

Service Date: February 8, 1990

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

* * * * *

IN THE MATTER Of The Application Of)	UTILITY DIVISION
MONTANA-DAKOTA UTILITIES COMPANY,)	
a Division of MDU Resources Group,)	DOCKET NO. 88.11.53
Inc., for Authority to Establish)	
Increased Rates for Gas Service.)	ORDER NO. 5399d
_____)	

ORDER ON RECONSIDERATION

GENERAL

On December 1, 1989, the Commission approved Order No. 5399b, which disposed of all matters pending in Docket No. 88.11.53. On January 9, 1990, the Commission issued an Errata Sheet to Order No. 5399b correcting minor typographical errors.

The Commission received a motion for reconsideration (MFR) from the Montana-Dakota Utilities Company (MDU or Company) on December 22, 1989. In its motion, MDU requested reconsideration of Commission decisions regarding base rate revenues and the treatment of rate refund revenues to determine Class Revenue Requirements.

MDU described its motion to be addressing "mechanical (arithmetic) errors in the Commission's calculation of the Company's test year revenues and the resulting class revenue responsibilities." The

Company's motion continued, "The correction of these errors should be considered ministerial in nature, and not subject to the Commission's discretion."

The Commission received a motion for reconsideration from the Montana Consumer Counsel (MCC) on December 26, 1989. MCC requested reconsideration of Commission decisions regarding construction overhead rates and several cost of service issues.

REVENUE REQUIREMENTS

Base Rate Revenues

MDU asserts that the Commission's base rate revenue adjustment is erroneous because no rounding occurred. The Company explained that this Docket was the first proceeding for its gas utility since the inception of the PSC tax. The Commission's adjustment included revenues associated with the gross up used by the Company to reflect the PSC tax expense in its rates. The Company claims that the gross up cannot be included as revenues while the expenses are reflected in cost of service without denying MDU the opportunity to recover the expenses.

After thoroughly analyzing this \$8,285 adjustment, the Commission finds MDU's assertions to be incorrect. In fact, whether included or excluded, the adjustment has absolutely no effect on rates. This is because the adjustment does not change

the total authorized level of revenues that rates are designed to recover. The adjustment simply changes the pro forma revenue and required revenue increase figures by the same amounts but in opposite directions. If the adjustment had not been included, the required revenue increase figure would have been higher but the approved level of revenues would still be the same.

From a revenue requirements perspective no changes are necessary. MDU's motion is DENIED.

Construction Overhead Rates

MCC holds that the Commission's Order No. 5160a in Docket No. 85.7.30 mandated a specific set of construction overhead rates to be used by MDU until modified by a future Commission order. MCC believes that the Commission may have engaged in retroactive ratemaking when it did not restate the construction overhead portion of the Company's rate base as proposed by Mr. Clark.

The Commission disagrees. Order No. 5160a disallowed a small amount of rate base related to construction overheads. To calculate the disallowance, the Commission used different overhead rates than were applied by the Company during the test year. MCC has interpreted that disallowance as a mandate. Nowhere in that order did the Commission mandate a specific set of overhead rates to be used by MDU. MCC's interpretation of Order No. 5160a is in error. No retroactive ratemaking has occurred as a result of the Commission's treatment of construction overheads in this proceeding.

MCC's motion requesting a restatement of construction overheads in the determination of the Company's rate base is DENIED.

Revenue Requirement Calculation

Upon review and consideration of the motions put forth by MDU and MCC, an error was discovered in the revenue requirement calculation included in Order No. 5399b. The error effectively understated the authorized level of revenues by \$1,315. Rather than issue a separate errata sheet, the Commission finds it appropriate to correct the error in this Order. Therefore, the Company's authorized revenues are increased to \$47,518,287 as demonstrated by the corrected calculation on the following page.

The balance of this order addresses the cost of service motions filed by MCC, changes in revenue moderation and rate design impacting motions filed by MDU.

