

STATE OF MICHIGAN
BEFORE THE MICHIGAN PUBLIC SERVICE COMMISSION

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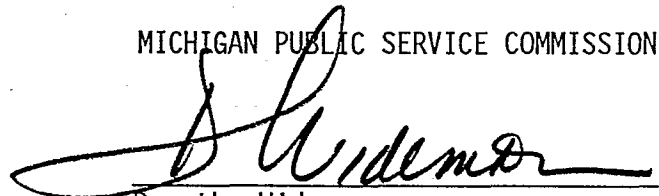
In the matter of the application of
MICHIGAN GAS COMPANY for authority to
increase its rates for the sale of gas
and for other relief.

Case No. U-9323

ERRATUM

On June 29, 1990, the Commission issued an order in this case that requires a correction to be made on pages 88 and 89. The date of the order is corrected to read June 29, 1990.

MICHIGAN PUBLIC SERVICE COMMISSION



Dorothy Wideman
Its Executive Secretary

July 10, 1990
Lansing, Michigan
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At a session of the Michigan Public Service Commission held at its offices
in the city of Lansing, Michigan, on the 29th day of June, 1990.

PRESENT: Hon. William E. Long, Chairperson
Hon. Ronald E. Russell, Commissioner

OPINION AND ORDER

I.

HISTORY OF PROCEEDINGS

On April 14, 1989, Michigan Gas Company filed an application for authority to increase its rates by \$6 million per year. The application was accompanied by supporting testimony and exhibits reflecting an annual revenue deficiency of approximately \$9.6 million.

Pursuant to due notice, a prehearing conference was held on May 23, 1989 before Administrative Law Judge Lana Shafer (ALJ). Michigan Gas, the Commission Staff (Staff), and the Association of Businesses Advocating Tariff Equity (ABATE) participated in the proceedings. Cross-examination of the company's direct case was completed on July 24, 1989. As a result of discussions among the parties, a full settlement was reached and a signed agreement was received into evidence on September 11, 1989. Despite the existence of this settlement, the Staff filed its direct testimony on September 14, 1989. That testimony proposed granting a final rate increase of approximately \$2.4 million.

On October 11, 1989, the Commission issued an order rejecting the settlement agreement and returning the case to the ALJ for further proceedings. Although not specifically finding that the settlement was unreasonable, we determined that the issues of this case should be resolved on the basis of a contested case record. Thereafter, on October 13, 1989, Michigan Gas filed a motion for partial and immediate rate relief (interim rate relief) in the amount of \$2.4 million. On that same date, Michigan Gas filed direct testimony and one exhibit in support of its request for interim rate relief.

A prehearing conference was held on October 19, 1989, at which the ALJ established a schedule for future hearings and ordered Michigan Gas to provide its customers with notice of the motion for interim rate relief. Following issuance of this notice, the Staff filed a Report and Technical Staff Investigation and Recommendation (report and recommendation) regarding Michigan Gas's motion. That same day, November 20, 1989, the Staff filed the direct testimony of two witnesses and two exhibits supporting its report and recommendation. On November 21, 1989, Michigan Gas filed the rebuttal testimony of one witness concerning this issue.

The direct cases of Michigan Gas and the Staff regarding the motion for interim rate relief were cross-examined on November 27, 1989. In addition, the ALJ heard arguments on the Staff's motion to strike the utility's rebuttal testimony concerning interim rate relief. Although the ALJ granted the motion to strike, she allowed Michigan Gas to create a special record containing the direct testimony and cross-examination of this proposed rebuttal witness. Following receipt of briefs from all parties, the Commission rejected the utility's request for interim rate relief in an order issued on January 23, 1990.

Cross-examination of the Staff's direct case on final rate relief was completed on December 1, 1989. The utility's rebuttal and the Staff's surrebuttal

testimony regarding final rate relief were cross-examined on January 16 and 20, 1990, respectively. These proceedings generated a total of 14 volumes of transcript encompassing 2,101 pages. In addition, 80 exhibits were marked for the record. Michigan Gas and the Staff filed briefs and reply briefs, and the ALJ issued a Proposal for Decision (PFD), recommending a rate increase of \$3,097,974, on March 26, 1990. Thereafter, both Michigan Gas and the Staff filed exceptions and replies to exceptions on April 16 and 30, 1990, respectively.

II.

DESCRIPTION OF THE APPLICANT

Michigan Gas furnishes natural gas at retail to the public in service areas in the lower peninsula counties of Allegan, Berrien, Cass, Ottawa, St. Joseph, and Van Buren; the western upper peninsula counties of Baraga, Houghton, Marquette, and Ontonagon; and the eastern upper peninsula counties of Luce, Mackinac, and Schoolcraft.

The present rates of Michigan Gas, exclusive of Gas Cost Recovery (GCR) factors, are those established by the Commission in the Opinion and Order issued October 25, 1988 in Case No. U-9112.

III.

TEST YEAR

A test year must be selected in each rate case. In this proceeding, Michigan Gas proposed using a fully-projected test year based on the 12 months ending December 31, 1990. In contrast, the Staff used a historical test year based on figures from year-end 1988. Finally, while not conceding that the use of its fully-projected test year was inappropriate, Michigan Gas offered rebuttal testi-

mony supporting the use of a historical test year modified by specific known conditions.

In support of its initial proposal, Michigan Gas points out that it has been the past practice of the Commission to base its rate case decisions upon projected test year data. Because the projected test year closely matches the calendar year in which proposed rates will first take effect, the utility argues, its use better assures that just and reasonable rates will be established. Further, Michigan Gas asserts, use of its projected test year allows for the inclusion of known, measurable, and significant expenditures that are not reflected in historical data. For example, the utility contends that use of its projected test year will assure the inclusion of funds for its proposed 1989 and 1990 construction programs, as well as the increased working capital needed to add significant amounts of underground storage to its system. Because the financial impact of those projects is not recognized by use of historical data, Michigan Gas believes that its 1990 fully-projected test year should be adopted.

The Staff's approach to developing a test year differs greatly from the utility's. For example, the Staff asserts that Michigan Gas's proposal has no basis in fact but, instead, merely represents a budget request. Furthermore, because the purchase cost of the utility is in dispute,¹ the Staff fears that adopting the utility's fully-projected test year could allow Michigan Gas to use any increase in revenues to compensate the new owner for its purchase rather than for any budgeted costs intended to improve gas service. The Staff therefore asserts that a historical test year must be adopted in order to assure the accountability of costs charged to the utility's ratepayers.

¹As discussed on page 19 of this order, the utility was purchased by a holding company in 1987 at a price that significantly exceeded its book value. At the time that this rate case was filed, no decision had been made regarding how much, if any, of the resulting acquisition adjustment the Commission would allow the new owner to recover from Michigan Gas's ratepayers.

However, the Staff acknowledges that Michigan Gas's situation differs from that of most gas utilities. Specifically, the Staff indicates that, due to a change of ownership in August 1987, the utility's operations during much of 1988 reflected a temporary start-up by its new management and justified some deviation from an actual historical test year. The Staff therefore used a year-end analysis, viewing the cost of service in November 1988 as representative of what cost levels would have been for the entire 12 months had no transition taken place. These cost-of-service figures were then adjusted to reflect seasonal variations. Additionally, the Staff considered year-end plant-in-service as being in place from the beginning of the year, thus recognizing significant additions to rate base arising from construction projects undertaken during 1988 by the new management. Finally, following past Commission practice, the Staff used the Consumer Price Index (CPI) to raise components of the utility's income statement to the levels expected in 1990.

The ALJ concurred with the Staff's assertion that the use of historical data provides a more accurate assessment of a utility's actual cost of service. She found this to be especially true in this case because Michigan Gas's fully-projected test year incorporated several modernization projects that, at the time of the proceedings, had not progressed beyond the planning stage. The ALJ therefore agreed with the Staff that the utility's fully-projected test year represented little more than a budget request and should be rejected. Despite rejecting the test year proposed by Michigan Gas, the ALJ was not convinced that all aspects of the Staff's proposal should be adopted. Instead, she recommended adopting the Staff's historical year-end 1988 test year as a starting point, to which certain adjustments for known and measurable changes occurring after December 31, 1988 should be made.

Both Michigan Gas and the Staff except to the ALJ's recommendation. Although conceding that the ALJ's proposal is more appropriate than that sponsored by the Staff, Michigan Gas asserts that its fully-projected test year provides the most accurate representation of the period during which the rates approved in this case will be in effect. Furthermore, Michigan Gas objects to the ALJ's conclusion that the utility's proposal represented little more than a budget request. According to Michigan Gas, the record reflects that actual expenditures for plant additions during the first 11 months of 1989 exceeded by \$1.18 million the additions included in the utility's direct case for all of 1989. Michigan Gas therefore contends that its original projections were not mere budgetary wishes, but rather represent a reasonable cost of future service. In contrast, the Staff's exception regarding this issue appears to arise from its belief that test year data should be based, in significant part, upon more easily verifiable historical data. The Staff therefore contends that no adjustments should be made to its proposed test year. The Staff also believes that, by using November 1988 cost levels adjusted for inflation through 1990 and by considering year-end 1988 plant-in-service as being in place throughout the test year, its proposal was already highly beneficial to the utility. However, the Commission finds that these parties' exceptions regarding the recommended test year are not well-taken.

Rate cases are, by their very nature, complicated. The United States Supreme Court recently observed in Duquesne Light Company v Barasch, 488 US 299, 109 S Ct 609, 102 L Ed 2d 646 (1989), that "the economic judgments required in rate proceedings are often hopelessly complex and do not admit of a single correct result." (102 L Ed 2d at 661.) As with many of the other aspects of rate proceedings, the selection of a test year has no single correct answer. This is illustrated by the fact that other states employ different approaches for the

selection of a test year. For example, in Georgia the use of a projected test year is mandated by state law. See Re Savannah Electric & Power Company, 90 PUR 4th 563 (1985). However, in Iowa the most recent historical test year must be utilized, subject only to the availability of existing and verifiable data respecting costs and revenues. See Iowa Power & Light Company, 92 PUR 4th 299 (1988).

A test year is a device employed to determine representative revenues, expenses, rate base, and capital structure for use in the rate-setting formula. A test year may employ historical, projected, or a combination of historical and projected data. A historical test year uses the latest known level of activity as a normal representation of future levels of activity, whereas a projected test year uses a future expected level of activity that incorporates normal changes in activity levels from one year to the next. However, both historical and projected test years use future expected price levels. Thus, so-called "historical" test years and "fully-projected" test years seek to set future rates by projecting future costs. The difference between the two is that historical test years are based on the assumption that known business activity levels are representative of normal future business activity levels, while projected test years are based on attempts to project future changes in known business activity levels.

Michigan does not have a statute that requires the use of any particular type of test year. Rather, the selection of a test year is within the Commission's broad ratemaking power and expertise. Consumers Power Company v Michigan Public Service Commission, 181 Mich App 261 (1989). The Commission is therefore free to select any reasonable methodology that is consistent with the objective of determining the level of investment on which the shareholders of the utility are entitled the opportunity to earn a fair rate of return, as well as the levels of expenditures that the utility is entitled the opportunity to recover. While

it is true that the Commission has frequently utilized fully-projected test years, it does not follow that we are bound to select Michigan Gas's proposal over either the historical test year proposed by the Staff or the modified historical test year recommended by the ALJ. Similarly, the fact that the Staff's proposal constitutes a more pure form of a historical test year does not require its selection over the test year used in the PFD. As was recently stated by this Commission, "[i]t is the overall objective of fairness, rather than devotion to a particular methodology, that is of paramount importance." (December 7, 1989 order in consolidated Cases Nos. U-8678, U-8924, and U-9197, p. 13.)

In this case, the need for fairness dictates that we reject both the fully-projected test year sponsored by the utility and the historical year-end 1988 test year proposed by the Staff. We agree with the ALJ that at least portions of Michigan Gas's projected test year figures constitute little more than budget requests, which would unnecessarily inflate the utility's revenue requirements. We further agree that strict adherence to the Staff's historical test year does not provide the most accurate estimate of future conditions in light of the recent plant improvements initiated by the utility's new management. However, because the Staff's proposed historical test year provides incentive for Michigan Gas to operate more efficiently, produces simpler rate proceedings, and depends on more easily verifiable data, we find that it should be adopted as the starting point for our calculation of the utility's revenue requirements. We further hold that those figures should be revised to reflect known and measurable changes occurring after December 31, 1988.

IV.

RATE BASE

A utility's rate base consists of the capital invested in plant, less accumulated depreciation, plus the utility's working capital requirements. Based on 1988 data, the Staff proposed that \$53,677,049 be adopted as Michigan Gas's total rate base, consisting of \$46,015,000 in net utility plant and \$7,662,049 in working capital. In contrast, Michigan Gas calculated its projected rate base to be \$68,484,386, composed of \$60,019,890 in net utility plant and \$8,464,496 in working capital. Adopting the Staff's figure for working capital and increasing the proposed net utility plant figure to \$48,002,439, the ALJ recommended a total rate base of \$55,664,488.

Net Utility Plant

Jon A. Kosht, the utility's Vice-President of Rates, Regulation, and Gas Supply, and Steven R. Makowski, its Manager of Engineering and Gas Control, testified that Michigan Gas's plant was inadequate and out-of-date, included sub-standard pipe and distribution facilities, and was in questionable repair. They further stated that the utility's gas control and monitoring system was so antiquated that it was of little use in the areas of safety, security, and economic protection. Thus, they indicated that over \$14 million in construction projects would be necessary during 1989 and 1990 to remedy various deficiencies in Michigan Gas's utility plant. However, because this additional plant investment was scheduled to occur after December 31, 1988, none of the \$14 million was included in the Staff's proposed historical test year. According to the Staff, its use of a year-end plant-in-service figure--rather than the lower figure that would result from the traditional 12-month averaging approach--was sufficiently bene-

ficial to Michigan Gas to justify strict adherence to the Staff's proposed December 31, 1988 cut-off.

Due to her earlier adoption of the Staff's 1988 year-end figures as a starting point for any discussion of the utility's rate case elements, the ALJ concluded that there was no remaining dispute regarding inclusion of the Staff's \$46,015,000 of plant-in-service. None of the parties challenged this conclusion. However, several areas of dispute arose concerning proposed adjustments for known and measurable changes to the utility's plant-in-service occurring after December 31, 1988.

a. The SCADA System

In order to improve its gas control and monitoring abilities, Michigan Gas elected to purchase and install a computerized Supervisory Control and Data Acquisition (SCADA) system. The cost of this project, which replaced what Mr. Makowski termed an "antiquated" and "barely adequate" gas control, data acquisition, and safety monitoring system, totalled \$398,000. However, because only 2 of the system's 37 monitoring stations were hooked into the computer by December 31, 1988, the Staff concluded that the SCADA system should not be included in the utility's rate base. In response, Michigan Gas submitted uncontroverted testimony showing that the system became fully operational during 1989 and that no further work on the project was required. The ALJ therefore concluded that the SCADA system was used and useful, and recommended that the cost of this project be recognized as a known and measurable addition to plant-in-service.

No exceptions to this recommendation were filed by the parties.² Because

²Although the Staff excepted to the ALJ's general recommendation that known and measurable changes be allowed to historical test year figures, this exception was fully addressed in the preceding section of this opinion and order. Fur-

the ALJ's recommendation is supported by the record, the Commission finds that the \$398,000 cost of the SCADA system should be included in Michigan Gas's plant-in-service.

b. Century Pipe Replacement

Michigan Gas has instituted a program to replace certain sections of distribution pipe installed in its system between 1970 and 1974. This pipe, manufactured by the now-defunct Century Plastics Company (Century), has experienced a higher than expected rate of failure. Thus, in addition to replacing the most dangerous sections of Century pipe during 1987 and 1988, Michigan Gas proposed spending approximately \$2.5 million during 1989 and 1990 on further replacement activities. Michigan Gas therefore asserted that, if its fully-projected test year were adopted, all costs of this proposed pipe replacement should be included in the utility's plant-in-service. The utility also provided rebuttal testimony indicating that approximately \$610,000 had been spent during the first 11 months of 1989 on Century pipe replacement. Michigan Gas therefore asserted that, even if the Staff's historical test year were adopted, this \$610,000 would constitute a known and measurable change that should be added to net utility plant.

The Staff objected to Michigan Gas's proposal to include the \$2.5 million budgeted for Century pipe replacement during 1989 and 1990. According to Ramakrishna Veerapaneni, Supervisor of the Gas Operations Section of the Commission's Gas Division, the utility had already replaced the sections of pipe that posed the most significant safety concerns. Due to the utility's failure to show that the remaining segments of Century pipe have "undergone substandard operating experiences and are subjected to suspected deleterious environmental stresses,"

thermore, on page 2 of its replies to exceptions, the Staff specifically stated that it does not except to the ALJ's position regarding the SCADA system.

Mr. Veerapaneni suggested that Michigan Gas should be encouraged to replace only those segments of Century pipe that exhibit significant safety concerns. The ALJ concluded that, based on this testimony, there was no justification for including the post-1988 portion of the Century pipe replacement program. Noting that Michigan Gas had yet to receive its consultant's report regarding the long-term serviceability of the remaining sections of pipe, the ALJ recommended that none of the post-1988 Century pipe replacement costs be added to the utility's plant-in-service for purposes of this rate case.

Michigan Gas excepts to the ALJ recommendation to reject all post-1988 Century pipe replacement costs. According to the utility, the Staff only recommended that "budgeted Century pipe investment be excluded from rate base, not investment that was already made." (Michigan Gas's Exceptions, p. 5.) The utility therefore claims that the \$610,000 actually invested in Century pipe replacement during the first 11 months of 1989 should be recognized as additional plant-in-service. To do otherwise, claims Michigan Gas, would be inconsistent with the Staff's position. We agree. Mr. Veerapaneni recommended that Michigan Gas "be allowed to recover its investment in Century pipe replacement after it has actually made the investment to meet safety concerns." (Tr. 1179.) Because none of the parties alleged that the specific pipe replaced during the first 11 months of 1989 was not safety-related, this testimony leads us to find that the cost of this replacement, \$610,000, should be added to the utility's plant-in-service for purposes of this rate case. However, the Commission further holds that the remainder of the \$2.5 million budgeted for Century pipe replacement should not be given rate base treatment, particularly in light of the fact that Michigan Gas has not received its consultant's report regarding the serviceability of the remaining sections of pipe. Thus, the remainder of this \$2.5 million proposed plant addition should await consideration in a future rate case.

A second issue concerning the replacement of Century pipe was addressed by Michigan Gas and the Staff. William H. Clemence, the utility's Manager of Accounting, testified that the early retirement of Century pipe should be treated as an extraordinary expense and amortized over the approximate normal remaining life of this pipe. He therefore asked that, as part of this rate case, Michigan Gas be authorized to amortize \$663,728 in unrecovered Century pipe investment over 20 years, for an annual amortization of \$33,186. The total proposed by Mr. Clemence, \$663,728, consists of the unrecovered investment of the Century pipe that was actually retired during 1988 and that Michigan Gas proposed to retire during 1989 and 1990.

In opposition to this proposal, the Staff offered the testimony of David J. Berquist, a public utilities engineer in the Valuation and Depreciation Section of the Commission's Technical Services Division. According to Mr. Berquist, the amortization of unrecovered investment is only necessary if: (1) it is undertaken prior to the utility's implementation of remaining life depreciation,³ (2) the utility's accumulated provision for depreciation has a debit balance; (3) the asset account is closed; and (4) the entire investment in the asset account was replaced in one year with new plant. Because none of these situations exist in the present case, he recommended that we deny the utility's request to amortize the unrecovered investment in Century pipe. According to Mr. Berquist, Michigan Gas will have the opportunity to revise its depreciation rates to account for the

³Under the remaining life depreciation method, gains or losses are not recorded upon retirement of plant assets. Instead, the accumulated provision for depreciation--otherwise referred to as the depreciation reserve--is charged with the remaining book value of the property retired. It is assumed that each unit of property is fully depreciated when it is retired. Thus, it is recognized that some units of the utility plant will be retired earlier than the average remaining life and that some units will be retired later than the average service life. Any reduction of the accumulated provision for depreciation due to unanticipated early retirements will therefore be recovered by means of recalculating the utility's depreciation rates in its next depreciation case.

early retirement of Century pipe by way of the depreciation case it is required to file on or before June 30, 1990. Mr. Berquist went on to state that, even if we elect to allow the amortization requested by Michigan Gas, the amount of this amortization must be limited to \$339,137--the unrecovered investment that arose from actual Century pipe retirements in 1988.

The PFD made no mention of the utility's request to amortize its unrecovered Century pipe investment. The Staff therefore excepts to the PFD and asks that we deny the utility's request for amortization. In response, Michigan Gas asserts that the Staff failed to address this issue in its post-hearing briefs. The utility therefore contends that we are precluded from adopting Mr. Berquist's proposal.

The utility's argument is not well-taken. Both Mr. Berquist and Mr. Clemence discussed the treatment of Michigan Gas's unrecovered Century pipe replacement in their testimony. Furthermore, the Staff's initial brief thoroughly addressed this issue on pages 78 through 80. It was therefore proper for the Staff to except to the PFD and request a ruling on the potential amortization of the unrecovered investment in Century pipe. Furthermore, we find that Mr. Berquist's recommendation should be adopted. As noted in his testimony, Michigan Gas can revise its depreciation rates to account for the early retirement of Century pipe in its upcoming depreciation case. Thus, because none of the four factors discussed in his testimony have been shown to exist, and because no special circumstances have been alleged that would require adoption of the utility's proposal, the Commission denies Michigan Gas's requested amortization.

c. Additional Plant Investment Made Prior to November 30, 1989

In addition to work performed on the SCADA system and the replacement of Century pipe, Mr. Clemence's rebuttal testimony indicated that Michigan Gas spent

\$5,290,737 on other plant additions during the 11 months ended November 30, 1989.⁴ The utility therefore requested that this additional plant investment be included in its current plant-in-service. The Staff objected to this proposal, claiming that these miscellaneous plant additions should be offset by increased revenues arising from those additions and by any increase in the utility's accumulated depreciation between December 31, 1988 and November 30, 1989. The ALJ agreed in part with the Staff's position. Specifically, she held that the \$3,664,297 of 1989 plant investment for new customer connections should not be recognized on the grounds that it would be offset by a corresponding increase in revenues. However, she went on to conclude that the Staff did not sufficiently explain why depreciation alone would be sufficient to "wipe out" recognition of the utility's remaining 1989 plant investment. The ALJ therefore recommended that we increase Michigan Gas's plant-in-service by the portion of the actual plant investment made on or before November 30, 1989 for purposes other than connecting new customers.

Both Michigan Gas and the Staff except to this recommendation. Although the utility agrees with the ALJ's decision to exclude the \$3,664,297 in plant investment that could result in increased revenues (Michigan Gas's Exceptions, p. 6), it excepts to her calculation of the amount to be added to plant-in-service. Specifically, Michigan Gas notes that the ALJ's recommended addition to plant-in-service failed to include the \$610,000 expended on Century pipe replacement during the first 11 months of 1989. Renewing its earlier arguments concerning this cost, the utility requests that the ALJ's recommendation be increased by \$610,000. Based on our earlier discussion of Century pipe replacement costs, we

⁴Although Exhibit A-77 indicates that construction costs for this period totalled \$6,261,737, this figure included \$609,726 of Century pipe replacement costs and \$361,274 of SCADA system completion costs. Because the costs of these two projects have been separately addressed in this order, they must be removed from consideration in this discussion.

agree with the utility and find that the figure recommended by the ALJ should be increased by \$610,000. We therefore turn our attention to the remaining miscellaneous plant additions made by Michigan Gas.

As reflected in both its exceptions and replies to exceptions, the Staff contends that none of this additional post-1988 plant investment should be included in rate base. Specifically, the Staff asserts that these "gross additions to plant investment" conflict with the Commission's accepted practice of only including "net additions" in rate base. (The Staff's Replies to Exceptions p. 3.) We agree. As indicated in our December 7, 1989 order in consolidated Cases Nos. U-8678, U-8924, and U-9197, any new plant additions must be offset by such factors as plant retirements, increased depreciation, and amortization expense. However, nothing in this record indicates that the requisite offsets were made to the additional plant investment discussed on page 15 of the PFD.

For example, Mr. Clemence admitted that his proposed additions to plant-in-service did not account for any plant retirement that may have occurred during the first 11 months of 1989. Furthermore, he testified that the utility's depreciation expense for the 12 months ended November 30, 1989 was \$2,168,424. (Tr. 2059.) Assuming that this expense was incurred at a steady rate, the depreciation offset would total \$1,987,722 [$\$2,168,424 \div 12 \text{ months} \times 11 \text{ months}$]. However, the non-customer connect portion of the utility's additional plant investment totals only \$1,626,440 [$\$5,290,737 \text{ additional plant investment} - \$3,664,297 \text{ in investment pertaining to new customer connections}$]. Because the potential addition to rate base arising from the non-customer connect portion of Michigan Gas's additional plant investment between December 31, 1988 and November 30, 1989 fails to exceed the potential depreciation offset, let alone the offsets resulting from plant retirements and amortization expense increases during this 11-month period, no "net addition" results. Instead, it appears that a net reduction to the

utility's rate base would result. Therefore, we find that the ALJ's recommendation to include this additional plant investment in rate base should be rejected.

Working Capital

Working capital is the amount of funds required to bridge the gap between the time of payment of a utility's expenses and the receipt of revenues from its customers. Although the proper methodology for calculating a utility's working capital requirement was once a controversial issue, almost all parties now rely on the balance sheet method adopted by the Commission's June 11, 1985 order in Case No. U-7350. Indeed, both the Staff and Michigan Gas used the balance sheet method to develop their proposed working capital allowances. However, due to their reliance upon different test years, the parties' working capital projections differed by \$802,447. The utility's use of a 1990 fully-projected test year led to a working capital proposal of \$8,464,496, whereas the Staff's use of year-end 1988 data resulted in a figure of \$7,662,049.

The difference between these proposals arose from the fact that Michigan Gas's test year included an expected investment in additional underground storage. Specifically, in addition to existing storage contracts with Consumers Power Company (Consumers), Michigan Gas planned to lease 4 billion cubic feet (Bcf) of space in a new gas storage field being developed by ANR Eaton Company and SEMCO Gas Storage Company. According to Mr. Kosht, although Michigan Gas had previously contracted for this additional 4 Bcf of underground storage, this new facility--known as the Eaton Rapids 36 Storage Field--was not scheduled for completion until April 1, 1990. Thus, because Michigan Gas had not begun using this facility by December 31, 1988, the Staff's test year ignored its possible effect on the utility's working capital allowance.

The ALJ rejected the utility's working capital proposal. According to her, the record failed to show when the Eaton Rapids facility would actually be available for use. Furthermore, she stated that because no historical or actual figures existed regarding the utility's cost for the use of this storage field, Michigan Gas's proposed adjustment to its working capital allowance was too speculative to constitute a known and measurable change. The ALJ therefore recommended that we adopt the Staff's working capital figure of \$7,662,049. Michigan Gas excepts to this recommendation. The utility contends that our December 7, 1989 order in consolidated Cases Nos. U-8678, U-8924, and U-9197, which increased Consumers' working capital allowance to account for proposed increases in underground storage, supports increasing Michigan Gas's working capital requirement in the present case. The utility further asserts that because the record shows that this additional storage was expected to be available by April 1, 1990 and that Michigan Gas had contracted for 4 Bcf of the storage field's capacity, the "known and measurable" standard has been satisfied. We agree.

The rebuttal testimony of Mr. Clemence pointed out that construction and operation of the Eaton Rapids 36 Storage Field was approved by our November 9, 1989 order in Case No. U-9355, and further confirmed that Michigan Gas would begin using this facility during 1990. Further, we note that our February 6, 1990 order in Case No. U-9369 established rates for the use of this storage field based on a Memorandum of Understanding that stated that storage service would be made available to Michigan Gas on or before April 1, 1990. These factors, as well as other evidence and arguments offered in this case, lead us to find that the utility's proposed \$802,447 adjustment to its working capital allowance is based on a known and measurable change. The Commission therefore holds that Michigan Gas's proposed working capital allowance, in the amount of \$8,464,496, should be adopted for purposes of this rate case.

As discussed later in this opinion and order, we generally agree with the Staff's position regarding cost allocation and rate design. Thus, for purposes of cost allocation, we find that the additional \$802,447 should be treated as an incremental increase to the Staff's gas in storage working capital requirement. All remaining working capital amounts should remain at the levels originally reflected in the Staff's cost-of-service allocation study.

Acquisition Adjustment

The utility property that became Michigan Gas was purchased by Southeastern Michigan Gas Enterprises (SEMGE) from Michigan Power Company (Michigan Power) on August 31, 1987. The purchase price of \$39,433,000 created an original plant acquisition adjustment⁵ of \$8,820,000. (Tr. 673-675.) Although having already written off over \$1.4 million of this acquisition adjustment, Michigan Gas sought authority to recover the remainder from its ratepayers. Specifically, the utility asked that it be allowed to amortize \$7,373,810 of the original acquisition adjustment over 30 years and to include the unamortized balance in its rate base. This proposal sparked substantial controversy regarding how an acquisition adjustment should be treated.

According to Michigan Gas, many state regulatory commissions have found that public policy favors the recovery by a utility of an acquisition adjustment. However, the utility noted, they have required varying levels of proof to support their rulings. For example, in states that are fair value jurisdictions, the record need only establish that the purchase price was less than or equal to the utility's true market value at the time of purchase. In original cost jurisdictions, on the other hand, some commissions have only required proof that the

⁵An acquisition adjustment--otherwise known as an acquisition premium--is the amount paid above "book cost" or "depreciated original cost" to acquire utility property previously devoted to public service.

purchase was prudent and that the price was reasonable. Finally, Michigan Gas noted, other original cost states have adhered to a more stringent level of proof, requiring that actual benefits to ratepayers be substantiated before the acquisition adjustment can be recovered.

