READING FILE

Service Date: May 30, 1979

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

In the Matter of the Application of the CITY OF BIG TIMBER for authority to adopt increased water rates.	)))	Docket No. 6651 Stipulated Final Order No. 4512

APPEARANCES

For the Applicant:

James A. Tulley, Attorney at Law, Paulson & Tulley, P.O. Box 700, Big Timber, MT 59011

For the Protestant:

Geoffrey Brazier, Montana Consumer Counsel, 34 West Sixth Avenue, Helena, MT 59601

For the Staff:

Eileen E. Shore, Attorney
James Dwyer, Rate Analyst

Before:

THOMAS J. SCHNEIDER, Commissioner & Hearing Examiner

APPLICATION AND PROCEEDINGS

1. On January 25, 1979 the City of Big Timber (Applicant) filed a petition with the Montana Public Service Commission pursuant to jurisdiction granted by Section 69-3-101 et seq., MCA (Section 70-101 et seq., R.C.M. 1947) for an order authorizing Applicant to increase its water rates for additional revenue to defray increased costs of operation and to maintain, repair and renovate the existing system.

2. On January 31, 1979 a Notice of Proposed Hearing was published in this matter.

3. Protests and requests for a public hearing were received by this Commission.

4. Subsequently a notice of Public Hearing was published on March 30, 1979. This notice was published in the April 11, 1979 edition of the Billings Gazette and the April 4, 1979 edition of the Big Timber Pioneer. The notice set this matter for public hearing in the Sweet Grass County Courthouse Courtroom in Big Timber at 10:00 a.m., May 1, 1979.

5. On April 10, 1979 the Montana Consumer Counsel (MCC) submitted several data requests to the Applicant.

6. On April 17, 1979 the Applicant responded to the data requests of MCC.

7. On May 1, 1979 at 10:00 a.m. this matter was heard in the Courtroom of the Sweetgrass County Courthouse, Big Timber, Montana.

The Commission having taken evidence and being fully advised in the premises makes the following Findings of Fact, Conclusions of Law and Order.

FINDINGS OF FACT

1. The Applicant presented five witnesses. They were Mayor Harold McLauchlan; John Gow, ES, MS, Phd of the firm of Christian, Spring Seilbach and Associates (CSSA) the consulting engineers for the City of Big Timber; Eugene S. Hufford, Vice President of D. A. Davidson & Company and manager of the firm's Municipal Bond Department, also financial consult-

ants to the City of Big Timber; Arden Kahl, Project Manager CSSA; and Lois Birendahl, City Treasurer.

2. Mayor McLauchlan's testimony was primarily concerned with City Council's policy concerning the Big Timber Water Department. The Mayor testified with respect to several instances in recent summers in which water usage was restricted due to lack of an adequate water supply. When cross-examined about public participation the Mayor was unable to give specific instances in which the public was invited to discuss and participate in the decision making process with respect to water problems in Big Timber. The Mayor stated that because, under state law, the City is not required to submit the issuance of revenue bonds to voters for approval, no election was held.

Further cross-examination elicited the fact that the City Council had discussed the principle of metering all consumption but had declined to proceed because of the expense involved and public opposition to the metering project.

Consideration of modifying the present rate structure was not considered by the City Council.

During redirect the Mayor stated that the local press constantly attended and monitored City Council proceedings. Further redirect testimony by the Mayor produced the fact that the standard lot size in Big Timber for purposes of the residential water rates is considered to be 30 feet by 140 feet or 4,200 square feet.

PROPOSED IMPROVEMENTS

3. Mr. Gow's testimony concerned the engineering projects that CSSA has undertaken for the Big Timber Water Department. The current study conducted by CSSA (Exhibit 1) contained five recommendations as follows:

1) Construction of a new 600,000 gallon reservoir
2) Replacement of the water main on 4th Avenue (Designated "B" line in the study)
3) Cross ties on Harris Street (Designated "C" line in the study)
4) Cross ties on Walnut Street (Designated "A" line in the study)
5) Two blocks of eight inch main on 2nd Avenue (Designated "D" line in the study)

Witness Gow testified that each of these could be completed as individual projects but his professional opinion was that all improvements should be completed as one project.

A. Distribution Lines

The study states that a computer model showed lines "A" and "D" offer "moderate to no improvement in the system residual pressures." (Page 8) It further states that line "A" "would alleviate some pressure and flow shortages east and south of the highway. However, only a small portion of Town is affected." It is similarly stated that "the new crosstie in the proposed 'B' line above <u>accomplishes essentially the same residual pressure</u>." (Emphasis added)

The study also states that line "D" "would provide increased fire flow capability in the commercial area of downtown; however, residual pressures in other parts of town remain unaffected."

