Service Date: August 23, 1989

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

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IN THE MATTER Of The Application Of MONTANA POWER COMPANY To Re-structure Natural Gas Rates.	)	UTILITY DIVISION DOCKET NO. 87.8.38
IN THE MATTER OF the Application Of MONTANA POWER COMPANY For Authority To Implement A Natural Gas Incentive Rate.	)	DOCKET NO. 87.3.16
IN THE MATTER Of The Application Of MONTANA POWER COMPANY For Authority To Implement An Experimental Industrial Market Retention Rate For Natural Gas.	)	DOCKET NO. 85.7.32 ORDER NO. 5410a

BACKGROUND

Two parties submitted motions for reconsideration on the Commission's Order No. 5410. MPC raised eight general issues in its Motion and Great Falls Gas (GFG) raised a single issue in its motion. The Commission will, in turn, address the issues in MPC's and GFG's Motion.

FINDINGS ON RECONSIDERATION

I. MPC's Motions

Storage Facility Investment

MPC's first motion asks for reconsideration of the use of 116 Mcf as an accurate measure of the cost of storage facilities investments (FOF 135). The Commission grants MPC's motion to replace the 116 Mcf figure with 188. The Commission's reason for granting the motion is based on an inadequate record in support of the 116 Mcf figure. Consequently, while the Commission grants this motion it does require MPC to include testimony in its upcoming open access transportation and cost of service filing on the below noted concerns.

First, there is no explanation as to why MPC used the 116 figure in lieu of the higher 188 in the cited marketing analysis which was for a distribution level marketing program -- the Smart Choice program. Cost of service testimony must explain why the 116 Mcf figure is relevant for computing the benefits and costs of the Company's marketing programs, but not for purposes of computing the costs needed in a cost of service study. MPC must also explain why the 188 Mcf figure has no relevance in the Company's gas marketing analysis. Second, the Commission would note that MPC has made no clear distinction of the difference between the two variables.

Firm Customers' Peak Demands

MPC's second motion regards the use of MCC's peak day demand for unit storage and transmission costs. The issue involves using consistent peak demands. On reconsideration, the Commission grants MPC's request for using consistent data. In this docket MPC must use the 222,239 Mcf figure and not the 224,149 figure. MPC must revise its compliance filing to reflect this change.

Distribution Costs

MPC's third motion has two parts. The first part regards the Commission's exclusion of distribution investment costs in the cost study. The second part requests that $20.66/Mcf in distribution-related O&M expenses from the Company's Optimal System Approach (OSA) be included in the cost of service study. Both parts of the motion involve costs that are allocated to industrial, general service and residential customers. While discussed later in this order this third motion of MPC's relates to GFG's single motion. Thus, the decisions and arguments that arise in the following will be referenced later in findings on GFG's Motion

The Commission will address, in turn, the two parts of this motion. The Commission's decisions and concerns associated with the two parts of this motion will then be followed by findings on certain arguments contained in this, MPC's third motion.

<u>Distribution Investments.</u> The Commission grants MPC's Motion to use the alternative cost study to compute distribution costs. The Commission finds that although concerns exist, the alternative cost study contained in the Motion (DR MPC GFG 1-16) is an improvement over the OSA, as it must be to MPC. The Commission <u>estimates</u> that the resulting total marginal distribution costs will equal $6,140,520, an amount that actually exceeds the Montana Consumer Counsel's (MCC's) estimate of $6,078,614. MPC must revise the $6,140,520 (in 1987 dollars) to reflect mid-year 1989 dollars. MPC must also correct the "Peak Day" Mcf estimate for C.D.I.F. At 8868 annual Mcf a rough estimate, based on the Peak Day to Annual Mcf for Ben Hughs Subd, would equal 79.8 Mcf not 1.1. Mcf