Michigan Gas went on to admit that a few decisions exist in which a commission has summarily rejected recovery of and on an acquisition adjustment, on the basis that the concept of original cost strictly bars such treatment. The utility argued, however, that those decisions generally contained only abbreviated discussions of the issue and typically did not address whether the acquisition resulted in any offsetting benefits to ratepayers. Michigan Gas therefore asserted that whenever commissions have thoroughly analyzed the issue, it has been consistently recognized that the concept of original cost does not bar inclusion of an acquisition adjustment in rate base or preclude recognition of the corresponding amortization expense in a utility's cost of service.

Concerning the treatment of acquisition adjustments in Michigan, the utility asserted that the Commission has failed to adopt a particular methodology. Specifically, Michigan Gas asserted that past orders have not been entirely consistent and have seldom expressed the rationale underlying the Commission's decision. For example, although noting that the November 16, 1982 order in consolidated Cases Nos. U-7125 and U-7098 denied Southeastern Michigan Gas Company's request for rate base treatment of an acquisition adjustment, Michigan Gas cited six other rulings--issued both before and after that order--in which favorable treatment of a plant acquisition adjustment was allowed. Michigan Gas therefore concluded that although a Michigan utility's request for rate base treatment may not always be granted, the Commission has never viewed the concept of original cost as an absolute bar to recovery of and on acquisition adjustments. According to the utility, the Commission will permit this type of recovery "in appropriate

circumstances." (Michigan Gas's Initial Brief, p. 29.) Michigan Gas further asserted that even if the stringent actual benefits standard is used to determine whether "appropriate circumstances" exist in the present case, the utility satisfied that standard.

According to the utility, SEMGE's purchase of Michigan Power's gas division resulted in significant actual benefits to the utility's customers: (1) its construction of the Overisel pipeline resulted in a significant gas cost savings by increasing the utility's sources of gas and improving its access to storage facilities, (2) its superior gas purchasing strategies dramatically reduced ratepayers' gas costs between 1986 and 1988; (3) its aggressive marketing plans helped spread fixed cost over a wider customer base; (4) it has improved the utility's emergency response time and procedures; (5) it has improved safety by replacing critical sections of Century pipe; (6) its installation of the SCADA system has increased efficiency and safety, as well as precluding overbillings by the utility's pipeline suppliers; and (7) its interconnection of the Sawyer and New Buffalo distribution networks will improve system reliability for ratepayers in those areas. According to Michigan Gas, these benefits have more than offset the rate increase necessary to permit a return of and on its acquisition adjustment. The utility therefore asserted that its proposed treatment of the remaining \$7,373,810 acquisition adjustment should be adopted.

In opposition, the Staff asserted that regulatory and accounting principles, as well as public policy considerations, require us to deny Michigan Gas's request for rate base treatment of the acquisition adjustment. The Staff contended that ratepayers received no value as a result of the system's purchase by SEMGE. Instead, the Staff argued that any value that has accrued to ratepayers following SEMGE's purchase of this gas franchise arose not from the acquisition itself, but rather from subsequent expenditures made by the new owners to improve

service. Because ratepayers will ultimately pay for this improved service through a return of and on these additional expenditures, the Staff concluded that no benefit to ratepayers arose from the acquisition itself.

The Staff went on to assert that although Michigan Gas's ratepayers received no direct benefit from the acquisition, the new owner did. For example, the Staff pointed out that the acquisition has allowed SEMGE to shift a significant level of indirect costs from its other subsidiaries to Michigan Gas. Specifically, \$1,023,821 of indirect cost were shifted to Michigan Gas's ratepayers during 1988 alone. (Exhibit S-27, Schedule C-2.) The Staff further noted that this cost-shifting had the effect of providing SEMGE with an 11.61% return on the original plant acquisition premium [\$1,023,821 savings + \$8,820,000 original premium], a benefit the parent company will continue to receive whether we specifically authorize Michigan Gas to earn a return of and on the acquisition adjustment. Moreover, the Staff asserted that this 11.61% return did not include returns caused by: (1) the shifting of some direct costs to Michigan Gas; (2) the continuing growth of the utility's customer base; and (3) the synergy resulting from the consolidation of some subsidiary operations.

In addition to these ongoing benefits, the Staff noted that SEMGE will likely receive a premium--possibly exceeding that paid to Michigan Power--if and when it elects to sell Michigan Gas to some other party. Because there is no mechanism that guarantees Michigan Gas's ratepayers a recapture of the future premium SEMGE might receive upon resale of the franchise, the Staff argued that it would be inequitable to assess SEMGE's current acquisition adjustment against these ratepayers.

Finally, the Staff contended that it would be poor public policy to allow returns of and on plant acquisition adjustments. Specifically, the Staff argued that allowing acquisition premiums to be recovered in rates will encourage bid-

ding wars for utility assets and result in setting rates based on the highest bidder's costs, rather than those of the lowest bidder. The Staff therefore concluded that, unless the acquisition of the utility is ordered by the Commission or other public authority as being in the public's interest, no return of or on an acquisition adjustment should be allowed.

The ALJ recommended that we reject Michigan Gas's proposed treatment of its acquisition adjustment, based on her reading of past Commission orders, her understanding of the treatment given acquisition premiums in other jurisdictions, and her conclusion that ratepayers received no value as a direct result of this acquisition.

Concerning past Commission orders, the ALJ agreed with the Staff that the six cases cited by Michigan Gas were not applicable to the present situation. Specifically, she concluded that each of those cases was outdated, was based on settlements that required no Commission findings regarding the propriety of giving rate base treatment to an acquisition premium, involved situations in which rates decreased as a result of an acquisition, or concerned the purchase of plant assets from a non-regulated subsidiary. In addition, the ALJ's reading of the November 16, 1982 order in consolidated Cases Nos. U-7125 and U-7098 convinced her that Michigan is an original cost state that follows the Uniform System of Accounts. She therefore concluded that although the Commission never specifically stated that it would preclude recovery of or on an acquisition adjustment in all cases, the November 16, 1982 order warned utilities that it may be difficult to obtain rate base treatment for their future acquisition premiums.

Noting that the Commission had not yet adopted a specific rule regarding the treatment of acquisition adjustments, the ALJ stated that we must look to other jurisdictions for guidance. Although recognizing that the treatment of this issue varied somewhat from one commission to another, she generally concluded

that recovery of and on acquisition adjustments will only be permitted when ratepayers have received an actual benefit from the acquisition. The ALJ therefore applied the actual benefits standard to her evaluation of this case.

Despite the utility's assertions that its ratepayers received numerous benefits from the acquisition, the ALJ concluded that these benefits did not arise from the acquisition itself. Instead, the ALJ stated, any actual benefit received by Michigan Gas's ratepayers following the change in ownership resulted solely from the increased expenditures that were addressed in Case No. U-9112⁶ or that will be addressed in this proceeding. The ALJ went on to indicate that, as asserted by the Staff, allowing Michigan Gas to recover its acquisition adjustment in this case could send the wrong signal to utilities and encourage bidding wars for utility assets. In that regard, the ALJ agreed with the California Public Utility Commission's statement in Re: Conejo Valley Water Company, 58 PUR 3d 284 (1965):

"If a regulated utility purchasing dedicated property were allowed to pass on to its customers a price higher than original cost, the parties to the transactions would be in a position to frustrate the application of the original cost standard by arranging a transfer of ownership at a premium. The seller would receive, at the expense of future ratepayers, more than his original cost, and yet the willingness of the purchaser to pay such a premium would have little significance since he himself would not bear the burden."
(58 PUR 3d at 296-297.)

The ALJ further stated that she found it somewhat ironic that Michigan Gas seeks authority to recover an acquisition premium paid for plant assets while, in attempting to justify its repeated requests for rate increases, the utility has consistently stated that the plant purchased in 1987 was in significant disrepair. The ALJ stated that "either the plant is in disrepair or it isn't."

⁶Case No. U-9122, Michigan Gas's last general rate case, was filed on April 29, 1988. Our October 25, 1988 order in that case approved a settlement that increased the utility's revenues by \$3.5 million annually.

(PFD, p. 33.) If it is, she concluded, there would be little justification for the payment of an acquisition premium unless the premium were being paid for something other than the intrinsic value of the plant. Believing that SEMGE's payment of an acquisition premium for an allegedly out-of-date system constituted an investment risk, the ALJ concluded that this risk should be borne by the utility's shareholders rather than its ratepayers. She therefore recommended that we reject Michigan Gas's request for a return of and on its remaining acquisition adjustment.

Michigan Gas excepts to this recommendation on several grounds. First, the utility argues that the ALJ employed an improper standard by agreeing with the Staff that in order to recover an acquisition adjustment, an improvement in service must be shown to be the direct and immediate result of the acquisition rather than the result of ratepayer-underwritten plant additions. Michigan Gas contends that because no other commission has adopted that standard, it should not be applied in this case. We find that the argument is not well-taken.

The ALJ properly noted, as did Michigan Gas in both its initial brief and its exceptions, that the Commission has never adopted a particular methodology regarding the treatment of acquisition adjustments. She also correctly concluded that, although the November 16, 1982 order in consolidated Cases Nos. U-7125 and U-7098 indicates that Michigan is an original cost state, we must turn to other jurisdictions for guidance regarding what standard should be employed. Our review of other commissions' dealings with this issue reveals that the standards adopted in original cost jurisdictions range from those that summarily reject recovery of and on all payments in excess of the original cost--Re: Dayton Power & Light Co., 21 PUR 4th 376 (1977)--to those that only require proof that the purchase of utility property was prudent and that the price was reasonable--Re: Montana-Dakota Utilities Co., 81 PUR 4th 90 (1987). Because the standard

employed by the ALJ falls well within this range, we find that its application to this case was reasonable. Furthermore, this standard avoids the situation in which ratepayers would be required to pay twice for the same improvement in service--once for the particular plant addition and again for the acquisition adjustment--while still allowing for the recovery of and on an acquisition adjustment in appropriate circumstances. The Commission therefore finds that the ALJ's use of this standard was proper.

Second, Michigan Gas points out that, elsewhere in the PFD, the ALJ noted that certain benefits arose from SEMGE's purchase of the utility. Specifically, the ALJ concluded that the utility's cost of capital and its income tax expense declined as a result of the acquisition, and recommended that these benefits be shared with its ratepayers. (PFD, pp. 37-38.) Although not waiving its potential challenge to the ALJ's recommendation on this issue, Michigan Gas contends that these alleged benefits satisfy the standard recommended by the ALJ. The utility claims that because these purported benefits arose directly from the acquisition and because they did not result from additional expenditures that will be recovered as part of the utility's rate base, they justify allowing a recovery of and on the acquisition adjustment. We disagree.

The argument appears to be based on the utility's misunderstanding of the standard adopted above. Michigan Gas seems to believe that a utility can receive favorable treatment of its acquisition adjustment by showing that one or two isolated benefits arose from the transfer of ownership, regardless of whether the overall effect of the acquisition was beneficial to ratepayers. We find that this interpretation of the standard establishes too low a threshold. Instead, we read the standard recommended by the ALJ and adopted by this Commission to require a showing that ratepayers received a net benefit from the acquisition. Here, Michigan Gas asserts that the capital cost and income tax benefits total

just under \$1 million. However, this total fails to offset even the \$1,023,821 in indirect costs that have been shifted to Michigan Gas's ratepayers as a result of the acquisition. We therefore do not find the utility's second argument to be persuasive.

Third, the utility objects to the ALJ's statement that "it is clear from the record that [Michigan Gas's] acquisition has resulted in increases to the ratepayers rather than decreases." (PFD, p. 32.) According to the utility, the record actually indicates that, due to Michigan Gas's success in reducing gas costs, its customers paid less for service during 1988 than in any of the five preceding years. Specifically, Mr. Kosht testified that the average price of gas for the utility's customers dropped from \$4.50 per thousand cubic feet (Mcf) in 1986 to \$4.25 per Mcf in 1988. The utility therefore contends that this reduction in gas prices offsets any rate increases caused by SEMGE's purchase of the franchise. Again, we disagree.

As pointed out in the Staff's replies to exceptions, a gas utility's overall rates are divided into two distinct categories. One consists of gas costs and the other consists of all non-gas costs. The costs that are assigned to the first category are recovered by the utility through GCR factors, while all non-gas costs are recovered through base rates. Thus, because the present case is concerned solely with establishing new base rates for Michigan Gas, it appears that the ALJ's above-quoted statement was intended to apply only to the non-gas portion of ratepayers' bills. Thus, the ALJ's statement was not contrary to the record evidence. Furthermore, the record indicates that gas costs dropped significantly for all of Michigan's small gas utilities between 1986 and 1988. (Exhibit A-72.) Because an industry-wide drop in gas prices should not be used as a justification for raising a utility's base rates, we find that the price

reduction discussed by Mr. Kosht cannot be used to offset the rate increases granted to Michigan Gas in Case No. U-9112 and requested in the present case.

Fourth, Michigan Gas objects to the ALJ's statement that allowing it to earn a return of and on its acquisition adjustment will encourage bidding wars for utility assets. According to Michigan Gas, requiring proof that an actual benefit to ratepayers arose from the sale of the franchise provides sufficient protection against excessive bids. Once again, we disagree. As noted earlier, granting favorable treatment of an acquisition adjustment based solely on a showing that one or two isolated benefits arose from the new ownership constitutes an unreasonably low threshold. Unless the overall effect of the acquisition--including rate increases proposed by the new owner--is beneficial to ratepayers, any potential buyer that could offer proof of a single ratepayer benefit would be free to bid as much as it wanted, secure in the knowledge that the resulting acquisition premium would be recovered.

Fifth, Michigan Gas objects to language in the PFD stating that:

"... the Administrative Law Judge finds it somewhat ironic that [Michigan Gas] seeks a premium acquisition adjustment in this proceeding claiming that the plant purchased was somehow worth more than the original book cost of the plant when at the same time; for purposes of other aspects of this rate case, [Michigan Gas] argues that the plant purchased is in such disrepair that the Company must repeatedly come to this Commission to secure rate increases for plant improvements. It seems to the Administrative Law Judge that either the plant is in disrepair or it isn't. If it is in disrepair then there is not substantial justification for an acquisition premium unless that acquisition premium applied to something other than the intrinsic value of the plant."
(PFD, p. 33.)

The utility contends that it is not ironic to pay an acquisition premium for property that is in a state of disrepair. Michigan Gas cites the housing market as an example. The utility notes that homes built 30 years ago do not generally sell at their net original cost, but rather at levels greatly in excess of original cost. Although the home's condition would affect its selling price, it

does not follow that such a house, if in disrepair, would only sell for its original cost or some price below original cost. Instead, Michigan Gas asserts, it is far more likely that the house would sell for more than its original cost despite the need for renovations. The utility contends that the same logic applies to the present case. However, the Commission finds that this argument is not well-taken. Michigan Gas's analogy is not germane to the present situation because house prices are based on market value, whereas the ratemaking value of utility property in Michigan is based on its original cost.

Sixth and finally, Michigan Gas argues that considerations of public policy support recovery of and on the acquisition adjustment in this case. In support of this contention, the utility asserts that its gas purchasing strategy and its construction of the Overisel pipeline have resulted in significant savings to its customers. Furthermore, Michigan Gas states that its implementation of the SCADA system and its replacement of critical portions of Century pipe have improved the system's safety. The utility contends that because these improvements in service have resulted from SEMGE's purchase of the franchise, the Commission should encourage this type of acquisition by authorizing recovery of Michigan Gas's acquisition adjustment. Doing so, the utility claims, will serve the public good. Again, we disagree. Although we commend Michigan Gas for the steps it has taken to improve service and reduce the cost of gas, we cannot ignore the fact that the benefits mentioned above did not arise from the acquisition itself. Instead, they resulted either from construction projects that will ultimately be paid for by ratepayers or from industry-wide changes in the cost of gas.

Based on the factual, legal, and public policy issues discussed above, we find that the ALJ's recommendation should be adopted. Michigan is an original cost jurisdiction in which no specific standard has been established for the treatment of acquisition adjustments. The Commission must therefore decide in

this case whether to adopt the utility's proposal to allow a return of and on an acquisition adjustment whenever the purchase price is shown to be reasonable or to establish some more stringent standard. Because the relatively lax standard proposed by Michigan Gas fails to protect ratepayers from paying twice for the same improvement in service, public policy dictates that we allow recovery of and on acquisition adjustments only where ratepayers receive a net benefit from the change in ownership. Furthermore, the record indicates that the benefits arising from this acquisition resulted either from plant additions that will ultimately be paid for by ratepayers or from industry-wide variations in the cost of gas, rather than from SEMGE's purchase of this franchise. We therefore adopt the ALJ's recommendation and find that Michigan Gas should not be allowed to recover either a return of or on the acquisition adjustment.

Conclusion

Based on the discussion and findings set forth above, the Commission finds that Michigan Gas's rate base is \$55,487,496, computed as follows:

Net Utility Plant per Staff's Case	\$46,015,000
Plus: Cost of the SCADA System	398,000
Plus: Century Pipe Replacement	610,000
Total Net Utility Plant	47,023,000
Plus: Working Capital Allowance	8,464,496
Total Rate Base	<u>\$55,487,496</u>

V.

RATE OF RETURN

In order to calculate Michigan Gas's revenue requirement, it is necessary to select a rate of return to be applied to the utility's total rate base. Establishing a rate of return requires us to review each element of Michigan Gas's capital structure.

Both Michigan Gas and the Staff presented evidence regarding the appropriate capital structure and cost of capital. Dennis R. Bolster, an economist and senior consultant for Foster Associates, Inc., testified on behalf of the utility. Mr. Bolster recommended that we adopt an overall rate of return of 11.18%, including a return on common equity of 13.5%. The Staff's position was presented by Brian L. Ballinger, a senior economist in the Commission's Technical Services Division. Mr. Ballinger recommended authorizing an overall rate of return between 9.99% and 10.16%, including a return on common equity of between 11.21% and 11.53%.

Capital Structure

The first step in determining the utility's rate of return is to select the appropriate capital structure. Consistent with Michigan Gas's use of a fully-projected 1990 test year, Mr. Bolster presented a projected capital structure for the 12 months ended December 31, 1990. In contrast, Mr. Ballinger presented a capital structure that comported with the Staff's use of a 1988 year-end test year. In addition to the use of a different test year, Mr. Ballinger's proposal varied from Mr. Bolster's in two important ways. First, his proposal used a consolidated capital structure approach instead of Mr. Bolster's independent company approach.⁷ Mr. Ballinger testified that this was necessary to account for the effects of leverage and double leverage and to avoid authorizing the utility's

⁷The consolidated capital structure approach is based on the premise that investors make their investment decisions regarding utilities that are subsidiaries of a holding company by evaluating the parent company's consolidated financial statements. The independent company approach, in contrast, ignores the interrelationship of the parent company and its subsidiaries.

owners to obtain an excessive return on investment.⁸ Second, Mr. Ballinger adjusted the utility's capital structure to reflect the potential disallowance of the acquisition adjustment.

The ALJ concluded that the Staff's consolidated capital approach should be used. Otherwise, she reasoned, ratepayers would not benefit from the new owner's lower consolidated cost of capital and lower consolidated income taxes, despite the fact that ratepayers would be required to pay any higher consolidated operating costs that might be allocated to them. Furthermore, because the record showed that SEMGE used double leverage in purchasing Michigan Gas, the ALJ felt that some method must be used to account for this leverage. Otherwise, she reasoned, the parent holding company would be allowed to earn a return on its investment that greatly exceeded its cost of capital. In support of her conclusion, the ALJ cited Re: Hawkeye State Telephone Co., 2 PUR 4th 166 (1974), which states as follows:

"[W]hen there is a parent-subsidary relationship, where there is debt issued by both parent and subsidiary, there exists a form of financial pyramiding known as 'double leverage.' If we were to ignore this double leverage and allow the subsidiary a return on its 'apparent' equity investment in utility plant equal to the market cost of equity, this could result in the parent's shareholders earning more on their investment in the company than the market cost of equity. Permitting this to occur not only results in greater earnings to the actual equity holder than is proper, but also discriminates against those companies who do not engage in double leveraging, and whose shareholders are restricted to earnings on their investments in the company equal to the market cost of equity." (2 PUR 4th at pp. 180-181.)

⁸Leverage refers to the use of debt to finance the acquisition or operation of a company. As noted by Mr. Ballinger, raising funds through the use of debt instruments allows the shareholders of a corporation to maintain control of the company with a lesser investment, thereby reducing the owners' financial risk. Moreover, if the company earns more on the borrowed funds than it pays in interest, the owners' return on each dollar of investment is magnified. Double leverage describes a situation where--as in the present case--debt is employed by both a parent company and its subsidiary. This situation can result in the further magnification of the owners' return on equity invested in the parent company.

The ALJ therefore recommended that we adopt a capital structure that reflects the consolidated cost of capital.

Regarding the Staff's proposal to adjust Michigan Gas's capital structure to reflect disallowance of the acquisition adjustment, the ALJ noted that this would increase the utility's percentage of cost-free capital--made up of deferred income taxes and deferred investment tax credits--from 7.56% to 8.68% and reduce its overall rate of return by 12 basis points. The ALJ concluded that failing to take this step would allow Michigan Gas to earn a return on the acquisition premium. She therefore recommended that we make the adjustment proposed by Mr. Ballinger in order to ensure consistency with the acquisition premium disallowance recommended earlier.

Finally, the ALJ rejected the utility's claims that Mr. Ballinger's 1988 year-end capital structure is stale and fails to recognize known changes. Despite the utility's assertions that (1) a significant proportion of short-term debt would be converted to long-term debt, (2) the reserve for deferred federal taxes would decline, and (3) the percentage of cost-free capital would drop, all by the close of 1990, the ALJ noted that no evidence established the extent of these purported changes. Thus, concluding that Michigan Gas failed to prove the existence of any known and measurable change, she recommended that we adopt the Staff's year-end 1988 consolidated capital structure, adjusted to reflect the disallowance of the acquisition adjustment. This recommended capital structure is as follows:

Short-Term Debt	13.91%
Long-Term Debt	24.63%
Common Equity	49.94%
Cost-Free Capital	8.68%
Job Development Investment Tax Credit (JDITC)	<u>2.84%</u>
	100.00%

Michigan Gas excepts to this recommendation. First, it argues that the ALJ was wrong to recommend the use of a consolidated capital structure. Because the risks of a parent company are generally different than those of its individual operating utilities, Michigan Gas asserts that it should be treated on a stand-alone basis in order to insulate it from SEMGE's other business risks. Michigan Gas further contends that, by reducing the utility's allowed rate of return "solely because it is a subsidiary," use of a consolidated capital structure constitutes discrimination that bears no rational relationship to a legitimate governmental end. We disagree.

Some highly-diversified parent companies have business risks that are significantly different from those of their subsidiaries. In those situations, use of a consolidated capital structure may not be appropriate. However, the record indicates that we are not facing that situation in the present case. Specifically, 93.82% of SEMGE's total capitalization pertains to local gas distribution activities like those performed by Michigan Gas. (Exhibit S-49.) Thus, because SEMGE's business risk is nearly identical to that of Michigan Gas, we find that use of a consolidated capital structure is appropriate in this case. Moreover, we find that its use is neither discriminatory nor without justification. Despite Michigan Gas's protestations to the contrary, it is not being treated differently due to its position as a subsidiary. Rather, the consolidated capital structure approach is being applied due to the fact that the use of debt financing by both SEMGE and Michigan Gas has led to the existence of double leverage. We further find that the use of a consolidated capital structure in this instance promotes a legitimate government end, namely the accurate determination of the utility's cost of capital.

Although Michigan Gas offers two other arguments in support of this exception, neither is persuasive. Specifically, although the utility claims that no

evidence supports the ALJ's conclusion that ratepayers will pay higher consolidated operating costs due to the acquisition, we find that this argument ignores the fact that \$1,023,821 of indirect costs were shifted to Michigan Gas's ratepayers during 1988. Furthermore, testimony offered by the Staff indicates that this shifting of costs to the utility's customers will continue indefinitely. We also disagree with the utility's final argument, in which it contends that the use of a consolidated capital structure constitutes improper regulation of a non-regulated holding company. Although today's order may indirectly affect SEMGE, it neither requires nor authorizes the holding company to take or refrain from taking any course of action. We therefore hold that our adoption of the consolidated capital structure proposed by the Staff does not constitute regulation of a non-regulated entity.

In its second exception regarding the capital structure, the utility claims that the ALJ erred by removing the acquisition adjustment from Michigan Gas's capital structure. According to the utility, removing the acquisition adjustment from the rate base, as we have done in this order, fully protects ratepayers because it precludes the utility from earning any return of and on that investment. The utility therefore contends that removing this acquisition adjustment from the capital structure, as both the Staff and the ALJ have done, will inequitably compound that disallowance by also reducing the required rate of return. Again, we disagree.

In our earlier discussion regarding treatment of the acquisition adjustment, the Commission indicated that ratepayers should not be assessed higher rates for gas service simply due to a change in the franchise's ownership. Thus, to protect Michigan Gas's customers, we rejected the utility's request for rate base treatment of the acquisition adjustment. However, we find that this action is not, by itself, sufficient to shield ratepayers from the full effect of the

acquisition adjustment. As noted in the Staff's replies to exceptions, unless the acquisition premium is also removed from the utility's capital structure, rates would still reflect the effects of financing the acquisition. The Commission therefore finds that, consistent with our intent to protect Michigan Gas's customers from any rate increases arising from SEMGE's purchase of the utility, the capital structure adjustment proposed by Mr. Ballinger and recommended by the ALJ should be adopted.

The utility's third exception concerning this issue is that the ALJ erred in rejecting Mr. Bolster's projected year-end 1990 capital structure. According to the ALJ, her rejection of the projected capital structure was based on her earlier rejection of the utility's fully-projected test year. Michigan Gas therefore argues that if we agree with the utility's exception regarding selection of the test year, we must also adopt Mr. Bolster's projected capital structure. However, having rejected Michigan Gas's arguments regarding use of the fully-projected 1990 test year, the Commission finds that Mr. Bolster's projected capital structure should also be rejected. We therefore adopt the capital structure proposed by the Staff and recommended by the ALJ.

Cost Rate--Long-Term Debt

In keeping with Mr. Bolster's capital structure, Michigan Gas asserted that a long-term debt cost rate of 10% would be proper. Alternatively, the utility concedes that Mr. Ballinger's proposed rate of 10.57% would be appropriate if his capital structure is adopted instead of Mr. Bolster's. This is true, the utility says, because of the way Mr. Ballinger computed the amount of long-term debt and its cost rate. Specifically, he first determined that the nominal coupon rate of the utility's outstanding long-term debt of \$10 million was 10%, and then converted the nominal rate to an effective rate of 10.57% by reducing the face

amount of the outstanding debt by \$541,000 of unamortized debt expense. He therefore reduced the percentage of debt, but increased the cost of debt, to recognize that interest is paid only on the face amount.

Due to the lack of dispute between the parties, and in light of her use of Mr. Ballinger's capital structure, the ALJ recommended that we adopt the long-term cost rate of 10.57%. No exceptions have been filed concerning this recommendation. Thus, due to the Commission's acceptance of Mr. Ballinger's proposed capital structure, we find that the ALJ's recommendation is supported by the record and should be adopted.

Cost Rate--Short-Term Debt

Mr. Bolster determined that the cost rate for short-term debt would be 10.50%, which represented his estimate of what the average commercial prime rate would be in 1990. Mr. Ballinger, on the other hand, computed this rate to be 10.58%. Starting with the utility's existing short-term debt rate of 10.50%, Mr. Ballinger included customer deposits and pipeline refunds as part of Michigan Gas's short-term debt, and recommended that we adopt his figure of 10.58%.

No exceptions have been filed regarding the ALJ's recommendation to use 10.58% as the cost rate for the utility's short-term debt. The Commission finds that this recommendation is supported by the record and should be adopted.

Cost of Common Equity

Mr. Bolster recommended a rate of return of 13.5% on Michigan Gas's common equity. In doing so, he considered the utility on a stand-alone basis. In arriving at his recommendation, Mr. Bolster performed a discounted cash flow (DCF) analysis and a risk premium analysis to estimate the utility's cost of common equity. The DCF approach used by Mr. Bolster is based on the hypothesis that

the current required rate of return on an investment in Michigan Gas is equal to the anticipated dividend yield plus anticipated future growth of an 11-company barometer group of similar utilities. In contrast, the risk premium approach computes the required return on common equity by comparing common equity returns to risk-free returns, like long-term treasury bonds. The result of Mr. Bolster's evaluation was a bare cost of equity of 13.3% under the DCF analysis and 13.75% under the risk premium analysis. He therefore proposed 13.5%, the average of those two figures, as a reasonable cost of common equity for Michigan Gas.

Mr. Ballinger used the consolidated capital structure approach to estimate the utility's cost of common equity, rather than the stand-alone evaluation conducted by Mr. Bolster. Mr. Ballinger's first step was to establish an estimated range for the cost of common equity for the utility's parent, SEMGE. In doing so, he used the same 11-company barometer group as Mr. Bolster, and employed both the DCF and risk premium methodologies. However, because they were based on more recent data,⁹ Mr. Ballinger's analysis resulted in lower figures than those arrived at by Mr. Bolster. Mr. Ballinger's analysis led him to conclude that SEMGE's cost of common equity was between 12.75% and 13.25%. He then computed SEMGE's overall rate of return for year-end 1988. SEMGE's overall rate of return was then imputed to its subsidiaries, producing a cost of common equity for Michigan Gas of between 11.21% and 11.53%. Mr. Ballinger recommended that the low end of this range would be the most appropriate. (Tr. 1327.)

The ALJ recommended that we adopt Mr. Ballinger's proposal to impute SEMGE's overall cost of capital to Michigan Gas. Furthermore, because Mr. Ballinger's

⁹The dividend yield component of Mr. Bolster's DCF analysis was based on the average dividend yield for the 11-company barometer group during the eight months ended February 1989, whereas the average dividend yield proposed by Mr. Ballinger was derived from figures from May, June, and July 1989. (Tr. 1322 and 2191.) Furthermore, while Mr. Bolster's risk premium analysis used a prospective yield on long-term treasury bonds of 9.0%, that rate had fallen to 8.13% by the time Mr. Ballinger prepared his direct testimony. (Tr. 224 and 1326.)