The total cost of lines "A" and "D" will be $89,500. In view of the statements cited above, and in view of the study's statement that proposed line "B" will provide adequate fire flow capability for the commercial area (Page 7), the Commission strongly recommends that the City take a hard look at the advisability of approving construction of lines "A" and "D" at this time.

The Commission does not find that these proposals are so unnecessary as to warrant disapproval of that part of the rate request which will pay for these investments. Whether these projects should go forward should be left to the judgment of the City. The Commission does urge careful consideration of this matter, however, given the large impact for consumers of the rate increase granted by this order. As previously noted, Mr. Gow stated that the study recommendations could be completed as individual projects.

B. Reservoir Sizing and Inflow Capacity

The Commission received as a late filed exhibit the work paper setting out calculations of appropriate reservoir size. It is apparent that 240,000 gallons of storage is required for fire flow reserve (2,000 gpm for 2 hours). The remainder of the 600,000 gallon design capacity is population or consumption related. The engineering firm based its design on a population of 3,000 in the year 2010. Testimony by Mr. Mike Seiz of the City County Planning Staff essentially endorsed that projection based upon a current growth rate of about 2% per year.

Projecting to year 2000 (instead of 2010) at a 2% growth rate would yield a population of about 2,600. Performing the same calculation as the

Engineers, a reservoir design requirement of about 450,000 gallons is thereby determined. Testimony by the Engineers suggested there was not a substantial difference in cost between a 600,000 gallon tank and a 500,000 gallon tank. The Commission recommends that the City get cost estimates from the Engineers comparing 400, 500, and 600 thousand gallon reservoirs. The City will then be in a position to make an informed decision on the desired reservoir capacity. It may be that the "planning cushion" provided by the larger reservoir offsets the differential cost as suggested by Mr. Gow.

Finally, the record is not clear with respect to the capacity or capability of the inflow gallery. Mayor McLauchlan testified that high water had changed the course of the river, reducing its deliverability to the system.

The "Wenzel Report" related that in the dry summer of 1973 the water level dropped so much that the discharge pipe from the gallery was running only half full.

Mr. Rudolph Falling testified that the galleries were regularly cleaned in earlier years and suggested a need to clean them now. He further suggested a low lift dam to raise the water level for the intake. The Wenzel report recommended that action as well.

The Commission suspects that installation of any dam on the Boulder River is highly improbable. However, we suggest the City meet with the engineers to determine whether the limited intake capacity may limit the usefulness of the proposed reservoir. (i.e. Did inflows even fill the existing smaller reservoir during off peak hours during low water?) The information on this record is simply not adequate for the Commission to evaluate the "operating plan."

C. Potential Investment Modifications

If the City decides to modify the proposed improvements by CSSA to exclude "A" and "D," investment in facilities is reduced from $484,500 to 394,900. A corresponding adjustment should be made for the items listed as contingencies and engineering costs. Cross-examination of Mr. Gow attempted to derive the calculation of contingency, legal and administrative costs associated with the engineering of these projects. Application of an "equal percentage of investment" to the proposed contingency and engineering cost estimates would appear reasonable, with the following result:

Contingencies	38,700
Engineering	71,476
	$110,176

If the City were to choose to proceed with the project except for "A" and "D" the following table would appropriately estimate the construction and other costs:

Table
Estimated Cost
Less Line A & D

Construction Cost	484,400
Less: A & D	-89,500
	$394,900
Contingencies @ 9.8%	38,700
Engineering @ 18.1%	71,476
Right of Way	10,000
Soil Investigation	5,300
Legal & Administrative	15,000
Total Cost of Project less A & D	$535,376

METERING AND WATER USAGE

4. Witness Gow also testified about water consumption in Big Timber and a town of like size. The following table is from his testimony:

Big Timber	200-250 gal.	Water per capita/day-winter
Other	175 gal.	water per capita/day-winter
Big Timber	650 gal.	water per capita/day-summer
Other	250 gal.	water per capita/day-summer

From this testimony, it becomes evident that water consumption in Big Timber is extremely high when compared to metered systems in Montana. Testimony by Mayor McLauchlan confirmed that supply was a serious matter in summer months. The City first limited sprinkling use to alternate days and then to alternate days with limited morning and afternoon sprinkling times.

