggesting in your testimony

inappropriately discourages Montana Power from adding new resources, would you recommend against their adoption?

A. Yes, if I came to that conclusion, but I don't in my testimony. (TR 905)

\* \* \*

Q. In your computation of the SP-85 purchase rate of 30 mills, you used a 90 percent load factor. Could you tell us why you used that particular load factor?

A. That was an arbitrary choice.

Q. Do you have a reasonable alternative?

A. I really don't have a strong feeling for that. (TR 940)

\*\*\*

Q. Your analysis of the usefulness of Colstrip 3 relies heavily on the availability and prices of power purchases. You seem to conclude that it is likely that the least cost alternative to Colstrip 3 are those power purchases. Is that correct?

A. That was the least cost scenario that [I] identified, but I think I was pretty careful in my testimony to note that it's critical in something like this to optimize the mix of resources, and that was something that I hadn't done and, so I feel like that's maybe an upper bound, but definitely not as good as I would expect you could do, and it may well be possible to construct a scenario where you have no purchases. TR 931)

58. MPC asserted that Colstrip 3 should be rate based because it was a prudently planned resource and its construction was prudently accomplished:

Q. Must the "obligation to serve" and the associated long-range planning requirement be considered by the PSC in assessing rate base additions?

A. Yes. Because utilities have an obligation to serve and because of the long lead times associated with development of the most cost-effective resources, utilities must undertake long-range planning and commit themselves to resource additions, based on such long range plans, well in advance of the actual requirement for the resource. This process protects

the public interest by ensuring the availability of an adequate, least cost, reliable and environmentally acceptable power supply for utility customers in the future.

The PSC, therefore, must view a resource addition in the context of the time frame within which the decision to build was necessarily made. Before MPC commits to a resource, it examines all alternatives available at that time and selects the one which maximizes the long-term benefit to its customers. Thus, contrary to the finding of Order No. 5051c, Colstrip Unit No. 3 cannot later be displaced in the resource mix by alternative sources of power that were neither known about nor available for consideration during the planning process which resulted in the commitment to it. (Exh. 22, p. 11)

59. Additionally, MPC requested that the Commission consider the need for Colstrip 3 based on its loads and resource analysis, which showed peak deficiencies even with Colstrip 3 of 25 Megawatts (MOO) for 1985-1986, the period the rates can be expected to be in effect. (Exh. 23, p. 7 and Exh. 22, p. 18)

60. The Commission finds that MPC's first criteria, that of reliance upon prudence during the planning process, is inappropriate. As previously discussed, the primary consideration is a plant's used and usefulness on a peak basis during the time the rates will be in effect. Using this criteria, the Commission finds that MPC's analysis shows Colstrip 3 to be actually used and useful.

61. MPC seems to acknowledge the priority that the used and useful criterion has over the prudent planning criteria in its proposed disposition of Colstrip 4:

The Company's current load/resource picture shows that Colstrip 4, unlike Colstrip 3, will not be needed to serve Montana Power consumers for many years. Therefore, the Company has made a decision to remove Colstrip 4 from consideration in a manner that assures that Montana consumers will not bear the costs associated with the unit. (Exh. 3, p. 10)

This acknowledgment becomes especially clear when it is considered that Colstrip 4 is Colstrip 3's twin: It was planned, sited and constructed at virtually the same time.(8)

62. The Commission considers MPC's analysis, which was not factually contested, for the 1985-1986 operating year to be convincing evidence that Colstrip 3 actually is used and useful. MCC witness Clark similarly analyzed the need for Colstrip 3, as is discussed below.

63. Clark (Exh. 28) undertook an analysis of MPC loads and resources for the 1985-86 operating

year, a reasonable estimation of the period rates from this case will be in effect. His analysis provided for adjustments to: 1) normalize Colstrip 3 production; 2) normalize maintenance, and; 3) increase hydroelectric peak capability. He concluded that MPC would have surplus energy of 71 Avg. MW during critical water conditions but would be peak deficient by 61 MW. Accordingly, he proposed no excess capacity adjustment beyond imputed energy sales he included in the test year.

64. The Commission finds Clark's and MPC's conclusions with respect to the 1985-1986 peak deficiency to be valid. Both conclusions, while founded on page 7 of Exh. 23 (MPC's uncontested loads and resources forecast), differ in that MPC used the annual peak deficiency amount, whereas MCC used the highest monthly peak deficiency amount. If Clark's third adjustment were made to the annual deficiency calculation, the following would result:

Annual Peak Deficiency	(25) MW
Increased hydroelectric peak capability	2 MW
Adjusted Annual Peak Deficiency	(23) MW

65. The Commission finds the monthly peak deficiency as computed by MCC to be proper indicator of MPC's resource needs. It also finds Clark's third adjustment to be proper.

66. Clark's two other adjustments are made to critical water energy amounts, and therefore, are not determinative of whether or not Colstrip 3 should be rate based.(9)

67. The Commission finds Clark's analysis to be well reasoned. He takes a middle ground which provides for an equitable sharing of the risks of new plant construction between ratepayers and stockholders.(10) He concluded that all Colstrip 3 related investment should be rate based, since MPC will be capacity deficient, but that all excess energy should be sold off system to reflect the reality that during most times during the year MPC will have excess energy capability. The Commission finds that this position properly balances stockholder and ratepayer interests and, therefore, accepts Clark's position that Colstrip 3 should be rate based.

#### Off System Sales

MPC and MCC propose the following spot market (also referred to as secondary, off system, and nonfirm) purchases and sales:

	MPC	MCC
Purchases:		
Volumes	47.2 Avge. MW	47.2 Avge. MW
Unit Price (1980-1983 avge.)	7.345 mills/kwh	7.345 mills/kwh
\$	\$3,037,116	\$3,037,116
Sales:		
Volumes	135 Avge. MW	223.5 Avge. MW
Unit Price (1980-1983 avge.)	24.31 mills/kwh	22.10 mills/kwh
\$	\$28,142,489	\$41,722,188

In its analysis, MPC used actual 1983 spot market sales. It chose the cheapest resource available to make those sales with the following assumptions: 1) firm resources would not be available during maintenance periods, and 2) Corette's necessary availability during March, July and August, at a minimum of 65 Avge. MW. Clark reasoned that MPC should be able to sell all the output from its own resources at reasonable (by historic standards) plant capacity levels. He did not however, adjust upward or downward, spot market purchases from those used by MPC to reflect an historic norm.

68. Most of MPC's arguments opposing Clark's adjustment are based on the claim that Clark's expertise in and analysis of the secondary sales market was deficient, and, therefore, his adjustment was invalid. Clark simply replied, "As in the previous case, the Company has not shown that with median water, the marketable energy in any month cannot exceed median hydro plus the sum of actual 1983 thermal generation plus opportunity purchases." (Exh. 28, p. 12) Additionally, MCC pointed out in its brief that Colstrip 3, if it is to be added to plant in service based on a 1985-1986 year, carries with it all the costs and expenses from that future period. However, MPC has not included in its case adjustments to reflect load growth over and above the 1983 test year, a potentially serious mismatch of revenues and costs. The mismatch is partially resolved by Clark's off system sales adjustment.

69. The Commission finds MCC's excess capacity analysis correct on all points; and finds Clark's adjustment proper on that basis alone. The Commission also believes that the market and transmission facilities are sufficient to allow MPC to actually make the sales.

70. As was stated above, MPC and Clark used a four year average (1980-1983) to calculate off

system sales and purchase prices. If one accepts the premise that prices in that four year market were related to quantities bought and sold, then a review of off system sales quantities for the period is relevant. The Commission finds that MPC sold off system during the same four year timeframe an average of 206 Avge. MW of energy (DR MCC 2-13). This is within 17 Avge. MW of the off system sales quantities proposed by Clark. With Colstrip 3 coming on line after the end of the test year, it is reasonable to expect that MPC could even better its four year performance, since it would be in solid control of an asset with substantial excess energy capability to sell off system, as opposed to trying to purchase nonfirm power from others to sell off system as it did from 1980-1984.