COST OF SERVICE (COS)

While MDU filed no motions on COS, MCC submitted motions on three COS issues addressed in the final order in this Docket. MCC contends that the Commission misstated three of MCC's cost positions and/or methods used to compute costs. MCC seeks clarification on these positions and/or methods used. These positions include, 1) MCC's treatment of marginal demand cost data, 2) the Commission's portrayal of MCC's treatment of customer costs, and 3) MCC's classification of marginal demand costs as demand and energy. Furthermore, MCC makes the following requests in conjunction with the foregoing three positions or methods: 1) That the Commission order MDU to provide alternate estimates of distribution capacity costs in lieu of the demand data used by MCC; 2) that the Commission clarify its review of MCC's customer cost methodology in Finding of Fact No. 182; and 3) that the Commission reconsider its denial of MCC's proposed classification of marginal demand costs as demand and energy. Each of these related concerns and requests will be discussed in turn.

MCC Treatment of Demand Cost Data and
Request for Alternative Distribution Capacity Costs

MCC contends the Commission incorrectly portrayed Mr. Drzemiecki's testimony on marginal demand costs when it indicated that MCC appears concerned only with the difficulties associated with dividing marginal demand costs between capacity- and commodity-related investments. MCC argues that Mr. Drzemiecki questioned the use of historical trends in distribution mains investments but used the refined MDU provided data to compute marginal demand costs in the absence of alternative preferred data.

Thus, MCC renews its request that the Commission require MDU to "develop estimates of distribution capacity costs based on the cost of adding the least expensive increment to the system solely for capacity purposes" (MCC MFR, p. 2).

Commission Discussion and Decision

The Commission finds that in Finding of Fact Nos. 174 and 175 it addressed all of Mr. Drzemiecki's demand cost methods. The Commission would add that its intention was not to highlight MCC's segregation of demand costs between demand and commodity, but rather to give equal treatment to all of the aspects of MCC's applied methods. For purposes of clarity, the Commission recognizes Mr. Drzemiecki's concern with the data he used and notes its acceptance of his results, due in part to the refinements he made to the MDU data (see FOF No. 196, Order No. 5399b).

MCC's request for MDU to file estimates of least cost distribution capacity data appears to be based, in part, on MCC's inability to segregate energy costs from demand costs in MDU's

distribution mains investment data (Exh. No. 13, p. 8). Further, MCC maintains that the data provided by MDU, subject to MCC's refinements, would "likely approximate" preferred forecast data composed of the "lowest cost of satisfying additional distribution capacity requirements through additions to the existing system" (Exh. No. MCC-12, p. 30). Finally, MCC states that its refined MDU provided data was used since it was the only data available.

The Commission finds merit in distribution capacity costs based on additional investments to a system already in place, and that such investments should reflect the least costly measures required to meet needed capacity. The Commission would prefer, however, to move in a direction in which such costs can be avoided.

MCC's request does not appear to move in that direction. Therefore, the Commission denies MCC's request.

Although MCC's request relates to data restrictions and its classification of demand costs, the Commission makes the following comments regarding the data used by both MCC and MDU to compute marginal demand costs. In certain instances, in the final order in this docket, the Commission used the best elements from each party's cost studies to compute cost of service. Additionally, the Commission followed a policy that does not apply embedded cost study methods and results to compute cost of service (FOF Nos. 188-190, Order No. 5399b). Given these parameters, the Commission used the two marginal cost of service studies on record as a basis for its cost of service computations. The Commission would note, however, that it has reservations regarding the data used to compute marginal demand costs. The Commission finds that using historical cost data to approximate or represent the costs of

adding capacity to MDU's distribution system (Exh. Nos. MCC-13, p. 30 and PSC DR No. 37) conflicts with the principles of cost avoidability. The following explains the Commission's preference for avoided costs.

In arriving at rate design decisions, this Commission has routinely considered several well established criteria including, but not limited to 1) allowing a utility an opportunity to earn a fair rate of return, 2) moderation of rate impacts, and 3) efficiency in resource allocation. In a market economy prices serve to allocate resources. Since one goal of regulation is to simulate the results of competition for an industry characterized by monopoly, prices should be designed based on marginal costs. As prices affect resource allocation, one must ask if optimal prices exist to allocate resources. In theory, optimal prices lead to the most efficient resource allocation. One must then ask what is meant by "efficient" resource allocation. An efficient price reflects costs such that if consumers buy a product or service at a given price, the price charged reflects the resource costs incurred. If the consumers choose not to consume the product at a given price, society would avoid incurring the underlying resource costs.