Public testimony was evenly divided on the desirability of meters. Arguments in favor of meters pointed to: (1) the unfairness of the rate structure based on numbers of rooms instead of water use; (2) the excessive or high use of the unmetered system; and (3) the possibility of saving substantial investment in new facilities because of decreased water consumption and peak demands. Arguments against metering included: (1) the cost of meters and difficulty of converting locations with existing "standpipes"; (2) a desire to use water to keep Big Timber green and beautiful; and (3) a concern that the cost of meters would be <u>added to</u> rather than substituted for the proposed reservoir and distribution system investments.

Witness Kohl was presented by the City to relate the extremely high cost associated with a metering project. Kohl testified that each meter installed would cost approximately $140, for a total cost in excess of $100,000 for such a project.

The Commission strongly favors metered service for all utilities. Without metered service it cannot be determined with certainty that any rate structure is nondiscriminatory and fairly reflects the cost of providing service to individual customers. Similarly, unmetered service results in uncontrolled and excessive usage which in turn requires excess capacity, storage, and distribution costs. The Commission, however, is reluctant to force municipal systems into a particular investment or policy.

The Commission strongly recommends that the City examine this question carefully with the engineering firm to obtain a comparison between the metering cost (including meter reading) and the potential savings in new investment through reduced usage and peak demands prior to a final decision on the proposed construction project.

The Commission makes it clear, however, that the Order granting rate relief to accomodate the City's investment in facilities does not depend on a particular course of action by the City. It is not the Commission's intent to inject itself into the management decision of the City in selecting a water system design, but rather to assist the City in making a fully informed decision on the proposed design which will have a marked impact on the water consumer.

RATE STRUCTURE

5. The Commission is persuaded that the existing tariff which relates the residential customer bill to the number of rooms is not the most equitable basis for unmetered rates. While equity or fairness between customers is not easily achievable on an unmetered system, it is the responsibility of the

Commission to do its best to align rates with water use (or cost of serving). The record testimony indicates the City, faced with a desire to proceed with the proposed construction project, opted to leave the existing rate structure unchanged by applying a uniform percentage increase to all customers at the earliest practicable time.

The Commission, from the public testimony in this case, finds that a tariff based upon the number of persons in a home is a better indicator of water use than numbers of rooms. Although some individual inconvenience and administrative burden is involved in setting up the change, basic fairness requires it. A possible conversion method would be to include a "census form" in the customer bill. A list could then be posted by the City to set out the number of persons per household.

A conversion to a "number of people" based tariff from a "number of rooms" tariff for residential customer would require a calculation to assure a revenue match. The residential revenues per period under the current tariff divided by the "census" number of customers will yield the current revenue per person per period for the revised approach. A percentage increase would then be applied to that rate to reflect the approved increase resulting from the investment to upgrade the water system, which is ultimately approved by the City for its revenue bond issue.

The equity of the rate of the cement Redi-Mix plant was correctly questioned by certain residential consumers. A reexamination of the entire commercial rate is desirable. The City council is obviously most familiar with the character of the businesses. A reexamination of the existing commercial rate structure is in order to more nearly reflect the cost of providing water

to each broad business category (barber shop, laundromat, cafe, bar, bank). Numbers of persons and character of business would generally indicate relative water use. Residential use (excluding sprinkling) should provide the basis for comparison in devising a commercial tariff. Because there was virtually no discussion of commercial rates a uniform percentage increase applied to existing rates is considered appropriate until the reexamination of commercial rates is performed by the City. (See ordering paragraph No. 6).

BONDING AND REVENUE REQUIREMENTS

6. Witness Hufford testified about the current revenue bond and the proposed revenue bond issue. Hufford recommended, in the light of current market conditions, a bond coverage factor of 130%. With certain reservations as to the use of the excess 30%, this Commission finds that witness Hufford's calculation of $99,054 is an accurate reflection of the bond debt service involved in the 1974 and 1979 proposed bond issues.

7. Witness Bierendahl testified about current balances in the City water department. Her testimony indicated that the City does currently allocate salaries in accordance with generally accepted accounting practices. The City did present three or four financial statements for this matter and as such this Commission finds it must accept the only audited report available, that being the Galusha, Higgins & Galusha report sent to MCC in answer to data requests.