The Commission finds MPC must submit testimony on using the alternative approach in the Company's upcoming transportation and cost of service filing. While not exhaustive, some concerns the Commission finds MPC must address include the following. First, is the relevance of cost discounting. The alternative cost study features the relation of historic costs to changed peak demands. Whether or not such costs ought to be discounted projected costs, not escalated historic, is a relevant concern. Second, the data response does not address whether such costs are avoidable. This second issue relates to the issue of discounting. Third, the peak day Mcf values must be noncoincident peak (NCP) demands. The use of NCP demands versus coincident peak demands must be addressed (see for example MPC DR PSC 1-32-v-c). Fourth, to the extent the projects include interruptible loads, the issue of their inclusion in this estimate arises. A fifth concern regards whether the investments noted in the data response for new customers ought to be in a line extension charge. A sixth concern regards whether the costs included in the data response include any O&M charges.

<u>Fixed O&M Costs.</u> The second part of this motion requests the Commission to include $20.66/Mcf of distribution O&M costs in the cost of service study. The Commission denies this motion. This figure was not used by the MCC when it considered the merit of other O&M costs. The value also arises from the Company's OSA. The relevant O&M cost should be derived with the existing distribution system as a starting point. Another concern MPC must address in its upcoming case, regards the use of coincident peak

volumes to unitize the total O&M cost estimate. Noncoincident peak demands, as appear in the Company's alternative estimate of distribution capital costs, may be appropriate.

With the above decisions the Commission will now turn to numerous issues raised in MPC's motion on the issue of distribution costs. First, MPC states "It is fair to say that most participants in this docket support marginal cost (MC) based rates." While a majority (3 of 4) of the active participants do appear to "support" marginal cost analyses, a minority (1 of 4) put this view into practice with regard to the distribution function. There were four active participants including: MPC, MCC, Stone Container (SC) and GFG. SC did not support marginal cost studies nor did SC endorse MPC's LRMC study (FOF 103). Second, the only cost analysis GFG submitted was of an "average", not marginal, cost nature (FOF 99). MCC's distribution cost study was an embedded, not marginal, study. Thus, there was not "widespread agreement", at least in practice, as MPC states.

The Commission also takes issue with MPC's description of the impact of excluding, zeroing out, distribution costs from a cost of service study as reflected in its Motion when it states at page 7, last paragraph:

> In other words, without recognizing approximately $17 million in distribution costs (from the Company's original filing, updated to 1987 dollars), the marginal revenue requirement resulting from Order No. 5410 falls $17 million short of the current revenue requirement level of $102 million, leaving a 20 percent assignment of costs to the three functions that were given marginal cost recognition.

Only if MPC's OSA was a valid method for computing marginal distribution costs, and the Commission were to deny its use would MPC's statement be correct. The OSA is not valid and the Commission has properly rejected the underlying philosophy and cost results. By adopting MPC's alternative proposal to compute distribution costs, MPC's logic suggests that the difference between total distribution investment costs from MPC's OSA and its new proposal would be inappropriately assigned to other classes. This logic is fallacious.

Classification of Storage and Transmission Costs

MPC's fourth motion requests reconsideration of how storage and transmission costs are classified. MPC asserts the MCC's basis of classification is not documented. MPC proposes using the classification percents that result from the OSA. Elsewhere MPC states it does not attempt even a "veiled" effort of raising the merits of the OSA. But, this motion proposed using the results from the OSA to classify costs. The Commission denies the motion.

MPC's OSA treats cost functions as equally scarce by computing the replacement cost today of each function. If, however, the OSA were redone discounting costs to reflect the unique scarcity of each function, each function would not have the same scarcity value as results from MPC's OSA. For example, if actual storage capacity is inadequate but transmission capacity excessive, the OSA would overstate the scarcity of storage relative to transmission capacity by virtue of treating both as equally scarce. Thus, to use the OSA results for classification is not appropriate. Also see Findings of Fact 127 - 129 in Order No. 5410.

Finding of Fact No. 160

MPC's fifth motion requests the Commission to reconsider Finding of Fact 160 and delete the last sentence. The Motion states:

> The Company suggests, however, that in stating its concerns on this issue, the Commission has seriously mischaracterized the record in finding: 'that MPC does not find enough validity in the results of its cost study to support seasonal prices seriously challenges the integrity of the OSA.' (Finding of Fact. 160.) Not only does such a statement occur nowhere in the record, no statement in the record would support even a casual inference to this effect.