71. With respect to transmission constraints, the Commission finds that MPC made off system sales of 249 Avge. MW in 1980 and 241 Avg. MW in 1981. This evidence strongly suggests that MCC's off system sales levels of 223.5 Avg. MW can in fact, be achieved. Additionally, MPC's statement that transmission constraints may exist does not meet the burden of proof MPC carries

with respect to its assertion. MPC is in the best position of any party to these proceedings to inform the Commission whether, in fact, transmission constraints preclude it from making the sales Clark assumes can be made. It has not done so. In view of information that strongly suggests it can, in fact make such sales, its testimony cannot serve as the basis for rejecting Clark's proposal.

72. Finally, MPC contended that 35 percent of the off system purchases made during 1983 were constrained by MPC's agreement with its suppliers that it would reduce its own thermal production to the extent of the purchases for the duration of the purchase. (Exh. 21, p. 3) The Commission notes that actual 1983 off system purchases, were 197 Avge. MW but that the level included in MPC's and Clark's rate making exhibits was 47.2 Avge. MW. If Clark had included 65 percent of actual 1983 of, system purchases-he would have included 128 Avge. MW, thereby providing more energy for off system sales. Clearly, off system purchase quantities used by MCC are well within the range of reasonableness.

73. In conclusion, the Commission finds Clark's adjustment proper, based on his excess capacity reasoning alone. Additionally, the Commission finds substantial evidence to support the idea that MPC will be able to sell its excess energy off system. Therefore, MCC's off system sales adjustment is adopted.

## The Bird Plant

74. While MCC witness Clark advocated adding Colstrip 3 to rate base, he also testified that MPC's oldest thermal plant, the F.W. Bird Plant, should be removed from rate base. (Exh. 28, p. 34). This adjustment would reduce MPC's revenue requirement by \$1,258,884.

75. Clark proposed to remove Bird because it was unavailable to meet load:

Available information establishes that the Bird plant is totally inoperable due to a forced draft fan motor problem and various other problems. Furthermore, even if the Company started today to undertake the economic analysis necessary to determine if it is feasible to return Bird to a reliable operating condition, it would take 18 months to three years to complete the work. Therefore, during the time that rates from this case will be in effect, I believe it is not appropriate to reflect Bird as an energy or peaking resource. (Exh. 28, p. 34)

While the Commission may agree with Clark's logic in general, it finds that the practical circumstances in this instance may deprive ratepayers of a low cost resource that has been dedicated to public service since 1951. Although MPC had not requested Commission approval to remove Bird from rate base, it has made its plans for Bird well known. MPC has offered to donate Bird to the MHD Development Corporation for use as a MHD pilot plant, contingent on receipt of federal government appropriations to convert the plant to the MHD process. (TR 666) MPC specified during the hearing in this case that, should the converted plant ever produce a marketable product, MPC will credit ratepayers with its share of any profits. (TR 734-736)

76. Although the Commission views MPC's proposed donation to be an admirable attempt to assist in efficient coal use, it finds removal of Bird from rate base at this time to be premature. MPC has indicated that an engineering study can be done. (TR 665, 666) The Commission, therefore, requests that the study be undertaken, and that it be completed within 15 months from the date of this order.

77. The reason for the Commission's request is as follows: MPC's forecast (Exh. 23, p. 2 revised) shows a peak deficiency in every future year including the year rates will be in effect.(11) MPC intends to provide for these deficiencies by purchasing power, or if none is

available, from hydro upgrades and development. MPC has also projected that it will cost approximately \$5 million to repair Bird's current mechanical problems. (TR 663, 664) Added to Bird's present depreciated value (including gas facilities) -this would make Bird's installed cost \$98.66/kw, compared to \$1314/kw for Colstrip 3 or \$375/kw for a new peaking turbine (DR MC 1-103). At first blush it appears that Bird may provide a very economical solution to MPC's peak deficiency problem. While the Commission does not expect Bird to displace other resources from rate base, it finds premature, if not imprudent, the idea of donating a potentially valuable resource during a period of significant projected peak deficiencies (for which MPC has no firm resource) and before an engineering study has been performed.

78. The Commission, therefore, requests that the study address all aspects of Bird's continued viability, including, but not limited to: 1) Bird's future viability and cost as a peaking resource over a 5, 10, 15, 20, 25 and 30 year life; 2) Bird's future viability and cost as a hydro firming resource over a 5,10, 15, 20, 25 and 30 year life. The study should be completed from the perspective of Bird's cost and value to the MPC system as well as to the Pacific Northwest Region.(12) The Commission is also very interested in the value and quantities of gas reserves that have been used to supply Bird with fuel, including any reserves that have been transferred to MPC's non-utility subsidiaries within the past five years, and requests that those concerns be addressed by the study. Also of interest is the cost, by year, of preserving Bird for the next 10 years. The Commission requests that MPC provide periodic reports detailing the status of the study as it proceeds.

79. MPC should be made aware that the Commission expects it to keep detailed records of the peak purchases it makes or other peak resources it acquires, and their costs. If the costs (life cycle and/or yearly) are greater than Bird's costs, the Commission may disallow them based on a finding of imprudence.

80. The Commission finds, subsequent to an engineering study which definitely shows Bird to be not actually used or useful to ratepayers, that it may approve removal of Bird from rate base. At that time the Commission wishes to be apprised of all factors contributing to any decrease in the electric cost of service, including the tax deductibility of Bird's fair market value. Accordingly, the Commission requests that MPC undertake a study of Bird's fair market value for tax purposes.

## HRC'S Plan

81. HRC witness, Robert F. Logan proposed a trended rate base approach to phase in the Colstrip 3's related investment cost. His trended rate base defers the inflation component of return on capital for each year and recovers the deferred amount over the remaining life of the plant. Additionally, he allowed for a return on the deferred component at the overall cost of capital.

82. Logan's proposal is based on the idea that Colstrip 3 may provide greater benefits in the latter years of its life than early on:

Q. Okay, let's assume this Commission finds Colstrip 3 to be fully used and useful, whatever that expression may mean. Will you agree, then, that it's entirely inappropriate, at that point, to apply trended rate base treatment?

A. If this Commission finds, on a net present value basis, as I have suggested, that Colstrip 3 is used and useful over its life, but that it has greater benefits in the later years, then trending is the appropriate way to put Colstrip 3 in the rate base. (TR 766)

Logan may be correct. Another approach to achieve a result similar to that suggested by Logan is to sell excess capacity off system and exclude any peak surplus, the course the Commission has concluded is appropriate in this case.

83. MPC opposed Logan's proposal for several reasons:

- A. Original cost statutes prevent asset write ups above original cost
- B. Trended rate base would have to be applied to all assets
- C. The proposal fails to comply with FASB#71
- D. A cash flow shortfall occurs with respect to cost of capital.

84. Logan does not characterize his proposal as a mechanism to "write up" Colstrip 3's original cost:

In my proposal, the original cost of Colstrip 3 is put in at an original cost in the rate base and it is depreciated on a straight line basis and declines every year. The deferred return is booked as a separate account... (TR 826)

The Commission finds no difference in this regard between Logan's phase in and that proposed by MPC. Both defer return and collect it in the future. MPC's collects it over a shorter future period. Logan's proposal allows for a full capital return on the deferred balance, whereas MPC's proposal allows for a partial return.

85. MPC's argument specifying that Logan's trended rate base be applied to all MPC rate base additions is probably valid. From a practical and evidentiary basis, in this case, the Commission has before it trended rate base only with respect to Colstrip 3.