8. Accordingly the Commission adopts the following test year based on witness testimony and the Galusha, Higgins and Galusha audit report:

	GHG 1978	ADJ	Test Year
Cash Income from Operation:			
Customer sales	$39,108.53		$ 39,108.53
Taps, hookups	24.80		24.80
Interest Income	1,450.98	(a) 4,680.00	6,130.98
Total	$40,584.31		$ 45,264.31
Operating Expenses			
Salaries et al	$10,128.98		$ 10,128.98
Chemicals	376.86		376.86
Utilities & Maintenance	2,198.72		2,198.72
Gas & Oil	216.74		216.74
Supplies	1,977.49		1,977.49
Repairs	72.65		72.65
Postage	177.53		177.53
Audit & Legal	202.78		202.78
Reports & Fees	176.40		176.40
Water Reservation Hearings	1,824.12	(b) (1,824.12)	-0-
Water Analysis	170.00		170.00
Miscellaneous	181.37		181.37
Total Operating Expenses	$17,703.64		$ 15,879.52
Net Revenue	$22,880.67		$ 29,384.79
Other Deductions:			
Interest (Debt Service)	6,526.50	(c) 92,527.50	99,054.00
Depreciation	7,800.28	(d) (7,800.28)	-0-
Trenching & Pipe	6,050.36	(e) (3,050.36)	3,000.00
Total Other	20,377.14		$102,054.00
Net Income (Deficit)	$ 2,503.53		$(72,669.21)

(a) With the sale of the new bond issue, certain new funds will be required for reserve. The reserve fund requirement is equal to the highest year's principal and interest, or $78,000 and must be achieved in the first five years of the bond issue. Because the 30% coverage factor can be used to achieve this reserve at an earlier date, the calculation can be 78,000 X 6% = $4,680. The City will inform this Commission when it has achieved the required $78,000 reserve so that the 30% coverage factor as in Ordinance 295 Section 3.06(d) can be used to offset repairs and maintenance.

(b) The water reservation hearing expense is a nonrecurring expense that is deleted from the test year.

(c) Witness Huffords amount of $99,054 is accepted.

(d) Depreciation as a non-cash item is not allowed.

(e) Historical Capital Outlay of $3,000 is allowed.

A revenue increase of $72,669 per year is required in order to satisfy the operating expense and debt service if the City elects to proceed with the entire construction program proposed. (See Finding No. 3). An increase of 160% is required to achieve that revenue increase ($\frac{72,669}{45,264}$ = 160%).

CONCLUSIONS OF LAW

1. The Big Timber water system is a public utility furnishing water service to consumers in Montana.

2. This Commission has jurisdiction over the rates and conditions under which utility service is rendered in Montana.

3. The rate increase granted by this order is necessary to meet the utility's reasonable expenses and to make necessary repairs and additions in order to insure that consumers receive adequate service.

4. The rates authorized by the Commission are just, reasonable and not unjustly discriminatory.

ORDER

1. The City of Big Timber shall file rate schedules which reflect a 160% increase over present approved rates, as calculated in Finding No. 8.

2. The filed tariff shall be effective for water service rendered on and after the first day of the first month following sale of the revenue bonds.

3. A copy of the Bond Sale Agreement will be filed with the Commission.

4. Any interest earned on the reserve account will go into the water fund.

5. If the City sells bonds totalling less than $650,000, (See Finding of Fact Number 3) the City shall apply to the Commission for an appropriate corresponding downward adjustment in the rates approved by this order.

6. The City shall institute an investigation into the current rate structure. This investigation must include the considerations outlined in Finding of Fact Number 5, as well as other considerations the City thinks desirable. This investigation shall not stay the effective date of this order. The City shall report to the Commission the results of its investigation no later than September 1, 1979. Following receipt of the City's report, the Commission will hold a public hearing to consider the desirability of adjusting the present rate structure to more equitably apportion costs according to estimated usage.

DONE IN OPEN SESSION at a meeting of the Montana Public Service Commission held on May 29, 1979 by a vote of 5-0.

GORDON E. BOLLINGER, Chairman

CLYDE JARVIS, Commissioner

THOMAS J. SCHNEIDER, Commissioner

JAMES R. SHEA, Commissioner

GEORGE TURMAN, Commissioner

ATTEST:
Madeline L. Cottrill
Commission Secretary

(SEAL)

NOTE: You are entitled to judicial review of the final decision in this matter. If no Motion for Reconsideration is filed, judicial review may be obtained by filing a petition for review within thirty (30) days from the service of this order. If Motion for Reconsideration is filed, a Commission order is final for purpose of appeal upon the entry of a ruling on that motion, or upon the passage of ten (10) days following the filing of that motion. cf. the Montana Administrative Procedure Act, esp. Sec. 2-4-702, MCA; and Commission Rules of Practice and Procedure, esp. 38-2.2(64)-P2750, ARM.