The Commission finds the distribution mains data used by MCC and MDU to compute marginal demand costs are, by their historical nature, sunk and apparently no longer avoidable. Although the parties maintain that these distribution mains investments based costs approximate or represent the cost of adding capacity to the system, the Commission finds use of such data to compute marginal costs in conflict with its policy to use cost data

leading to avoidable costs. As a means of addressing these concerns, the Commission finds that MDU should file either marginal costs, based on data which will result in avoided costs, or provide testimony stating why such costs and methods used to produce such costs are not appropriate. This should take place in MDU's next filing in which demand costs directly or indirectly affect MDU's proposals. The Commission intends to fully explore the merits of using avoidable costs as a possible enhancement of its calculation of marginal costs.

Commission's Interpretation of MCC's Customer Cost Method

MCC requests that the Commission reexamine its portrayal of MCC's treatment of customer costs and clarify its summary of MCC's customer cost methodologies. MCC maintains that Mr. Drzemiecki did not classify customer costs as 50% demand and 50% energy, as Finding of Fact 182 suggests.

Commission Comment

Reexamination of Mr. Drzemiecki's direct and supplemental testimony reveals that the Commission's portrayal of his methods used to compute customers costs is incorrect. The following correction should replace the first sentence of Finding of Fact No. 182 in Order No. 5399b:

The Commission finds that MCC classified distribution mains costs in its embedded cost study as 50% demand and allocated these costs in proportion to the peak demands of distribution customers. MCC then classified the remaining distribution mains costs as commodity related and allocated these costs according to distribution-level commodity requirements.

Although these allocations may be more appropriately described under the "Allocations" section of the Final Order (at about FOF 183-185), Mr. Drzemiecki's customer cost allocations were made within his embedded cost study. These customer cost allocations were done separately from his overall COS allocations.

Problems with the Data Underlying MCC's Marginal Demand Costs

MCC requests that the Commission reconsider its 100% classification of the adopted MCC marginal demand costs as demand.

MCC contends the Commission ignored Mr. Drzemiecki's concerns regarding the quality of the underlying data, which drew him to classify demand as 50% demand and 50% commodity (cf FOF 204, Order No. 5399b).

Commission Discussion and Decision

In consideration of MCC's request, the Commission applies the analysis contained in Mr. Feingold's supplemental rebuttal testimony (Exh. No. MDU-L, pp. 6-7, henceforth MDU). MDU first notes that in his direct testimony Mr. Drzemiecki maintained it was appropriate to assign demand costs to interruptible customers, but changed his approach to argue the contrary in his supplemental testimony. MDU characterized MCC's alternative argument as based on the point that the peak demand requirements of interruptible customers should not affect the allocation of costs to interruptible customers. MCC says it is only the commodity requirements that affect the allocation of costs to interruptible customers (Exh. No. MCC-13, p. 9). However, MDU also recognizes that if MCC would continue to treat distribution mains costs as only capacity, interruptible customers would not be allocated any of these costs. MDU effectively notes that since MCC classifies distribution costs as 50% commodity, it continues to assign distribution costs to interruptible customers (Exh. No. MDU-L, p. 6). MCC notes, however, that the 50% classification is a result of the lack of precision in the estimates of distribution investments as to whether these investments were made as commodity or capacity related (Exh. No. MCC-13, p. 8). MDU contends that interruptible

customers do not cause it to incur demand related costs due to their interruptible nature (Exh. Nos. MDU-L and MDU-J).

The Commission finds the foregoing argument sound and adopts MDU's position. The Commission finds that MCC's 50% classification of distribution mains costs as commodity-related inappropriately assigns peak based costs to interruptible customers.