DCF and risk premium analyses were based on more recent data, she concluded that his projections of the utility's cost of common equity were superior to those offered by Mr. Bolster. However, due to Mr. Ballinger's failure to justify using the low end of his 11.21% to 11.53% range, the ALJ recommended that we adopt the midpoint, 11.37%, as Michigan Gas's cost of common equity.

Michigan Gas excepts to the ALJ's recommendations on several grounds. First, the utility renews its argument that the consolidated capital structure approach does not best reflect its cost of common equity. Instead, Michigan Gas asserts, this approach merely identifies SEMGE's cost of equity and then uses this figure to derive the utility's cost of equity. Michigan Gas therefore asserts that Mr. Bolster's proposal, which computed the utility's cost on a stand-alone basis, should be adopted instead. Second, the utility again contends that the consolidated capital structure approach serves to regulate the non-regulated holding company. Third, the utility asserts that the rate of return on common equity for both SEMGE and Michigan Gas should be no less than 13.25%, the rate of return recently authorized for both Michigan Consolidated Gas Company (Mich Con) and Consumers. Fourth, Michigan Gas asserts that the ALJ should have adjusted SEMGE's rate of return on common equity to reflect the fact that because 38.6% of SEMGE's capital structure comes from common equity as opposed to an average of 51.7% for the 11-company barometer group, SEMGE has a higher financial risk than comparable gas distributors.

The Commission disagrees with the first three arguments made by the utility. The record reflects that Michigan Gas does not arrange for its own financing. Instead, all debt financing for SEMGE and its subsidiaries is arranged by the parent company. Furthermore, Michigan Gas does not seek out and obtain its own equity capital. Rather, SEMGE sells its own stock and puts the money raised from the sale into its subsidiaries, like Michigan Gas. It therefore follows that an

analysis of the utility's cost of common equity depends, in great part, upon its parent company's position in the market. Thus, the Commission finds that it was proper for the ALJ to use SEMGE's cost of common equity to derive Michigan Gas's cost of equity, rather than using the independent company methodology proposed by Mr. Bolster. Regarding the utility's claim that the consolidated capital structure improperly regulates SEMGE and its non-regulated subsidiaries, we again note that its use in this case only determines what cost of capital is appropriate for Michigan Gas, a regulated utility. As stated earlier, this order neither requires nor authorizes the parent company to take or refrain from taking any course of action. The Commission therefore finds that Michigan Gas's first two arguments regarding this issue should be rejected.

With regard to the utility's third argument, we are not persuaded that the authorized rate of return on common equity for both SEMGE and Michigan Gas must be greater than or equal to that of Mich Con and Consumers. Mich Con's current rate of return, established by our April 12, 1990 order in Case No. U-9475, resulted from a settlement agreement. Because this agreement does not necessarily reflect the result that would have been reached had the parties chosen to fully litigate the issue, we find that Mich Con's rate of return on common equity should not be determinative of the return allowed in the present case. Furthermore, because the return authorized for Consumers in consolidated Cases Nos. U-8678, U-8924, and U-9197 was based on a different record and because Consumers faces different business risks than either SEMGE or Michigan Gas, we find that these entities need not have identical rates of return on common equity.

Although we disagree with the utility's first three arguments, we do find some merit to the fourth. Specifically, a company's greater-than-average reliance upon debt financing may, in some cases, necessitate raising its rate of return on common equity to attract additional investment. However, because

SEMGE's decision to use debt instead of equity to finance its operations was solely within its management's discretion, we find that the fact that its capital structure contains more debt than the average of the 11-company barometer group does not, by itself, support the adoption of Mr. Bolster's position.

For these reasons, we find that Mr. Ballinger's approach to estimating the utility's cost of common equity should be adopted. However, we further find that the top end of his cost ranges for both SEMGE and Michigan Gas should be used in this case. We therefore hold that SEMGE's cost of common equity should be 13.25% and that, based on the consolidated capital structure approach, Michigan Gas's authorized rate of return on common equity should be 11.53%.

Conclusion

Based upon the discussion and findings set forth above, the Commission finds the overall rate of return for Michigan Gas to be 10.16%, is computed as follows:

<u>Description</u>	<u>Structure Percent</u>	<u>Cost Rate</u>	<u>Weighted Cost Rate</u>
Long-Term Debt	13.91%	10.57%	1.47%
Short-Term Debt	24.63	10.58	2.61
Common Equity	49.94	11.53	5.76
Cost-Free Capital	8.68	0.00	0.00
JDITC	<u>2.84</u>	<u>11.12</u>	<u>0.32</u>
Total	100.00%	---	10.16%

IV.

ADJUSTED NET OPERATING INCOME

In order to establish whether a revenue deficiency exists, it is necessary to determine what Michigan Gas's net operating income will be in the future based on its current rates. To make this calculation, allowable expenses, taxes, and

depreciation must be subtracted from the utility's projected total operating revenues. The starting point for this calculation is the determination of the utility's future sales and transportation volumes.

Sales and Transportation Volumes

Consistent with its position that a fully-projected test year is appropriate, Michigan Gas computed its operating revenues on the basis of projected sales and transportation volumes (throughput) for 1990. The Staff, on the other hand, based its calculation of proposed volumes on actual data from year-end 1988. These historical figures were then updated to present a reasonable prediction of the utility's sales and transportation volumes for 1990 and beyond. In updating these figures, the Staff adopted several of the adjustments proposed by Michigan Gas. In addition, the Staff included 98,817 Mcf of interruptible transportation for BASF Corporation and 1,203,646 Mcf of coal displacement sales to Stone Container Corporation. These additions led the Staff to propose the adoption of 23,922,432 Mcf as the utility's throughput for purposes of this rate case.

Michigan Gas conceded that if the historical test year was adopted, the Staff's figure of 23,922,432 Mcf would be an acceptable starting point for the utility's total sales and transportation volumes. (Michigan Gas's Initial Brief, pp. 76-77.) However, Michigan Gas argued that weather normalization should be based on a 15-year average of annual degree days, rather than the 30-year average employed by the Staff. This claim was supported by Michigan Gas's own statistical study indicating that the state is experiencing a warming trend that can only be sufficiently accounted for by using its 15-year average of annual degree days. The utility went on to assert that using the 15-year average would reduce the Staff's throughput projection by 88,003 Mcf and cause expected revenues to drop by \$59,608.

Noting that the Commission has long adhered to the use of a 30-year average of annual degree days, the ALJ recommended rejecting Michigan Gas's proposal to use a 15-year average. According to the ALJ, the study undertaken by the utility was not sufficient to warrant a change in Commission policy. Instead, she felt that further study was needed before we abandon the use of the 30-year average.

Michigan Gas excepts to the ALJ's recommendation that we use a 30-year average. According to Michigan Gas, evidence presented in this case shows that the 15-year average was "more accurate in predicting expected weather in the near term." (Michigan Gas's Exceptions, p. 64.) Additionally, the utility notes that both Charles D. Laderoute, an economist and President of Charles D. Laderoute, Ltd., and George M. Chapel, a rate and gas supply analyst for Michigan Gas, testified that a warming trend is currently underway that is not adequately reflected in the 30-year average. The utility further asserts that this trend, referred to by Mr. Laderoute as "the greenhouse effect" or "global warming," has been recognized by the American Meteorological Society (AMS). (Tr. 62-63.) Michigan Gas therefore contends that the ALJ's adherence to the 30-year average is not appropriate and that the 15-year average proposed by the utility should be adopted instead. We disagree.

The Commission recognizes that, due to the cyclical nature of weather, a shorter historical period may provide a more accurate prediction of short-term weather conditions. However, in rate cases like this, the Commission is looking for the "normal" temperature, whether or not that figure precisely coincides with the temperature predicted in the near term. Moreover, the Commission has long used a 30-year average to compute "normal" weather. The Commission therefore finds that, until we are presented with more compelling evidence supporting the use of a shorter period, we should continue to employ the 30-year average proposed by the Staff. Thus, we adopt the Staff's projected sales volume of

17,275,217 Mcf and transportation volume of 6,647,215 Mcf, and find that a combined throughput level of 23,922,432 Mcf is reasonable and prudent.

Net Operating Income

Using a fully-projected test year, Michigan Gas computed its net operating income for 1990 to be \$1,490,549. (Exhibit A-9, Schedule C-1.) The Staff, in contrast, began with the utility's 1988 net operating income of \$3,478,000 and made 12 adjustments in arriving at a level of \$3,586,000 for 1990. With one exception,¹⁰ these adjustments were confined to normalizing and updating 1988 data. Due to the Staff's belief that the historical test year should be rigorously adhered to, neither known, measurable, nor anticipated changes in the utility's expenses were included in the Staff's computation.

In light of her recommendation regarding the selection of a test year, the ALJ concluded that the Staff's figure was more appropriate than the utility's proposal. Specifically, she indicated that "the purity of the test year" could only be preserved by adopting the Staff's computation of net operating income as a starting point. (PFD, p. 50.) However, the ALJ again stated that the Staff's figure should be adjusted for known and measurable changes in Michigan Gas's operating expenses. We agree.

During our earlier discussion of the appropriate test year, we found that some of the utility's cost projections constituted mere budget requests. However, we further held that strict adherence to the Staff's historical figures

¹⁰As noted in our discussion of the parties' proposed test years, the Staff used a year-end analysis of Michigan Gas's cost of service in recognition of the fact that the utility's operations during early 1988 reflected a temporary start-up by its new management. In doing so, the Staff viewed Michigan Gas's November 1988 other operation and maintenance expense (other O&M expense) as representative of what these cost levels would have been for all 12 months had no transition been taking place. The Staff then applied CPI inflation factors of 5.1% and 5.2% for the years 1989 and 1990, respectively, to arrive at a 1990 level of other O&M expense.

would not provide the most accurate estimate of future income. We therefore adopted the Staff's historical data as a starting point, but held that those figures should be revised to reflect known and measurable changes occurring after December 31, 1988. For those same reasons, we adopt the Staff's figure of \$3,586,000 as a reasonable estimate of Michigan Gas's 1990 net operating income, but further find that this figure should be adjusted for known and measurable changes identified on this record.

Operating Expenses

Michigan Gas requested that several adjustments be made to the Staff's calculation of net operating income due to changes in certain expense levels. The ALJ recommended that we adopt some of those proposed adjustments and reject the rest. Although both Michigan Gas and the Staff except to her recommendations regarding several proposed changes to operating expenses, no dispute exists with regard to her conclusions on seven expense-related issues. For example, Michigan Gas does not except to the ALJ's recommendation that we deny the utility's request to increase the historical amount of other O&M expense by \$720,000 before applying CPI inflation factors for 1989 and 1990. Similarly, the Staff raises no specific exceptions¹¹ to the ALJ's recommendation that the Commission grant the utility's request to: (1) increase depreciation expense by \$59,379 to reflect the fact that the SCADA system was operational prior to the start of 1990; (2) increase depreciation expense by an additional \$68,022 to reflect that, according to record evidence for the 12 months ended November 30, 1989, the Staff had underestimated the utility's actual depreciation costs; (3) raise the util-

¹¹Although the Staff has generally excepted to the ALJ's recommendation that we make known and measurable changes to historical test year figures, the Commission fully addressed, and ultimately rejected, this exception earlier in today's opinion and order.

ity's property tax expense by \$9,000 due to the SCADA system becoming operational; (4) increase property tax expense by an additional \$147,643 beyond the Staff's proposed increase due to other known and measurable plant additions made during 1989; (5) increase the Staff's proposed uncollectible expense by \$12,304; and (6) amortize the utility's rate case expense for Case No. U-9112 at \$94,076 annually for three years, rather than at the Staff's proposed level of approximately \$9,000 per year.

As noted above, no exceptions have been filed regarding the ALJ's recommendations on these seven issues. The Commission finds that the ALJ's recommendations are supported by the record and should be adopted. As for the other adjustments proposed by the parties, we will address each of these issues seriatim.

a. Maintenance Expense

The Staff's calculation of Michigan Gas's net operating income included \$800,000 in maintenance expense. This figure was drawn from the utility's books, which indicated that it had spent that amount on maintenance during 1988. Claiming that \$800,000 was an unreasonably low amount to budget for maintenance expense during 1990 and beyond, the utility proposed that this figure be increased by \$218,000 annually. However, the ALJ rejected this proposed adjustment. According to her, the fact that Michigan Gas spent \$800,000 during calendar year 1988 and an identical amount during the 12-month period ended November 30, 1989 indicated that a maintenance expense of \$800,000 per year is sufficient to allow the utility to operate in a satisfactory manner.

Michigan Gas excepts to the ALJ's rejection of the utility's proposal to increase its annual maintenance expense by \$218,000. According to Michigan Gas, its predecessor, Michigan Power, spent \$1,018,000 on maintenance of the system during 1986. Mr. Clemence asserts that the only reason annual maintenance

expense did not remain at this level following SEMGE's purchase of the franchise is that many maintenance projects were deferred during 1988 and 1989 in order for the utility to "realize a modicum of profitability." (Tr. 876.) The utility contends that this deferral of maintenance projects cannot continue indefinitely without reducing the system's safety and reliability. Therefore, Michigan Gas asserts that we should increase the Staff's allowance for maintenance expense by \$218,000.

We agree, in part, with the utility's assertion. The fact that Michigan Power previously spent as much as \$1,018,000 annually to maintain this system supports Michigan Gas's claim that it was only able to reduce this expense to \$800,000 during 1988 and 1989 by deferring some maintenance. Furthermore, we agree that system maintenance and repair cannot be deferred indefinitely without adversely affecting safety and reliability. Thus, some adjustment should be made to the level of maintenance expense proposed by the Staff and recommended by the ALJ. However, Michigan Gas has failed to persuade us that maintenance expense must immediately be increased by \$218,000 per year. We therefore find that only one-half of the utility's proposed increase, or \$109,000, should be authorized at this time. Furthermore, we instruct the Staff to closely monitor the utility's actual spending on maintenance and repairs to verify that these additional funds are being spent on system maintenance.

b. Appliance Sales

As had been the case with Michigan Power, a portion of Michigan Gas's facilities and labor has been dedicated to the sale of appliances such as gas stoves and ranges. Because the sale of appliances constitutes a non-jurisdictional activity, all costs related to this activity must be removed from the utility's jurisdictional expenses. Although the parties agreed that removal of appliance

sale costs was necessary, they disagreed on the amount. The Staff proposed that an additional \$50,000 should be disallowed beyond the amount deducted in Michigan Gas's own books, resulting in an after-tax reduction of \$33,000. (Exhibit S-27, Schedule C-9.) The ALJ agreed with the Staff and incorporated this disallowance into her calculation of Michigan Gas's adjusted net operating income.

Michigan Gas excepts to the ALJ's conclusion regarding appliance sale costs on the grounds that the record does not support this disallowance. According to the utility, the only evidence supporting this adjustment was a single sentence in the testimony of Robert C. Mogis, an auditor in the Commission's Gas Division, stating that he "disallowed a net amount of \$33,000 for appliance sales costs over the amount recorded on the books of account due to audit findings." (Tr. 1831.) However, Michigan Gas points out, no explanation of these "audit findings" was provided in the record.¹² In contrast, the utility argues, Mr. Clemence's rebuttal testimony provided overwhelming evidence of the propriety of the utility's initial handling of these non-jurisdictional costs. Specifically, Mr. Clemence reviewed the Staff's workpapers and discovered that the Staff: (1) allocated too much square footage to appliance sales, and (2) failed to use current data when assigning salary expenses to these non-jurisdictional activities. (Tr. 2050 and 2061.)

Although Mr. Clemence's testimony on this issue is far from overwhelming, we find that it is superior to the record evidence submitted by the Staff. The Commission therefore holds that the Staff's disallowance should be rejected and that Michigan Gas's operating expenses should be increased by \$50,000.

¹²Although a more detailed explanation of the reasons for this proposed disallowance was provided on pages 30 through 32 of the Staff's Initial Brief, Michigan Gas properly notes that these "factual assertions" do not constitute record evidence. Thus, we do not consider these assertions in formulating today's opinion and order.

c. Sale and Leaseback of the Utility's Motor Vehicle Fleet

Shortly after SEMGE purchased the utility, Michigan Gas sold its company fleet to another subsidiary of SEMGE, Southeastern Michigan Engine Specialists (Engine Specialists). The utility then leased the entire fleet of vehicles back from Engine Specialists. According to Mr. Mogis, this arrangement unnecessarily increased Michigan Gas's annual vehicle expense. (Tr. 1831.) Despite the utility's assertions that this sale and leaseback could save the ratepayers money due to the removal of these vehicles from ratebase, the ALJ recommended that we adopt the Staff's proposal to disallow \$35,000 in gross expenses and \$23,000 in net expenses arising from this arrangement.

Michigan Gas excepts, and requests that we include these disallowed expenses in the calculation of the utility's net adjusted operating expenses. This exception is based on the utility's assertion that the benefits of this sale and leaseback outweigh any increases in Michigan Gas's vehicle expense. The Commission disagrees.

Mr. Clemence admitted that the lease between the utility and Engine Specialists calls for the payment of an "interest element" based on the net book value of the fleet at the time of its transfer. (Tr. 2059-2060.) He further indicated that the same rate would be applied until expiration of the lease, despite the fact that the vehicles will continue to depreciate throughout this period. Thus, due to the lease's failure to account for depreciation, the sale and leaseback of the company fleet will actually require Michigan Gas's ratepayers to pay higher vehicle costs than if the utility had retained ownership of the fleet. However, Michigan Gas has not shown any countervailing benefit to ratepayers from this sale and leaseback. The Commission therefore finds that the Staff's proposed adjustment was proper and that Michigan Gas's request should be rejected.

d. Economic Development Expense

On April 29, 1986, the Commission issued an order in consolidated Cases Nos. U-6490 and U-8455 in response to federal guidelines contained in the Public Utility Regulatory Policies Act (PURPA). Section 303(b)(2) of Title III of PURPA established an advertising standard for gas utilities that provides:

"No gas utility may recover from any person other than the shareholders (or other owners) of such utility any direct or indirect expenditure by such utility for promotional or political advertising as defined in Section 304(b)."

The term "promotional advertising" was defined to mean any advertising for the purpose of encouraging any person to select or use the service or additional service of the gas utility or the selection or installation of any appliance or equipment designed to use the utility's service.

With regard to advertising that promotes economic development in Michigan, the April 29, 1986 order stated:

"The Commission also finds that advertisements which promote economic development in Michigan have a direct benefit to ratepayers. This type of advertisement benefits both a utility's shareholders and ratepayers. Increased sales could generate increased profits for shareholders and may provide ratepayers with a benefit by increasing the base over which fixed costs are spread, thus lowering the fixed cost burden of each customer. Additionally, the public interest is served through the creation of more jobs and the development of a stronger, more diversified state economy.

* * *

"Therefore, the Commission finds that utility advertising to promote economic development and the reindustrialization of Michigan should be allowed cost of service treatment. However, the Commission stresses that such advertising programs must not be tailored to raid another Michigan utility's existing customers. . . . Cost of service treatment for advertisements will not be permitted if those advertisements are designed to encourage existing companies to switch energy sources or to simply relocate from one Michigan location to another.

"Additionally, as a utility's shareholders will also benefit from advertising directed at improving Michigan's

economic climate, the Commission believes that the shareholders should be required to pay a significant share of those costs." (Order in consolidated Cases Nos. U-6490 and U-8455, pp. 24-25.)

In light of language quoted above, Michigan Gas has taken steps to implement a comprehensive economic development program that, according to the utility, is not intended to divert customers from other Michigan utilities. According to Thomas M. Sherman, the utility's Manager of Marketing, the purpose of this program is to actively pursue industrial retention and to revitalize areas that have already experienced industrial flight by bringing in new businesses. He stated that Michigan Gas plans to spend a total of \$140,700 in 1990 on: (1) economic development advertising, (2) participation in organizations like the Michigan Electric and Gas Association Development Corporation and the Southwest Michigan Utility Alliance, and (3) the employment of two persons to run the program by engaging in promotional and occasional legislatively-oriented activities.

The Staff objected to the utility's request to recover all but \$20,000 of its economic development expense through its rates. According to Cornell D. Pettiford, an auditor in the Commission's Gas Division, it would be improper to give cost-of-service status to these expense items for three reasons. First, he stated that the utility failed to present the evidence required by the April 29, 1986 order in consolidated Cases Nos. U-6490 and U-8455 regarding "descriptions of its advertising programs or the specific targets to which the advertising is to be directed." (Tr. 1216.) Second, he indicated that the Staff's position was consistent with the Commission's December 22, 1988 order in consolidated Cases Nos. U-8812, U-8635, and U-8854, where Mich Con's economic development advertising expense was disallowed. Third, he asserted that the amount of the utility's proposed economic development expense was not supported by historical data. The Staff therefore argued that none of Michigan Gas's \$140,700 economic development expense should be included in the calculation of net operating income.

The ALJ concluded that Michigan Gas satisfied the requirements set out in consolidated Cases Nos. U-6490 and U-8455. Specifically, she noted that Mr. Sherman described in detail the various components of the economic development program, indicated what specific problems exist with respect to economic development in its service territory, testified about the specific activities the utility intends to undertake, and identified the following as its target industries: (1) pulp and paper production, (2) food processing, and (3) auto parts manufacturing. The ALJ went on to state that she was not persuaded by the Staff's argument regarding the lack of an equivalent amount of economic development expense during the historical test year. According to her, sufficient information exists on the record to warrant inclusion of this \$140,700 expense as a known and measurable change to historical test year figures. However, despite Michigan Gas's claim that prior Commission orders only required utility shareholders to absorb half of the advertising expenses related to economic development, the ALJ went on to rule that shareholders and ratepayers should split all economic development costs. She therefore recommended that only one-half of the utility's total economic development expense, \$70,350, be included in the computation of Michigan Gas's net operating income.

The Staff excepts to this recommendation, renewing its claim that only historical levels of economic development expense should be considered when calculating the utility's net operating income. Furthermore, based on its assertion that Michigan Gas spent little on economic development during 1988, the Staff asserts that none of this proposed expense should be passed on to the utility's ratepayers. We disagree. Although this expense is less certain than the other known and measurable changes adopted in today's opinion and order, we find sufficient evidence to warrant its inclusion. Furthermore, we find that the ALJ's recommendation to hold shareholders and ratepayers equally responsible for

the reasonable cost of economic development activities is both reasonable and in the public interest. In reaching this conclusion, we reaffirm our belief--stated in our December 7, 1989 order in consolidated Cases Nos. U-8678, U-8924, and U-9197--that, although utilities should not be given an open-ended authorization to spend ratepayer money on economic development activities, the public interest is served by the creation of more jobs, the development of a stronger, more diversified economy, and the potential lowering of the fixed cost burden on ratepayers. Accordingly, we reject the Staff's exception regarding this issue and adopt the ALJ's recommendation to include \$70,350 of Michigan Gas's economic development expense in the calculation of net operating income.

However, we also find that it would not be proper to require ratepayers to finance any lobbying efforts that Michigan Gas may have contemplated as part of its "legislatively-oriented activities." Instead, any lobbying by the utility should be paid for solely by its shareholders.

e. Parent Company Tax Savings

The Staff proposed including a \$297,000 income adjustment in the computation of Michigan Gas's net operating income. According to the Staff, this figure reflects Michigan Gas's share of the annual tax savings SEMGE realized by acquiring the utility. The Staff contended that because Michigan Gas is assigned part of the common costs incurred by SEMGE and its subsidiaries, it should also be entitled to a share of the benefits derived from the consolidation, such as reduced taxes. The Staff further asserted that use of the consolidated capital structure, which includes the parent company's interest expense when computing the overall rate of return, demands that the tax savings arising from that interest expense be accounted for; otherwise, \$1.00 of parent company interest requirements would be translated into \$1.51 of revenues to cover that interest.

Despite the utility's arguments in opposition to this proposal, the ALJ recommended that we adopt this adjustment.

Michigan Gas excepts to this recommendation. The utility claims that, contrary to the Staff's assertions, Michigan Gas is only assigned costs that are directly attributable to its own gas distribution activities. Thus, Michigan Gas contends, the utility pays only its own costs and not those of the consolidated group. Furthermore, the utility argues that it is inconsistent for the ALJ to recommend the sharing of this parent company tax savings in light of her earlier conclusion that no return of or on the acquisition adjustment should be allowed since ratepayers received no direct benefit from this consolidation. We disagree with both of these arguments.

Despite Michigan Gas's assertion that it pays only those costs that are directly attributable to its own activities, the record shows that SEMGE also assigns a significant amount of indirect expenses to this utility. Furthermore, we find that the utility has again misinterpreted the standard applied by the ALJ regarding returns of and on acquisition adjustments. As stated earlier, the test is not whether one or two isolated benefits arise from the change in ownership, but rather whether the overall effect of the acquisition was beneficial to ratepayers. Thus, the existence of this tax benefit and its partial assignment to Michigan Gas's ratepayers is not inconsistent with the denial of the utility's request for favorable treatment of its acquisition premium. We therefore find that the ALJ's recommendation regarding the parent company tax savings should be adopted.

Remaining Issues

Two additional adjustments are required when computing net operating income. The first reflects the tax effect of the interest implicit in the capital struc-

ture. This adjustment, which results in an increase of \$38,043 in net operating income due to a reduction in income tax, is computed as follows:

Rate Base	\$55,487,496
Weighted Cost of Debt	<u> x 4.08% </u>
Required Interest Expense	\$ 2,263,890
Booked Interest Expense	<u>- 2,152,000</u>
Increased Interest Deduction	\$ 111,890
Federal Income Tax Rate	<u> x 34% </u>
Income Tax Savings	<u>\$ 38,043</u>

The second adjustment reflects the impact of the JDITC contained in the capital structure. This adjustment, which recognizes the tax consequences of interest synchronization, leads to an increase of \$21,860 in the utility's net operating income, and is computed as follows:

Rate Base	\$55,487,496
Percent of JDITC in Capital Structure	<u> x 2.84% </u>
Amount of JDITC in Rate Base	\$ 1,575,845
Weighted Cost of Debt	<u> x 4.08% </u>
Gross Interest Synchronization	\$ 64,294
Federal Income Tax Rate	<u> x 34% </u>
Tax Savings Due to Interest Synch.	<u>\$ 21,860</u>

None of the parties have disputed the need for, nor the method of computing, these two adjustments.

Conclusion

Based upon the discussion and findings set forth above, the Commission finds the utility's adjusted net operating income to be \$3,546,508. This figure is computed as follows:

	<u>Gross</u>	<u>Net</u>
Net Operating Income: (per Staff Exhibit S-27)		\$3,586,000
Adjustments Increasing Expenses:		
Depreciation from SCADA System	(59,379)	(39,190)
Other Depreciation through November 30, 1989	(68,022)	(44,895)
Property Tax on the SCADA System	(9,000)	(5,801)
Other Property Tax through November 30, 1989	(147,643)	(95,156) ¹³
Rate Case Expenses (from U-9112)	(85,076)	(54,831)
Uncollectibles Expense	(12,304)	(7,930)
Maintenance Expense	(109,000)	(70,251)
Appliance Sales Expense	(50,000)	(33,000)
Economic Development Expense	(70,350)	(45,341)
Adjustments Decreasing Expenses:		
Parent Company Tax Savings	297,000	297,000
Interest Implicit in Capital Structure	111,890	38,043
Interest Synchronization	64,294	<u>21,860</u>
Adjusted Net Operating Income:		<u>\$3,546,508</u>

¹³Although the Staff did not except to the gross amount of the ALJ's adjustment regarding increases in the utility's property tax expense due to miscellaneous plant additions, it did except to the net figure of \$104,089 used in computing Michigan Gas's adjusted net operating income. We find that the Staff's exception--to the effect that the ALJ made a mathematical error in computing the after-tax effect of this adjustment--was correct and that the proper net adjustment should be \$95,156.

VII.

REVENUE DEFICIENCY

Having determined Michigan Gas's rate base, overall rate of return, and adjusted net operating income, the computation of the utility's revenue deficiency is relatively straight-forward. This computation, as set forth below, leads us to find that the utility's revenue deficiency totals \$3,244,430.

<u>Description</u>	<u>Amount</u>
Rate Base	\$55,487,496
Overall Required Rate of Return	<u>x 10.16%</u>
Required Income	\$ 5,637,530
Less: Adjusted Net Operating Income	<u>- 3,546,508</u>
Income Deficiency	\$ 2,091,022
Revenue Multiplier	<u>x 1.5516</u>
Revenue Deficiency	\$ <u>3,244,430</u>

VIII.

RATE DESIGN

Having established Michigan Gas's revenue deficiency, the Commission must now design rates and establish or modify certain rules for the utility's customers, both sales and transportation. Testimony and exhibits supporting specific proposals were submitted by Michigan Gas and the Staff.

Rate Restructuring

Michigan Gas proposed to restructure its rates in two important ways. First, based on an analysis of its customers' load and usage characteristics, the utility proposed revising its rate classes. Specifically, it suggested: (1) incorporating all large and firm transportation customers into a single rate

class, (2) creating a new grain drying class, and (3) combining rate classes GS-2, GS-3, and GS-4 into one rate class, entitled "large general service." The ALJ recommended that we adopt this proposal, and no exceptions were filed regarding this issue. The Commission finds that this recommendation is supported by the record and should be adopted.

By way of its second proposal, Michigan Gas requested that it be allowed to implement seasonal rates for the sale and transportation of gas. Because a higher percentage of the utility's demand-related costs are required by peak usage, and because Michigan Gas's system peak occurs during the winter, this proposal calls for higher base rates during the winter and lower rates during the summer. According to the utility, those seasonal rates better reflect the cost of service than rates that remain the same throughout the year.

During the hearings, the Staff indicated that it "agreed in principle" with this proposal. (Tr. 1586.) However, William G. Aldrich, a cost of service specialist in the Commission's Gas Division, warned that seasonal rates could prove unpopular with customers because they would increase base rates during the part of the year when most customers are already receiving their highest gas bills. Furthermore, he noted that low load factor customers (e.g., residential space heating customers, whose gas use is significantly higher in the winter) could experience significantly higher rates than they would pay if the distribution charge was the same all year. Despite these concerns, the Staff originally recommended that Michigan Gas's seasonal rate proposal be approved on a one-year trial basis. In its initial brief, however, the Staff changed its position and asked that seasonal rates not be adopted in this case. This change arose, at least in part, from our issuance of the December 21, 1989 order in Case No. U-9185--Michigan Gas's 1989 GCR plan case--in which we rejected the utility's

proposal to implement monthly GCR factors that charged higher prices in the winter and lower prices in the summer.