The Commission denies MPC's motion to delete the final sentence in Finding of Fact 160 for the following reasons. First, MPC correctly notes that reasons other than the OSA cost results were given by the Company to not use the OSA results in pricing; MPC's Motion in this regard referred, in part, to FOF 161. The Commission's order, however, raised two inconsistencies associated with the direct quote of Mr. Haffey in Finding of Fact 161. MPC's Motion did not refute the inconsistencies raised by the Commission in regard to MPC's testimony. (Findings of Fact 162 and 163.)

Second, aside from the inconsistencies referenced above, the Commission remains convinced that MPC's decision to not reflect the results of its OSA in pricing seriously challenges the integrity of the OSA. MPC computed significant seasonal cost differences but chose not to reflect the same in prices. MPC's stated concern for efficient resource allocation is not achieved with its pricing proposals given its cost results.

As an aside, the Commission would reiterate that the issue of not reflecting OSA costs in pricing proposals is but one of many reasons for which the Commission rejected MPC's OSA.

Interruptibility Findings

MPC's sixth motion asks the Commission to reconsider its findings on interruptibility to the extent the same will be used later in the docket.

First, the Commission will clarify the sentence in Finding 160 which reads: "The ratio of interruptible loads to total Montana loads appears fairly constant, especially when compared to the 1970s..." From the cited data response it visually appears, for years 1983 to about 1990, that the ratio of interruptible load to the total gas market ranges between 13 and 17 percent. In contrast, and in 1975, the ratio of industrial interruptible load to the total gas market is about 38 percent and generally falls throughout the balance of that decade.

Second, and more to the point is MPC's primary concern that the Commission suggests MPC may have a substantial cushion of interruptible loads. While this issue will be further explored in the upcoming transportation filing, the point here is that since the time of MPC's most recent peak demand (December, 1983), MPC has not had cause to interrupt all interruptible customers' interruptible loads simultaneously on any occasion. As MPC well knows, interruptible service carries with it a theoreti cally lower quality of service due to the likelihood of an interruption. Given

MPC has not had to interrupt all loads simultaneously, the Commission questions the merit of added interruptible volumes combined with the price discount associated with interruptiblility.

Finally, as a general remark and keeping with the tenor of Order No. 5410, the Commission finds MPC's analysis of the value of interruptible loads to be lacking in rigor. The value would vary by amount and location as the Order noted. MPC admitted that the value of interruptible loads is not uniform across its system (MPC DR PSC 2-37). The upcoming transportation docket shall serve to further explore these issues.

NGI Flow Through

MPC's seventh motion regards the NGI "flow-through" issue. MPC requests the Commission to reconsider its decision to deny MPC's request to allow the shareholders to share in 10 percent of the net NGI revenues instead of crediting 100 percent of the net revenues to the unreflected gas cost account.

The Commission will first restate its decision, followed by a review of MPC's motion and, finally, findings on MPC's Motion. This issue regards the need for incentive mechanisms for MPC to make NGI sales. The incentive MPC sought with its initial NGI filing was that its shareholders receive 10 percent of the difference between the NGI price and the incremental cost of each sale. The Commission's interim order on the NGI and its final order denied the 10 percent flow through to shareholders.

The Commission's Order No. 5410 denied MPC's 10 percent flow through to shareholders for two reasons. First, the Commission noted the uncertainty of the relevant incremental cost. The incremental cost is important due to MPC's proposal to flow through to shareholders 10 percent of the difference between the actual NGI price and the incremental cost: for a given NGI price the lower the incremental cost the larger the flow through to shareholders. There is also the concern for selling NGI customers gas at prices that create user costs. The second reason the Commission denied the 10 percent flow through is "...MPC's conditioned admission that both customers and stockholders realize benefits for each Mcf sold when gas is sold at prices in excess of incremental costs..." (Finding of Fact No. 198). This second reason should not be discounted.