86. MPC witness Jerrold Pederson, the Company's Controller, specified that Logan's proposal would not comply with the provisions of FASB #71, the authoritative accounting profession pronouncement for regulated entities:

Dr. Logan's proposal would not meet the criteria necessary to record an asset under paragraph 9 of Standard No. 71 because a judgment could not be made that recovery by the Company of the amount deferred was probable. (Rebuttal p. JPP-23)

He further testified that a 22 year delay before MPC begins to recover the deferral would not be considered probable. Logan countered that, as an economist, he knew of no reason why his proposal would not meet the provisions of FASB #71, although he - had heard that any phase in plan of longer than 10 years may not.

87. The Commission defers to the expertise of Pederson in this matter. Even Logan stated that meeting FASB #71 standards was important. (TR 814) HRC, in its reply brief, seems to acknowledge the problem when it suggests that, perhaps, a ten year phase-in period could be used. (p. 19)

88. Logan, under cross-examination by MPC, appeared to admit that his proposal would not provide sufficient return on capital to allow MPC to service its capital obligations. (TR 824) MPC needs \$32.49 million to service its return on capital obligations for Colstrip 3 in year one. Logan's proposal would provide \$30.2 million, a shortfall of \$2.29 million. (TR 824) This recurring shortfall could have been factored into Logan's proposal as additional external financing, but was not. The record is not clear what effect this would have on MPC's financial condition or future revenue requirement. The Commission, therefore, finds this point to be a deficiency in Logan's proposal.

89. The deficiencies discussed here constitute sufficient grounds for the Commission to reject Logan's proposal.

Other Rate Moderation Testimony.

90. Both MPC and MCC propose phase-in plans with similar characteristics:

	MPC	MCC
Phase In Period	3 years	2 years
Amortization Period for Unrecovered Balances	3 years, modified(1)	2 years/12year
Interest Rate	5.5%	None(2)
Colstrip 3 valuation Cost	Original cost	Original

1 MPC's "3" year amortization backloads collection in the early years because it's amortization amounts are computed using the formula (Amt. into rates X years in Deferral Act)- years in Amort. periods. 2 Clark doesn't disagree with using MPC's interest rate.

91. Comparing the stream of moderated (phase-in) prices with the traditional (all-at-once) price increase caused Duffield to conclude that consumers with a discount rate (nominal, before-tax) of less than 16.65 percent "should prefer the traditional rate plan" (Exh. 32, p. 18).

92. Duffield's rate moderation plan analysis (Exh. 32, pp. 18, 8, and 9) is not correct (TR 951). As proposed by MPC, the first step of the plan is one and one-half years. The MPC proposal features only a Consumer Price Index (CPI) adjustment to maintain the real value of the revenue flow at constant levels. As such, any consumer with a real discount rate of greater than zero should prefer the moderation plan.

93. The Commission has also received a four year phase in plan with a three year amortization period computed as MPC computed its amortization balances, which also incorporated a 5.5 percent interest rate. The results of this phase in plan assuming an \$80.392 million revenue deficiency are as follows:





94. MPC Chairman Paul Schmechel has expressed a willingness to work with the people of the State of Montana to ameliorate the adverse effects that the substantial rate increase for Colstrip 3 will cause (Exh. 3, p. 9; TR 25). He also expressed the desire to achieve a "substantially similar result" financially for MPC as the Company's proposed three year phase in plan would achieve (TR 58). The Commission accepts Schmechel's offer and, in the same spirit, finds that the four year phase in plan best balances the interests of the ratepayer and shareholder, since it further reduces revenue requirements, while providing MPC with an adequate cash flow.

95. The Commission also finds that the 5.5 percent carrying charge should apply for the duration of the plan. Unit

rates for amortization amounts should be computed at the beginning of each amortization period using lines 16 and 20, Table 1 and be based on the ensuing period's estimated market. In no case will amortization balances be overcollected or

undercollected. Additional revenue deficiency amounts to be incorporated into rates at the beginning of each period should

be computed using Table 1, line 4 and be based on the test period market in this order. All rates should be implemented on a uniform percentage basis.

The Company is directed to prepare and submit to the Commission staff and all parties within 45 days from the date of this

order the information and rate calculation methodologies necessary to implement the phase-in plan approved in this Order. The phase in plan total revenue deficiency of \$80.392 million is approved in total in this order. The Company shall submit compliance rates 45 days prior to each annual approved effective date, as set forth in Table 1 for Commission staff review and the review of all parties to this proceeding.

#### Carrying Charges

96. Order Nos. 5051a and 5051b, Docket No. 83.9.67 provided for an interest allowance "to accrue on the capital costs associated with Colstrip Unit No. 3 and related facilities for the time period from January 10, 1984 to the date the Commission's final order in the Docket is issued" (Finding 3, Order 5051a). The orders also allowed for property taxes and depreciation, offset by sales revenues from Colstrip 3 output and for a three year amortization of unrecovered balances.

97. MPC has transmitted workpapers to the Commission which reflect its agreement to amortize the capital cost accumulation for the period January 10, 1984 through August 29, 1985 over the remaining life of the plant, as opposed to three years as originally approved. MPC provided for a return on the unamortized capital cost accumulation, a factor also not provided for in 5051a or 5051b. First year property taxes and depreciation in total have been included in the results of operations in this case.

98. The Commission finds use of the provisions of Orders 5051a and 5051b to be a fair interpretation of the effect of Judge Sullivan's order, which rendered invalid several provisions of the PSC's Final Order 5051c. The effect of Sullivan's action is a triggering of the provisions of Order Nos. 5051a and 5051b until a "real" final order for Docket No. 83.9.67 is issued.<sup>13</sup> MPC described its approach to the carrying charge issue in its brief in this case.

99. The revenue impact of the carrying costs is an additional \$12.6 million in revenue requirement for year one. The Commission finds that implementation of MPC's plan to recover the uncollected carrying costs will complete the Commission's responsibilities with respect to complying with Judge Sullivan's order and, accordingly, approves the additional \$12.6 million for year one. In making this conclusion, the Commission notes that the financial impact is far less than other approaches that were possible under the order. Thus, the interests of both the ratepayer and the shareholder are equitably satisfied.

100. As a final matter, the Commission finds that implementation of the carrying charge proposed by MPC adequately compensates them for all unrecovered returns on Colstrip 3 and related facilities for the period January 10, 1984 - August 29, 1985. Accordingly, in calculating amounts for the phase in plan MPC should use \$0 for "Amount of Deferred Revenue - Cumulative to Date" as of August 29, 1985.

#### Coal Supply and Cost

101. During the hearing MPC attorney Pamela Merrell read into the record a stipulation on coal expenses to be allowed in this case. The stipulation is an agreement between MPC and MCC. The stipulation adopts the rate of return methodology which was accepted by the Commission in Docket No. 83.9.67. Embodied in the stipulation is a return on coal sales from Western Energy

(an MPC subsidiary) to the parent utility company of 15.85 percent. That figure was derived in Order No. 5051c, Finding of Fact No. 281. The Commission accepts the stipulation reached by the parties with respect to coal expense. Use of the rate of return method ensures that ratepayers do not pay excessive fuel costs while allowing Western Energy a reasonable return on sales to MPC. Based on findings on loads and resources to be used in this case, the adjustment approved in the stipulation results in a reduction in fuel expense of \$712,000. The Commission commends the parties for reaching agreement on the issue of coal expense. It is the hope of the Commission that this approach can be used in future cases.

102. The other coal issue is related to the loss factor for Corette coal. Clark reduced the loss factor from 2 percent to 0.9 percent, based upon the response to data request MCC 3-5. Based on that testimony, the Commission finds that a loss factor of 0.9 percent should be used in this Docket. The Commission urges the Company to continue its efforts to improve the accuracy of the Corette loss factor.