The ALJ concluded that our order in Case No. U-9185 should not affect whether seasonal rates are adopted in the present case. According to her, there was "nothing in the record on which to substantiate rejection of such factors." (PFD, p. 61.) She therefore recommended that seasonal rates be adopted despite the Staff's objection.

The Staff excepts to this recommendation on several grounds. For example, it asserts that the present situation is much like that addressed by our December 21, 1989 order in Case No. U-9185. According to the Staff, the seasonal rates proposed in this rate case would have the same effect on many ratepayers as the monthly GCR factors proposed by Michigan Gas in Case No. U-9185; costs would rise during the winter, when heating bills are already the highest. Thus, the Staff argues, we should treat the utility's request for seasonal rates the same as we treated its request for monthly GCR factors. The Staff further asserts that, contrary to the ALJ's belief, Mr. Aldrich's testimony regarding the effect on low load factor customers supports the rejection of seasonal rates in the present case. We agree.

Although our prior ruling regarding Michigan Gas's request for monthly GCR factors in Case No. U-9185 is not controlling, we do find it to be instructive. Specifically, that order expresses the Commission's belief that seasonal rates are not desirable. For example, whether dealing with the non-gas component (base rates) or the gas component (GCR factors) of an average customer's bill, increasing the size of the bill during winter months can have serious consequences. As noted in our December 21, 1989 order in Case No. U-9185, this is particularly true with regard to certain residential space heating customers who need state

assistance to heat their residences. Thus, we reject the utility's proposal to implement seasonal rates for any of its customers.

Gas Allocation and Curtailment Rule Changes

Both Michigan Gas and the Staff proposed replacing the utility's gas allocation and curtailment rules with a new set of rules that, among other things, better recognizes the advent of gas transportation. Each set of proposed rules specifies how the utility will handle curtailment due to lack of gas supply as well as curtailment due to lack of capacity. In addition, the Staff proposed modifying Michigan Gas's current interruptible service rate schedule to make it clear that the utility's obligation to serve ends following the issuance of proper notice. The Staff further proposed that Section F6.2 of the utility's existing rules, entitled "Indemnification of the Company," be eliminated and that Section F3.3, concerning transportation customers' gas nominations, be revised. The utility consented to the adoption of the Staff's proposed changes. (Michigan Gas's Initial Brief, p. 103.)

Due to the lack of dispute among the parties, the ALJ recommended that we adopt the Staff's proposed rule changes. No exceptions have been filed concerning this recommendation. The Commission finds that this recommendation--concerning adoption of the Staff's proposed Rule B3, Controlled Service, and Rule B4, Curtailment of Gas Service, as well as the proposed amendments to the utility's interruptible service schedule and Section F3.3 of its Rules and Regulations for Gas Transportation Customers--is supported by the record and should be adopted. Attached to the original of this order is a copy of the revised rules and regulations. Due to their length, the rules and regulations are not attached to copies of this order. However, they are available upon request or may be examined at the Commission's offices.

Cost Allocation and Rate Design

Both Michigan Gas and the Staff submitted testimony and exhibits supporting specific cost allocation and rate design proposals. Mr. Laderoute, who presented the utility's proposal, testified that Michigan Gas's predecessor--Michigan Power--never performed a detailed cost-of-service allocation study. Mr. Laderoute also stated that the settlement agreement adopted in Case No. U-9112 used the utility-sponsored cost-of-service allocation study to assign the revenue increase to each rate class. Thus, he testified that Michigan Gas's rates presently reflect some notion of a cost basis from an interclass standpoint, but not on a rate design basis. According to Mr. Laderoute, the utility's cost allocation and rate design proposal in this case is intended as the final step in achieving fully cost-based rates.

Mr. Laderoute testified in detail about the background theories underlying cost-of-service allocation methods, particularly those concerning the cost-of-service study he performed. He stated that a key factor in his study is the allocation of demand costs. He used the relative system utilization method (the RSUM method) to allocate these demand costs to various customer classes. According to Mr. Laderoute, the RSUM method takes into account gas use throughout the year, but gives more weight to the system's highest monthly average daily demand. In using the RSUM method, Mr. Laderoute developed a cost allocation study and a rate design that were "time differentiated." (Tr. 77.) Specifically, he used two costing periods, on-peak (November through April) and off-peak (May through October).

The Staff proposed allocating demand costs using the average and peak (A&P) method, which apportions costs based on two components: (1) the average demand, and (2) the peak demand. A weighted average is developed from a capacity (peak)

allocation factor and a commodity (average use) factor. Mr. Aldrich testified that by using the A&P method, the Staff developed a rate design proposal that will permit Michigan Gas to recover 100% of the costs allocated to each of the following three customer groups: (1) residential, (2) GS-1, GS-2, grain drying, and firm transportation, and (3) interruptible sales and interruptible transportation.

However, Mr. Aldrich went on to state that, to prevent inequities to customers and revenue loss to the utility, the Staff did not adhere to strict cost-of-service rates for each rate class within these three broad groups. According to Mr. Aldrich, strict adherence to cost-of-service principles in this case would have resulted in large rate increases for some classes while granting significant rate decreases to others.¹⁴ This, he claimed, would violate the principle of "gradualism" and create significant rate shock. (Tr. 1584.) Furthermore, he testified that it would have changed the break-even points between several rate classes, causing many customers to migrate from one rate class to another. Mr. Aldrich went on to state that this customer migration would likely result in a revenue shortfall for the utility because customers would end up paying lower rates than it was assumed that they would pay. To reduce these inequities and to lessen the potential for customer migration, the Staff's proposal deviated from true cost-of-service rates in five ways: (1) the revenue requirement for the GS-1 rate class was reduced by \$400,000; (2) the revenue requirement for the grain drying rate class was reduced by \$11,000; (3) the GS-2 rate class revenue requirement was raised by \$100,000; (4) the revenue requirement for firm transportation customers was held constant, rather than being reduced by \$300,000; and

¹⁴According to the record, strict application of cost-of-service principles would increase GS-1 rate by 35%, grain drying rates by 36%, and interruptible sales rates by 76%, while decreasing firm transportation rates by 26%. (Tr. 1584.)

(5) interruptible sales and interruptible transportation rates were designed so that the utility would be revenue indifferent if customers switched from one rate class to the other.

Due to the different approaches used by Michigan Gas and the Staff, significant dispute arose regarding several cost allocation and rate design issues. We will deal with each of these issues seriatim.

a. Demand, or Capacity-Related, Costs

The ALJ recommended that the Staff's A&P method be used to allocate demand costs (commonly referred to as capacity-related costs). In doing so, she recognized that, while the Commission has never employed the RSUM method to allocate costs, we have repeatedly adopted the A&P method. Due to the Commission's consistent adherence to the A&P method, the ALJ believed that further analysis of the RSUM method was needed before it is used to allocate costs in rate cases like this.

Michigan Gas excepts to this recommendation on two grounds. First, claiming that the RSUM method is superior to the A&P method when designing seasonal rates, the utility argues that the ALJ's support of the Staff's methodology is inconsistent with her recommendation to adopt seasonal rates. Second, the utility asserts that the fact that nearly 70 pages of testimony were submitted in support of the RSUM method, coupled with the fact that the Commission has seen this method in three earlier cases, indicates that the RSUM method is valid and reliable. Thus, Michigan Gas claims, it can be adopted without the need for further analysis.

The Commission finds that neither of these arguments are well-taken. Although the RSUM method may prove superior in designing seasonal rates, today's order rejects the use of seasonal rates by this utility. Furthermore, we find

that the mere volume of testimony offered in support of a position does not have a direct correlation to the position's validity. Moreover, of the three cases cited by the utility in which the RSUM method was proposed, its use was specifically rejected in Cases Nos. U-8897 and U-9185, Michigan Gas's 1988 and 1989 GCR plan cases, respectively. The third case, Case No. U-9112, was settled by the parties and required no Commission findings regarding either the validity or the reliability of the RSUM method. We therefore find that all demand or capacity-related costs, such as the cost of the utility's distribution plant, should be assigned to utility customers by way of the Staff's A&P method.

b. Adjustments to Ensure Gradualism

As with the demand cost issue, the ALJ adopted the Staff's request not to strictly adhere to cost-of-service rates for each rate class. She agreed with Mr. Aldrich that the Staff's proposed rate design would better allow the Commission to move toward cost-of-service-based rates in a gradual manner, thus avoiding excessive rate shock. The ALJ therefore recommended that we adopt the five adjustments to true cost-of-service rates proposed by the Staff and listed on pages 62 and 63 of this order.

Michigan Gas excepts to this recommendation on the grounds that the record clearly shows that no rate shock will result from the imposition of strict cost-of-service rates. We disagree. The only record evidence cited in support of Michigan Gas's claim that no rate shock will occur is an uncorroborated assurance to this effect by Mr. Laderoute. We find this testimony insufficient to convince us that no rate shock will occur and that we may safely abandon the principle of gradualism regarding rate increases. Furthermore, we note that Mr. Aldrich's five proposed adjustments are revenue-neutral with regard to the utility. We

therefore find that the five adjustments proposed by the Staff and recommended by the ALJ should be adopted.

c. Uncollectibles

Based on a study that indicated that almost 75% of Michigan Gas's uncollectible expense comes from its residential customers while several other rate classes cause none of this expense, the utility proposed allocating 75% of this expense to its residential rate class. In contrast, the Staff allocated uncollectibles on the basis of total cost of service, arguing that customers who pay their bills should not be held accountable for the bad debts of others in their rate class. The ALJ agreed with the Staff, and recommended that we adopt its allocation of uncollectibles.

In its exceptions, Michigan Gas renews its argument that unless 75% of these costs are assigned to existing residential customers, other rate classes will be unfairly required to subsidize the residential rate class. The Commission disagrees. This expense is not caused by some characteristic common to all members of the residential rate class. Instead, it results from the actions of a few individuals that happen to have been assigned to that rate class. We therefore find that the Staff has properly viewed uncollectible expense as part of the utility's overall cost of doing business. Accordingly, the Commission holds that this expense should be apportioned among the various rate classes on a total cost-of-service basis, including the cost of gas for sales customers.

d. Customer Accounts Expense

Michigan Gas proposed that customer accounts expense be allocated to each rate class on the basis of average customer count. This proposal was based on Mr. Laderoute's assertions that because the utility's billing and accounting

functions are now computerized, it costs no more for a large customer to be billed than a small customer. The Staff, relying on the testimony of Mr. Aldrich, proposed using weighted customer allocation factors to assign these costs to various rate classes. The Staff's allocation factors were based on each rate class' relative share of all customer-related plant costs. The ALJ recommended adopting the utility's proposal based on Michigan Gas's use of computerized billing and accounting programs.

In its exceptions, the Staff argues that all customers should not be allocated the same amount of these costs. Specifically, the Staff asserts that the ALJ's recommendation ignores the fact that meter reading costs attributable to large volume and many interruptible customers greatly exceed those of residential customers. It therefore claims that we should use weighted customer allocation factors, which are primarily related to the length and composition of a customer's service extension and the cost of the customer's meter or meters.

The Commission finds the Staff's argument to be persuasive. As noted by Mr. Aldrich, use of the weighted customer approach for allocation of customer account expense is consistent with past Commission practice. (Tr. 1589-1590.) For example, weighted customer allocation factors were adopted in our December 7, 1989 order in consolidated Cases Nos. U-8678, U-8924, and U-9197, Consumers' most recent rate case. Furthermore, we find that the Staff's approach recognizes the likelihood that customers having the more sophisticated and complicated service equipment and meters require more time and effort for the reading of their meters.

e. Gas Storage Costs

As recognized by the parties, the Commission has recently taken the position that gas storage costs should generally be allocated based on each rate class's

share of peak-day usage. However, because the only storage available to Michigan Gas at the time of these hearings was based on an interruptible lease agreement between the utility and Consumers, the Staff noted that gas storage may not be available on the peak day. Thus, the Staff concluded that the peak day allocation method would not be appropriate in this case. Instead, the Staff proposed that "storage costs be allocated based on a 50/50 split between winter throughput requirements and annual gas sales volumes." (Staff's Initial Brief, p. 65.) According to the Staff, this dual allocation recognizes that Michigan Gas's use of storage serves two purposes: (1) increasing the availability of winter throughput, and (2) reducing the cost of gas for the utility's sales customers.

The utility objected to the Staff's allocation of gas storage costs due to the fact that it assigned a portion of these costs to transportation customers. According to Mr. Laderoute, these costs should be assigned exclusively to the utility's sales customers because gas storage is a supply option, not a capacity option. The ALJ noted that the benefits of gas storage are more closely related to sales customers. However, she agreed with the Staff that some indirect benefits accrue to transportation customers from Michigan Gas's use of storage and that rate design should account for these benefits. The ALJ therefore recommended that we adopt the Staff's allocation of the utility's gas storage costs.

Michigan Gas excepts to the ALJ's recommendation on two grounds. First, it renews its claim that because transportation customers do not store gas on the utility's system, it is unfair to allocate any storage costs to them. Second, the utility claims that no indirect benefit accrues to transportation customers due to Michigan Gas's use of storage. The utility therefore asserts that all storage costs should be assigned to its sales customers and none to its transportation customers. We disagree.

Despite the utility's claims to the contrary, we find that transportation customers do receive an indirect benefit from Michigan Gas's use of gas storage. Specifically, by storing gas for use during the winter months, Michigan Gas has available more capacity in interstate pipelines as well as at several pipeline interconnects during that time. This capacity, which might otherwise be used for the shipment of system supply or other contract gas, is therefore available for the transportation of gas for the utility's transportation customers. In light of this benefit, we find that it is not unfair to allocate less than 10% of Michigan Gas's storage costs to its transportation customers, as is done by the Staff's proposal.¹⁵ The Commission therefore adopts the ALJ's recommendation and finds that the Staff's allocation of gas storage costs should be used in this case.

f. Allocation of General Plant

The Staff's cost-of-service study allocated the cost of Michigan Gas's general plant--which includes miscellaneous items like office buildings, furniture, computers, vehicles, tools, telephone systems, and laboratory equipment--on the basis of plant ratios. Thus, general plant expenses were assigned to rate classes in the same manner as the utility's distribution plant costs. Michigan Gas, on the other hand, allocated these costs on the basis of labor ratios. According to Mr. Laderoute, the utility's method of allocating general plant costs was superior because it acknowledged that a portion of Michigan Gas's general facilities "are a function of the number of customers." (Tr. 1961.)

¹⁵As reflected on Exhibit S-29, Schedule F-9, only \$463,580 of the utility's \$4,719,646 of gas storage costs were assigned to transportation rate classes by the Staff's proposal. This constitutes only 9.8% of the entire gas storage costs.

In addressing this dispute, the ALJ stated that the Staff had not pursued this issue in either its initial brief or its reply brief. She concluded from this that the utility's approach must have been more generally accepted. Thus, she recommended that we adopt Michigan Gas's proposal to allocate general plant on the basis of labor ratios.

The Staff excepts to this recommendation on several grounds. First, it points out that this issue was fully addressed on pages 69 and 70 of the Staff's initial brief. Second, it notes that distribution plant ratios used in the Staff's allocation reflect, to a large degree, the number of customers in the various rate classes. Third, the Staff points out that its methodology was adopted in our December 7, 1989 order in consolidated Cases Nos. U-8678, U-8927, and U-9197, Consumers' most recent rate case. Fourth, because the utility's general plant constitutes a minute portion of its total rate base, the Staff argues that recognition of the utility's allocation methodology would have little effect on total cost allocation and the final rates established by this order. The Staff therefore asserts that we should adopt the Staff's allocation of general plant, as we did in Consumer's recent rate case. We agree.

Any cost allocation method is to some extent a matter of judgment. In the broad sense, no customer should be assessed more than the cost of serving that customer. Carried to an extreme, each customer should have a separate computation based upon the amount of computer and telephone time spent on the customer, the number of service calls made to his or her facility, and the cost of the tools used to establish, maintain, or disconnect the customer's service. Obviously, the resources required to make such a computation for each utility customer would greatly exceed any resulting benefit and probably would be correct only for the time period analyzed. Thus, particularly when dealing with rela-

tively small amounts like those comprising the utility's general plant, another allocation methodology must be adopted.

In the final judgment, the question is not whether a more exact method can be constructed; rather, the question is whether the method and result are reasonable. Here, the allocation method proffered by the Staff and fully explained in both Mr. Aldrich's testimony and the Staff's initial brief is the same as that used in prior cases. Furthermore, we find that it is an accepted and reasonable way to allocate the costs of the utility's general plant. The Commission therefore adopts the Staff's allocation of these costs.

g. Monthly Service Charges

Michigan Gas proposed to significantly increase several of its monthly service charges. As reflected on Exhibit A-11, Schedule F-5-1, the utility planned to raise its service charges by \$3 for the residential rate class, by \$9 for its GS-1 rate class, by an average of \$26.40 for its grain drying rate class, and by \$45 for customers currently taking service under its GS-2 rate class.¹⁶ In contrast, the Staff's proposed rate design would only raise the monthly service charge for the GS-1, GS-2, and grain drying rate classes. Furthermore, the Staff's proposed increase for each of these three rate classes was much lower than that envisioned by Michigan Gas.

Much of the difference between the parties' proposals arose from their different readings of the Commission's January 18, 1974 order in Case No. U-4331. In that order, the Commission took several steps to design rates in a way that would provide gas customers with an economic incentive to conserve this finite

¹⁶As discussed earlier, Michigan Gas is being allowed to combine rate classes GS-2, GS-3, and GS-4 into a single rate class called "large general service." Under the utility's proposal, this new rate class would have a monthly service charge of \$60. This is \$45 more than the existing service charge for the GS-2 rate class.

natural resource. First, the Commission replaced declining block rates, which had allowed customers to pay less per Mcf for each incremental block of gas purchased, with flat rates. Second, it allocated more of the gas utility's fixed costs to its commodity charge and less to its monthly service charges. In limiting the amount of costs that could be passed on to ratepayers as part of the service charge, the Commission stated as follows:

"The maximum allowable service charge would be limited to those costs associated directly with supplying service to a customer. Only costs associated with metering, the service lateral, and customer billing are includable since these are the costs that are directly incurred as a result of a customer's connection to the gas system." (January 18, 1974 order, p. 30.)

That language has led to much of the dispute over Michigan Gas's monthly service charges. The Staff gave this language a strict interpretation, concluding that only direct customer costs--service line costs, meter and regulator costs, and customer billing and collection costs--should be recovered through a customer service charge. In contrast, Michigan Gas read this language as allowing recovery of both direct and indirect costs arising from having the customer attached to the utility's system. In assembling the various direct and indirect costs that it proposed to collect through monthly service charges, the utility used the "basic customer approach." According to Mr. Laderoute, this approach includes in service charges:

"[T]he costs of return and associated income taxes associated with meters, meter installations, house regulators, and service plant in service on the rate base side of the revenue requirements. It also includes, on the income statement side, the costs of meter reading and customer records and collection." (Tr. 92.)

Mr. Laderoute went on to state that because other expenses within his cost allocation study are, in turn, a function of these costs, they should be included in the "basic customer approach."

The ALJ agreed with the Staff that the January 18, 1974 order in Case No. U-4331 allowed for a much narrower range of cost to be included in monthly service charges than represented by Michigan Gas's proposal. Because she felt that the utility had not provided sufficient justification for abandoning the position announced in that order, the ALJ recommended that we adopt the customer charges proposed by the Staff.

Michigan Gas excepts to this recommendation. The utility argues that, contrary to the ALJ's conclusion, it did provide sufficient justification for abandoning the Commission's long-held position. Specifically, Michigan Gas cites Mr. Laderoute's rebuttal testimony where he states that the energy situation is different today than it was when the Commission issued its order in Case No. U-4331. The utility further argues that the ALJ's adherence to the literal application of Case No. U-4331 leads to the improper subsidization of small customers by large customers. However, we find that these arguments are not well-taken.

From a review of the record, it appears that Michigan Gas has not provided sufficient justification for abandoning the position announced in Case No. U-4331. Although the country is no longer in the throes of the energy crisis created by the OPEC oil embargo of the early 1970s, this Commission is not prepared to state, as Michigan Gas would have us do, that there is no need for economic incentives to conserve finite resources like natural gas. Furthermore, we find no record evidence to support the utility's claim that continued adherence to Case No. U-4331's standards regarding monthly service charges will result in the improper subsidization of small-volume customers by the utility's large-volume customers. The Commission therefore adopts the ALJ's recommendation to implement the monthly service charges proposed by the Staff.

h. Interruptible Rates

In preparing its cost-of-service study, Michigan Gas shifted a portion of peak capacity costs from interruptible customers to firm customers. According to the utility, this was necessary to reflect the fact that, due to the threat of curtailment, interruptible gas service is of much less value to a customer than firm gas service. The Staff objected to this proposed adjustment, claiming that it distorts the measure of the true cost of serving interruptible customers. Specifically, the Staff stated that because Michigan Gas is capable of providing service to interruptible customers in all but the most extreme conditions, there is little need for special treatment of those customers in a cost-of-service study. Furthermore, the Staff believed that its proposed rates for interruptible customers were already sufficiently low in comparison to the rates it proposed for firm sales customers. The ALJ agreed with the Staff. Although recognizing that interruptible service is of less value than firm service, she concluded that the rates proposed by the Staff adequately reflect the difference in value. The ALJ therefore recommended that we reject the utility's request to lower the rate for interruptible customers and, instead, adopt the Staff's position on this issue.

Michigan Gas excepts to this recommendation. Although admitting that the Staff had proposed lower rates for interruptible customers than for firm customers, the utility points out that this price difference arises solely from the load and usage characteristics of interruptible customers. Michigan Gas therefore argues that, due to the possibility of interruption, rates for its interruptible customers should be even lower than those proposed by the Staff.

The record indicates that, during the last five years, Michigan Gas has only interrupted service to these customers on one occasion. We therefore agree with Mr. Aldrich's assessment that the likelihood of interruption is "very small."

(Tr. 1642-1643.) Furthermore, we find that the Staff's cost-of-service-based rates for interruptible customers are sufficiently lower than firm customers' rates so as to eliminate the need for the utility's proposed value-of-service subsidy. The Commission therefore finds that the Staff's position regarding interruptible rates should be adopted.

Transportation Service, Rates, and Surcharges

During the past few years, the gas industry has undergone, and is undergoing, significant changes. As with most gas utilities in this state, Michigan Gas is shifting from a role as a local distribution company that provides all gas-related services to its customers to a role as a provider of a number of unbundled, separate services. In the past, Michigan Gas planned its system and its gas supply purchases to meet the needs of its customers: if gas was to be purchased in the utility's service territory, it was purchased only from Michigan Gas. This situation required the utility to have gas available for sale when its customers wanted to purchase gas. It also dictated the construction and configuration of Michigan Gas's system.

Michigan Gas's role has now changed. The utility has revised its method of operation to provide for new services, which has resulted in the bifurcation of its business into the transportation of customer-owned gas and the sale of utility-owned gas. Under a transportation program, customer-owned gas is received into and moved through Michigan Gas's system for delivery at the customers' premises. The utility's traditional role continues under its sales program. However, while Michigan Gas now transports for, rather than sells to, a number of customers, the distribution system is still one that was constructed for the utility's prior sales-only operation. Moreover, due to the intermingling of sales and transportation customers throughout Michigan Gas's service territory,

it is, in the Commission's judgment, unlikely that a separate transportation distribution system will be developed. We therefore find it necessary to establish a transportation program for Michigan Gas that allows the utility to make use of its existing system in a manner that neither favors transportation over sales nor sales over transportation.

Both Michigan Gas and the Staff proposed comprehensive transportation programs. Because both parties appear to have based their proposals on the program established for Mich Con in consolidated Cases Nos. U-8635, U-8812, and U-8854, there is limited dispute among the parties regarding the establishment of transportation service, rates, and rules.

a. Implementation of the Transportation Program

Michigan Gas proposed to implement a program, allowing for both firm and interruptible transportation service, in a transitional manner. Under this program, all existing transportation customers presently receiving service under 1929 PA 9 (Act 9) that have reserved system supply gas would be given an opportunity to contract for the same or some reduced level of entitlement. After each of these customers has had this opportunity, the utility would offer existing Act 9 customers or new transportation customers the chance to reserve additional or new back-up supply to the extent that system supply is available. Michigan Gas's proposal then indicated that transportation customers would be given an opportunity to renominate amounts of gas on the anniversary date of their transportation contracts, October 31. The utility's proposal went on to state that if the final order in this case was not issued until after October 31, 1989, new Act 9 contracts would be issued that would expire 12 months later. Michigan Gas further proposed filing special Act 9 transportation contracts used to attract prospective incremental loads, like coal displacement and economic development loads.

Due to the lack of opposition to these proposals, the ALJ recommended that we adopt the utility's general proposals regarding the implementation of its transportation program. No exceptions were filed regarding this recommendation. We find that the ALJ's recommendation is supported by the record and should be adopted, with one change. As noted in our December 7, 1989 order in consolidated Cases Nos. U-8678, U-8924, and U-9197, once a system of tariffed transportation service has been created--as it has in this case--under 1939 PA 3 (Act 3), the utility should cease signing new Act 9 contracts. Thus, the Commission finds that although Michigan Gas should be given sufficient flexibility to attract incremental loads like coal displacement and economic development loads, this should be accomplished through the use of Commission-approved Act 3 contracts instead of new Act 9 contracts.

b. System Supply Entitlement Service (SSES)

Michigan Gas proposed that both firm transportation service (FTS) and interruptible transportation service (ITS) customers be allowed to use the utility's system supply gas as a back-up source of fuel. To do so, Michigan Gas planned to impose a system supply entitlement charge (SSEC) that would have to be paid by any FTS or ITS customers that wanted this service. In consideration of the payment of the SSEC, the utility would, in effect, continue to plan for the transportation customer's supply needs. The utility proposed using a demand-type SSEC charge. Any transportation customers that chose not to participate in the SSES would not be eligible to use system supply gas. They would, however, be required to sign an affidavit attesting to their election not to avail themselves of the SSES. Under this proposal, the SSEC would be calculated each year in Michigan Gas's GCR proceedings.

The Staff, although generally supporting this proposal, felt that two revisions should be made. First, it proposed that a flexible volumetric SSEC of between 20¢ and \$1.50 per Mcf be adopted instead of the utility's demand-type charge. This volumetric SSEC would be equal to the system's unavoidable pipeline charges (UPC), and would vary with changes in the utility's UPC and projected sales volumes during the course of the GCR period. Michigan Gas did not oppose the volumetric approach proposed by the Staff, but requested that imposition of the Staff's SSEC be timed to commence with the utility's 1991 GCR plan.

The ALJ recommended that an SSES be established, that Staff's flexible volumetric approach be used to compute the SSEC, that the affidavit requirement be adopted, and that the SSES be timed to commence with Michigan Gas's 1991 GCR plan. No exceptions were filed regarding this recommendation. The Commission finds that this recommendation is supported by the record and should be adopted.

The second revision proposed by the Staff was based on its belief that the SSES should only be made available to FTS customers, and not to ITS customers. Michigan Gas disagreed with this proposed change. Because any SSEC received by the utility will ultimately benefit its sales customers, Michigan Gas felt that it was in the best interests of all ratepayers to offer the SSES to ITS customers. The ALJ agreed with the utility and recommended that both ITS and FTS customers be allowed to use Michigan Gas's SSES.

The Staff excepts to this recommendation. In support of its position, it argues that making the SSES available to Michigan Gas's ITS customers would conflict with our April 20, 1989 order in Case No. U-8788, where we precluded Michigan Gas Utilities (MGU) from offering its SSES to its interruptible transportation customers. Furthermore, the Staff points out that Michigan Gas has agreed to eliminate its obligation to serve its interruptible sales rate customers. The Staff therefore argues that it would be inconsistent and unfair

to allow ITS customers to obtain guaranteed back-up of their transported gas, while telling interruptible sales customers that Michigan Gas has no continuing obligation to serve them. We agree with both of the Staff's arguments on this issue. To be consistent with our April 20, 1989 order in Case No. U-8788, as well as to treat all customers of Michigan Gas in the same manner, we find that the utility's SSES should not be offered to its ITS customers.

c. Company Use, Lost, and Unaccounted-for Gas

Not all gas that enters Michigan Gas's system eventually reaches the burner tip. Some gas is consumed by compressors that are needed for the system to operate. Other gas is simply lost or otherwise unaccounted for due to leaks, faulty meters, or other reasons. The Staff proposed that transportation customers be permitted to make up for company use, lost, and unaccounted-for gas in-kind rather than by paying for it in base rates. In contrast, Michigan Gas proposed that ITS and FTS rates be designed to recover transportation customers' collective share of the cost of company use, lost, and unaccounted-for gas. The utility argued that because a gas-in-kind factor would have to be revised annually, it would be difficult to administer and confusing to ratepayers. The ALJ agreed with the utility, and recommended that the Staff's proposal be rejected.

The Staff excepts, claiming that both Michigan Gas and the ALJ were wrong in concluding that the gas-in-kind factor proposed in this case, 0.89%, would need to be revised each year. We agree with the Staff. Gas-in-kind factors have been included in transportation rates for Mich Con, Consumers, and MGU. In none of those cases is it required that the factor be revised annually. Instead, the factors will remain in effect until a subsequent rate case order is issued by the Commission. The Commission therefore finds that the cost of all company use, lost, and unaccounted-for gas allocated to Michigan Gas's transportation cus-

tomers should be recovered through the application of a gas-in-kind factor of 0.89%, rather than through the utility's ITS and FTS rates.

d. Miscellaneous Transportation Rate Issues

Five other issues regarding gas transportation rates have been raised by the parties. Two of these issues were addressed in the PFD. The other three, while not specifically discussed by the ALJ, are worthy of mention in this order.