MDU notes that an additional unit of gas flowing on an LDC's distribution system at times other than during peak load conditions does not cause an LDC to incur additional fixed costs associated with distribution mains (Exh. No. MDU-L, p. 7). MDU also notes that the way MCC computes its per MCF of capacity distribution investment suggests no degree of commodity related investment. An examination of Exh. No. MCC-13, JD-7, p. 3 shows that MCC relates demand related additions costs with additions to capacity. Hence MDU maintains that MCC's method of computing distribution costs and classification of those costs are contradictory.

By applying MDU's logic regarding costs associated with distribution mains during times other than the peak, the Commission

finds illogical MCC's proposal to classify distribution costs as demand and commodity. The Commission notes that while annual throughput capabilities are expanded as capacity is increased, expanded annual throughput capability appears to be a by-product of increased capacity. The only way the Commission can justify that peak capabilities and average annual throughput would be served equally by investments in distribution mains is if MDU's firm customer load factor were 100%. Moreover, if the investments made in distribution mains were not peak related then MDU would probably be forced to interrupt firm customers during peak days. Hence, as regards the work orders MCC used as data to compute marginal demand costs (Exh. No. MCC-5, DR No. 5-11.1), the Commission maintains that the prevailing logic would suggest that these investments could only have been made to meet peak capabilities.

In addition, MCC stated that if the same plant used to meet distribution system peak demands were not resilient, that plant could not be used to meet average energy requirements (PSC DR No. 112). However, MDU stated that its Montana distribution mains are adequately resilient to meet loads every day of a given year (PSC DR No. 247).

If, in a future proceeding, MCC can provide empirical evidence that a portion of the investments it uses to compute marginal demand costs are used for the purpose of providing annual throughput separately from meeting peak demand, the Commission may consider classifying a portion of demand costs as commodity. However, in the instant docket, the Commission will maintain its decision to classify demand costs as 100% demand.

Other COS Issues

Reconciliation. While not entirely a direct result of motions filed in this Docket, the Commission finds necessary to revise its Tables C10 and C11, per the Commission's adjustment to annual revenues and MDU's motion for reconsideration. The effect of these changes (see Finding of Fact No. 10 above and the Commission's decision on MDU's rate design motions, below) is an increase in the equal percent reconciliation factor applied to total marginal costs as a means of reconciling the Commission's total marginal costs to MDU's allowed revenue requirement. This change appears in columns 3 and 4 of Revised Table C10 and in column 6 of Revised Table C11. These tables are provided in Appendix A.

RATE DESIGN

MDU was the only party to file motions directly impacting the final rate design in this Docket. MDU sought reconsideration regarding the Commission's treatment of 1) revenues used to develop its "Adjusted Pre-Final Revenues" (Table C11, Order No. 5399b) and 2) the treatment of rate refund revenues in its determination of modified class revenue requirements. These revenues appear in Table C11 of the Final Order under the title "Other Revenues". The following addresses each of MDU's motions.

Commission Decision

Adjusted pre-final revenues were used by the Commission as the base line scenario upon which moderated class revenue requirements were determined. "Other Revenues", as stated on Table C11, were developed as stated in Table 1:

Table 1.
Other (Non-Rate Class) Revenues per Table C11

Other revenues, Statement H, page 1.	\$95,984
Provision For rate refund, FOF No. 28	28,504
Base rate revenue adjustment, FOF No. 47	8,285
NSF Check Charges, FOF No. 52	3,500
Late payment charges, FOF No. 57	19,371
Gain on sale of property, FOF No. 60	29,453
Total	<u>\$185,097</u>

The following addresses each of MDU's two motions regarding the Commission's computation of other revenues.

First, MDU contends that the Commission double counted an adjustment for rounding base rate revenues by an amount of \$8,285.

Although the Commission denies MDU's motion regarding the \$8,285 adjustment in base rate revenues (FOF Nos. 4-6, above), the Commission finds it has double counted the \$8,285 in its revenue category called "Other Revenues" (Table C11). The computation of

adjusted pre-final revenues for each class already includes the adjustments made in Finding of Fact Nos. 46 and 47 in the final order, which consist of an adjustment for PSC tax related rounding errors.

Second, MDU contends that the Commission apparently double counted the provision for rate refunds. The Commission acknowledges that it did not properly adjust other per books revenues from Statement H, p.1. Hence, the Commission's other revenue figure in Table C11 includes a double counting of the provision for rate refunds.