#### Uncontested Issues

103. Clark made two adjustments to the Company's filing in order to comply with Order No. 5051c. The first adjustment reflects increased revenues associated with the two-year amortization of the Puget retroactive payment. This adjustment results in an increase to operating revenues of \$763,000. The second adjustment, in the amount of \$390,000, reflects increased expenses associated with the two-year amortization of the Hanford deferred liability. The Company reflected the rate base impact of these items, but failed to include the income statement impact. These adjustments are not contested by MPC or any other party. The Commission accepts both of the adjustments in order to reflect the decision in Order No. 5051c.

104. MPC eliminated \$13,276 in expenses from Account 930.61 (other administrative and general expenses) because these items were determined to be non-allowable expenses. However the Company did not remove \$530 of labor expense associated with this Account. MCC recommended that the \$530 also be eliminated. This adjustment is agreed to by MPC and is accepted by the Commission.

#### Replacement Parts and Special Maintenance

105. Estimated test year operation and maintenance expenses for replacement parts and special maintenance were estimated using an average of those costs over the first five years of Colstrip 3 operation. Clark opposed the five year average and instead used actual 1984 values for these categories. These adjustments reduce replacement parts expense by \$347,799 and special maintenance expense by \$232,251. Using the actual expenses experienced in 1984 is not correct because in the first year, the parts in the replacement parts category are covered by warranty. Since actual results in 1984 do not represent a normal year, Clark's recommended adjustment is rejected.

106. In evaluating the MCC adjustment to reduce special maintenance, the Commission attempted to determine whether 1984 represented a normal year. Special maintenance expenses include an estimate of overhaul costs. The maintenance schedule recommended by the manufacturer is a five year cycle. It is clear that an overhaul will not be performed during the first year of Colstrip 3 operation. While consideration was given to that fact by MPC in developing the five year average, the Commission finds that 1984 expense levels do represent a reasonable level of expenses. The Clark adjustment which reduces special maintenance expense is accepted by the Commission.

#### EPRI Dues

107. MCC eliminated an increase in Electric Power Research Institute (EPRI) dues in the amount of \$401,488. Clark referred to Finding of Fact No. 119 in Order No. 5036a, Docket No. 83.9.68 (an MDU electric case) where the Commission found:

The Commission agrees with MCC that test year expenses should not be adjusted for increases associated with future growth in sales because such increases will be covered by an accompanying growth in future revenues.

108. Clark also testified that the increased assessment is excessive on its face. The Company's adjustment results in an 85.1 percent increase in Research, Development and Demonstration expenses in one year (Exh. 28, p. 15).

109. MPC does not agree with either of the reasons given by Clark to reduce the EPRI assessment. In his rebuttal testimony, MPC witness John D. Haffey notes that in Order No. 5036b, the Commission reversed Finding of Fact No. 119 in Order No. 5036a. In Order No. 5036b the Commission found: Upon further scrutiny of the record, the Commission agrees with MDU that, since 1983 dues are based on 1981 loads and sales which results in a two year lag in the calculation of EPRI dues, a categorization of the increased dues as being based on future load growth is improper, and any increase in net revenues as a result of that load growth would have been fully reflected in the test year data. The Commission, therefore, GRANTS MDU's Motion for Reconsideration concerning EPRI research and development dues.

110. As to the benefits of EPRI research, Haffey testified:

It is MPC's position that the magnitude and complexity of the technological issues facing the electric utility industry are beyond the research resources of any individual utility. It is essential for the Company to support research and development in a manner that is cost-effective. The coordinated R&D programs of EPRI enable MPC to benefit from new technologies while sharing, rather than duplicating, the costs of development with others (rebuttal p.2).

111. The Commission finds that Order No. 5036b is the Order which reflects the correct position with respect to EPRI dues, absent evidence to the contrary. It is clear that these dues are not based on future growth in sales. The Commission rejects Clark's proposed adjustment to reduce EPRI dues. However, MPC should strive to achieve direct benefits for ratepayers from these expenditures and should be prepared to discuss those benefits in future proceedings.

#### Advertising Expenses

112. Clark reduced the allowable advertising expense booked in Accounts 930.11 and 930.13. In this Docket, MPC excluded 90 percent of these expenses. This methodology has been used in past cases. Clark, on the basis of the response to data request MCC 4-6 recommended that 97.3 percent of these expenses should be excluded. The Commission finds that in view of Clark's testimony, the old 90 percent exclusion is no longer correct. The MCC adjustment which reduces advertising expense by \$3,447 is accepted.

## Industry and Association Dues

113. Clark made a number of adjustments to reduce or eliminate certain association dues. These adjustments are shown on Exhibit 28, Schedule 2, Page 5b of 7. Starting with Account 930.41, Clark made six adjustments which in total reduce expenses by \$91,678.

114. The first adjustment removes the entire amount of dues paid to the Montana Tax Foundation in the amount of \$5,544. This dues expense elimination is accepted by the Commission because the benefit to ratepayers of MPC's involvement in this organization has not been established. The second, third and fourth adjustments reduce by 25 percent, dues associated with the Western Regional Council, Western Systems Coordinating Council and the Pacific Northwest Utilities Committee. Based on rebuttal testimony by MPC, membership appears to be a reasonable expense for an electric utility. Therefore, the Commission rejects the 25 percent reduction to these dues categories. Clark's fifth adjustment removes \$11,840 in dues for the Montana International Trade Commission. The Commission agrees with Clark that 100 percent of this expense should be eliminated because benefits to ratepayers have not been demonstrated. Finally, Clark proposed a reduction of \$53,574 for 139 items in a miscellaneous category. This adjustment was made without any attempt to discover what the individual items were. The Commission is unable to accept this adjustment due to the lack of any basis to support the decision.

115. Clark made to Account 930.42. Two adjustments reduced EEI and NELPA dues by 25 percent. The basis for the adjustment was a reference to a decision by the Commission in Docket No. 83.9.68. Apparently, Clark relied on the decision in that Docket as precedent. In this Docket the Commission finds that dues to these two organizations are reasonable and therefore will not reduce them by 25 percent. A third adjustment removed \$967 in a miscellaneous category. This adjustment is rejected for lack of any basis.

## Regulatory Expenses

116. Clark made five adjustments to reduce regulatory commission expenses. These adjustments are shown on Exhibit 28, Schedule 2, Page 5c of 7. First, Clark proposed to reduce FERC administrative charges by-\$239,357. Instead, Clark recommended that these charges be

capitalized. During the hearing, Clark disavowed this adjustment. Clark also proposed to eliminate \$5,000 associated with a cable TV rate filing. Because the revenues from pole attachments are credited to the utility, Clark withdrew this adjustment at the hearing. Clark's third adjustment eliminates \$3,244 in filing fees for electric tariffs before FERC. The Commission finds this adjustment proper because this expense is not allocable to jurisdictional custom fourth adjustment provides for a two year amortization of the budgeted 1984 expense associated with Docket No. 83.9.67. The Commission is aware that actual 1984 expenses are greater than the budgeted amount included in this case. However, the Commission finds this two year amortization as a reasonable normalization of this particular item for reasons discussed in the testimony. The fifth adjustment reduces regulatory expense by \$30,000 to reflect capitalization of the Kerr relicensing fee. This adjustment is accepted as reasonable by the Commission and is reflected in the rate base section of this Order.

#### Kerr Rental Expense

117. At the present time there is a proposed settlement with regard to the Kerr hydroelectric plant between the Confederated Salish and Kootenai Tribes and MPC. When the settlement is approved by FERC the annual rentals will increase from \$2,600,000 to \$9,000,000. MPC has requested a waiver of the minimum filing requirements so that the Company will be able to file a rate increase related to the Kerr rental. There is a great deal of similarity between the Kerr rent issue and the pass through in natural gas cases of a change in the border price for Canadian gas. The Company's request for a single item rate filing associated with the Kerr rental is granted.