MPC's Motion contends the record demonstrates that the Company can determine the "highest marginal cost" of gas given the specifics of any transaction. In the following the Commission will state why it finds necessary a denial of this Motion. The reasons are the same, but the degree of detail buttressing the reasons will be expanded.

First, to dispel any argument that semantics is the source of MPC's Motion the Commission will review the many different terms that relate to "incremental costs", as regards the NGI. MPC's initial NGI filing referred to "incremental" costs as did the Commission's interim order. The Commission's Order No. 5410 analogized between incremental, opportunity and user costs. The point being that the cost subtracted from the NGI sales price must reflect the greatest opportunity to MPC. MPC itself used "highest expected cost", "opportunity cost", "highest marginal cost", "incremental costs" and "actual average cost" in reference to the NGI tariff (MPC DR PSC 1-24, 1-28 Docket No. 87.3.16, and MPC DR PSC 1-29-viii). The third section on this motion will tie these concepts together.

Second, notwithstanding any differences of opinion on the relevance of certain alleged Industrial Market Retention (IMR) testimony regarding the range in NGI "incremental cost" values, as discussed in MPC's Motion, there exists substantial evidence that the source and thus the incremental cost for the NGI tariff is elusive. In this docket MPC enumerated many sources on which to base the NGI's "incremental cost" which included: 1) "spot gas" with a range of values from $1.05 to $1.50/Mcf (PSC 1-15 in Docket No. 87.3.16), 2) "embedded supplies" with a value of $.27/Mcf (id). MPC added some detail on these sources of supply which included: 1) Montana Royalty Gas, 2) Montana or Spot Purchased Gas, 3) Aden Royalty Gas and 4) Aden Purchased Gas (MPC DR PSC 1-6-i). Later MPC provided an estimate of the "spot gas" or otherwise termed "highest incremental cost" of gas for the NGI, not the IMR tariff, that equaled $.832/Mcf (MPC DR PSC 2-62-i). The above range, however, does not account for another source of uncertainty, that being the impact user costs have on the range of incremental cost values.

From the above, the Commission can reach the following conclusion: The incremental cost of gas for the NGI could range between $.27 and $1.50/Mcf depending on MPC's choice of the sources listed above. One need not reference any potentially confusing IMR testimony to establish the above range. The Commission has a concern that while the above addresses certain sources for the "highest incremental cost" of gas, it excludes one key source --

user costs-- in Order No. 5410. The point being no matter what term one coins (e.g., marginal-, incremental- highest or user-cost), what is relevant in the calculation of the "incremental cost" with the NGI tariff is that the NGI price does not create opportunity costs.

Third, "user costs", while explicitly and illustratively discussed in the order, did not surface in MPC's motion. In order to be assured that MPC is not making NGI sales below cost, one must be confident that MPC has sold NGI gas at prices that equal the gas' highest opportunity cost. An absence of any reference to the idea in MPC's Motion, given the clarity of its description in the order, suggests to the Commission MPC may not yet appreciate the Order's intent with regard to user costs. The Commission finds relevant a further discussion on the import of user costs to the NGI tariff.

MPC on one hand appears to grasp the relevance of user costs in establishing the incremental cost for NGI gas. MPC's initial NGI filing listed several costs any NGI price must recover (see Finding of Fact 191), which included reference to net present value calculations of the revenue requirement. Elsewhere MPC answered a data request with the following question:

> ... Since MPC customers already have a 'sunk' investment in royalty gas and therefore have it available at a low variable cost, at what price should it be sold today to NGI customers, (and not saved for future consumption) to cover the customers' costs to buy replacement gas (at higher variable costs) on the open market later? (MPC DR PSC 1-30-vii.)

This question clearly implies MPC follows the user cost argument. To restate, the question MPC posed raises the issue of whether selling gas today at a given price creates lost opportunities in the future, based on what the replacement cost of gas is later. This is one important application of user costs. A practical problem is that we do not know if in a year or two MPC will have to buy gas whose NPV today exceeds the price at which MPC sold gas today to NGI customers.