An examination of other operating revenues (Statement L, Part A, p. 13, ll. 15-29) shows \$67,480 (other revenues adjusted for transportation revenue and provision for rate refund). Adjusted Montana per books revenues shows an increase in the provision for rate refund of \$28,504 (Id. p. 3, l. 16). The provision for rate refund revenues was accepted by the Commission in Finding of Fact No. 28 of the Final Order (Order No. 5399b). Hence, inclusion of the provision for rate refund revenues as other operating revenues would result in double counting these revenues.

The correct calculation of other revenues per MDU's two motions are as summarized on Table 2.

Table 2
Adjusted Other (Non-Rate Class) Revenues

Adjusted other operating revenues	
Statement L, Part A, p. 13	\$67,480
Provision For rate refund, FOF No. 28	28,504
NSF Check Charges, FOF No. 52	3,500
Late payment charges, FOF No. 57	19,371
Gain on sale of property, FOF No. 60	29,453
 Total	 <u>\$148,308</u>

Removal the base rate adjustment and the double counted provision for rate refund results in a revenue shift of \$36,789 away from "Other Revenues" in Table C11. Additionally, per Finding No. 10 above, the total revenue requirement for the Commission's moderated class revenue requirements increases by \$1,315. Consistent with its final order in this case, the Commission finds reasonable to spread the \$36,789 shifted revenues and the \$1,315 minor adjustment to MDU's revenue requirement equally to Rates 60 and 70. This results in approximately a net equal percent increase of 1.22% to Rates 60 and 70 class revenues over the adjusted pre-final revenue level, as stated in Revised Table C11. This

increase is in lieu of the 1.13% applied in the Final Order (FOF No. 221). The Commission anticipates the aforementioned revenue changes will result in Commodity charges for Rates 60, 62, 70, and 72 as indicated in Table 3.

Table 3
Anticipated Commodity Charges Per The
Commission's Change in Revenues

<u>Rate Class</u>	<u>Commodity Charge</u> <u>(\$/dk)</u>		
	<u>Annual</u>	<u>Summer</u>	<u>Winter</u>
Rate 60	\$4.253		
Rate 62		\$3.876	\$4.296
Rate 70	4.559		
Rate 72		4.165	4.601

The Commission requires MDU to file work papers reflecting the changes to revenues, per the rate design portion of this order. These workpapers should reflect changes in the commodity charges to Rates 60, 62, 70, and 72. Additionally, the Commission finds MDU's treatment of the PSC tax, as noted in Finding of Fact Nos. 307 through 310 (Order No. 5399b), will be

effected by the above revenue shifts and increase. Hence, MDU must file work papers, similar to those required in Finding of Fact No. 310 of the Final Order, reflecting this change. The Commission anticipates an upward change of \$488.

Implementation

With regard to implementing the above stated changes in rates, the Commission prefers to defer the rate change until MDU's next gas tracker filing. With its next tracker filing, MDU must provide sufficient workpapers and exhibits demonstrating that the rate changes approved in this Order have been properly incorporated into the tracker.

In Order No. 5360e, Docket No. 88.6.15, the Commission allowed the Montana Power Company to accrue interest or apply a carrying cost to an adjustment regarding insurance dividends. Similarly, in this Docket the Commission will allow MDU to accrue an annual carrying cost equal to its allowed overall rate of return in this proceeding (10.828%) on the net revenue adjustments granted in this Order. The Commission finds this approach to be most appropriate because of the relatively minor change in rates

resulting from this Order. MDU is required to indicate in its compliance filing the interest amount it expects to accrue.

CONCLUSIONS OF LAW

1. The Applicant, Montana-Dakota Utilities 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 Commission properly exercises jurisdiction over the Applicant's rates and operations. Section 69-3-102, MCA, and Title 69, Chapter 3, Part 3, MCA.

3. The Commission has provided adequate public notice of all proceedings and opportunity to be heard to all interested parties in this Docket. Title 2, Chapter 4, MCA.

4. The rate level and rate structure approved herein are just, reasonable, and not unjustly discriminatory. Section 69-3-330, MCA.