#### Revenue Requirement

118. The following schedules show that additional annual revenues in the amount \$80,392,375 are needed by the Applicant in order to provide the opportunity to earn a return of 11.65 percent:

#### Schedule I

#### Montana Power Company Balance For Return

Test Year December 31, 1983

MPC                      Approved                      Approved

r  
o  
v  
e  
d  
  
P  
r  
o  
  
F  
o  
r  
m  
a

	Pro	MCC	PSC
	Forma	Adjustments	Adjustments
Revenues	\$230,510,307	\$ 13,579,699	

\$  
2  
4  
4  
,  
0  
9  
0  
,  
0  
0  
6

Total O&M Expense	\$122,469,542	\$ 5,570,689	\$ 103,627
\$128,143,858			
Amort. of Hanford Deferred Liability	390,000		
390,000			
Amort. re Colstrip 3			1,586,613
1,586,613			
Depreciation	24,699,772		892,896
25,592,668			
Amort. of Computer Software Costs	220,445		
220,445			
Amort. of MPSC/FERC Plant Dif.	1,458,187		
1,458,187			
Amort. of Milwaukee Line	94,914		
94,914			
Amort. of ITC Dr.	- 0 -		
- 0 - Amort. of ITC Cr.		(437,882)	
(437,882)			
Prov. for Def. Inc. Tax - Accel. Depr.	4,447,699		19,247
4,466,946			
- Arbitrage	1,130,519		

1,130,519			
- Kerr Rents	(239,521)		
(239,521)			
- MPSC/FERC	713,093		
713,093			
- Mt. Corp. Lic. Tax	(793,338)	(248,679)	109,672
(932,345)			
- Accel. Amort.	(76,500)		
(76,500)			
Taxes Other Than Income Taxes	23,029,022		187,271
23,216,293			
Income Tax Federal	843,234	3,684,145	(1,624,780)
2,902,599			
Income Tax State	44,883	540,608	(238,419)
347,072			
Total Cost of Service	177,994,069	\$ 9,546,763	\$ 1,036,127
\$188,576,959			
Balance for Return	\$ 52,516,238	\$ 4,032,936	\$ (1,036,127)
\$ 55,513,047			

Schedule II  
Montana Power Company  
Revenue Requirement

Rate Base	\$834,203,083	
Rate of Return	.1165	
Required Return		
\$97,184,659		
Less: Balance for Return		
55,513,047		
Revenue Deficiency		
41,671,612		
Times Tax Multiplier		
41,166,885		
Allocation to REC Customers		2,446,122
Revenue Increase		\$80,392,375

PART E  
RATE DESIGN

Inverted Residential Prices Introduction and Summary of the Issue.

119. District XI Human Resource Council (HRC, Direct Testimony of Thomas M. Power, Exh. 10) submitted testimony regarding the structure of the residential price schedule.<sup>14</sup> Whereas MPC proposes to maintain the existing structure of the residential prices, Power proposed several changes.

120. The existing structure resulted from Docket No. 83.9.67. At the existing (Order No. 5113a) revenue level it features a monthly "service charge" of \$2.40 per meter per month and a combined energy and demand price of 4.82 cents and 3.71 cents per kwh for winter and summer periods, respectively.

121. Power proposed a structure that features a minimum monthly charge (\$3.00 per month) instead of a service charge and an inverted energy/demand price structure with a similar seasonal differentiation. Table 1 provides a comparison of the two structures at the Order 5113a revenue level.

TABLE 1  
A COMPARISON OF MPC'S PROPOSED (EXISTING) STRUCTURE  
WITH HRC'S PROPOSAL

	WINTER	SUMMER
EXISTING/MPC		
Service Charge (\$/meter/month)	2.40	2.40
Energy/Demand (cents/kwh)	4.82	3.71
HRC(1)		
Service Charge (\$/meter/month)	0	0
Energy/Demand (cents/kwh)(2)		
First block (3)	4.35	3.36
Second block	5.80	4.48

- ( 1) Subject to a minimum bill of \$3.00 per month.
- ( 2) The energy price ignores minimum bill revenues, but the effect is minor.
- ( 3) The first block consists of 400 kwh in the winter and 300 kwh in the summer.

122. Power provided comprehensive testimony in support of the restructuring. The testimony addresses the following areas: 1) a survey of Commission rulings on the issue, 2) a response to the orders in Docket No. 83.9.67, 3) an embedded cost case for inverted rates, 4) a marginal cost and conservation case for inverted rates, and 5) the effect of inverted rates on low income households.

123. MPC (Rebuttal Testimony of John D. Haffey, Exh. 5) submitted limited rebuttal on the issue. MPC argues that the existing structure, in effect at the time for only six months, should be retained, pending a more extensive examination of the ' issue. In addition to a review of cost of service, MPC argues that full consideration of the issue requires one to delve into the relationship between electricity prices and economic development (Exh. 5 pp. 2-4).

The HRC's Testimony.

124. Power points out that inverted rates have been well received in Montana, the Pacific Northwest, and in many other state jurisdictions. The Commission, specifically, has previously embraced the concept for MPC, Montana-Dakota Utilities Company (MDU), and Pacific Power &

Light (PP&L) (Exh. 10, pp. 10-13).

125. In Docket No. 83.9.67 (Order Nos. 5051f and 5051gj, the Commission rejected a similar inverted rates/minimum bill proposal. Power addressed each of the concerns expressed by the Commission.

126. In that Docket, the Commission found that moderating impacts (or avoiding disruption) and providing continuity argued against an inverted rate/minimum bill proposal. Power, in response, argued that not implementing inverted rates will lead to disruptive changes in consumer prices because of costly supply expansion and that the structure proposed by HRC is a long-run stable structure.

127. The Commission also found that the proposed restructuring appeared untimely in that regional load/resource forecasts indicated a substantial market surplus. Power's response argued that the surplus conditions end "in the early 1990's." The surplus provides a "window of opportunity" in which we should not "relax our conservation efforts."

128. In its previous rejection of the minimum bill concept, the Commission cited the difficulty in administering that price structure. Power argued that, although it is a complication, it is a minor complication in terms of either the revenue or prices at issue.

129. In Order No. 5051g the Commission also cited difficulties in accepting the Ramsey pricing (inverse elasticity) proposal which appeared to be a rather selective application of the concept. The "rule of equity" usually proposed by Power and widely used by the Commission effectively limits the use of inverse elasticity. Power maintained that there is no inconsistency. The Ramsey principles have been used extensively to shape price structures within a class of customers while at the same time using the "rule of equity" on an interclass basis (Exh. 10, pp. 16-26).

130. The third category of arguments in support of Power's proposal can be described as the embedded cost case for inverted rates. Power argued that large electric uses are more costly than small electric uses to the utility. The load factors for large users are lower, thereby reflecting a higher proportional peak than that of small users. The larger user's loads are, therefore, more risky and require, generally, a newer, exurban, and larger capacity distribution system. A last

embedded cost factor relates to "an equitable share of the hydro resource."

Power argued that an equitable allocation on a per customer basis would result in an inverted rate structure (Exh. 10, p.29-34).

131. The marginal cost and conservation case for inverted rates features a discussion of what is usually considered an application of economic efficiency criteria. The objective here is to present the consumer with that set of prices which, to the maximum extent practicable, reflects the economic costs caused by the resource consumption decision. Ignoring so-called second best considerations, this would be achieved by a price structure that featured prices equal to marginal cost. The resulting consumption decisions would tend to optimize resource utilization by eliminating wasteful resource uses and promoting conservation.

132. Under an embedded revenue constraint, the economic formula for minimizing the resulting distortion to prices and resource utilization is to adjust the set of prices away from marginal cost in inverse proportion to price elasticity. Thus, the economic set of prices in this situation features a reduced service charge and a reduced initial block price, while leaving a more elastic tail block price proportionately closer to the marginal cost level (Exh. 10, pp. 37-42).

133. The last area of support provided in Power's testimony deals with the impact of inverted rates on low income house holds. Power provided a survey of statistical evidence linking electricity consumption to income. The conclusion is that "I have yet to see a single study which did not reveal a positive correlation between income and electric energy consumption". Although a certain, but relatively minor, percentage of low income households will face higher monthly bills, Power argued that there are alternative programs to deal with that outcome (Exh. 10, pp. 43-51).