First, the Staff proposed that Michigan Gas be allowed to assess its FTS and ITS customers a flexible excess pipeline cost (EPC) surcharge of not more than 10¢ per Mcf.¹⁷ This surcharge was intended to recover from transportation customers a portion of pipeline fixed costs for capacity that exceeds Michigan Gas's actual requirements. Although indicating that the utility had no overcapacity at that time, the Staff cautioned that overcapacity could develop if too many customers sign up for transportation service without also contracting for system supply back-up by Michigan Gas. The Staff therefore requested that we authorize an EPC surcharge for this utility that, if needed, would be calculated in Michigan Gas's future GCR cases.

Due to the lack of opposition to this proposal, the ALJ recommended that we authorize the imposition of the EPC surcharge proposed by the Staff. No exceptions to the ALJ's recommendation have been raised by the parties. Accordingly, the Commission finds that the ALJ's recommendation should be adopted and that the flexible EPC surcharge proposed by the Staff should be authorized.

The second of the issues that was discussed by the ALJ concerned take-or-pay costs billed directly to Michigan Gas by its pipeline suppliers. The Staff pro-

¹⁷Although the ALJ only discussed the EPC surcharge in relation to the utility's FTS customers, Mr. Aldrich's testimony (Tr. 1592-1596) and the Staff's proposed transportation rate schedules (Exhibit S-29, Schedule F-8) indicate that this surcharge was to be applied to ITS customers as well.

posed that all direct-billed take-or-pay costs that were reasonably and prudently incurred by the utility should be allocated across total throughput. According to the Staff's proposal, Michigan Gas would then be allowed to impose, at its discretion, a flexible surcharge of up to 10¢ per Mcf on its ITS and FTS customers to recover its transportation customers' share of these costs. The charge imposed on--and the amount collected from--these customers would be reviewed in future GCR cases.

Michigan Gas agreed with the Staff's proposal, leading the ALJ to recommend its adoption. Again, no exceptions have been raised concerning this issue. The Commission finds that, in addition to being supported by the record, the ALJ's recommendation comports with the methodology for take-or-pay recovery proposed by our orders in Michigan Gas's last two GCR plan cases, Cases Nos. U-9185 and U-9452. We therefore find that the Staff's proposal regarding direct-billed take-or-pay costs should be adopted.

The remaining three issues concerning transportation rates arise from rate proposals that were not addressed in the PFD. First, the Staff suggested implementing an emergency gas usage charge of \$2.00 per Mcf, which would allow transportation customers that failed to reserve enough gas under the SSES to obtain system supply back-up if the utility had available gas. Revenue received from this charge would be credited to Michigan Gas's GCR customers in future GCR reconciliation proceedings. Next, both the Staff and Michigan Gas proposed establishing a load balancing charge and a load balancing penalty charge¹⁸ for both FTS and ITS customers. Finally, the Staff suggested imposing a heating value measurement charge of \$250 per month upon transportation customers that require heat value measurement equipment at their facilities.

¹⁸The load balancing penalty charge is often referred as an "unauthorized gas usage charge."

The Commission has reviewed each of these three proposed charges and finds them to be reasonable and supported by the record. We therefore hold that the proposed emergency gas usage charge, the load balancing and load balancing penalty charges, and the heating value measurement charge should be adopted.

Reporting Requirements

The Staff recommended that the Commission direct Michigan Gas to file a quarterly summary of specific information concerning transportation service. This proposal required the utility to submit the following monthly data for all transportation volumes:

1. Total transportation revenue, by rate class;
2. Transportation volumes delivered, by rate class;
3. Average transportation rate, by rate class;
4. Authorized deliveries of system-supply, by rate class;
5. Unauthorized deliveries of system-supply, by rate class;
6. Net cumulative imbalances, by rate class;
7. Transportation volumes received, by pipeline;
8. Transportation volumes received from Michigan production; and
9. Volumes transported for non-end users.

Michigan Gas did not oppose this proposal, and instead noted that it has already begun reporting this information.

The ALJ recommended that we adopt the Staff's proposed reporting requirements. No exceptions were filed regarding this recommendation. The Commission finds that this recommendation is supported by the record and should be adopted.

IX.

GUIDELINES FOR TRANSACTIONS BETWEEN AFFILIATES

In his testimony, Mr. Ballinger proposed the adoption of ten conditions designed to ensure that the Commission can effectively safeguard the public interest while Michigan Gas's parent holding company, SEMGE, pursues corporate diversification. Mr. Ballinger's conditions, which were also recommended by the Staff in consolidated Cases Nos. U-8678, U-8924, and U-9197, Consumer's gas rate case, are as follows:

- "1. That the utility ensure that the Commission has access to books and records of the holding company and each of its affiliates and their joint ventures. Any objections to not providing all books and records must be raised before the Commission and the burden of showing that the request is unreasonable or unrelated to the proceeding is on the respondents.
2. Each utility, holding company, and each of its subsidiaries and the joint ventures of the holding company and/or its subsidiaries shall employ accounting and other procedures and controls related to cost allocations and transfer pricing to ensure and facilitate full review by the Commission and to protect against cross-subsidization of non-utility activities by the utility's customers.
3. The holding company and each of its subsidiaries and the joint ventures of the holding company and/or its subsidiaries shall keep their books in a manner consistent with general accounting principles and, where applicable, consistent with the Uniform System of Accounts.
4. The utility shall furnish the Commission with:
 - a. The quarterly and annual financial statements of the consolidated utility and/or its parent holding company;
 - b. Annual statements concerning the nature of intercompany transactions concerning the utility and a description of the basis upon which cost allocations and transfer pricing have been established in these transactions;

- c. Annual balance sheets and income statements of the non-regulated subsidiaries of the utility and/or the non-consolidated subsidiaries of the holding company;
 - d. The utility shall submit, as a separate exhibit in its next general rate case, an audit report of its transactions between the utility and its non-utility affiliates;
 - e. Provide federal income tax on a consolidated or non-consolidated basis depending on filing.
- 5. The utility shall avoid a diversion of management talent that would adversely affect the utility. An annual report identifying personnel transferred from the utility to non-utility subsidiaries is required.
 - 6. The utility shall notify the Commission in writing within thirty days prior to any transfer to non-utility affiliates of any utility assets or property exceeding a fair market value of \$100,000. Asset transfers from regulated to non-regulated shall be at the higher of cost or fair market value and non-regulated to regulated shall be at the lower of cost or fair market value. That all services and supplies provided by non-regulated enterprises shall be at market price or 10% over fully allocated cost, whichever is less.
 - 7. Market, technological, or similar data transferred, directly or indirectly, from the utility to a non-utility affiliate shall be transferred at the higher of cost or fair market value.
 - 8. The utility shall not issue notes to, loan its funds to, guarantee loans of, or give credit on its books or otherwise to the holding company or any non-utility affiliated party without the approval of the Commission.
 - 9. The capital requirements of the utility, as determined to be necessary to meet its obligation to serve, shall be given first priority by the Board of Directors of the utility and/or the parent holding company.
 - 10. Where product rights, patents, copyrights, or similar legal rights are transferred from the subsidiary, suitable compensation may be provided. Such compensation shall be developed on a case-by-case basis." (Tr. 1328-1330.)

According to Mr. Ballinger, the same conditions that are adopted for Consumers should be adopted in the present case.

Subsequent to Mr. Ballinger's testimony, we issued our December 7, 1989 order in consolidated Cases Nos. U-8678, U-8924, and U-9197, adopting several of Mr. Ballinger's recommendations. Specifically, we found that the first four proposed conditions did not interfere with management's decision-making activities. In addition, we held that Consumers should file annual reports covering the subject matter discussed in conditions five, six, and seven. However, we further found that conditions eight, nine, and ten should not be implemented at that time because some of those conditions could be considered to involve management's decision-making authority.

Michigan Gas consented to the adoption of the first five conditions in the present case but asked that the last three conditions be rejected, as was done in Consumers' case. As for conditions six and seven, the utility agreed to file annual reports regarding the transfer of assets or data from the utility to a non-utility affiliate, but rejected to the "formulistic method" of valuing these transfers proposed by Mr. Ballinger. (Michigan Gas's Initial Brief, p. 126.)

In response to the potential concerns of this Commission regarding dealings among affiliated companies, Michigan Gas developed and submitted an Affiliated Service Agreement. That agreement, sponsored by the utility as Exhibit A-66, addressed several of the same issues as Mr. Ballinger's proposal. Michigan Gas therefore requested that we formally recognize this agreement as being proper and appropriate, and asked that we apply the principles contained in Article II of the agreement to all future rate case determinations. Although the Staff applauded the utility's adoption of this agreement and its development of an Affiliated Transaction Policy Manual, it recommended that we not give Commission approval to either the agreement or the policy manual. According to the Staff, while it is appropriate for us to impose the generic conditions sponsored by Mr.

Ballinger, the adoption of agreements and policy manuals like those developed by Michigan Gas should be left to the discretion of each utility's management.

The ALJ recommended that we apply the same conditions to Michigan Gas as we did to Consumers in consolidated Cases Nos. U-8678, U-8924, and U-9197. She further recommended that, for the reasons stated by the Staff, we reject the utility's request to adopt its Affiliated Services Agreement. No exceptions were raised concerning these two recommendations. The Commission finds that the ALJ's recommendations are supported by the record, comport with prior Commission practice, and should be adopted. We therefore hold that: (1) conditions one through five should be adopted in their entirety, (2) Michigan Gas should file annual reports covering the subject matter discussed in conditions six and seven, and (3) the utility's affiliated service agreement should not be formally adopted by the Commission.

The Commission FINDS that:

a. Jurisdiction is pursuant to 1909 PA 300, as amended, MCL 462.2 et seq.; 1919 PA 419, as amended, MCL 460.51 et seq.; 1939 PA 3, as amended, MCL 460.1 et seq.; 1969 PA 306, as amended, MCL 24.201 et seq.; and the Commission's Rules of Practice and Procedure, 1979 Administrative Code, R 460.11 et seq.

b. A working capital requirement of \$8,464,496, net utility plant of \$47,023,000, and a rate base of \$55,487,496 are reasonable and appropriate.

c. An overall rate of return of 10.16% and a return on common equity of 11.53% are reasonable and appropriate.

d. A sales level of 17,275,217 Mcf, a transportation volume of 6,647,215 Mcf, and a combined throughput volume of 23,922,432 Mcf are reasonable and appropriate.

e. Michigan Gas's adjusted net operating income is \$3,546,508, resulting in an income deficiency of \$2,091,022 and a revenue deficiency of \$3,244,430.

f. Take-or-pay costs and excess pipeline costs should be apportioned between sales and transportation customers, with transportation customers' share of these costs assessed to them by way of two flexible surcharges of not more than 10¢ per Mcf each. These surcharges should be reviewed and adjusted as necessary in Michigan Gas's future GCR proceedings.

g. Transportation customers should reimburse Michigan Gas for company use, lost, and unaccounted-for gas through a 0.89% gas-in-kind factor.

h. Michigan Gas should incorporate all large and firm transportation customers into a single rate class, create a new grain drying class, and combine rate classes GS-2, GS-3, and GS-4 into one rate class entitled "large general service."

i. Michigan Gas should establish separate rates for FTS and ITS customers.

j. Michigan Gas should be authorized to include in its transportation rates an emergency gas usage charge, a load balancing charge, a load balancing penalty charge, and a heating value measurement charge.

k. Michigan Gas should be authorized to offer its FTS customers, in conjunction with its 1991 GCR plan, a flexible SSEC of 20¢ to \$1.50 per Mcf.

l. Michigan Gas's transportation program and rates should be implemented in the transitional manner described in this opinion and order.

m. Conditions one, two, three, four, and five, appearing on pages 81 and 82 of this order, should be implemented and annual reports on conditions six and seven should be filed by Michigan Gas.

n. The Staff's reporting requirements for all transportation volumes should be adopted.

o. All contentions of the parties inconsistent with this order and not specifically determined should be rejected.

THEREFORE, IT IS ORDERED that:

A. Michigan Gas Company is authorized to increase its rates and charges for gas service by \$3,244,430 for service rendered on and after June 30, 1990, as provided for by this opinion and order.

B. Take-or-pay costs and excess pipeline costs shall be apportioned between sales and transportation customers. These costs will be assessed to transportation customers by way of two flexible surcharges of not more than 10¢ per Mcf. These surcharges will be revised and adjusted as necessary in future Gas Cost Recovery proceedings.

C. Michigan Gas Company shall implement, in a transitional manner, a transportation program as described in this opinion and order. Existing gas transportation contracts shall remain in effect according to their terms.

D. Conditions one, two, three, four, and five, appearing on pages 81 and 82 of this opinion and order, are hereby imposed. Additionally, annual reports on conditions six and seven shall be filed by Michigan Gas Company.

E. Michigan Gas Company's rules and regulations shall be revised as provided for in this opinion and order to be consistent with the rules and regulations attached to the original order contained in the Commission's file.

F. The Commission Staff's reporting requirements for all transportation volumes are adopted.

G. Michigan Gas Company shall file, within 30 days of the date of this order, all tariff sheets necessary and appropriate to comply with this order.

H. All contentions of the parties inconsistent with this opinion and order and not specifically determined are rejected.

The Commission specifically reserves jurisdiction of the matters herein contained and the authority to issue such further order or orders as the facts and circumstances may require.

Any party desiring to appeal this order must perfect an appeal to the appropriate court within 30 days after issuance and notice of this order, pursuant to MCL 462.26.

MICHIGAN PUBLIC SERVICE COMMISSION

/s/ William E. Long
Chairperson

(S E A L)

/s/ Ronald E. Russell
Commissioner

By the Commission and pursuant to
its action of June 14, 1990.

/s/ Dorothy Wideman
Its Executive Secretary

(Continued From Sheet No. B-25.00)

- E. No gas heating equipment shall be connected which does not have adequate shut-off controls for safe operation.

B3. CONTROLLED SERVICE

A. Definitions

- (1) Alternate fuel capability means that an alternate fuel could have been used whether or not the facilities for use have actually been installed or the alternate fuel is available.
- (2) Boilers shall mean all closed vessels in which a liquid is heated or vaporized by the combustion of fuel for the generation of steam or hot liquid.
- (3) Cogeneration shall mean the sequential production of both electrical (or mechanical) and thermal energy from the same fuel source.
- (4) Commercial gas requirements shall refer to any usual commercial use of gas including but not limited to all gas purchased by a business which does not qualify for a manufacturing industry code under the Standard Industrial Classification, as listed in the current edition of the Standard Industrial Classification Manual issued by the Executive Office of the President of the United States.
- (5) Essential Agricultural Requirements means any use of natural gas for agricultural production, natural fiber production and processing, food processing, food quality maintenance, irrigation pumping, crop drying, or a process fuel or feedstock in the production of fertilizer, agricultural chemicals, animal feed or food; provided, however, that boilers, gas turbines and engines which have alternate fuel capability shall not qualify as essential agricultural requirements without the express authorization of the Michigan Public Service Commission. The matter will be considered by the Commission pursuant to its Rules of Practice relating to petitions or complaints.

(Continued on Sheet No. B-27.00)

ISSUED
JON A. KOSHT
VICE PRESIDENT
16587 ENTERPRISE DRIVE
THREE RIVERS, MICHIGAN

BY

EFFECTIVE FOR GAS SERVICE
RENDERED ON AND AFTER

ISSUED UNDER AUTHORITY OF THE
MICHIGAN PUBLIC SERVICE COMM.
DATED
IN CASE NO. U-9323

(Continued From Sheet No. B-26.00)

A. Definitions (cont.)

- (6) Feedstock gas is natural gas used as a raw material for its chemical properties in creating an end product.
- (7) Industrial gas requirements shall refer to any usual industrial use of gas, including but not limited to all gas purchases under the Standard Industrial Classification, listed in the current edition of the Standard Industrial Classification Manual, issued by the Executive Office of the President of the United States.
- (8) Process gas is natural gas used in appliances capable of burning a gaseous fuel so as to utilize those combustion characteristics of gaseous fuels such as complete combustion, safe combustion products, flame geometry, ease of temperature control to precise levels, and optimum safety of heat application. Specifically excluded are boilers, gas turbines, space heating equipment (other than direct fired makeup air heaters for process purposes) and indirect air heaters.
- (9) Requirements for services essential for public health and safety shall mean gas purchased for use by or in connection with hospitals, convalescent homes, nursing homes, medical centers and clinics; water and sewage treatment and waste disposal facilities; civil defense centers and public utility buildings; newspapers, radio and television stations; fire stations, police stations, jails and penal institutions; and such other uses of gas are found qualified by the Michigan Public Service Commission as requirements of services essential for public health and safety; provided, however, that boilers, turbines and engines which have alternate fuel capability shall not qualify as requirements for services essential for public health and safety without the express authorization of the Michigan Public Service Commission. The matter will be considered by the Commission pursuant to its Rules of Practice relating to petition or complaints.

(Continued on Sheet No. B-28.00)

ISSUED
JON A. KOSHT
VICE PRESIDENT
16587 ENTERPRISE DRIVE
THREE RIVERS, MICHIGAN

BY

EFFECTIVE FOR GAS SERVICE
RENDERED ON AND AFTER

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MICHIGAN PUBLIC SERVICE COMM.
DATED
IN CASE NO. U-9323

(Continued From Sheet No. B-27.00)

A. Definitions (cont.)

- (10) Residential gas requirements shall include all gas usage metered and consumed within an individual household, and reasonably appurtenant and related to and normally associated with such a household, for such applications as space conditioning, cooking, water heating, refrigeration, clothes drying, incineration, lighting and other similar household applications. The term "household" includes single-family homes, farm homes, seasonal dwellings, duplexes and individual living units within mobile home parks, condominiums, apartments and cooperatives; provided, however, to qualify for residential usage a household must have the normal household facilities such as bathroom, individual cooking and kitchen sink facilities.

B. Scope

This rule provides the Company with the authorization to control the attachment of load, consistent with changes in gas supply as they occur. The Company reserves the right to discontinue service to any customer who violates any of the provisions of this rule.

C. Application for Service

- (1) All customers requesting gas service shall make written application for such service on a form provided by the Company. Written application for residential service may be waived by the Company when warranted by gas supply conditions.
- (2) Applications shall be maintained separately by priority of service and date received for prospective customers within each of the Company's gas supply areas, namely Upper Peninsula-East, Upper Peninsula-West, and Lower Peninsula.
- (3) A transportation customer who does not pay the System Supply Entitlement Charge (SSEC) may not be granted firm sales service prior to the expiration of the customer's transportation contract. If the customer pays the SSEC on a portion of its transportation load, on that portion for which the SSEC is not paid, the customer must await expiration of the underlying transportation contract before firm sales service may be granted.

(Continued on Sheet No. B-29.00)

ISSUED
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VICE PRESIDENT
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IN CASE NO. U-9323

(Continued From Sheet No. B-28.00)

D. Approval of Application for Service

- (1) As the Company is able to contract for gas supplies at reasonable and prudent prices, terms and conditions, applications for service shall be approved subject to the following:
 - (a) Approval shall be on a first-come, first-served basis within each Controlled Service Priority.
 - (b) The Company shall open the highest Priority first. If all the applicants within that Priority are granted service, and sufficient supply is available, the next highest Priority shall be opened.
 - (c) If the available supply is committed before granting all applicants service, then those applicants who do not receive service shall have their standing reserved within their Priority, but shall not receive preference over a later applicant who qualified for a higher Priority, when gas becomes available and Priorities are again opened.
 - (d) An applicant whose Priority is open at the time of application may be granted immediate approval through written notification by the Company, provided such applicant demonstrates to the satisfaction of the Company that the construction and installation of the necessary equipment will proceed in a timely manner.
 - (e) An applicant whose Priority is closed at the time of application, such that gas service is not initially granted, shall have that application for service kept on file by Priority and by the date the application was received.
- (2) The Company may not grant service to new customers or permit additional load by existing customers, if:
 - (a) The Company is curtailing any customers in the affected service area under the Capacity Deficiency provisions of Rule B4, Curtailment of Gas Service.

(Continued on Sheet No. B-30.00)

ISSUED
JON A. KOSHT
VICE PRESIDENT
16587 ENTERPRISE DRIVE
THREE RIVERS, MICHIGAN

BY

EFFECTIVE FOR GAS SERVICE
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IN CASE NO. U-9323

(Continued From Sheet No. B-29.00)

- (b) The Company is curtailing any customers under the Gas Supply Deficiency provisions of Rule B4, Curtailment of Gas Service; except that the Company may attach controlled service Priority One or Priority Two customers provided no customers in Curtailment Priority Three are being curtailed.
- (3) The Company reserves the right to attach new interruptible loads.
- (4) The written notification by the Company granting approval of the application shall specify the date gas service must commence.

E. Forfeiture

- (1) A customer shall install the necessary equipment and commence gas service by the date specified in the Company's notification of approval, otherwise the customer's reservation of gas supply is forfeited.
- (2) When the Company grants approval in those cases where the Application for Gas Service was not initially granted, the customer shall notify the Company in writing within thirty days (from the date of the Company's written notification of approval) of the customer's intention to accept service. If the customer does not respond within thirty days, the customer's original application is void.
- (3) If any time after commencing firm gas sales service, a customer switches to transportation service, that customer shall pay a System Supply Entitlement Charge applied to transported volumes, otherwise such customer forfeits firm sales customer status.

(Continued on Sheet No. B-31.00)

ISSUED
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IN CASE NO. U-9323

(Continued From Sheet No. B-30.00)

F. Restricted Sales

As a result of warmer-than-normal weather, or other factors, the Company may have gas in excess of its immediate load. The Company may sell such excess gas subject to:

- (1) The provision of a net economic benefit to the Company's customers as a result of the sale of such gas.
- (2) Demonstration by the Company at its Gas Cost Recovery Reconciliation proceeding that the sale of such gas caused no detriment to its customers.
- (3) The Gas Supply Deficiency Curtailment Priority Nine of Rule B4, Curtailment of Gas Service for all special contract sales of such gas.
- (4) Commission approval of such sales on a special contract basis, limited as to time and volume.

G. Priorities

- (1) Service shall be controlled under this rule in accordance with the following Priorities. Priority One constitutes the highest Priority. Priority Six constitutes the lowest Priority which will be the first Priority controlled. Within each Priority, sub-priority (a) shall have the highest priority and sub-priority (c) the lowest Priority.

PRIORITY ONE

- (a). Residential gas requirements for any purpose, except space-heating or air-conditioning.
- (b) Residential gas requirements for space-heating or air-conditioning.
- (c) Commercial gas requirements having a peak usage less than 50 Mcf per day.

(Continued on Sheet No. B-32.00)

ISSUED
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(Continued From Sheet No. B-31.00)

PRIORITY TWO

- (a) The use of natural gas for services essential for public health and safety.
- (b) The use of natural gas for essential agricultural requirements.

PRIORITY THREE

- (a) Industrial gas requirements for process and feedstock needs or for gas-fired after burners to limit or abate obnoxious odors or air pollution.
- (b) Industrial gas requirements having a peak usage less than 50 Mcf per day and not otherwise classified.

PRIORITY FOUR

- (a) Commercial and Industrial gas requirements having a peak usage of 50 Mcf per day and greater and not otherwise classified.
- (b) Commercial and Industrial gas requirements for cogeneration having alternate fuel capability and a peak usage of 50 Mcf per day, but less than 300 Mcf per day.
- (c) Commercial and Industrial gas requirements for cogeneration having alternate fuel capability and a peak usage of 300 Mcf per day or greater.

PRIORITY FIVE

- (a) Commercial and Industrial requirements for boilers or kilns having alternate fuel capability and a peak usage of 50 Mcf per day but less than 300 Mcf per day.
- (b) Commercial and Industrial requirements for boilers or kilns having alternate fuel capability and a peak usage of 300 Mcf per day or greater.

(Continued on Sheet No. B-33.00)

ISSUED
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(Continued From Sheet No. B-32.00)

PRIORITY SIX

The use of natural gas for the generation of steam or electricity by utilities.

- (2) A customer who has a pollution problem which presents a threat to the public health and safety, where the use of natural gas offers the only feasible solution to the problem, may petition the Commission to assign a Priority of use higher than that to which the customer would otherwise be entitled. The matter will be considered by the Commission pursuant to its Rules of Practice relating to petitions or complaints.

(Continued on Sheet No. B-34.00)

ISSUED
JON A. KOSHT
VICE PRESIDENT
16587 ENTERPRISE DRIVE
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BY

EFFECTIVE FOR GAS SERVICE
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DATED
IN CASE NO. U-9323

(Continued From Sheet No. B-33.00)

B4. CURTAILMENT OF GAS SERVICE

A. Definitions

- (1) Alternate fuel capability means that an alternate fuel could have been used whether or not the facilities for use have actually been installed or the alternate fuel is available; provided, however, where the use of natural gas is for plant protection and the only alternate fuel is propane or other gaseous fuel, then the customer will be treated as if he had no alternate fuel capability.
- (2) Boilers shall mean all closed vessels in which a liquid is heated or vaporized by the combustion of fuel for the generation of steam or hot liquid.
- (3) Cogeneration shall mean the sequential production of both electrical (or mechanical) and thermal energy from the same fuel source.
- (4) Commercial gas requirements shall refer to any usual commercial use of gas, including but not limited to all gas purchased by a business which does not qualify for a manufacturing industry code under the Standard Industrial Classification, as listed in the current edition of the Standard Industrial Classification Manual issued by the Executive Office of the President of the United States.
- (5) Essential Agricultural Requirements means any use of natural gas for agricultural production, natural fiber production and processing, food processing, food quality maintenance, irrigation pumping, crop drying, or as a process fuel or feedstock in the production of fertilizer, agricultural chemicals, animal feed or food; provided however, that boilers, gas turbines and engines having alternate fuel capability shall not qualify as essential agricultural requirements without the express authorization of the Michigan Public Service Commission. The matter will be considered by the Commission pursuant to its Rules of Practice relating to petitions or complaints.

(Continued on Sheet No. B-35.00)

ISSUED
JON A. KOSHT
VICE PRESIDENT
16587 ENTERPRISE DRIVE
THREE RIVERS, MICHIGAN

BY

EFFECTIVE FOR GAS SERVICE
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MICHIGAN PUBLIC SERVICE COMM.
DATED
IN CASE NO. U-9323

(Continued From Sheet No. B-34.00)

A. Definitions (cont.)

- (6) Feedstock gas is natural gas used as a raw material for its chemical properties in creating an end product.
- (7) Industrial gas requirements shall refer to any usual industrial use of gas, including but not limited to all gas purchased under the Standard Industrial Classification Manual issued by the Executive Office of the President of the United States.
- (8) Process gas is natural gas used in appliances capable of burning a gaseous fuel so as to utilize those combustion characteristics of gaseous fuels such as complete combustion, safe combustion products, flame geometry, ease of temperature control to precise levels, and optimum safety of heat application. Specifically excluded are boilers, gas turbines, space heating equipment (other than direct fired makeup air heaters for process purposes) and indirect air heaters.
- (9) Requirements for plant protection shall mean such minimum volumes of gas as required to prevent physical harm to the plant facilities or danger to plant personnel when such protection cannot be afforded through the use of alternate fuel. This includes the protection of such material in process as would otherwise be destroyed, but shall not include deliveries required to maintain plant production. For the purposes of this definition, propane and other gaseous fuels shall not be considered alternate fuels.
- (10) Requirements for services essential for public health and safety shall mean gas purchased for use by or in connection with hospitals, convalescent homes, nursing homes, medical centers and clinics; water and sewage treatment and waste disposal facilities; civil defense centers and public utility buildings; newspapers, radio and television stations; fire stations, police stations, jails and penal institutions; and such other uses of gas as are found qualified by the Michigan Public Service Commission as requirements for services essential for public health and safety; provided, however, the

(Continued on Sheet No. B-36.00)

ISSUED
JON A. KOSHT
VICE PRESIDENT
16587 ENTERPRISE DRIVE
THREE RIVERS, MICHIGAN

BY

EFFECTIVE FOR GAS SERVICE
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DATED
IN CASE NO. U-9323

(Continued From Sheet No. B-35.00)

A. Definitions (cont.)

boilers, turbines and engines, which have alternate fuel capability shall not qualify as requirements for services essential for public health and safety without the express authorization of the Michigan Public Service Commission. The matter will be considered by the Commission pursuant to its Rules of Practice relating to petitions or complaints.

- (11) Residential gas requirements shall include all gas usage metered and consumed within an individual household, and reasonable appurtenant and related to and normally associated with such a household, for such applications as space conditioning, cooking, water heating, refrigeration, clothes drying, incineration, lighting and other similar household applications. The term "household" includes single-family homes, farm homes, seasonal dwellings, duplexes and individual living units within mobile home parks, condominiums, apartments and cooperatives; provided, however, to qualify for residential usage a household must have the normal household facilities such as bathroom, individual cooking and kitchen sink facilities.

B. Curtailment of Gas Service for Gas Supply Deficiency

(1) Determination of Need for Curtailment

- (a) If at any time the Company cannot provide continuous service to its customers subject to the Company's Gas Cost Recovery Clause (GCR customers) because of an inability to procure sufficient gas from its suppliers, and reliable short-term supplies are not available at reasonable and prudent prices, the Company has the right to curtail the distribution of gas to its customers in accordance with this rule.

(Continued on Sheet No. B-37.00)

ISSUED
JON A. KOSHT
VICE PRESIDENT
16587 ENTERPRISE DRIVE
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BY

EFFECTIVE FOR GAS SERVICE
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(Continued From Sheet No. B-36.00)

B. Curtailment of Gas Service for Gas Supply Deficiency (cont.)

- (b) All sales of gas to other than GCR customers shall be curtailed prior to curtailing the distribution of gas to such GCR customers. All sales of gas to interruptible customers shall be interrupted prior to curtailing the distribution of gas to firm customers.
- (c) The Company may separately institute curtailment of its system supply gas in the Upper Peninsula-West, Upper Peninsula-East, and Lower Peninsula gas supply areas, consistent with the inability to procure sufficient gas volumes in each respective portion of its system.