There is another example of user costs that is relevant. The second example was illustrated in the order in Finding of Fact No. 194. Rather than MPC's user cost version which references the buying of gas in the future, the Order discussed the future sales value of a unit of gas sold to an NGI customer today. Both examples are valid user costs considerations.

The Commission's order holds that user costs are another consideration to value the incremental cost of an NGI gas sale.

Clearly, future gas values are unknown today. In the future, however, past sales prices can be compared to the then market value of gas.

For the above reasons the Commission denies MPC's Motion to flow through 10 percent of the net NGI revenues to shareholders. Furthermore, as Order No. 5410 stated user costs, while a valid component of the relevant NGI "incremental cost" consideration, must be established in a later docket.

IMR 90/10 Split On Certain Sales

MPC's last motion regards the Commission's findings on the 90/10 split for IMR sales that do not exceed a customer's base volume. In this Motion, MPC requests the Commission to "...clarify its conclusion regarding the 90/10 split only for IMR sales that do not exceed a customer's base volume."

To some extent the Commission is surprised by this Motion. The Commission will attempt to clarify its Order for MPC. The IMR is a retention rate. Retention rates retain load. Load to be retained is load that would, but for the IMR, be lost. The potential volumes lost that would be retained as a result of the IMR are base volumes. If, as a result of the dis counted IMR price a customer's load exceeds that which it was designed to retain, the revenues generated associated with the sales volumes over and above the base volumes are revenues that should be 100 percent credited to the unreflected gas cost tracking account just as though they were NGI sales.

In this regard the Commission's Order No. 5410 referred to a data response from MPC. The cited question and answer are:

> Q: Assume an MPC customer qualifies for the IMR tariff and receives a price which, in turn, causes the same customer to increase its demand above the level that existed when the same customer was on the otherwise applicable tariff (the expenditure elasticity exceeds one in absolute value).
>
> At some point, would increased consumption create positive revenues of which 90 percent should not be treated as a deficiency?
>
> A: <u>Yes</u>. It would depend upon the magnitude of the price difference and the customer's price elasticity of demand. (Order No. 5410, Finding of Fact No. 200, and MPC DR PSC 3-5-ii-b). (Emphasis added.)

The above question and answer was referenced in the Commission's order. MPC clearly understands the implications in the data request, but did not appear to understand the Order that cited the data request. A later unreflected gas cost tracking docket will have to identify the base volumes for which the IMR 90/10 spit applies as opposed to the additional volumes for which 100 percent crediting applies. MPC must provide written testimony on this issue in its next tracker docket in which IMR revenues are at issue.

II. GFG's Motion

GFG's motion focused on one issue, that being the Commission's rejection of both MCC's and MPC's distribution cost of service study results and consequent exclusion of such costs in the cost of service study. In short GFG holds the Commission's decision is unreasonable, not based on sustainable rationale and unsupported in the record. Importantly, GFG makes no recommendation as to which distribution cost study the Commission should reconsider adopting, adding that if the Commission is determined to reject the functionalization of distribution costs the hearing should be reopened on this and any other matter on which the Commission seeks added evidence.

In part, the above discussion regarding MPC's third motion addresses the aspect of GFG's motion to include distribution costs in the marginal cost study. Thus, the Commission has granted

GFG's Motion in this regard. There appears numerous flaws in GFG's arguments that the following will address.

First, GFG's motion mischaracterizes the Commission's order. The order did not reject the functionalization of distribution costs in a cost of service study. The Commission found that the quantified distribution costs by the only two parties submitting cost studies were not acceptable in a marginal cost study. There is a difference. MPC recognized this difference and proposed to supplant the results from a data request submitted to GFG for its OSA results: MPC did not propose replacing its OSA with MCC's study but rather an approach included in a data response to GFG. Thus, GFG's point that the Commission rejects inclusion of distribution costs in a marginal cost study, is incorrect.