Decision.

134. Power's claim that inverted rates have been well received in the U.S., particularly in the Pacific Northwest, including Montana, is correct. However, it implies a once-and-for-all ruling, which isn't the case. The structure of the retail price schedule reflects a moving target -- a balancing of average unit revenue requirement with marginal costs. The marginal costs, in turn, will reflect changing market conditions. MDU's residential price structure now (Docket No. 83.9.68, Order No. 5026a) features a flat rate (7.53 cents/kwh, 11.3 cents TOD, on peak) with a customer charge. PP&L's (Docket No. 84.7.38, Order No. 5128) remains inverted, but with a smaller differential between the two blocks. PP&L's structure also now features a customer charge where it once did not. Each of the changes resulted from a changing balance between average unit revenue requirement and long run marginal cost.(15)

135. Regarding Power's response to the Docket No. 83.9.67 decision (Order No. 5051j and 5051g), the discussion of minimum bill calculation complexity is well taken. Although a minimum bill does present a more difficult calculation of determining precise test year revenue levels, the amount of dollars at issue is minor and its ultimate effect on prices is truly minuscule.

136. However, the Commission finds the remaining concerns cited in Docket No. 83.9.67 to still be valid. They are: 1) moderation and continuity, 2) the load/resource balance, and 3) the role of Ramsey pricing versus the "rule of equity."

Moderation and continuity.

137. The winter residential price of electricity was 3.63 cents/kwh in 1984. It is now 4.82 cents -- a 32.8 percent increase. Power's proposal features a water and space heating price of approximately 5.80 cents -- a 59.8 percent increase. With the Colstrip 3 phase-in increase in revenue requirement approved in this order, plus a \$9 million Kerr related increase, the phase-in prices will reach 6.91 cents/kwh within four years without an inverted rate and without any consideration of other possible increases.(16) The 6.91 cents represents a 90 percent increase. Power's proposal, with subsequent uniform percent phase in increases would feature a price of approximately 8.32 cents/kwh – a 129 percent increase over the 1984 level.

138. A major problem the Commission has found with the minimum bill concept is continuity. Although Power's proposal appears to suggest a once-and-for-all restructuring, the Commission has found otherwise. Whereas the structure of the energy and demand prices has some flexibility, customer charges do not. Its past experience in the area strongly suggests to the Commission that customers simply do not find customer charges varying from \$4 to \$0 and back to \$5 an acceptable way to balance average unit revenues with marginal cost.

The load/resource balance.

139. It is resolving this issue that the decision on inverted rates hinges. In Docket No. 83.9.67 the Commission found itself dealing with a dramatic surplus while at the same time dealing with a proposal to invert the residential energy rate to reflect scarcity.(17) The apparent contradiction is no less in this Docket. Missoula County witness Duffield testified that, according to the Power Planning Council, not until 2008 (medium high growth) to 2018 (medium low growth) will the

region "get to a coal plant" (TR 911).(18)

140. Power disagrees with the Power Planning Council's conclusion (TR 313), but concedes that if the system were "capacity sufficient for almost the next twenty years, I certainly wouldn't be here trying to make any efficiency argument for an inverted rate structure. In that situation, the case for an inverted rate structure would have to depend entirely on... equity arguments" (TR 314).

141. A different way of looking at the load/resource balance issue is to look at the regional marginal cost that Power emphasizes (Exh. 10, pp. 12, 27, 39 and 51). The 1983 Regional Plan featured a 1980 levelized marginal cost of 40 mills. Nominal escalation to 1985 dollars brings the value up to 53 mills. In line with the deferral in time of costly expansion between the 1983 and 1985 plans, this value will be revised downward.(19) Even this value represents "lost opportunity" costs. This may be appropriate for a price signal to home builders, but using even it as a basis for charging existing space heaters an inverted price during an extended surplus is very questionable.(20)

Ramsey pricing and the rule of equity.

142. The Commission finds there remains a problem. There appears to be a degree of arbitrariness as to when one is to apply the Ramsey efficiency formula or the broader "rule of equity". The inverted rate proposal singles out a relatively minor subclass (the entire MPC residential space heating load is only 3.5 percent of its load) and effectively charges them more than other customers because their consumption is more price elastic. On a broader interclass level it has been argued and accepted that this poses equity concerns.(21)

The embedded cost case

143. The Commission finds merit in at least one portion-of this argument. Because of the combined energy/demand price, there is an unavoidable averaging of the unmetered demand component. However, it is not clear how much averaging error results from the combination, especially on a marginal basis. For example, the winter peak capacity cost is the basis for the existing 30 percent seasonal energy differential. Winter space heat consumption that causes winter peaking costs is, therefore, appropriately charged winter peaking prices.

144. A second factor here is the irony in the argument itself. The basis for Power's proposed

minimum bill is the economic irrelevance of the customer charge (i.e., low price elasticity). Effectively, the proposal entails ignoring the embedded costs of metering and minimum distribution and recovering those embedded costs in other customer's energy prices. If the Commission is to begin utilizing allocated embedded costs in structuring prices, then the industrial customer's argument that using marginal costs to set class revenue requirement effectively allocates a large portion of the residential embedded metering and minimum distribution costs to industrial energy prices, would seem to have some merit.

145. The load factor argument also appears to be similar to the traditional industrial argument. The industrial customer with a 100 percent load factor would be charged less for peak demands because it wasn't their kw's, but someone else's, that caused the need for peaking capability. The Commission has consistently rejected this argument on grounds that prices -for all consumption should reflect the marginal demand and energy costs that are caused by that consumption, regardless of vintage or end use.

146. As for the equitable allocation of cheap hydro, there may be some merit in the per residential customer allocation.

There also may be merit to using the cheap hydro to stimulate economic activity, or targeted low income space heating assistance, etc. A customer charge at a level less than the full costs of metering and minimum distribution effectively amounts to a per customer allocation of "cheap hydro."

The marginal cost and conservation case.

147. The Commission, since at least 1979, has focused its pricing efforts on utilizing economic efficiency criteria to arrive at prices which, to the maximum extent practicable, reflect marginal cost. The Commission finds this remains the appropriate pricing objective.

The impact on low income households

148. The Commission finds indisputable Power's conclusion that there exists a strong positive correlation between income and electricity consumption. The fact that there is a certain percentage (possibly 10 percent to 15 percent) of low income households made worse off by an inverted rate is troublesome -certainly not irrelevant. However, it is clear that the vast majority (possibly 85 percent to 90 percent) of low income electricity consumers are made better off under inverted rates.

149. It is not clear however, that it can be concluded that the level of economic hardship is lessened with inverted rates. Reducing all consumer's bills by \$2 (i.e., eliminate the customer charge), so that one can increase 25 percent of the bills by \$8, leaves it unclear that one has reduced the total impact of consumers' electricity costs. The distribution of the impact of eliminating customer charges and inverting the energy/demand price is very much concentrated in the high use brackets.(22)

150. The Commission also finds that the low income impact argument hinges on the marginal cost situation. Except for purposes of moderating impacts over time, the Commission has consistently found that the provision of subsidies, whether they are commercial, industrial, or residential, 1) requires a taxing authority and 2) belongs with the public agencies created for that purpose.

Conclusion.

151. The Commission rejects HRC's proposal to reduce the service charge and invert the energy/demand price. This decision is based largely on the finding that the current forecast of the load/resource balance (i.e., regional marginal cost) coupled with a flat, seasonally differentiated price which will reach the 7 cent level within four years does not suggest that an inverted rate is necessary to balance revenues with marginal cost. In fact, it is not at all clear that, similar to the current natural gas situation, the Commission will not find itself considering declining block rates based on the same economic argument used by HRC here in support of inverted rates.