(2) Notice of Curtailment

- (a) The Company shall provide not less than ninety days advance written notice of curtailment to all firm customers expected to be curtailed, except where action by foreign, federal, state or local government, or regulatory agencies preclude the giving of such notice.
- (b) The Company shall provide notice as stated on the rate schedule to all interruptible customers expected to be curtailed. In the event of any emergency which threatens the continuance of service to the Company's firm customers, the Company may immediately interrupt service, for such duration as the Company in its sole judgement shall deem necessary.
- (c) The Company may immediately curtail or interrupt the distribution of gas to non-GCR customers, by oral notice or otherwise, to the extent and for such duration as the Company in its sole judgement shall deem necessary.
- (d) Notification of Curtailment shall specify the starting date, an estimate of the length of time the curtailment is expected to be in effect, and the classification of the

(Continued on Sheet No. B-38.00)

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IN CASE NO. U-9323

(Continued From Sheet No. B-37.00)

B. Curtailment of Gas Service for Gas Supply Deficiency (cont.)

Priorities to be curtailed. Prior to and during the period of curtailment, all customers in Curtailment Priorities to be affected shall be given not less than thirty days advance written notice of the authorized volumes which the Company reasonably expect, will be available to them during the following month.

(3) Method of Curtailment

- (a) Curtailments shall be made in accordance with the Curtailment Priorities set forth in Section B of this rule, beginning with the lowest Priority category and proceeding to the next highest Priority category. The total curtailment shall equal the estimated deficiency of gas brought about by the demands of all customers purchasing gas.
- (b) When curtailment of less than 100% of the volume in a particular curtailment Priority is required, the available volumes shall be allocated to each customer assigned to the Priority, on a pro rata basis, using the customer's total base period volumes associated with such priority.

(4) Base Period

(a) Base Period for Firm Customers

- (i) For the purpose of determining the volumes, within each curtailment category, a 12-month base period shall be established. Such base period shall be fixed for the term of the curtailment. The base period volumes shall consist of the 12 consecutive monthly consumptions ending 6 months prior to the commencement of curtailment under this rule. In those instances where the customer has encountered strikes, interruption of gas service or unavoidable operational abnormalities, the Company may make reasonable adjustments to normalize the customer's requirements. Base period volumes may be adjusted for equipment added or deleted.

(Continued on Sheet No. B-39.00)

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- (ii) In determining monthly consumptions, the Company shall determine the gas used during each month of the period described above for all buildings, parts of buildings, and equipment associated with each customer's gas billing in accordance with the Company's Gas Rate Schedule. Volumes specified in Curtailment Priorities One through Five shall apply in the aggregate for all equipment of the same end use rather than on a unit of equipment basis.
 - (iii) The monthly consumptions so determined, with such adjustments as provided above, shall then be divided by the number of billing days in each month to arrive at the various maximum day requirements specified in the curtailment categories. In determining a customer's curtailment category, the highest maximum daily requirement in any of the twelve months of the base period shall be used.
 - (iv) In the case of transportation customers of the Company who pay an SSEC on some portion of their load, the volume for which the SSEC is paid shall be considered equivalent to firm GCR purchases for purposes of computing base period volumes.
- (b) Base Period for Interruptible Customers
- A base period is not established for interruptible customers. The distribution of gas to interruptible customers is subject to Curtailment Priority Six whereby the Company has sole discretion in determining the extent and duration of curtailment of such customers.

(Continued on Sheet No. B-40.00)

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(Continued From Sheet No. B-39.00)

(c) Base Period for Special Contract Customers

A base period is not established for special contract customers. The distribution of gas to special contract customers is subject to Curtailment Priority Seven whereby the Company has sole discretion in determining the extent and duration of curtailment of such customers.

(5) Curtailment Priorities

Service shall be curtailed under this rule in accordance with the following Priorities. Priority One constitutes the highest Priority. Priority Seven constitutes the lowest Priority which will be the first Priority curtailed.

PRIORITY ONE

- (a) Residential gas requirements.
- (b) Commercial gas requirements having a peak usage less than 50 Mcf per day.

PRIORITY TWO

- (a) The use of natural gas for services essential for public health and safety, and plant protection.
- (b) The use of natural gas for essential agricultural requirements.

PRIORITY THREE

- (a) Industrial gas requirements for process and feedstock needs or for gas-fired after burners to limit or abate obnoxious odors or air pollution.
- (b) Industrial gas requirements having a peak usage less than 50 Mcf per day and not otherwise classified.

(Continued on Sheet No. B-40.10)

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(Continued From Sheet No. B-40.00)

PRIORITY FOUR

- (a) Commercial and Industrial gas requirements having a peak usage of 50 Mcf per day and greater and not otherwise classified.
- (b) Commercial and Industrial gas requirements for cogeneration having alternate fuel capability and a peak usage of 50 Mcf per day, but less than 300 Mcf per day.
- (c) Commercial and Industrial gas requirements for cogeneration having alternate fuel capability and a peak usage of 300 Mcf per day or greater.

PRIORITY FIVE

- (a) Commercial and Industrial requirements for boilers or kilns having alternate fuel capability and a peak usage of 50 Mcf per day but less than 300 Mcf per day.
- (b) Commercial and Industrial requirements for boilers or kilns having alternate fuel capability and a peak usage of 300 Mcf per day but less than 1500 Mcf per day.
- (c) Commercial and Industrial requirements for boilers or kilns having alternate fuel capability and a peak usage of 1500 Mcf per day or greater.

PRIORITY SIX

All gas requirements purchased under the Company's interruptible sales rate schedule.

PRIORITY SEVEN

All gas requirements purchased under a special gas sales contract.

(Continued on Sheet No. B-40.20)

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(Continued From Sheet No. B-40.10)

(6) Authorized Emergency Use of Gas and Unauthorized Use of Gas for Customers with System Supply Status

For any customer, with System Supply Status, under curtailment pursuant to this Rule whose curtailment period quantity entitlement will result in emergency conditions, including environmental emergencies, or irreparable injury to life or physical property, the Company may, under authority of Order U-5202, Authorized Emergency Use of Gas And Unauthorized Use of Gas, provide gas service on a day-to-day basis under the following conditions:

1. The customer must have scheduled the use of all alternate sources of supply available for the curtailment period involved.
2. The Company must have satisfied itself that the customer is entitled thereto.
3. Such emergency use must not create similar emergencies for other customers or jeopardize the Company's operating program.
4. If available, such volumes will be sold under the following conditions:
 - (a) Service is 24 hours a day subject to interruption or curtailment. A day is to be considered as the 24 hour period beginning at noon of the specified billing day and continuing until noon of the following day.
 - (b) The charges shall be \$0.50 per Mcf plus the charges under the appropriate tariff otherwise applicable to the service, for gas which the Company purchases from its supplier under Emergency Service rate schedules. Such gas is subject to repayment in accordance with the same provisions that apply to the Company under

(Continued on Sheet No. B-40.30)

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(Continued From Sheet No. B-40.20)

Emergency Service rate Schedules. For firm customers being served under the Company's Contract Sales Tariff who are served with gas made available by the interruption of higher priority customers, the commodity charge shall be that which would have been charged to the interrupted customer.

Any customer requesting authorized emergency service hereunder may obtain such authorization by telephone communication to the Company, but each such customer obtaining such authorization shall mail to the company within ten days after the date the Company agrees to such authorization an affidavit certifying the detailed facts concerning the emergency involved and showing that such customer has met each of the criteria specified herein for such authorization for the period thereof.

C. Curtailment of Gas Service for Capacity Deficiency

(1) Determination of Need for Curtailment

If in the event of an emergency such as extreme cold weather, damage to facilities, or other cause, the Company determines that its ability to supply gas may diminish to the point where continuous Service to its customers is threatened, the Company shall have the right to curtail the distribution of gas to its customers, regardless of the contracts in force.

(2) Notice of Curtailment

The Company may immediately curtail or interrupt service by oral notice or otherwise, to the extent and for such duration as the Company in its sole judgement shall deem necessary.

(3) Method of Curtailment

The curtailment of gas shall equal the deficiency in capacity brought about by the demands of all customers in the Company's system during the period of curtailment.

(Continued on Sheet No. B-40.40)

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(Continued From Sheet No. B-40.30)

(3) Method of Curtailment (cont.)

Customers shall be curtailed pro rata based upon the volume of gas taken by the customer in the same month occurring one year prior to the month in which the customer is to be curtailed.

In those instances where the customer's consumption of gas in the same month of the prior year does not fairly represent normal operations, or if the curtailment of a customer would endanger public health and safety or plant protection as defined in Section A, the Company may make reasonable adjustments as it deems appropriate.

(4) Curtailment Priorities

- (a) Service shall be curtailed under this rule in accordance with the following Priorities. Priority One constitutes the highest Priority. Priority Four constitutes the lowest Priority which will be the first Priority curtailed.

PRIORITY ONE

Residential sales and Residential transportation customers.

PRIORITY TWO

Non-residential sales and Non-residential transportation customers consuming annual volumes less than 10,000 Mcf.

PRIORITY THREE

Non-residential sales and Non-residential transportation customers consuming annual volumes greater than 10,000 Mcf.

(Continued on Sheet No. B-40.50)

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(Continued From Sheet No. B-40.40)

PRIORITY FOUR

All Interruptible sales and Interruptible transportation customers.

- (b) The annual volumes of gas consumed shall be based on the latest available 12-month period for that customer.

D. Payment of Customer Charge

A customer shall not be liable for any part of a monthly service charge provided in a rate schedule if such customer's consumption under that rate is completely curtailed for the entire billing period. No other rate adjustments will be permitted.

E. Enforcement

The Company reserves the right to inspect the customer's equipment, to install special metering, and to immediately discontinue gas service for violations of this rule. Once gas service is discontinued, the Company may withhold such service until it is satisfied that the terms and conditions of this rule will be observed.

F. Penalty for Violation

Any gas used by a customer in excess of the volumes authorized during the period when a gas supply deficiency or capacity deficiency curtailment has been instituted pursuant to this rule shall be subject to excess use charges, with such charges being in addition to the rates set forth in the applicable Company rate schedule. The charges for such excess usage shall be ten (10) dollars per Mcf. Failure of the customer to pay such excess use charge when rendered shall constitute sufficient cause for the Company to discontinue gas service to such customer.

(Continued on Sheet No. B-41.00)

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(Continued from Sheet No. B-40.50)

B5. APPLICATION OF RATES

B5.1 Classes of Customers, Definitions:

Residential - Service to customers that are supplied for residential purposes by individual meters in a single family dwelling or apartment for residential use where the primary heating is supplied by other than gas furnished by the Company.

Residential Space Heating - Service to customers that are supplied for residential purposes by individual meters in a single family dwelling or apartment for residential use where the primary heating is supplied with gas furnished by the Company.

Commercial - Service to customers primarily engaged in the wholesale or retail trade who do not manufacture a product, schools, churches, municipal buildings and centrally metered apartments or multiple dwellings whose primary heating is supplied by other than gas furnished by the Company.

Commercial Space Heating - Service to customers primarily engaged in the wholesale or retail trade who do not manufacture a product, schools, churches, municipal buildings and centrally metered apartments or multiple dwellings whose primary heating is supplied by gas furnished by the Company.

Industrial - Service to customers who are engaged in manufacturing.

(Continued on Sheet No. B-41.10)

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(Continued from Sheet No. B-41.00)

B5.2 General

A copy of the tariffs and standard terms and conditions under which service may be rendered to the customer will be furnished upon request at the Company's office. The customer shall elect there from the tariff on which his service shall be based.

After the customer has selected the rate under which he elects to take service, the customer will not be permitted to change from that rate to another rate until at least twelve months have elapsed. Neither will the customer be permitted to evade this Rule by temporarily terminating service. However, the Company may, at its option, waive the provisions of this paragraph where it appears that an earlier change is requested for permanent rather than for temporary or seasonal advantage. The intent of the Rule is to prohibit frequent shifts from rate to rate.

A written agreement may be required from each customer before service will be commenced. A copy of the agreement will be furnished to the customer upon request.

When the customer desires delivery of gas at more than one point, a separate agreement will be required for each separate point of delivery. Service delivered at each point of delivery will be billed under the applicable tariff.

In no case may service be shared with another or transmitted off the premises to which the gas is delivered.

Service at different delivery points and at different premises shall be separately measured and billed.

(Continued on Sheet No. B-42.00)

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(Continued from Sheet No. B-41.10)

B5.3 Terms of Service:

Service agreements shall remain in force for the term stated, if any, and in any event for the full period during which service is taken and until three days after receipt by the Company at its office of written notice, from the customer, of his wish to discontinue service.

B5.4 Rate Schedule:

A. Apartment Buildings and Multiple Dwellings:

A customer receiving gas through a single meter to a building containing more than one apartment or dwelling unit will be classified as a commercial customer, and will have one bill under the General Service Rate schedule.

If the building has meters and services for each apartment, the apartment will be classified residential and service will be billed to each service under the General Service Rate schedule.

B. Centrally Metered Installation - Customer Owned Facilities:

A centrally metered installation serving multiple living units, such as apartments, multiple family units or mobile home courts, is one that meets the following conditions:

The meter is located outside or in a separate meter building.

Except for mobile home courts, more than one building is supplied with gas. A mobile home court is defined as a court containing more than four (4) living units.

The gas lines extend underground from the meter to the location at which each gas line enters the customer's building.

(Continued on Sheet No. B-43.00)

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(Continued from Sheet No. B-42.00)

B. Centrally Metered Installation - Customer Owned Facilities
Continued:

Gas deliveries to a customer may be centrally metered under the appropriate rate schedule when the customer enters into an Inspection and Maintenance Contract with the Company covering the centrally metered installation. All facilities downstream of the meter will be paid for and owned by the customer. Customers served with centrally metered installations will be classified commercial.

For new installations the design, installation, inspection and testing of gas service facilities from the central metering point to the location at which the gas line(s) enter (s) the customer's building(s) and initiation of gas service to each building will be the responsibility of the Company and will be in accordance with the Company's requirements and with the provisions of the Michigan Gas Safety Code. The Inspection and Maintenance Contract will provide for periodic inspection and maintenance, by the Company, of said facilities in accordance with the provisions of the Michigan Gas Safety Code. The customer may, with his own forces, or by a contractor designated by him, perform the design and/or installation provided for in this paragraph upon obtaining the Company's approval therefor and upon agreeing to all conditions with which the Company has accompanied its approval.

The cost for the installation of service facilities will be in accordance with the provisions of Rule B8., Service Extensions, of the Company's Rules and Regulations.

(Continued on Sheet No. B-44.00)

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SURCHARGES

<u>Rate Schedule No.</u>		<u>Michigan Residential Conservation Surcharge</u>
1.0	Residential Service Rate	\$.001180 /Ccf
2.0	General Service (GS) Rate	\$.001180 /Ccf
3.0	Large General Service (LGS) Rate	\$.001180 /Ccf
4.0	Grain Dryer (GD) Rate	\$.001180 /Ccf
5.0	Interruptible Service Rate	\$.001180 /Ccf
6.0	Cogeneration	\$.001180 /Ccf
7.0	Contract Sales	\$.001180 /Ccf

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VICE PRESIDENT
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IN CASE NO. II-9323

Rate Schedule No. 1.0

RESIDENTIAL SERVICE RATE

Availability:

Available to all residential customers in the Company's Service Territory.

Characteristics of Service:

Continuous service, except as may be limited by the effective Rules and Regulations of the Company.

Monthly Rate:

Customer charge	\$7.00
Distribution charge per Ccf	\$.08413
Gas Cost Recovery charge per Ccf.	As set forth on Sheet No. E-3.00

Surcharges and Credits:

Gas service under this rate may be subject to surcharges and/or credits as indicated on Sheet No. E-2.00 and Sheet No. E-3.00.

Terms of Payment:

All bills are due and payable on or before the due date shown thereon.

A late payment charge of two percent (2%) of the unpaid balance shall be added to any bill which is not paid on or before the due date shown thereon. The late payment charge is not applicable to customers participating in the Winter Protection Plan set forth in Order U-4240

(Continued on Sheet No. E-5.00)

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(Continued from Sheet No. E-4.00)

Rate Schedule No. 1.0 (Continued)

Minimum Charge:

The monthly customer charge.

Contract Form and Term:

Open order; terminable on three days written notice by either party. Written application approved by the Company is required when space heating service is to be furnished.

Rules and Regulations:

Service supplied under this rate schedule shall be governed by the Rules and Regulations of the Company as approved by the Michigan Public Service Commission.

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Rate Schedule No. 2.0

GENERAL SERVICE (GS) RATE

Availability:

Available to all commercial and industrial customers in the Company's Service Territory using less than 500 Ccf per day. This schedule is also available to customers using more than 500 Ccf per day and who enter into a contract with the Company covering their entire gas requirements. A contract is also necessary for customers who require higher than normal delivery pressure. Customers classified under this schedule will have a meter installed capable of delivering up to 1,000 cubic feet per hour.

Characteristics of Service:

Continuous service, except as may be limited by the effective Rules and Regulations of the Company.

Monthly Rate:

Customer charge	\$10.00
Distribution charge per Ccf	\$.07977
Gas Cost Recovery charge per Ccf.	As set forth on Sheet No. E-3.00

Surcharges and Credits:

Gas service under this rate may be subject to surcharges and/or credits as indicated on Sheet No. E-2.00 and Sheet No. E-3.00.

Terms of Payment:

All bills are due and payable on or before the due date shown thereon.

A late payment charge of three percent (3%) of the unpaid balance shall be added to any bill which is not paid on or before the due date shown thereon.

(Continued on Sheet No. E-7.00)

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(Continued from Sheet No. E-6.00)

Rate Schedule No. 2.0 (Continued)

Minimum Charge

The monthly customer charge unless otherwise provided for under contract.

Contract Form and Term:

Open order; terminable on three days written notice by either party. Written application approved by the Company is required when space heating service is to be furnished.

Rules and Regulations

Service supplied under this rate schedule shall be governed by the Rules and Regulations of the Company as approved by the Michigan Public Service Commission.

Unauthorized Use in Excess of Contract Volumes

Customers purchasing gas in accordance with this rate schedule requiring a contract shall be subject to a \$10.00 per Mcf penalty charge for gas usage in excess of contracted volumes. Exception to this rule will be made for those customers who gain either written or verbal agreement with the Company prior to using gas in excess of their contracted volumes.

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M.P.S.C. No. 1 - Gas
Michigan Gas Company

Rate Schedule No. 3.0

LARGE GENERAL SERVICE (LGS) RATE

Availability:

Available to all commercial and industrial customers in the Company's Service Territory using greater than 500 Ccf per day and who enter into a contract with the Company covering their entire gas requirements. A contract is also necessary for customers who require higher than normal delivery pressure.

Characteristics of Service:

Continuous service, except as may be limited by the effective Rules and Regulations of the Company.

Monthly Rate:

Customer charge	\$30.00
Distribution charge per Ccf	\$.0767
Gas Cost Recovery charge per Ccf.	As set forth on Sheet No. E-3.00

Surcharges and Credits:

Gas service under this rate may be subject to surcharges and/or credits as indicated on Sheet No. E-2.00 and Sheet No. E-3.00.

Terms of Payment:

All bills are due and payable on or before the due date shown thereon.

A late payment charge of three percent (3%) of the unpaid balance shall be added to any bill which is not paid on or before the due date shown thereon.

(Continued on Sheet No. E-7.20)

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(Continued from Sheet No. E-7.10)

Rate Schedule No. 3.0 (Continued)

Minimum Charge

The monthly customer charge unless otherwise provided for under contract.

Contract Form and Term:

Open order; terminable on three days written notice by either party. Written application approved by the Company is required when space heating service is to be furnished.

Rules and Regulations

Service supplied under this rate schedule shall be governed by the Rules and Regulations of the Company as approved by the Michigan Public Service Commission.

Unauthorized Use in Excess of Contract Volumes

Customers purchasing gas in accordance with this rate schedule requiring a contract shall be subject to a \$10.00 per Mcf penalty charge for gas usage in excess of contracted volumes. Exception to this rule will be made for those customers who gain either written or verbal agreement with the Company prior to using gas in excess of their contracted volumes.

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Rate Schedule No. 4.0

GRAIN DRYER (GD) RATE

Availability:

Available to all commercial and industrial customers in the Company's Service Territory using less than 500 Ccf per day for the purpose of agricultural product dehydration. This Schedule is also available to customers using more than 500 Ccf per day and who enter into a contract with the Company covering their entire gas requirements. A contract is also necessary for customers who require higher than normal delivery pressure.

Characteristics of Service:

Continuous service, except as may be limited by the effective Rules and Regulations of the Company.

Monthly Rate:

Customer charge	\$20.00
Distribution charge per Ccf	\$.06977
Gas Cost Recovery charge per Ccf	As set forth on Sheet No. E-3.00

Surcharges and Credits:

Gas service under this rate may be subject to surcharges and/or credits as indicated on Sheet No. E-2.00 and Sheet No. E-3.00.

Terms of Payment:

All bills are due and payable on or before the due date shown thereon.

A late payment charge of three percent (3%) of the unpaid balance shall be added to any bill which is not paid on or before the due date shown thereon.

Minimum Charge:

The monthly customer charge unless otherwise provided for under contract.

(Continued on Sheet No. E-9.20)

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(Continued from Sheet No. E-9.10)

Rate Schedule No. 4.0 (Continued)

Special Provisions:

The customer must agree that any gas service covered by this rate schedule will be used solely for the express purpose of agricultural product dehydration. Failure to comply with this provision may result in discontinuation of service at the Company's discretion.

Contract Form and Term:

Open order; terminable on three days written notice by either party.

Rules and Regulations:

Service supplied under this rate schedule shall be governed by the Rules and Regulations of the Company as approved by the Michigan Public Service Commission.

Unauthorized Use in Excess of Contract Volumes

Customers purchasing gas in accordance with this rate schedule requiring a contract shall be subject to a \$10.00 per Mcf penalty charge for gas usage in excess of contracted volumes. Exception to this rule will be made for those customers who gain either written or verbal agreement with the Company prior to using gas in excess of their contracted volumes.

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THREE RIVERS, MICHIGAN

BY

EFFECTIVE FOR GAS SERVICE
RENDERED ON AND AFTER

ISSUED UNDER AUTHORITY OF THE
MICHIGAN PUBLIC SERVICE COMM.
DATED
IN CASE NO. U-9323

Rate Schedule No. 5.0

INTERRUPTIBLE SERVICE RATE

Availability:

Available to all classes of customers in the Company's Service Territory entering into a contract to take gas in accordance with the terms of this tariff and only at locations where the utility has adequate distribution facilities and who shall agree:

1. that the use of gas under this Schedule shall be continued on and subject to the requirements of present and future firm customers of the Company and to such other uses or sales of gas as the Company shall in its discretion determine to make;
2. that if at anytime during the contract period it is necessary, in the sole judgement of the Company, to curtail or discontinue use of gas hereunder, the Company may, upon not less than thirty (30) days notice given to the customer, limit, curtail, or discontinue the supply of gas to the customer;
3. that in the event of any emergency which, in the sole judgement of the Company, threatens that continuance of service to the Company's firm customers, the Company may immediately curtail or interrupt service hereunder, by oral notice or otherwise, to the extent, and for such duration, as the Company, in its sole judgement, shall deem necessary.

Characteristics of Service:

The supply of gas under this rate schedule will be subject to interruptions or curtailments at the sole discretion of the Company and the Company reserves the right to temporarily discontinue the supply of gas to effectuate such interruption or curtailment.

(Continued on Sheet No. E-11.00)

ISSUED
JON A. KOSHT
VICE PRESIDENT
16587 ENTERPRISE DRIVE
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(Continued From Sheet No. E-10.00)

Rate Schedule No. 5.0 (cont.)

Monthly Rate:

Customer Charge	\$300.00
Distribution charge per Ccf	\$.04618
Gas Cost Recovery charge per 100 Ccf.	As set forth on Sheet No. E-3.00

Surcharges and Credits:

Gas service under this rate may be subject to surcharges and/or credits as indicated on Sheet No. E-2.00 and Sheet No. E-3.00.

Term of Payment:

All bills are due and payable on or before the due date shown thereon.

A late payment charge of three percent (3%) of the unpaid balance shall be added to any bill which is not paid on or before the due date shown thereon.

Special Provisions:

1. Any customer purchasing gas under this rate schedule shall own complete stand-by equipment and maintain the same in good operating condition with sufficient fuel stocks on hand so that, if necessary, gas service from the Company can be completely curtailed on not more than two hours advanced notice.
2. In the event the customer fails to curtail or discontinue gas consumption after two hours notice as directed by the Company, the customer shall pay a penalty to the Company at rates for unauthorized purchases set forth by its supplier, in addition to the monthly rate set forth above.
3. The customer must agree that any burners, apparatus, appliances or equipment which may be supplied with gas on a Firm Basis under the terms of any filed Rate Schedule of the Company will not be piped or connected in a manner which will permit them to operate from the gas service covered by an Interruptible Service Contract.

(Continued on Sheet No. E-11.10)

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(Continued From Sheet No. E-11.00)

Rate Schedule No. 5.0 (cont.)

Contract Term:

The term of the contract shall be subject to the mutual agreement of the customer and the Company, but in no even shall it be for a period of less than one year.

Rules and Regulations:

Service supplied under this rate schedule shall be governed by the Rules and Regulations of the Company.

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Rate Schedule No. 6.0

COGENERATION SERVICE RATE

Availability

This Rate Schedule is available for contracted gas service to an approved Cogeneration system utilizing natural gas as the primary energy source. Approval of a qualifying Cogeneration system will be at the sole discretion of the Company.

Service under this schedule will be available for a period of time, not to exceed 5 years, from the beginning of the first full billing cycle following the commercial operation of the cogeneration unit. Actual use of the cogeneration use by the customer for space heating, process heating or production purposes will constitute commercial operation. Determination of the commercial operation effective date will be at the sole discretion of the Company.

Monthly Base Volumes

The Monthly Base Volumes shall be a volume of gas established for each customer based on a month-by-month comparison of sales made to that customer in the year 1983 and 1984. The higher volume shall be the Monthly Base Volume for that month. For customers taking service under this rate for which no previous history of consumption exists for years 1983 and 1984, 70% of all volumes consumed shall be considered as the Monthly Base Volume for the purpose of billing and interruption.

Monthly Rate

Customer Charge \$ 300.00 per month

Commodity Charge:

For all volumes metered up an amount equal to the Monthly Base Volume the rate to be charged shall be the sum of:

1. The gas cost recovery charge as set forth on page E-3.00
2. The Distribution Charge of the rate Schedule on which the customer previously received service or, for new customers, the rate schedule for which the customer would have been eligible to receive service.

For all volumes consumed in excess of the Monthly Base Volume, the rate to be charged will be: \$.425 per Ccf

(Continued on Sheet No. E-13.00)

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(Continued from Sheet No. E-12.00)

Rate Schedule No. 6.0 (Cont.)

Surcharges and Credits:

Gas service under this rate may be subject to surcharges and/or credits as indicated on Sheet No. E-2.00.

Cost of Gas Credit

If the commodity charge for all volumes consumed by the customer in excess of the Monthly Base Volumes is greater than the sum of:

1. The commodity cost of gas purchased for sale to the customer;
2. The pipeline supplier transportation charges for delivery of such volumes, if applicable;
3. A distribution charge of \$.04618 per Ccf

then a credit will be made to customers receiving service under rate schedules subject to the Company's Gas Cost Recovery Clause.

The amount to be credited will be the the product of the difference between the Commodity Charge and the the above mentioned sum multiplied by the sales volumes in excess of the Monthly Base Volume. This credit will be used as an offset to the cost of gas in a GCR Reconciliation proceeding.

Character of Service

The volumes of gas equal to the customers' Monthly Base Volume will be considered firm or interruptible depending on the classification of the rate Schedule under which the customer previously received service or for new customers, the rate schedule for which the customer would have been eligible for service.

All volumes of gas in excess of the customers' Monthly Base Volume will be considered eligible for interruption. Those volumes considered eligible for interruption will be subject to interruptions or curtailment at the sole discretion of the Company and the Company reserves the right to temporarily discontinue the supply of gas to effectuate such interruption or curtailment. Except in an emergency, notice of interruption or curtailment will be given by the Company not less than two hours in advance of such interruption or curtailment.

(Continued on Sheet No. E-14.00)

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DATED
IN CASE NO. U-9323

(Continued From Sheet No. E-13.00)

Rate Schedule No. 6.0 (Cont.)

Gas Cost Recovery Charge:

All volumes equal to the Monthly Base Volume as set forth above are subject to the monthly Gas Cost Recovery Factor as shown on Sheet No. E-3.00

Term of Payment:

All bills are due and payable on or before the due date shown thereon.

A late payment charge of three percent (3%) of the unpaid balance shall be added to any bill which is not paid on or before the due date shown thereon.

Special Provisions:

1. Any customer purchasing gas under this rate schedule shall own complete stand-by equipment and maintain the same in good operating condition with sufficient fuel stocks on hand so that, if necessary, gas service from the Company can be completely curtailed on not more than two hours advanced notice.
2. In the event the customer fails to curtail or discontinue gas consumption after two hours notice as directed by the Company, the customer shall pay a penalty to the Company at rates for unauthorized purchases set forth by its supplier, in addition to the monthly rate set forth above.
3. The customer must agree that any burners, apparatus, appliances or equipment which may be supplied with gas on a Firm Basis under the terms of any filed Rate Schedule of the Company will not be piped or connected in a manner which will permit them to operate from the gas service covered by an Interruptible Service Contract.

Rules and Regulations:

Service supplied under this rate schedule shall be governed by the Rules and Regulations of the Company as approved by the Michigan Public Service Commission.

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Rate Schedule No. 7.0

CONTRACT SALES

The rates to be charged to contract customers are as follows:

Holland Board of Public Works

Customer Charge	\$ 300.00 per month
Distribution Charge	\$.04618 per Ccf

Celotex Corporation

Customer Charge	\$ 300.00 per month
Distribution Charge	\$.04618 per Ccf

White Pine Copper Company

Customer Charge	\$ 300.00 per month
Distribution Charge	\$.04618 per Ccf

Surcharges and Credits:

Gas service under this rate may be subject to surcharges and/or credits as indicated on Sheet No. E-2.00 and Sheet No. E-3.00.