ORDER

1. The Montana-Dakota Utilities Company shall file rate schedules in its next tracker filing (May 1, 1990) that incorporate the adjustments to Final Order 5399b described herein.

2. Interest on the net revenue adjustments, as indicated in Finding of Fact 39, will begin to accrue upon Commission staff review and approval of MDU workpapers as described in Finding of Fact 37.

3. MDU is directed to comply fully with all findings contained in the body of this Order.

4. MDU is directed to address Commission concerns expressed at Finding of Fact 19 in its next appropriate filing, as described at Finding of Fact 19.

5. MDU shall provide the Montana Consumer Counsel with all resulting rate schedules and workpapers also provided to the Commission.

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

7. This Order is effective immediately.

DONE AND DATED this 7th day of February, 1990, by a 3 to 0
vote.

BY ORDER OF THE MONTANA PUBLIC SERVICE COMMISSION

HOWARD L. ELLIS, Commissioner

WALLACE W. "WALLY" MERCER, Commissioner

DANNY OBERG, Commissioner

ATTEST:

Ann Peck
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.

Revised Table C11
MDU's Pre-Interim and Interim Revenues and Commission's
Pre-Final Revenues and Moderated Class Revenue Requirements

Adjusted (\$000)	Commission's Adjusted Interim Rate	Equal Percent Total Revenues 1/	Commission's Reconciled Pre-Final Revenues 2/	Moderated Marginal Total Revenues 3/	Marginal Costs
Resident \$28,498 \$27,928	60	\$27,585	\$27,830	\$27,592	\$25,879
Commercial Firm 17,154	70 17,178	16,639	16,786	16,971	15,578
Commercial Interrupt 595	71 740	1,084	1,094	740	540
Industrial Interrupt 1,081	85 1,261	1,022	1,032	1,261	982
Commercial Transport 0.469	81 28	5.8	5.8	12	0.426
Industrial Transport 40	82 234	422	422	349	36
Standby Firm 0	83	0	0	0	
Commercial Firm Transport 0	84	0	0	0	
Alternate Fuels 0	90	0	0	0	
Rate 0.049	93 0.049	0.049	0.049	0.049	
Other Revenues 148	4/ 148	96	96	148	
Total \$47,518 \$47,518	\$46,854	\$47,266	\$47,074	\$40,017	

- 1/ Per Statement H, p. 8, and MDU's interim work papers. Rate 97 revenues were added to Rate 82 for pre-interim and interim revenues.
- 2/ Per workpapers sent regarding the Commission's approval of an equi-percent revenue increase (received 2/13/89). Revenues for Rates 81 and 82 were held constant in the interim.
- 3/ Exh. Nos. MDU-F, TAA-1, MCC 1-35. Revenues represent prices tariffed prior to Interim Order No. 5399, in addition to other revenues resulting in the docket. Volumes and number of customers are those accepted in this order.
- 4/ Applicant's Statement L and FOF Nos. 28, 52, 57 and 60.

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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-DAKOTA UTILITIES COMPANY,) A Division of MDU Resources Group,) Inc., for Authority to Establish) Increased Rates for Gas Service.)	UTILITY DIVISION DOCKET NO. 88.11.53 ORDER NO. 5399d
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TECHNICAL

APPENDIX

A

Revised Table C10
Commission Adopted Total Marginal Cost
and Revenue Requirement Reconciliation

Total Marginal Rate Class	Cost Class	Reconciled Marginal Reconciliation Revenues	Cost Revenue Factor	Requirements 1/
Resident	60	\$25,879,099	1.1012019846	\$28,498,115
Commercial Firm	70	15,577,918	1.1012019846	17,154,435
Commercial Interrupt	71	540,451	1.1012019846	595,145
Industrial Interrupt	85	982,287	1.1012019846	1,081,696
Commercial Transport	81	426	1.1012019846	469
Industrial Transport	82	36,387	1.1012019846	40,070
Standby Firm	83			
Commercial Firm Transp	84			
Alternate Fuels	90			
Rate	93			
Seasonal: Resident	62			
Comm Firm	72			