152. Given the load/resource balance, and especially in light of rate changes that will occur even without an inversion Of the rates, the Commission finds the HRC proposal untimely. With the Regional Plan showing surpluses and then infra marginal resources for a 23 to 33 year period, there is simply no reason to subject a select subclass of existing electrical customers to even higher rates. There is also no basis for charging this same select subclass for the metering and minimum distribution costs of the entire body of residential customers. To do so would be inequitable as well as inefficient.

153. The Commission finds that the existing residential structure should be revised on a uniform percent basis to reflect the authorized changes in revenue requirement.

## CONCLUSIONS OF LAW

1. All Findings of Fact are hereby incorporated as Conclusions of Law.
2. The Applicant, Montana Power Company, furnishes electric service to consumers in Montana, and is a "public utility" under the regulatory jurisdiction of the Montana Public Service Commission. Section 69-3-101, MCA.
3. The Montana Public Service Commission properly exercises jurisdiction over Montana Power Company's rates and operations. Section 69-3-102, MCA, and Title 69, Chapter 3, Part 3, MCA.
4. The Montana Public Service Commission has provided adequate public notice of all proceedings, and an opportunity to be heard to all interested parties in this Docket. Section 69-3-303, MCA, Section 69-3-104, MCA and Title 2, Chapter 4, MCA.
5. The rate level approved herein is just, reasonable, and not unjustly discriminatory. Section 69-3-330, MCA and Section 69-3-201, MCA.
6. Acceptance of Clark's off-system sale adjustment is legally valid.

## ORDER

### THE MONTANA PUBLIC SERVICE COMMISSION HEREBY ORDERS:

1. The increased rates granted in Order Nos. 5113 and 5051j in the amount of \$35,000,000 are hereby made permanent.
2. The Montana Power Company application to increase rates in the amount of \$80,392,375 is GRANTED. No further rate increase is to take effect at this time. The remainder of the revenue increase approved herein will be implemented pursuant to the rate moderation plan approved in the loads and resources section of this Order.
3. The Montana Power Company request for a single item rate filing associated with the Kerr rental and a waiver of the minimum filing requirements is GRANTED.
4. The rate schedules filed pursuant to this Order shall conform to the findings in the rate design section of this Order.
5. All other motions or objections made in the course of these proceedings which are consistent with the findings, conclusions and decision made herein are GRANTED, those inconsistent should be DENIED.

6. This Order is effective for service rendered on and after the 29th day of August, 1985.  
DONE AND DATED in Helena, Montana, this 27th day of August, 1985 by a vote of 4-1.

BY ORDER OF THE MONTANA PUBLIC SERVICE COMMISSION

\_\_\_\_\_  
CLYDE JARVIS, Chairman

\_\_\_\_\_  
HOWARD L. ELLIS, Commissioner

\_\_\_\_\_  
TOM MONAHAN, Commissioner

\_\_\_\_\_  
DANNY OBERG, Commissioner

\_\_\_\_\_  
JOHN B. DRISCOLL, Commissioner  
( Voting to Dissent - Attached)

ATTEST:

Trenna Scoffield Secretary

(SEAL)

NOTE: Any interested party may request the Commission to reconsider this decision. A motion to reconsider must be filed within ten (10) days. See 38.2.4806, ARM.

#### FOOTNOTES

1. Profit" is used here to indicate a return greater than "normal" levels.
2. Exh. JWD-1 summarizes the MC examination of rate base policy.
3. Exh. JWD-2 lists potential adjustments identified and Exh. JWD-5 lists those adjustments utilized.
4. See Exh. JWD-6 and data response to PSC-15.
5. The \$11 to \$111 million in present value revenue requirement is equal to approximately \$1.3 to \$12.9 million in (nominal) annual revenue requirement.
6. The abandoned plant example is admittedly extreme, but the point is valid regardless of the example. Whether it is WPPSS #3 vs. Creston, or CS3 vs. Kootnai Falls, energy resource development should be based on incremental costs.
7. It is interesting to note that the "least cost" alternative would have to be approved under the same Major Facility Siting Act provisions that Colstrip 3 had to comply with. The likely conclusion there would be that given the sunk existence of Colstrip 3 in a buyer's market (i.e., low incremental resource cost), it would not make much sense to develop additional energy resources at this time. Such a finding is consistent with the Northwest Power Planning Council's

approach as well.

8. Colstrip 4 construction originally lagged that of Colstrip 3 by 18 months. Its on-line date has been further delayed by MPC and its partners until Spring 1986, presumably due to the lack of adequate load growth to require its need.

9. MCC's off system sales adjustment (to be discussed in more detail below) which will affect rates for the 1985-1986 period, included Clark's second adjustment, which normalizes maintenance, but does not include his first adjustment, which normalizes plant capacity factor.

10. The PSC recognized and relied upon the concept of risk sharing in its Coyote decision. In that instance it ordered a "substantial balancing of risk in favor of the shareholder." In this case the PSC attempts to more closely balance the risk. (Findings 19-21, Order 4799e, Docket 81.1.2).

11. The forecast includes qualifying facilities peak resources which, as MPC's reply brief points out, have not materialized. Therefore, apparently MPC's peak deficiency will be even worse than projected. Even with the QF resources, MPC's -peak deficiency during the period rates will be in effect (61 MW) would use nearly all Bird's peak output (70 MOO).

12. Ratepayers could conceivably stand to benefit from a utility sale of Bird's output in the region even if it is determined to be costlier than other alternatives available to MPC.

13. Since Sullivan's order became law, Docket Nos. 83.9.67 and 83.11.71 have been consolidated. This order constitutes the final order for both dockets.

14. Pages 1-10 of Exh. 10 addressed an "interclass" issue and were stricken from the record (See Finding of Fact No. 12).

15. A survey of recent decisions by other states (e.g., Oregon PUC, AR 112, Jan, 1985) will indicate similar price structure changes. Not mentioned here is natural gas. In Docket No. 83.8.58, Order No. 5020b the MPSC eliminated an MDU inverted rate, given evidence that the tail block price was substantially in excess of marginal cost. In that Docket, MDU argued that to now get the residential tail block price down to marginal cost would require some combination of 1) a lump sum annual charge of nearly \$100, 2) a customer charge of \$8/month, or 3) a declining block rate.

16. \$115 million peak phase-in, less \$35 interim, plus \$9 million Kerr represents a 43% increase over existing revenue level.

17. Missoula County witness Dr. Duffield found the system to be surplus by "641 AV MW to 706 Av MW... just sufficient on an annual average energy basis to serve another system load equivalent to MPC's in 1982, excluding Stauffer" (Prefiled direct testimony of Dr. John Duffield, Exh. 30, Docket No. 83.9.67, p. 12).

18. HRC witness Dr. Logan poses a different contradiction with similar implications. Dr. Logan questions the correlation between front-loaded revenue requirement and true economic costs. The prices resulting from the front-loaded revenue requirement uneconomically discourages the use of the sunk resource.

19. Edward Sheets' letter to Chairman Jarvis (May 31, 1985) indicates a 45 to 42 mill level.
20. Unlike "lost opportunity" resources, retrofit conservation should receive the same temporal optimization consideration that any other resource decision requires. This is achieved by using a discounted present value of future avoidable costs. To do otherwise ignores the time variable and results in suboptimal resource utilization.
21. The equity concerns are magnified when applying the Ramsey principles in the other, more typical, direction; i.e., decreasing prices down to marginal cost for those with alternatives (higher price elasticity) while "socking it to" those without alternatives (lower price elasticity).
22. Exh. 10, Table N, provides both the distribution and the frequency of the impact. While 75% of the winter bills are decreased by less than \$4, 25% are increased by up to \$30. The major change in revenue requirement will magnify this affect.

## DISSENTING OPINION

Dissent: "Difference of opinion."  
Opinion: "...a belief based on what seems true, valid, or probable to one's own mind; what one thinks; judgement."