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SECTION F
RULES AND REGULATIONS
FOR GAS TRANSPORTATION CUSTOMERS

F1. APPLICATION

Unless otherwise provided for within these transportation service rules and regulations or under Interruptible Transportation Service (ITS) Rate, or under Firm Transportation Service (FTS) Rate, transportation customers are subject to all the rules and regulations contained within Section B of the Company's Rules and Regulations for all customers.

F2. DEFINITIONS

- 1.1 The term "Annual Contract Quantity" (ACQ) shall mean the maximum quantity of Gas obligated by the Company to provide to the Shipper over a period of twelve months.
- 1.2 The term "British Thermal Unit" (BTU) shall mean the amount of heat required to raise the temperature of one pound of water one degree Fahrenheit at sixty degrees Fahrenheit.
- 1.3 The term "Company" shall mean Michigan Gas Company, a Michigan corporation, P.O. Box 488, 16587 Enterprise Drive, Three Rivers, Michigan 49093.
- 1.4 The term "Cumulative Monthly Nominations" shall mean a cumulative total of all Nominations made by the Shipper for a given Month.
- 1.5 The term "Cumulative Negative Imbalance" shall mean the situation in which a Shipper has, on a cumulative basis, taken more gas than it arranged to have delivered to the Company.
- 1.6 The term "Cumulative Positive Imbalance" shall mean the situation in which a Shipper has, on a cumulative basis, taken less gas than it arranged to have delivered to the Company.
- 1.7 The term "Customer Charge" shall mean a fixed charge billed to the Shipper on a monthly basis representing certain fixed costs attributable to providing service to the Shipper.

(Continued on Sheet No. F-2.00)

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(Continued From Sheet No. F-1.00)

F2. DEFINITIONS (cont.)

- 1.8 The term "Day" shall mean a period of twenty-four (24) consecutive hours (23 hours when changed from Standard to Daylight time and 25 hours when changing back to Standard time) beginning at 12:00 noon Eastern time or at such time as may be mutually agreed upon.
- 1.9 The term "dekatherm" (dth) shall mean the quantity of heat energy which is equivalent to one million BTU.
- 1.10 The term "Designated Service Rate" shall mean the Company's existing gas sales rate designated in the Service Agreement.
- 1.11 The term "Equivalent Quantities" shall mean a quantity of gas containing an amount of dths equal to the amount of dths received by Transporter for the account of Shipper at the Point(s) of Receipt.
- 1.12 The term "Firm Transportation Service" (FTS) shall mean Transportation service from schedules or contracts under which the Company is expressly obligated to reserve specific capacity within a given time period and which anticipates no interruptions, but which may permit unexpected interruption in cases where capacity to higher priority customers is threatened.
- 1.13 The term "First-Come, First-Served" shall mean the procedure by which priority for Transportation Service is allocated by the date the Company received the Request for Transportation Service.
- 1.14 The term "Gas" shall mean natural gas, manufactured gas or a combination of the two.
- 1.15 The term "Heating Value Measurement Charge" shall mean a charge for any device installed by the Company to measure the heat content of gas delivered to the Shipper.

(Continued on Sheet No. F-3.00)

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(Continued From Sheet No. F-2.00)

F2. DEFINITIONS (cont.)

- 1.16 The term "Interruptible Transportation Service" (ITS) shall mean Transportation service from schedules or contracts under which the Company is not expressly obligated to reserve specific capacity within a given time period, and which anticipates and permits interruption on short notice, or service under schedules or contracts which expressly or implicitly require installation of alternate fuel capability.
- 1.17 The term "Load Balancing Charge" shall mean a charge incurred due to the Shipper taking more (negative imbalance) or less (positive imbalance) gas in a month than was nominated.
- 1.18 The term "Load Balancing Penalty Charge" shall mean a charge incurred, in addition to the Load Balancing Charge, due to the Shipper taking more/less gas in a month than was nominated.
- 1.19 The term "Load Balancing Service" shall mean the service by which the Company allows Shipper variances from Nominated volumes within a specific period of time, under the condition that such variance will be reconciled.
- 1.20 The term "Maximum Daily Quantity" (MDQ) shall mean the greatest volume of Gas that the Company is obligated to Transport to the Shipper on any Day.
- 1.21 The term "Mcf" shall mean one thousand cubic feet of Gas at 14.65 psia.
- 1.22 The term "Month" shall mean the period beginning at 12 noon Eastern Time on the first Day of a calendar month and ending at the same hour on the first Day of the next succeeding calendar month, or at such time as may be mutually agreed upon.
- 1.23 The term "Nominations" shall mean the process by which the Shipper notifies the Company of expected Transportation volumes.
- 1.24 The term "Point of Delivery" shall mean any point on the Company's Gas distribution system at which an interconnect exists with the Shipper's facility to enable the Company to deliver Shipper's gas.

(Continued on Sheet No. F-4.00)

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(Continued From Sheet No. F-3.00)

F2. DEFINITIONS (cont.)

- 1.25 The term "Point of Receipt" shall mean any point on the Company's gas distribution system at which an interconnection exists with Shipper's Transporter to enable the Company to receive Shipper's gas for redelivery to the Shipper.
- 1.26 The term "Rate Schedule" shall mean the particular schedule listing applicable rates for service found in the Company's Schedule of Rules, Regulations and Rates.
- 1.27 The term "Request for Transportation Service" shall mean a written request by the Shipper for Transportation service.
- 1.28 The term "Service Agreement" shall mean all written contracts executed by the Shipper and Company and any exhibits, attachments and/or amendments thereto.
- 1.29 The term "Service Territory" shall mean the geographical area defined in the Company's Schedule of Rules, Regulations and Rates in which the Company is responsible for Gas service.
- 1.30 The term "Shipper" shall mean any person, corporation, partnership or any other party requesting Transportation of Gas by the Company.
- 1.31 The term "Shipper's Transporter" shall mean the intrastate pipeline, interstate pipeline, or local distribution company transporting Gas to the Point(s) of Receipt.
- 1.32 The term "System Supply Status" shall mean a sales customer purchasing gas from the Company's reserved gas supplies or a Shipper paying for System Supply Entitlement Service.
- 1.33 The term "System Supply Entitlement Service" (SSES) shall mean the service provided by which an FTS customer can reserve entitlement to the Company's Gas Supplies as provided for in the Service Agreement.
- 1.34 The term "System Supply Entitlement Charge" (SSEC) shall mean the charge incurred for SSES.

(Continued on Sheet No. F-5.00)

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(Continued From Sheet No. F-4.00)

F2. DEFINITIONS (cont.)

- 1.35 The term "Transportation" shall mean the movement of gas from the Point(s) of Delivery to the Point(s) of Receipt. "Transportation" in a more generic form can also mean the movement of gas within the interconnected systems of interstate pipelines, intrastate pipelines and local distribution companies.
- 1.36 The term "Transportation Charge" shall mean the volumetric charge incurred from the Transportation of gas.
- 1.37 The term "Transportation Customer" shall mean any customer who has contracted for ITS or FTS. (See "Shipper")

F3. TRANSPORTATION SERVICE

F3.1 Operating Tolerances

It is recognized that Shipper will be unable to control exactly the quantities of Gas delivered and accepted hereunder on any Day, and that the actual quantities received by the Company may vary above or below the actual quantities delivered on any Day. Such variations shall be considered imbalances, shall be kept to the minimum permitted by operating conditions and shall be balanced as soon as practicable, but shall not exceed a daily variation of ten percent (10%) of the actual deliveries, except that the Company may allow a greater variation, and/or may adjust receipts or deliveries of Gas hereunder, if it determines that it may do so to achieve elimination of previous imbalances without adverse effect on the Company's operations or its ability to meet all its other obligations, including lower priority service.

A Load Balancing Charge and/or a Load Balancing Penalty Charge may be applicable to daily and/or monthly imbalances, pursuant to the ITS Rate or FTS Rate in addition to other remedies under law. It shall be the responsibility of Shipper to monitor and adjust deliveries of Gas to and receipts of Gas from the Company to match nominated volumes.

(Continued on Sheet No. F-6.00)

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(Continued From Sheet No. F-5.00)

F3.2 Treatment of Gas

The Company reserves the right to subject or permit the subjection of the Gas to be transported hereunder to compression, cooling, cleaning, or other processes to such an extent as may be required in the Company's sole opinion for its transmission from the Point(s) of Receipt to the Point(s) of Delivery. Nothing contained herein shall be construed so as to prevent the use of conventional separation equipment, including low temperature wellhead separation units, prior to the delivery of Gas to the Company hereunder.

F3.3 Nominations

A. Monthly

At least five (5) Working Days prior to the first Day of each Month, Shipper or Shipper's designated representative shall furnish the Company with a written schedule in a format supplied by the Company showing the estimated daily quantity of Gas it desires the Company to deliver and receive during such Month, unless other arrangements are required by the Company.

B. Departures From Nominations

Shipper shall, by telephoning the Company and then providing written confirmation, give the Company at least 24 hours notice of any proposed change of a daily quantity from that set forth in the schedule provided for above. Any proposed change in nomination made, pursuant to procedures specified by the Company, may not be made until after the first Day of the Month covered by the nomination. The Company may waive any part of the 24 hours notice upon request if, in its judgement, operating conditions permit such waiver. Shipper and the Company shall inform each other of any changes in anticipated deliveries immediately. Departures from the monthly and daily schedules shall be kept to a minimum as permitted by operating conditions, and the parties shall cooperate to this end.

C. Curtailments

If the Company has issued a 90-day notification of gas supply deficiency curtailment, under Rule B4, then Shippers who pay the System Supply Entitlement Charges (SSEC) must furnish the company

(Continued on Sheet No. F-7.00)

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(Continued From Sheet No. F-6.00)

C. Curtailments (cont.)

with a written monthly schedule of GCR purchases nominated by the shipper. Such schedule must be submitted to the Company 45 days prior to each month of curtailment. Pursuant to Rule B4, the Company will provide the shipper with 30 days prior notification of the authorized volumes which the shipper is entitled to purchase.

F3.4 Delivery of Gas

The Company, subject to the other provisions hereof, shall make daily delivery, to the extent practicable, of Equivalent Quantities of Gas at the Point(s) of Delivery up to the Maximum Daily Quantity (MDQ) agreed to in the Service Agreement with Shipper.

F3.5 Hourly Variation

To the extent practicable, Gas shall be transported to the Point(s) of Delivery at uniform hourly rates by the Company.

F3.6 Pressure

The Company shall not be required to alter its prevailing line pressure at the Point(s) of Receipt into its system or at the Point(s) of Delivery to Shipper.

F3.7 Measurement

All Gas delivered to the Shipper shall be measured by the Company. The accuracy of meters used for such purpose shall be evaluated and maintained in accordance with the Michigan Public Service Commission's Technical Standards For Gas Service (Technical Standards).

F3.8 Adjustments to Equivalent Quantities

Following receipt of Monthly statements, the parties shall adjust the receipts and deliveries of Gas within thirty (30) Days if practicable to balance any excess or deficiency in order for Shipper to receive Equivalent Quantities. In the event the quantities of Gas received and delivered are not in balance at the end of the term of the Agreement, then such balance shall be achieved within thirty (30) Days by extending receipts or deliveries as applicable at the appropriate Point(s) of Receipt or Point(s) of Delivery until such balance is achieved or by such other method as is then mutually agreed upon by the parties hereto.

(Continued on Sheet No. F-8.00)

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(Continued From Sheet No. F-7.00)

F3.9 Limitations of Service

The Company shall not be required to perform service under a Service Agreement on behalf of any customer failing to comply with any and all terms of the Service Agreement, Transportation Rate Schedules and/or the Company's Rules and Regulations for Transportation Customers. By mutual agreement between Shipper and the Company, specific transportation contract language may vary from the terms and conditions of the tariff.

F4. QUALITY

F4.1 Heat Content

The Gas received and hereunder delivered shall have a total heating value per cubic foot of not less than 950 BTU not more than 1,100 BTU.

F4.2 Freedom from Objectionable Matter

The Gas quality of received and delivered hereunder shall meet the following requirements:

- A. Gas shall not contain more than three percent (3%) oxygen by volume;
- B. Gas shall be commercially free from objectionable odors, solid or liquid matter, dust, gum or gum-forming constituents which might interfere with its merchantability or cause injury to or interference with proper operation of the lines, regulators, meters or other appliances through which it flows;
- C. Gas shall not contain more than 0.3 grain of hydrogen sulphide per 100 cubic feet;
- D. Gas shall not contain more than twenty grains of total sulfur (including hydrogen sulphide and mercaptan sulfur) per 100 cubic feet;

(Continued on Sheet No. F-9.00)

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(Continued From Sheet No. F-8.00)

- E. Gas shall not at any time have carbon dioxide content in excess of two percent by volume;
- F. Gas shall not contain an amount of moisture which at any time exceeds seven pounds per million cubic feet; and
- G. Gas shall not contain a nitrogen content in excess of three percent by volume.

F4.3 Commingling

The Company shall have the unqualified right to commingle Gas Transported hereunder with Gas from other sources. It is recognized that Gas redelivered at the Point(s) of Delivery may not be the same molecules as those received at the Point(s) of Receipt.

F5. BILLING, RECORDS, ACCOUNTING AND PAYMENT

F5.1 Issuance, Payment and Inquiry of Billings

The Company shall furnish, or cause to be furnished, to Shipper, on or before the (15th) Day of each Month, a billing of charges for service during the prior Month. Such charges may be based on estimated quantities if actual quantities are unavailable in time to prepare the billing. In that event, the Company shall provide, in the succeeding month's billing, an adjustment based on any difference between actual quantities and estimated quantities.

The Company will issue a separate billing for service under each of Shipper's Service Agreements which will be due 15 days from the date of rendition.

Each party to a Service Agreement shall have the right at all reasonable time to examine the books, records and charges of the other party, to the extent necessary to verify the accuracy of any statement, charge or computation made under or pursuant to any provision of the contract.

(Continued on Sheet No. F-10.00)

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(Continued From Sheet No. F-9.00)

F5.2 Mailing of Notices, Bills and Payments

All notices, bills and payments required or permitted to be given in connection with Transportation Service shall be sent to the address specified in the Service Agreement unless otherwise indicated therein, shall be in writing and shall be valid and sufficient if delivered in person, by first class mail, Western Union, express mail, courier or telex.

F6. POSSESSION OF GAS

F6.1 Responsibility for Gas

The Company and Shipper shall each be responsible for its own equipment, facilities and Gas on its own side of a delivery point. The Company and Shipper shall each have good title or good right to make such a delivery and further, shall warrant for itself, its personal representatives, successors and assigns that such Gas shall be free and clear of all license encumbrances and claims whatsoever. With respect to any such adverse claim that may arise to said Gas or to royalties, taxes, license fees or charges thereon, the party delivering or causing the delivery of the Gas shall indemnify and save the receiving party harmless from all suits, actions, debt, accounts, damages, costs, losses and expenses arising from or out of same, provided that the receiving party gives the other prompt notice of any such adverse claim.

F7. AGENCY

F7.1 Agency

If Shipper's Transporter has a provision for directly billing Shipper for Transportation fees, the Company has the option to collect fees to be paid to Shipper's Transporter.

The Company may, at its option, serve as Shipper's Agent in its contracts for transportation with Shipper's Transporter.

(Continued on Sheet No. F-11.00)

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Rate Schedule No. 1.0

INTERRUPTIBLE TRANSPORTATION SERVICE (ITS) RATE

Availability:

This Rate Schedule is available to any person, corporation, partnership or any other party (hereinafter referred to as "Shipper") for the transportation of Gas by Michigan Gas Company (hereinafter referred to as "Company") within the Company's Service Territory, when:

- (a) Shipper desires Interruptible Transportation Service of Gas; and
- (b) Shipper owns complete standby equipment and maintains the same in good operating condition with sufficient fuel stocks on hand so that, if necessary, gas service from the Company can be completely curtailed on not more than two hours advance notice, provided however, the Company will only curtail Shipper due to lack of capacity on the Company's system; and
- (c) Shipper has met the conditions specified in Section F of the Company's Rules and Regulations for Gas Transportation Customers; and
- (d) Shipper and Company have executed a Service Agreement for service under this Rate Schedule.

Transportation Service under this Rate Schedule shall be provided for all customers on a First-come, First-served basis determined as of the date the Company receives a Request for Transportation Service.

Shipper must contract for delivery of Gas to a specific Point(s) of Receipt where Shipper's Transporter will deliver Shipper's Gas to the Company and a specific Point(s) of Delivery where the Gas will be consumed. Gas transported under the terms of this rate may not be resold.

(Continued on Sheet No. F-12.00)

ISSUED
JON A. KOSHT
VICE PRESIDENT
16587 ENTERPRISE DRIVE
THREE RIVERS, MICHIGAN

BY

EFFECTIVE FOR GAS SERVICE
RENDERED ON AND AFTER

ISSUED UNDER AUTHORITY OF THE
MICHIGAN PUBLIC SERVICE COMM.
DATED
IN CASE NO. U-9323

(Continued From Sheet No. F-11.00)

Rate Schedule No. 1.0 (cont.)

Characteristics of Service:

This Rate Schedule shall apply to all Interruptible Transportation Service rendered by the Company for Shipper pursuant to the executed Service Agreement for service under this Rate Schedule.

Service under this Rate Schedule shall consist of: (i) the receipt of Gas on behalf of Shipper at the Point(s) of Receipt specified in the executed Service Agreement; (ii) the transportation of Equivalent Quantities of Gas through the Company's system; and iii) the delivery of Gas by the Company to Shipper at the Point(s) of Delivery specified in the executed Service Agreement.

The Company will provide Load Balancing Service equal to or less than $\pm 5\%$ of Shipper's Cumulative Monthly Nomination. Gas consumed by Shipper greater than $\pm 5\%$ of Shipper's Cumulative Monthly Nomination shall be subject to a Load Balancing Charge and a Load Balancing Penalty Charge.

Bills will be rendered on a Monthly basis.

Monthly Rate:

Subject to such modifications as may be imposed and/or authorized by the Michigan Public Service Commission (MPSC), each Month Shipper shall, where applicable, pay the Company the following amounts:

(i) Customer Charge

Shipper shall pay a Customer Charge of \$1,000 per Month for each account through which Shipper requests Gas to be transported, regardless of whether or not Shipper actually delivers Gas to the Point(s) of Receipt.

(Continued on Sheet No. F-13.00)

ISSUED
JON A. KOSHT
VICE PRESIDENT
16587 ENTERPRISE DRIVE
THREE RIVERS, MICHIGAN

BY

EFFECTIVE FOR GAS SERVICE
RENDERED ON AND AFTER

ISSUED UNDER AUTHORITY OF THE
MICHIGAN PUBLIC SERVICE COMM.
DATED
IN CASE NO. U-9323

(Continued From Sheet No. F-12.00)

Rate Schedule No. 1.0 (cont.)

(ii) Transportation Charge

Shipper shall pay the following Transportation Charge multiplied by the quantity of Gas in Mcf which the Company delivered to the Shipper at the Point(s) of Delivery during the Month:

\$.4218 per Mcf

If the gas to be transported is an incremental load, and will be used to displace coal or coal derived fuels, the transportation charge shall be a rate, as negotiated between the Transporter and the Shipper, between a floor of \$0.05 per Mcf and a ceiling price equal to the ITS transportation rate and all applicable surcharges for all gas redelivered.

In addition, the Transporter shall retain .89% of all gas received at the Point(s) of Receipt to compensate it for the company-use and lost and unaccounted-for-gas on Transporters system. This volume shall not be included in the quantity available for delivery to the Shipper.

(iv) Load Balancing Charge

Daily

In the event that Shipper's Transporter has a Daily Balancing Charge in its rates, and to the extent that Shipper causes the Company to incur a Daily Balancing Charge, the Company shall pass through the Daily Balancing Charge to Shipper.

Monthly

For a Cumulative Positive Imbalance (overdelivery) greater than 5% and less than or equal to 10% of the Shipper's Cumulative Monthly Nomination, all Shippers shall pay a charge of \$.12 per Mcf. For a Cumulative Positive Imbalance greater than 10% of the Shipper's Cumulative Monthly Nomination, all Shippers shall pay a Load Balancing Penalty Charge.

(Continued on Sheet No. F-14.00)

ISSUED
JON A. KOSHT
VICE PRESIDENT
16587 ENTERPRISE DRIVE
THREE RIVERS, MICHIGAN

BY

EFFECTIVE FOR GAS SERVICE
RENDERED ON AND AFTER

ISSUED UNDER AUTHORITY OF THE
MICHIGAN PUBLIC SERVICE COMM.
DATED
IN CASE NO. U-9323

(Continued From Sheet No. F-13.00)

Rate Schedule No. 1.0 (cont.)

(iv) Load Balancing Charge (cont.)

For a Cumulative Negative Imbalances (underdelivery) greater than 5% and less than or equal to 10% of Shipper's Cumulative Monthly Nomination, all Shippers shall pay \$.12 per Mcf. For a Cumulative Negative Imbalance greater than 10% of Shipper's Cumulative Monthly Nomination, Shipper may be subject to a Load Balancing Penalty Charge.

Load Balancing Charges will be credited to the Company's Booked Cost of Gas Sold as defined in Section B10.2 of the Company's Rules and Regulations for all Customers.

(v) Load Balancing Penalty Charge (Unauthorized Gas Usage Charge)

Daily

In the event that Shipper's Transporter has a Daily Balancing Penalty Charge in its rates, and to the extent that Shipper causes the Company to incur a Daily Balancing Penalty Charge, the Company shall pass through the Daily Balancing Penalty Charge to Shipper.

Monthly

For a Cumulative Positive Imbalance greater than 10% of Shipper's Cumulative Monthly Nomination, all Shippers shall pay a \$2.00 per Mcf Load Balancing Penalty Charge, in addition to all other applicable transportation charges.

For Cumulative Negative Imbalances in excess of 10% of Shipper's Cumulative Monthly Nomination, a Shipper shall pay a \$10.00 per Mcf Load Balancing Penalty Charge and the currently effective GCR rate per Mcf, in addition to all other applicable transportation charges.

Load Balancing Penalty Charges will be credited to the Company's Booked Cost of Gas Sold as defined in Section B10.2 of the Company's Rules and Regulations for all Customers.

(Continued on Sheet No. F-15.00)

ISSUED
JON A. KOSHT
VICE PRESIDENT
16587 ENTERPRISE DRIVE
THREE RIVERS, MICHIGAN

BY

EFFECTIVE FOR GAS SERVICE
RENDERED ON AND AFTER

ISSUED UNDER AUTHORITY OF THE
MICHIGAN PUBLIC SERVICE COMM.
DATED
IN CASE NO. U-9323

(Continued From Sheet No. F-14.00)

Rate Schedule No. 1.0 (cont.)

(vi) Heating Value Measurement Charge

The Company, at its option, may require the installation of a heating value measurement device and payment by the customer of a Heating Value Measurement Charge of \$250.00 per Month per installation under the following conditions:

- 1) if the heating value cannot be confirmed by pipeline measurement due to more than one supply source entering an area, and the customer has annual requirements of 100,000 Mcf or more; or
- 2) for any smaller customer, if the customer refuses to include in its Service Agreement a provision that holds the company harmless for any damages resulting from measuring errors based on heating value; or
- 3) for any smaller customer, if the customer requests that heating value measurement equipment be installed.

(vii) Emergency Gas Usage Charge (Authorized Gas Usage Charge)

The Company will provide emergency, short-term Gas on a First Come-First Served, best efforts basis to all Shippers desiring such service, subject to the provisions of this Charge.

Shippers requesting emergency service must obtain prior approval by telephone from the Company, each Day Shipper requests emergency service, before actually taking Gas. Shippers not requesting or obtaining approval from the Company will be charged the Company's Unauthorized Usage Charge.

In addition to all the applicable charges of this Rate Schedule, Shipper shall pay an Emergency Gas Usage Charge of \$2.00 per Mcf plus the currently effective GCR rate per Mcf for all emergency Gas purchases. However, to the extent that the emergency Gas purchased by Shipper contributes to the Company incurring an Unauthorized Usage Charge/Penalty from its supplier(s), Shipper shall be responsible for payment of the portion of the Unauthorized Usage Charge/Penalty Shipper caused the Company to incur.

(Continued on Sheet No. F-16.00)

ISSUED
JON A. KOSHT
VICE PRESIDENT
16587 ENTERPRISE DRIVE
THREE RIVERS, MICHIGAN

BY

EFFECTIVE FOR GAS SERVICE
RENDERED ON AND AFTER

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MICHIGAN PUBLIC SERVICE COMM.
DATED
IN CASE NO. U-9323

(Continued From Sheet No. F-15.00)

Rate Schedule No. 1.0 (cont.)

(vii) Emergency Gas Usage Charge (cont.)

Emergency Gas Usage Charges will be credited to the Company's Booked Cost of Gas Sold as defined in Section B10.2 of the Company's Rules and Regulations for all Customers.

(viii) Gas Cost Recovery Charge

This rate is not subject to adjustments for fluctuations in the cost of purchased Gas as stated in Section B10.1 of the Company's Rules and Regulations for all Customers.

(ix) Take-or-Pay Charge

A take-or-pay charge of \$0.10 per Mcf will be applied to all volumes of gas redelivered to the Shipper at the Point(s) of Delivery. The Company may, at its option, discount the take-or-pay charge to a floor of \$0.00 per Mcf.

This take-or-pay charge shall remain in effect until all reasonably and prudently incurred take-or-pay costs allocable to customers are fully collected. When the effective period for the take-or-pay charge has expired, the Company shall immediately discontinue this charge, and file revised rate sheets reflecting the elimination of the take-or-pay charge.

(x) Excess Pipeline Cost Charge

An excess pipeline cost charge may be assessed to customers. The charge shall not exceed \$0.10 per Mcf. Once the charge is in effect, that charge shall remain in effect until all appropriate customers are notified of a revised charge. Notice must occur at least 15 days prior to the beginning of the billing month in which the revised charge is to be in effect.

Special Provisions

In the event that the Company curtails Shipper due to lack of capacity on the Company's system, and Shipper discontinues its Gas consumption within two hours, Shipper will not be subject to a Load Balancing Charge or a Load Balancing Penalty Charge.

(Continued on Sheet No. F-17.00)

ISSUED
JON A. KOSHT
VICE PRESIDENT
16587 ENTERPRISE DRIVE
THREE RIVERS, MICHIGAN

BY

EFFECTIVE FOR GAS SERVICE
RENDERED ON AND AFTER

ISSUED UNDER AUTHORITY OF THE
MICHIGAN PUBLIC SERVICE COMM.
DATED
IN CASE NO. U-9323

(Continued From Sheet No. F-16.00)

Rate Schedule No. 1.0 (cont.)

Special Provisions (cont.)

In the event Shipper fails to curtail or discontinue Gas consumption after two hours notice as directed by the Company, Shipper shall pay the Company's Unauthorized Usage Charge, in addition to the monthly rate set forth above.

Shipper must agree that any burners, apparatus, appliances or equipment supplied with Gas on a Firm Basis, under the terms of any filed Rate Schedule of the Company, will not be piped or connected in a manner which will permit operation from the Gas transported under the terms of this Rate Schedule.

Due Date and Late Payment Charge

A late payment charge of 3% of the unpaid balance outstanding shall be applied to any bill which is not paid on or before the due date shown. If such failure to pay continues for thirty (30) days after payment is due, then, in addition to any other remedy it may have, the Company may suspend further receipt and/or redelivery of Gas until such amount is paid; provided however, that the Company provides at least five days notice before service is suspended for nonpayment.

The due date shall be 15 days from the date of rendition. Billing may be based upon estimated quantities if actual quantities are unavailable at the time of billing. In that event, the Company shall provide in the succeeding month's billing an adjustment based on any difference between actual and estimated quantities.

Contract Form and Term:

All service under this rate will require Shipper and the Company to execute a Service Agreement. All service under this rate must be contracted for a term of at least one year.

Alternative Charge Calculation:

The Company may, at its option, with the concurrence of the customer, cause any charges in this Rate to read per Dekatherm rather than per Mcf.

(Continued on Sheet No. F-18.00)

ISSUED
JON A. KOSHT
VICE PRESIDENT
16587 ENTERPRISE DRIVE
THREE RIVERS, MICHIGAN

BY

EFFECTIVE FOR GAS SERVICE
RENDERED ON AND AFTER

ISSUED UNDER AUTHORITY OF THE
MICHIGAN PUBLIC SERVICE COMM.
DATED
IN CASE NO. U-9323

(Continued From Sheet No. F-17.00)

Rate Schedule No. 1.0 (cont.)

Rules and Regulations:

Service supplied under this rate schedule shall be governed by the Rules and Regulations of the Company as approved by the Michigan Public Service Commission.

(Continued on Sheet No. F-19.00)

ISSUED
JON A. KOSHT
VICE PRESIDENT
16587 ENTERPRISE DRIVE
THREE RIVERS, MICHIGAN

BY

EFFECTIVE FOR GAS SERVICE
RENDERED ON AND AFTER

ISSUED UNDER AUTHORITY OF THE
MICHIGAN PUBLIC SERVICE COMM.
DATED
IN CASE NO. U-9323

AFFIDAVIT OF RECOGNITION

I. _____, do hereby declare that I understand that by opting to pay for _____ Mcf of SSES when transporting gas, I have forfeited my access to any volumes of system supply gas in excess of the stated amounts. In the event that I do not opt to pay for SSES when transporting gas, I understand that I have forfeited my status as a system supply customer of Michigan Gas Company (MI-GAS) and as such have forfeited my access to system supply gas. I further understand that in order to be granted new or increased firm sales service from MI-GAS, I must apply to MI-GAS as a new customer pursuant to MI-GAS' Controlled Service Rule B.3.

I understand that MI-GAS will strive to adjust its longer term gas supply contracts to reflect its lower gas sales obligation caused by transportation customers electing to pay for limited or no SSES.

I also do hereby declare that I have been provided a copy of, and have read, Rule B.3, Controlled Service Rule and Rule B.4, Curtailment of Gas Service.

I further affirm that I am authorized to sign this statement of understanding on behalf of _____.

By _____

Title _____

Subscribed and sworn to me, this _____ day of _____, 19__.

(Continued From Sheet No. F-18.00)

Rate Schedule No. 1.0 (cont.)