There is another flaw in GFG's motion. On page one of its motion GFG states:

> ...One of the purposes of this proceeding was to rectify that situation. That is, also one of the reasons that the cost of service study performed by MPC demonstrated that the Utility class was contributing in excess of its properly allocated share of revenue to the system.

The premise and GFG's conclusion is logically erred. The error impinges on GFG's endorsement of marginal costs and any needed revenue requirement reduction for this class. First, GFG appears to support the results of MPC's marginal cost study, including the OSA which the Commission rejected and MPC did not challenge. Second, and to the point, MPC's marginal cost study concluded that the firm utility class' revenue requirement and its marginal cost revenue requirement are identical at roughly 16.4 million dollars. Thus, based on MPC's marginal costs, which GFG appears to support, its revenue requirement should remain at its current level. That is, GFG's statement that "an indirect subsidy from the utility class to the distribution level customer" (GFG Motion, page 2) is incorrect assuming MPC's OSA cost study is correct and GFG's load is elastic.

Given GFG's apparent interest in bypassing MPC by building its own pipeline, GFG appears to be a highly elastic load |GFG DR MPC No. 3¬. In turn, loads that are elastic should be priced closest to marginal costs. Thus, if one accepted MPC's cost study, GFG's share of MPC's revenue requirement should remain essentially unchanged even if all of MPC's distribution costs were included.

Third, GFG's motion opposes the Commission's finding to deny both MPC and MCC's cost studies as regards distribution costs suggesting a nonexistent degree of harmony on marginal cost pricing. GFG states " ... at least four witnesses in this proceeding who have been qualified as experts...All of whom subscribe to the utilization of marginal costs pricing for the assignment of costs to the distribution function." (GFG Motion, p. 4) GFG's statement confuses parties with witnesses. First, SC's witness abhors marginal cost analysis. That leaves MCC, GFG and MPC. If MCC embraced distribution marginal cost analyses, they would have assumably submitted one, which they didn't. MPC's motion abandoned its OSA for purposes of computing marginal distribution costs and in its motion proposed a new approach. That leaves GFG. GFG states in its testimony to sup port marginal costing; but the only analyses GFG submitted was an <u>embedded</u> gas cost study.

CONCLUSIONS OF LAW

1. The Applicant, Montana Power Company, furnishes natural gas 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.

2. 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.

3. 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.

4. The cost of service approved herein is just, reasonable and not unjustly discriminatory. Section 69-3-330 and 69-3-201, MCA.

ORDER

THE MONTANA PUBLIC SERVICE COMMISSION HEREBY ORDERS:

1. The Montana Power Company shall design class cost revenue responsibilities to generate authorized revenues which are consistent with the findings entered by the Commission in this Order.

2. The Montana Power Company shall submit its revised cost of service study, including its working papers, revealing in detail

the structuring of unit costs and class revenue responsibilities. Also included shall be the specific information requested in Finding Nos. 175-179 of Order No. 5410, under the heading "MPC's Compliance Filing", and the information required by this Order.

3. All documentation, as described above, shall be filed with the Commission no later than 21 days after the issuance of this Order.

4. The Motions For Reconsideration filed by MPC and GFG herein are partially granted and partially denied as described in the "Findings on Reconsideration" herein.

5. MPC is ordered to comply with the requirements set forth in paragraphs 2, 3, 4, 7, 8, 9, 35 and 39 above, and said requirements are incorporated herein by this reference.

6. All motions and objections not ruled upon are denied.

DONE AND DATED at Helena, Montana this 23rd day of August, 1989 by a 5-0 vote.

BY ORDER OF THE MONTANA PUBLIC SERVICE COMMISSION

CLYDE JARVIS, Chairman

HOWARD L. ELLIS, Commissioner

WALLACE W. "WALLY" MERCER, Commissioner

DANNY OBERG, Commissioner

JOHN B. DRISCOLL, Commissioner

ATTEST:

Ann Purcell
Acting Commission Secretary

(SEAL)

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