This is the purported "final order" in the two Colstrip dockets (83-9-67 & 84-11-71) and the Montana Power portion of the main Avoided Cost docket (84-10-64). With this order the Commission hopes to meet the requirements of Judge Sullivan's remand of the first order (5051), wherein he "permanently enjoined (the Commission) from determining, or attempting to, determine, the need for the Colstrip 3 generating station on the MPC system in the manner adjudicated unlawful herein. That first order is currently being appealed. Until a final decision is rendered by the Supreme Court on the unlawfulness in our earlier determinations, this "final order" is not needed. The first level of revenue increase requested in this second docket, which is the "open docket", has already been awarded (\$35 million) in two interims, so there is no reason to fear an automatic increase with the tolling of the nine month statute. At the outset of this Dissent, I must therefore question the wisdom of even issuing this order as "final" if such an action is unnecessary at this time, and if all the information and guidance for a truly Final Order are not yet in place.

If this order is to be the final say by our Commission in this matter, it is a terribly poor order containing serious mistakes of major magnitude which injure the very credibility of the Commission. The only consistent theme that runs through the findings in the order, is that they help justify the ratebasing of Colstrip 3 generating station. The increased rate base is \$360 million, including carrying charges; allowing for the company adjustments, this means that the annual cost to the ratepayer will be about \$83 million; instead of the \$71 million that would have been faced with approval in the first docket. The phase in costs have to be stacked on top of this underlying revenue requirement. What has been -- done to justify this ratebasing action is, in my view pathetically unnecessary, and definitely not in keeping with sound development of public policy for the Montana ratepayer, and Montana utilities. My major concerns with what has been done, and our failure to do what could have been done properly based upon expert testimony and the record are as follows:

1. THIS ORDER DOES NOT INTEGRATE THE FACTS AND TESTIMONY IN THE THREE DOCKETS IT PURPORTS TO REFLECT AND FINALIZE:

2. THIS ORDER CONTAINS SEVERAL INTERNAL LOGICAL CONFLICTS:

3. IN THIS ORDER THE COMMISSION "TURNS IT'S HEAD" FROM A PROPER RESPONSE TO UTILITY INITIATIVES IN AT LEAST TWO CRITICAL AREAS (DISPLACING THE \$1.9 MILLION BIRD PLANT WITH \$114 MILLION OF COLSTRIP 3 AND TREATMENT OF PROJECTED CAPACITY DEFICIENCIES):

4. IN THIS ORDER THE COMMISSION FINDS ITSELF ATTEMPTING TO DISCREDIT THE CONCEPT OF VALUING A NEW RESOURCE BASED UPON AVAILABLE ALTERNATIVES, AND IS FORCED TO SIMILARLY QUESTION AN EXISTING STATUTORY OBLIGATION, RATHER THAN ENFORCE IT:

5. THIS ORDER MISSES THE OPPORTUNITY TO USE LIFE CYCLE COSTS TO JUSTIFY PROCUREMENT OR RATEBASING OF POWER IN EXCESS OF THE 1985/86 OPERATING YEAR; INSTEAD THE TIME TRIED LIFE CYCLE COSTING METHODOLOGY IS DISCREDITED:

6. THIS ORDER MISSES THE OPPORTUNITY, BASED UPON EXPERT TESTIMONY AND THE FACTUAL RECORD, TO COMBINE THE USE OF LIFE CYCLE COSTING AND COST COMPARISONS (USING AVAILABLE MARKET PRICES) TO EITHER DISALLOW COLSTRIP 3 OUTRIGHT (IN KEEPING WITH DUFFIELD'S RECOMMENDATION #2) AND COMMIT TO COVER THE COST OF PURCHASING THE OUTPUT OF COLSTRIP #4 (10% CHEAPER DUE TO TAX CREDIT IF MONTANA POWER BUYS IT FROM ITS OWN GENERATION SUBSIDIARY, CS 4 ALSO AN ALREADY SUNK SOCIAL COST, NO CARRYING CHARGES, NO TAX EFFECT, MORE DEPENDABLE FOR OPERATIONAL AND PLANNING PURPOSES THAN THE CURRENTLY RATEBASED THERMAL PLANTS), OR TO VALUE COLSTRIP #3 AT WHAT THE UTILITY'S CEO THINKS (ON THE RECORD) HE CAN GET FOR COLSTRIP 4 IN THIS MARKET:

7. THIS ORDER NEGLECTS THE RESPONSIBILITY THIS COMMISSION HAS TO MAKE THE EXCESS POWER AVAILABLE (70 AVERAGE MW BY THIS ORDER; ABOUT 120 AVERAGE MW WITH PROPER TREATMENT OF BIRD AND PROJECTED CAPACITY REQUIREMENTS) TO THE BENEFIT OF MONTANA, RATHER THAN ALLOW THE SUBSIDIZED RATE (2.3 CENTS) ONLY FOR THE USE OF OFF SYSTEM CUSTOMERS:

8. FINALLY, THIS ORDER IGNORES THE LARGER POLICY QUANDARY THE COMMISSION FACES TO TREAT DECENTRALIZED AND THE UTILITY'S FAVORITE CENTRALIZED FACILITY EQUALLY; THIS ORDER'S SOLUTION IS TO SIMPLY WEIGH IN ON THE SIDE OF THE MONOPSONIST'S RESOURCE TO THE LONG RUN DETRIMENT OF THE RATEPAYER: :

CONCLUSION:

I earnestly hope that the Supreme Court will not treat this order as the Final determination by this Commission in this matter. It simply is not, because the Commission is not yet free or able to do that, and it has used only part of the relevant record. If this is the final say, the victim is sound public policy. At this time I can only hope that the state's highest court will give the Commission clear language that reaffirms our initial course of action: that a prudent investment decision does not automatically mean that investment should be ratebased; that the Commission should use

market prices, when available, to determine the allowable cost of a new resource; and that an agency's determination in these matters holds more weight than the District Court Judge seemed willing to give his own expertise. Admittedly, our effort was not perfect in the first order, but we did what we could with the record. The material we asked for with the next filing in that docket would have cured many of our problem areas, had we been left free to pursue and develop sound public policy.

The three areas in which I hope the Supreme Court will give guidance are not the private preserve of the Public Service Commission's expertise. They are matters of public policy philosophy that were answered repeatedly by serious Montana citizens in over 20 public hearings in the first phase. Even the direct quotes from a great many thoughtful witnesses are conspicuously absent from either order in this matter, the public's philosophy carried great weight. The Sullivan Court substituted its philosophy for the public's. I far prefer to wait for the public's philosophy to come from our Supreme Court Justices, if we are not able to use the direct input of the citizenry. In closed meetings leading up to the meaningless "negotiated stipulated interpretation" of the Sullivan Decision, the Commission was driven by the belief that the Supreme Court would not be open to the Public Service Commission viewpoint. This political estimate is the basis for a whole series of decisions; that estimate had no place in our deliberations. I trust the highest court to look at the factual and theoretical basis for what we have done. A straightforward comparison of our first order, with Judge Sullivan's description of it, and a follow up reading of this second order should prove pretty convincing.

If the court gives us clear language to do things differently than has been done in this order, there is no guarantee that this "new" Commission, will comply with the policy thrust of the "old" Commission. However, I believe that if we are given time to survey the entire record, and unmuddled language as guidance, the "new" Commission will do a far better job for the people of Montana. Since the \$35 million expected in the first year of the utility's application is already in hand, the Commission could have quite a period to deliberate if given options by the Court. In my mind the real deadline is the end of this tax year when the Investment Tax Credit that helps make Colstrip 4 cheaper than Colstrip 3 by 10% will no longer be available to Montana Power. By the end of the year we still have time to get the job done right. Otherwise, we shouldn't be leading the public into believing the job is being done at all.

JOHN B. DRISCOLL  
Montana Commissioner