FORM OF SERVICE AGREEMENT

For Use Under the Company's Interruptible Transportation Service (ITS) Rate

THIS SERVICE AGREEMENT entered into as of the ____ day of ____, 19 __, by and between MICHIGAN GAS COMPANY, a Michigan Corporation, P.O. Box 488, 16587 Enterprise Drive, Three Rivers, Michigan 49093 (hereinafter referred to as "Company"), and _____, a _____ Corporation with principal offices at _____ (hereinafter referred to as "Shipper").

WITNESSETH

WHEREAS, Shipper has requested the Company to transport Gas on its behalf; and

WHEREAS, the Company may have capacity available to provide Interruptible Transportation Service to Shipper under the terms specified herein;

ARTICLE I
GAS TRANSPORTATION SERVICE

1. Transportation Service hereunder shall be subject to applicable federal and state laws and the applicable orders, rules and regulations of appropriate state agencies, including the Michigan Public Service Commission, and any federal authority having or asserting jurisdiction; but nothing contained herein shall be construed as a waiver of any right to question or contest any such law, order, rule or regulation in any forum having jurisdiction.
2. Transportation Service hereunder shall be subject to the terms and provisions of this Service Agreement, the Company's Rules and Regulations for Gas Transportation Customers; and the Company's Interruptible Transportation Service (ITS) Rate Schedule.
3. Shipper agrees to deliver or cause to be delivered to the Company Gas for transportation and the Company agrees to receive, transport and redeliver Gas to Shipper, on an interruptible basis, up to an aggregate Maximum Daily Quantity (MDQ) of _____ Mcf. In order for the Company to provide service hereunder, Shipper must request an MDQ and must pay the charges specified in the Company's Interruptible Transportation Service (ITS) Rate Schedule.

(Continued on Sheet No. F-20.00)

ISSUED
JON A. KOSHT
VICE PRESIDENT
16587 ENTERPRISE DRIVE
THREE RIVERS, MICHIGAN

BY

EFFECTIVE FOR GAS SERVICE
RENDERED ON AND AFTER

ISSUED UNDER AUTHORITY OF THE
MICHIGAN PUBLIC SERVICE COMM.
DATED
IN CASE NO. U-9323

(Continued From Sheet No. F-21.00)

Rate Schedule No. 1.0 (cont.)

4. Transportation service rendered hereunder shall be subject to interruption as specified in the Company's Curtailment of Gas Service, Section B of the Company's Rules and Regulations for All Customers.

ARTICLE II
POINT OF RECEIPT

Shipper shall deliver or cause to be delivered Gas at the following Point(s) of Receipt:

Point(s) of Receipt

(Continued on Sheet No. F-21.00)

ISSUED
JON A. KOSHT
VICE PRESIDENT
16587 ENTERPRISE DRIVE
THREE RIVERS, MICHIGAN

BY

EFFECTIVE FOR GAS SERVICE
RENDERED ON AND AFTER

ISSUED UNDER AUTHORITY OF THE
MICHIGAN PUBLIC SERVICE COMM.
DATED
IN CASE NO. U-9323

(Continued From Sheet No. F-20.00)

Rate Schedule No. 1.0 (cont.)

ARTICLE III
POINT OF DELIVERY

The Company shall redeliver to Shipper the Gas transported hereunder at the following Point(s) of Delivery:

Point of Delivery

(Continued on Sheet No. F-22.00)

ISSUED
JON A. KOSHT
VICE PRESIDENT
16587 ENTERPRISE DRIVE
THREE RIVERS, MICHIGAN

BY

EFFECTIVE FOR GAS SERVICE
RENDERED ON AND AFTER

ISSUED UNDER AUTHORITY OF THE
MICHIGAN PUBLIC SERVICE COMM.
DATED
IN CASE NO. U-9323

(Continued From Sheet No. F-21.00)

Rate Schedule No. 1.0 (cont.)

ARTICLE IV
TERM OF AGREEMENT

1. This Agreement shall be effective as of _____, 19____ and shall remain in force and in effect through _____, 19____. This Agreement will remain in effect from year to year thereafter, until either party notifies the other in writing within a 30 Day period prior to the expiration date. Termination of this Service Agreement shall be subject to final balancing of quantities in accordance with the provision of this Rate.

ARTICLE V
RATE SCHEDULE AND PRICE

1. Shipper shall pay the Company for Gas delivered to Shipper hereunder in accordance with the Company's Interruptible Transportation Service (ITS) Rate Schedule, the applicable provisions of this Service Agreement, and the Company's Rules and Regulations for Gas Transportation Customers, as filed with the MPSC which may be amended or superseded from time to time. Such Interruptible Transportation Service (ITS) Rate Schedule and Rules and Regulations for Gas Transportation Customers are by this reference made a part hereof.
2. It is further agreed that the Company may unilaterally seek authorization from the MPSC for such rate adjustments as may be found necessary to assure the Company just and reasonable rates. Nothing herein contained shall be construed to deny Shipper the right to participate fully in rate proceedings by intervention or otherwise to contest increased rates in whole or in part.

(Continued on Sheet No. F-23.00)

ISSUED
JON A. KOSHT
VICE PRESIDENT
16587 ENTERPRISE DRIVE
THREE RIVERS, MICHIGAN

BY

EFFECTIVE FOR GAS SERVICE
RENDERED ON AND AFTER

ISSUED UNDER AUTHORITY OF THE
MICHIGAN PUBLIC SERVICE COMM.
DATED
IN CASE NO. U-9323

(Continued From Sheet No. F-22.00)

Rate Schedule No. 1.0 (cont.)

ARTICLE VI
MISCELLANEOUS

1. Shipper agrees to provide a dedicated telephone line and a 110 volt electrical outlet at the meter site for the specialized metering equipment needed to be installed by the Company. Upon request, the Company agrees to provide the Shipper with the data collected from the specialized metering equipment.
2. Shipper agrees to provide 24 hour per day access to the specialized metering equipment located on the Shipper's premises.
3. Shipper agrees to hold the Company harmless for any damages resulting from measuring errors based on heating value corrections.

ARTICLE VII
FORCE MAJEURE

1. Notwithstanding anything to the contrary herein contained, either party shall be relieved of its duties and obligations under this Agreement if failure to perform in whole or in part such duties or obligations is occasioned by or due to any act of God, strikes or other labor troubles, lockouts, acts of the public enemy, wars, blockades, insurrections, riots, epidemics, landslides, lightning, earthquakes, fires, storms, floods, washouts, civil disturbances, explosions, sabotage, breakage or accident to machinery or lines of pipe, inability to obtain pipe, materials or equipment or the binding order of any court or governmental authority.
2. A failure to settle or prevent any strike, lockout, or other labor troubles shall not be considered a matter within the control of a party claiming suspension.
3. Upon the occurrence of any force majeure, the affected shall notify the other party as soon as is practicable of the full particulars of such force majeure, its expected duration, and the actions planned to alleviate the problems caused by the force majeure.

(Continued on Sheet No. F-24.00)

ISSUED
JON A. KOSHT
VICE PRESIDENT
16587 ENTERPRISE DRIVE
THREE RIVERS, MICHIGAN

BY

EFFECTIVE FOR GAS SERVICE
RENDERED ON AND AFTER

ISSUED UNDER AUTHORITY OF THE
MICHIGAN PUBLIC SERVICE COMM.
DATED
IN CASE NO. U-9323

(Continued From Sheet No. F-23.00)

Rate Schedule No. 1.0 (cont.)

ARTICLE VIII
NOTICE

1. Except as may be otherwise provided, any notice, request, demand, statement or bill provided for in this Service Agreement or any notice which a party may desire to give to the other shall be in writing and shall be valid and sufficient if delivered in person, by first class mail, Western Union, express mail, courier or telex to the following addresses:

Company

Michigan Gas Company
P.O. Box 488
Three Rivers, MI 49093-0488
Attention: Vice President of Rates, Regulation and Gas Supply

Copy to: Gas Supply Department
Manager of Marketing

Shipper

Attention:

This Service Agreement supersedes and cancels, as of the effective date hereof, the following contract between the parties hereto:

(Continued on Sheet No. F-25.00)

ISSUED
JON A. KOSHT
VICE PRESIDENT
16587 ENTERPRISE DRIVE
THREE RIVERS, MICHIGAN

BY

EFFECTIVE FOR GAS SERVICE
RENDERED ON AND AFTER

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MICHIGAN PUBLIC SERVICE COMM.
DATED
IN CASE NO. U-9323

(Continued From Sheet No. F-24.00)

Rate Schedule No. 1.0 (cont.)

IN WITNESS WHEREOF, the parties hereto have caused this Service Agreement to be signed by their respective officers.

ATTEST:

MICHIGAN GAS COMPANY
(Company)

Secretary

By _____

Its _____

ATTEST:

(Shipper)

Secretary

By _____

Its _____

ISSUED
JON A. KOSHT
VICE PRESIDENT
16587 ENTERPRISE DRIVE
THREE RIVERS, MICHIGAN

BY

EFFECTIVE FOR GAS SERVICE
RENDERED ON AND AFTER

ISSUED UNDER AUTHORITY OF THE
MICHIGAN PUBLIC SERVICE COMM.
DATED
IN CASE NO. U-9323

Rate Schedule No. 2.0

FIRM TRANSPORTATION SERVICE (FTS) RATE

Availability:

This Rate Schedule is available to any person, corporation, partnership or any other party (hereinafter referred to as "Shipper") for the transportation of Gas by Michigan Gas Company (hereinafter referred to as "Company") within the Company's Service Territory, when:

- (a) Shipper desires Firm Transportation Service of Gas; and
- (b) Shipper has met the conditions specified in Section F of the Company's Rules and Regulations for Gas Transportation Customers; and
- (c) Shipper and Company have executed a Service Agreement for service under this Rate Schedule.

For the purpose of billing Gas in excess of volumes delivered to the Company's distribution system, as provided for in the System Supply Entitlement Service, Shipper must qualify for, designate in its Service Agreement with the Company and comply with the applicable provisions of one of the Company's existing firm gas sales rates (Designated Service Rate).

Transportation Service under this Rate Schedule shall be provided for all customers on a First-come, First-served basis determined as of the date the Company receives a Request for Transportation Service.

Shipper must contract for delivery of Gas to a specific Point(s) of Receipt where Shipper's Transporter will deliver Shipper's Gas to the Company and a specific Point(s) of Delivery where the Gas will be consumed. Gas transported under the terms of this rate may not be resold.

(Continued on Sheet No. F-27.00)

ISSUED
JON A. KOSHT
VICE PRESIDENT
16587 ENTERPRISE DRIVE
THREE RIVERS, MICHIGAN

BY

EFFECTIVE FOR GAS SERVICE
RENDERED ON AND AFTER

ISSUED UNDER AUTHORITY OF THE
MICHIGAN PUBLIC SERVICE COMM.
DATED
IN CASE NO. U-9323

(Continued on Sheet No. F-26.00)

Rate Schedule No. 2.0 (cont.)

Characteristics of Service:

This Rate Schedule shall apply to all Firm Transportation Service rendered by the Company for Shipper pursuant to the executed Service Agreement for service under this Rate Schedule.

Service under this Rate Schedule shall consist of: (i) the receipt of Gas on behalf of Shipper at the Point(s) of Receipt specified in the executed Service Agreement; (ii) the transportation of Equivalent Quantities of Gas through the Company's system; and (iii) the delivery of Gas by the Company to Shipper at the Point(s) of Delivery specified in the executed Service Agreement.

Service rendered under this Rate Schedule shall be firm, up to Shipper's Maximum Daily Quantity (MDQ) on any Day. The MDQ shall be specified in the executed Service Agreement. If Shipper desires the Company's System Supply Entitlement Service, Shipper shall specify a fixed monthly quantity or a fixed percentage of its total transportation requirements in the Service Agreement.

The Company will provide Load Balancing Service equal to or less than $\pm 5\%$ of Shipper's Cumulative Monthly Nomination. Gas consumed by Shipper greater than $\pm 5\%$ of Shipper's Cumulative Monthly Nomination shall be subject to a Load Balancing Charge and a Load Balancing Penalty Charge.

Bills will be rendered on a Monthly basis.

Monthly Rate:

Subject to such modifications as may be imposed and/or authorized by the Michigan Public Service Commission (MPSC), each Month Shipper shall, where applicable, pay the Company the following amounts:

(i) Customer Charge

Shipper shall pay a Customer Charge of \$1,000 per Month for each account through which Shipper requests Gas to be transported, regardless of whether or not Shipper actually delivers Gas to the Point(s) of Receipt.

(Continued on Sheet No. F-28.00)

ISSUED
JON A. KOSHT
VICE PRESIDENT
16587 ENTERPRISE DRIVE
THREE RIVERS, MICHIGAN

BY

EFFECTIVE FOR GAS SERVICE
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DATED
IN CASE NO. U-9323

(Continued from Sheet No. F-27.00)

Rate Schedule No. 2.0 (cont.)

(ii) Transportation Charge

Shipper shall pay the following Transportation Charge multiplied by the quantity of Gas in Mcf which the Company delivered to the Shipper at the Point(s) of Delivery during the Month:

\$.4893 per Mcf

In addition, the Transporter shall retain .89% of all gas received at the Point(s) of Receipt to compensate it for the company-use and lost and unaccounted-for-gas on Transporters system. This volume shall not be included in the quantity available for delivery to the Shipper.

(iii) System Supply Entitlement Charge

At the customer's option, for all transported volumes received by the customer at the Point(s) of Delivery in a given month, up to the volume of gas delivered at the Point(s) of Receipt during that month, less company use and lost and unaccounted for gas, plus any volume of gas retained by the Company and redelivered at the Point(s) of Delivery during that month, the customer may pay a System Supply Entitlement Charge of \$1.5000 per Mcf. The Company shall discount the System Supply Entitlement Charge for all customers to reflect the currently effective unavoidable pipeline charges, but not below a floor of \$0.1000 per Mcf. Once a System Supply Entitlement Charge, including any discount, is in effect, that charge will remain effective until notification to the appropriate customers. Such notification must be made at least 15 days prior to the beginning of the billing month in which the rate change is to take effect.

Customers may choose to pay this charge at their option. This choice shall be made within 90 days of selecting transportation service, and a customer may choose to pay this charge on a fixed monthly quantity or percentage of its total transportation requirements. Transportation customers who have previously forfeited their status as firm sales customers for any portion of their total requirements must apply for and be granted firm sales service pursuant to the Company's Rule B3, Controlled Service, in

(Continued on Sheet No. F-29.00)

ISSUED
JON A. KOSHT
VICE PRESIDENT
16587 ENTERPRISE DRIVE
THREE RIVERS, MICHIGAN

BY

EFFECTIVE FOR GAS SERVICE
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MICHIGAN PUBLIC SERVICE COMM.
DATED
IN CASE NO. U-9323

(Continued from Sheet No. F-28.00)

Rate Schedule No. 2.0 (cont.)

(iii) System Supply Entitlement Charge (cont.)

order to exercise this option. A customer who chooses not to elect the System Supply Entitlement Charge must complete the Affidavit of Recognition, Form #0107.

(iv) Load Balancing Charge

Daily

In the event that Shipper's Transporter has a Daily Balancing Charge in its rates, and to the extent that Shipper causes the Company to incur a Daily Balancing Charge, the Company shall pass through the Daily Balancing Charge to Shipper.

Monthly

For a Cumulative Positive Imbalance (overdelivery) greater than 5% and less than or equal to 10% of the Shipper's Cumulative Monthly Nomination, all Shippers shall pay a charge of \$.12 per Mcf. For a Cumulative Positive Imbalance greater than 10% of the Shipper's Cumulative Monthly Nomination, all Shippers shall pay a Load Balancing Penalty Charge.

For a Cumulative Negative Imbalances (underdelivery) greater than 5% and less than or equal to 10% of Shipper's Cumulative Monthly Nomination, all Shippers shall pay \$.12 per Mcf. For a Cumulative Negative Imbalance greater than 10% of Shipper's Cumulative Monthly Nomination, Shipper may be subject to a Load Balancing Penalty Charge.

Load Balancing Charges will be credited to the Company's Booked Cost of Gas Sold as defined in Section B10.2 of the Company's Rules and Regulations for all Customers.

(v) Load Balancing Penalty Charge (Unauthorized Gas Usage Charge)

Daily

In the event that Shipper's Transporter has a Daily Balancing Penalty Charge in its rates, and to the extent that Shipper causes the Company to incur a Daily Balancing Penalty Charge, the Company shall pass through the Daily Balancing Penalty Charge to Shipper.

(Continued on Sheet No. F-30.00)

ISSUED
JON A. KOSHT
VICE PRESIDENT
16587 ENTERPRISE DRIVE
THREE RIVERS, MICHIGAN

BY

EFFECTIVE FOR GAS SERVICE
RENDERED ON AND AFTER

ISSUED UNDER AUTHORITY OF THE
MICHIGAN PUBLIC SERVICE COMM.
DATED
IN CASE NO. U-9323

(Continued from Sheet No. F-29.00)

Rate Schedule No. 2.0 (cont.)

(v) Load Balancing Penalty Charge (cont.)

Monthly

For a Cumulative Positive Imbalance greater than 10% of Shipper's Cumulative Monthly Nomination, all Shippers shall pay a \$2.00 per Mcf Load Balancing Penalty Charge, in addition to all other applicable transportation charges.

For Cumulative Negative Imbalances in excess of 10% of Shipper's Cumulative Monthly Nomination, a Shipper paying for System Supply Entitlement Service shall be treated as having purchased gas from the Shipper's Designated Service Rate. Whereas, a Shipper not paying for System Supply Entitlement Service shall pay a \$10.00 per Mcf Load Balancing Penalty Charge and the currently effective GCR rate per Mcf, in addition to all other applicable transportation charges.

Load Balancing Penalty Charges will be credited to the Company's Booked Cost of Gas Sold as defined in Section B10.2 of the Company's Rules and Regulations for all Customers.

(vi) Heating Value Measurement Charge

The Company, at its option, may require the installation of a heating value measurement device and payment by the customer of a Heating Value Measurement Charge of \$250.00 per Month per installation under the following conditions:

- 1) if the heating value cannot be confirmed by pipeline measurement due to more than one supply source entering an area, and the customer has annual requirements of 100,000 Mcf or more; or
- 2) for any smaller customer, if the customer refuses to include in its Service Agreement a provision that holds the company harmless for any damages resulting from measuring errors based on heating value; or
- 3) for any smaller customer, if the customer requests that heating value measurement equipment be installed.

(Continued on Sheet No. F-31.00)

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(Continued from Sheet No. F-30.00)

Rate Schedule No. 2.0 (cont.)

(vii) Emergency Gas Usage Charge (Authorized Gas Usage Charge)

The Company will provide emergency, short-term Gas on a First Come-First Served, best efforts basis to all Shippers desiring such service, subject to the provisions of this Charge.

Shippers requesting emergency service must obtain prior approval by telephone from the Company, each Day Shipper requests emergency service, before actually taking Gas. Shippers not requesting or obtaining approval from the Company will be charged the Company's Unauthorized Usage Charge.

In addition to all the applicable charges of this Rate Schedule, Shipper shall pay an Emergency Gas Usage Charge of \$2.00 per Mcf plus the currently effective GCR rate per Mcf for all emergency Gas purchases. However, to the extent that the emergency Gas purchased by Shipper contributes to the Company incurring an Unauthorized Usage Charge/Penalty from its supplier(s), Shipper shall also be responsible for payment of the portion of the Unauthorized Usage Charge/Penalty Shipper caused the Company to incur.

Emergency Gas Usage Charges will be credited to the Company's Booked Cost of Gas Sold as defined in Section B10.2 of the Company's Rules and Regulations for all Customers.

(ix) Gas Cost Recovery Charge

This rate is not subject to adjustments for fluctuations in the cost of purchased Gas as stated in Section B10.1 of the Company's Rules and Regulations for all Customers.

(Continued on Sheet No. F-32.00)

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(Continued from Sheet No. F-31.00)

Rate Schedule No. 2.0 (cont.)

(ix) Take-or-Pay Charge

A take-or-pay charge of \$0.10 per Mcf will be applied to all volumes of gas redelivered to the Shipper at the Point(s) of Delivery. The Company may, at its option, discount the take-or-pay charge to a floor of \$0.00 per Mcf.

This take-or-pay charge shall remain in effect until all reasonable and prudently incurred take-or-pay costs allocable to customers are fully collected. When the effective period for the take-or-pay charge has expired, the Company shall immediately discontinue this charge, and file revised rate sheets reflecting the elimination of the take-or-pay charge.

(x) Excess Pipeline Cost Charge

An excess pipeline cost charge may be assessed to customers. The charge shall not exceed \$0.10 per Mcf. Once the charge is in effect, that charge shall remain in effect until all appropriate customers are notified of a revised charge. Notice must occur at least 15 days prior to the beginning of the billing month in which the revised charge is to be in effect.

Due Date and Late Payment Charge

A late payment charge of 3% of the unpaid balance outstanding shall be applied to any bill which is not paid on or before the due date shown thereon. If such failure to pay continues for thirty (30) days after payment is due, then, in addition to any other remedy it may have, the Company may suspend further receipt and/or redelivery of Gas until such amount is paid; provided however, that the Company provides at least five days notice before service is suspended for non-payment.

The due date shall be 15 days from the date of rendition. Billing may be based upon estimated quantities if actual quantities are unavailable at the time of billing. In that event, the Company shall provide in the succeeding month's billing an adjustment based on any difference between actual and estimated quantities.

(Continued on Sheet No. F-33.00)

ISSUED
JON A. KOSHT
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(Continued from Sheet No. F-32.00)

Rate Schedule No. 2.0 (cont.)

Contract Form and Term:

All service under this rate will require the Shipper and the Company to execute a Service Agreement. All service under this rate must be contracted for a term of at least one year.

Alternative Charge Calculation:

The Company may, at its option, with the concurrence of the customer, cause any charges in this Rate to read per Dekatherm rather than per Mcf.

Rules and Regulations:

Service supplied under this rate schedule shall be governed by the Rules and Regulations of the Company as approved by the Michigan Public Service Commission.

(Continued on Sheet No. F-34.00)

ISSUED
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(Continued from Sheet No. F-33.00)

Rate Schedule 2.0

FORM OF SERVICE AGREEMENT

For Use Under the Company's Firm Transportation Service (FTS) Rate

THIS SERVICE AGREEMENT entered into as of the _____ day of _____, 19____, by and between MICHIGAN GAS COMPANY, a Michigan Corporation, P.O. Box 488, 16587 Enterprise Drive, Three Rivers, Michigan 49093 (hereinafter referred to as "Company"), and _____, a _____ Corporation with principal offices at _____ (hereinafter referred to as "Shipper").

WITNESSETH

WHEREAS, Shipper has requested the Company to transport Gas on its behalf; and

WHEREAS, the Company may have capacity available to provide Firm Transportation Service to Shipper under the terms specified herein;

ARTICLE I
GAS TRANSPORTATION SERVICE

1. Transportation Service hereunder shall be subject to applicable federal and state laws and the applicable orders, rules and regulations of appropriate state agencies, including the Michigan Public Service Commission, and any federal authority having or asserting jurisdiction; but nothing contained herein shall be construed as a waiver of any right to question or contest any such law, order, rule or regulation in any forum having jurisdiction.
2. Transportation Service hereunder shall be subject to the terms and provisions of this Service Agreement, the Company's Rules and Regulations for Gas Transportation Customers, and the Company's Firm Transportation Service (FTS) Rate Schedule.
3. Shipper agrees to deliver or cause to be delivered to the Company Gas for transportation and the Company agrees to receive, transport and redeliver Gas to Shipper, on a firm basis, up to an aggregate Maximum Daily Quantity (MDQ) of _____ Mcf. In order for the Company to provide service hereunder, Shipper must request an MDQ and must pay the charges specified in the Company's Firm Transportation Service (FTS) Rate Schedule.

(Continued on Sheet No. F-35.00)

ISSUED
JON A. KOSHT
VICE PRESIDENT
16587 ENTERPRISE DRIVE
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BY

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(Continued From Sheet No. F-34.00)

Rate Schedule No. 2.0 (cont.)

4. Transportation service rendered hereunder shall be subject to the Company's Curtailment of Gas Service rules as found in Section B of the Company's Rules and Regulations for All Customers.

ARTICLE II
POINT OF RECEIPT

Shipper shall deliver or cause to be delivered Gas at the following Point(s) of Receipt:

Point(s) of Receipt

(Continued on Sheet No. F-36.00)

ISSUED
JON A. KOSHT
VICE PRESIDENT
16587 ENTERPRISE DRIVE
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(Continued From Sheet No. F-35.00)

Rate Schedule No. 2.0 (cont.)

ARTICLE III
POINT OF DELIVERY

The Company shall redeliver to Shipper the Gas transported hereunder at the following Point(s) of Delivery:

Point of Delivery

ARTICLE IV
SYSTEM SUPPLY ENTITLEMENT SERVICE

1. Shipper is under no obligation to request the Company to provide System Supply Entitlement Service as part of the Company's Firm Transportation Service (FTS) Rate.
2. Shipper requests the Company to provide System Supply Gas of up to _____ Mcf or _____ % of the Shipper's total transportation requirements for use by Shipper in place of or in addition to the Gas Shipper is Transporting.

(Continued on Sheet No. F-37.00)

ISSUED
JON A. KOSHT
VICE PRESIDENT
16587 ENTERPRISE DRIVE
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IN CASE NO. U-9323

(Continued From Sheet No. F-36.00)

Rate Schedule No. 2.0 (cont.)

3. The Company will provide the System Supply Gas requested above by the Shipper on a firm basis.
4. A Shipper requesting System Supply Entitlement Service shall have the Company's LGS Service Rate as their Designated Service Rate for purposes of billing System Supply Gas purchases.

ARTICLE V
TERM OF AGREEMENT

1. This Agreement shall be effective as of _____, 19____ and shall remain in force and in effect through _____, 19____. This Agreement will remain in effect from year to year thereafter, until either party notifies the other in writing within a 30 Day period prior to the expiration date. Termination of this Service Agreement shall be subject to final balancing of quantities in accordance with the provision of this Rate.

ARTICLE VI
RATE SCHEDULE AND PRICE

1. Shipper shall pay the Company for Gas delivered to Shipper hereunder in accordance with the Company's Firm Transportation Service (FTS) Rate Schedule, the applicable provisions of this Service Agreement, and the Company's Rules and Regulations for Gas Transportation Customers, as filed with the MPSC which may be amended or superseded from time to time. Such Firm Transportation Service (FTS) Rate Schedule and Rules and Regulations for Gas Transportation Customers are by this reference made a part hereof.
2. It is further agreed that the Company may unilaterally seek authorization from the MPSC for such rate adjustments as may be found necessary to assure the Company just and reasonable rates. Nothing herein contained shall be construed to deny Shipper the right to participate fully in rate proceedings by intervention or otherwise to contest increased rates in whole or in part.

(Continued on Sheet No. F-38.00)

ISSUED
JON A. KOSHT
VICE PRESIDENT
16587 ENTERPRISE DRIVE
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(Continued From Sheet No. F-37.00)

Rate Schedule No. 2.0 (cont.)

ARTICLE VII
MISCELLANEOUS

1. Shipper agrees to provide a dedicated telephone line and a 110 volt electrical outlet at the meter site for the specialized metering equipment needed to be installed by the Company. Upon request, the Company agrees to provide the Shipper with the data collected from the specialized metering equipment.
2. Shipper agrees to provide 24 hour per day access to the specialized metering equipment located on the Shipper's premises.
3. Shipper agrees to hold the Company harmless for any damages resulting from measuring errors based on heating value corrections.

ARTICLE VIII
FORCE MAJEURE

1. Notwithstanding anything to the contrary herein contained, either party shall be relieved of its duties and obligations under this Agreement if failure to perform in whole or in part such duties or obligations is occasioned by or due to any act of God, strikes or other labor troubles, lockouts, acts of the public enemy, wars, blockades, insurrections, riots, epidemics, landslides, lightning, earthquakes, fires, storms, floods, washouts, civil disturbances, explosions, sabotage, breakage or accident to machinery or lines of pipe, inability to obtain pipe, materials or equipment or the binding order of any court or governmental authority.
2. A failure to settle or prevent any strike, lockout, or other labor troubles shall not be considered a matter within the control of a party claiming suspension.
3. Upon the occurrence of any force majeure, the affected shall notify the other party as soon as is practicable of the full particulars of such force majeure, its expected duration, and the actions planned to alleviate the problems caused by the force majeure.

(Continued on Sheet No. F-39.00)

ISSUED
JON A. KOSHT
VICE PRESIDENT
16587 ENTERPRISE DRIVE
THREE RIVERS, MICHIGAN

BY

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(Continued From Sheet No. F-38.00)

Rate Schedule No. 2.0 (cont.)

ARTICLE IX
NOTICE

1. Except as may be otherwise provided, any notice, request, demand, statement or bill provided for in this Service Agreement or any notice which a party may desire to give to the other shall be in writing and shall be valid and sufficient if delivered in person, by first class mail, Western Union, express mail, courier or telex to the following addresses:

Company

Michigan Gas Company
P.O. Box 488
Three Rivers, MI 49093-0488
Attention: Vice President of Rates, Regulation and Gas Supply

Copy to: Gas Supply Department
Manager of Marketing

Shipper

Attention:

This Service Agreement supersedes and cancels, as of the effective date hereof, the following contract between the parties hereto:

(Continued on Sheet No. F-40.00)

ISSUED
JON A. KOSHT
VICE PRESIDENT
16587 ENTERPRISE DRIVE
THREE RIVERS, MICHIGAN

BY

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IN CASE NO. U-9323

(Continued From Sheet No. F-39.00)

Rate Schedule No. 2.0 (cont.)

IN WITNESS WHEREOF, the parties hereto have caused this Service Agreement to be signed by their respective officers.

ATTEST:

MICHIGAN GAS COMPANY
(Company)

Secretary

By _____

Its _____

ATTEST:

(Shipper)

Secretary

By _____

Its _____

ISSUED
JON A. KOSHT
VICE PRESIDENT
16587 ENTERPRISE DRIVE
THREE RIVERS, MICHIGAN

BY

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