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

MICHIGAN PUBLIC SERVICE COMMISSION

1990 Mich. PSC LEXIS 178

June 14, 1990

PANEL: [*1]

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

OPINION: 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.

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 [*2] 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 [*3] 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 [*4] 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 testimony supporting the use of a historical test [*5] 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 [*6] has no basis in fact but, instead, merely represents a budget request. Furthermore, because the purchase cost of the utility is in dispute, n1 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.

n1 As 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 [*7] 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 [*8] 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 [*9] 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 [*10] 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" [*11] 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 [*12] 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 [*13] 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 [*14] of Engineering and Gas Control, testified that Michigan Gas's plant was inadequate and out-of-date, included substandard 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 beneficial 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 [*15] 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 [*16] recognized as a known and measurable addition to plant-in-service.

No exceptions to this recommendation were filed by the parties. n2 Because 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.

n2 Although 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. Furthermore, 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.

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 [*17] 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," Mr. Veerapaneni suggested that Michigan Gas should be encouraged to replace [*18] 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 [*19] 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, [*20] 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, n3 (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 [*21] rates to account for the 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.

n3 Under 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.

The PFD made no [*22] 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 [*23] 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. n4 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" [*24] 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.

n4 Although 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.

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, [*25] the utility requests that the ALJ's recommendation be increased by $ 610,000. Based on our earlier discussion of Century pipe replacement costs, we 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 [*26] 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 / 12 months x 11 months]. However, the non-customer connect portion of the utility's additional plant investment totals only $ 1,626,440 [$ 5,290,737 additional plant investment - $ 3,664,297 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 [*27] 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 [*28] 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, [*29] 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 [*30] on a known and measureable 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 adjustment n5 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 [*31] $ 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.

n5 An 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.

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 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 [*32] 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 [*33] 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 [*34] 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. [*35] 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 [*36] 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 bidding wars for utility assets and result in [*37] 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 [*38] 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, [*39] 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-9112 n6 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):*

n6 Case 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.

"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 [*40] 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." (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 [*41] 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 [*42] *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 [*43] 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 [*44] 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 [*45] 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, [*46] 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 [*47] 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, [*48] 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, [*49] 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 [*50] 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	$ 55,487,496

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 [*51] 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. n7 Mr. Ballinger testified that this was necessary to account for the effects of leverage and double leverage and to avoid authorizing the utility's owners to obtain an excessive return on investment. n8 Second, Mr. Ballinger adjusted the utility's capital structure to reflect the potential disallowance of the acquisition adjustment.

n7 The 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.

n8 Leverage 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. [*52]

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-subsidiary 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 [*53] 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.)*

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. [*54]

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)	2.84%
	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 [*55] 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 [*56] 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 [*57] 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 [*58] 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 [*59] 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, [*60] 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 [*61] 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 [*62] 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, n9 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.)

n9 The 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.) [*63]

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 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 [*64] 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 [*65] 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 [*66] 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 [*67] 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:

Description	Structure Percent	Cost Rate	Weighted Cost Rate
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	2.84	11.12	0.32
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 [*68] 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 [*69] 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 [*70] 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, [*71] 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, n10 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.

n10 As 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. [*72]

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 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 [*73] 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 exceptions n11 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 [*74] actual depreciation costs; (3) raise the utility'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.

n11 Although 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.

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 [*75] 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 [*76] 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 [*77] 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, [*78] 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. n12 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.)

n12 Although 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.

Although Mr. Clemence's testimony on this issue is far from overwhelming, we find that [*79] 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.

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 [*80] 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) [*81] 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 [*82] 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, [*83] 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, [*84] 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 [*85] 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 [*86] 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 [*87] 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 [*88] 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 [*89] 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 structure. 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	x 4.08%
Required Interest Expense	$ 2,263,890
Booked Interest Expense	- 2,152,000
Increased Interest Deduction	$ 111,890
Federal Income Tax Rate	x 34%
Income Tax Savings	$ 38,043

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	x 2.84%
Amount of JDITC in Rate Base	$ 1,575,845
Weighted Cost of Debt	x 4.08%
Gross Interest Synchronization	$ 64,294
Federal Income Tax Rate	x 34%
Tax Savings Due to Interest Synch.	$ 21,860

[*90]

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:

	Gross	Net
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)	n13 (95,156)
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	21,860
Adjusted Net Operating Income:		$ 3,546,508

n13 Although 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. [*91]

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.

Description	Amount
Rate Base	$ 55,487,496
Overall Required Rate of Return	x 10.16%
Required Income	$ 5,637,530
Less: Adjusted Net Operating Income	- 3,546,508
Income Deficiency	$ 2,091,022
Revenue Multiplier	x 1,5516
Revenue Deficiency	$ 3,244,430

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 [*92] 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 [*93] 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 [*94] 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 [*95] 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 [*96] 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. [*97] 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 [*98] 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 [*99] 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. n14 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 (5) interruptible sales and interruptible [*100] transportation rates were designed so that the utility would be revenue indifferent if customers switched from one rate class to the other.

n14 According 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.)

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 [*101] 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 [*102] 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 [*103] 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. [*104] 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 [*105] 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 [*106] 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 [*107] 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 [*108] 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. n15 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.

n15 As 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.

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, [*109] 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.)

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. [*110] 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 [*111] would be correct only for the time period analyzed. Thus, particularly when dealing with relatively 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. n16 In contrast, the Staff's proposed [*112] 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.

n16 As 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.

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 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 [*113] 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 [*114] 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 [*115] 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 [*116] 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 [*117] 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. [*118]

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 [*119] 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 [*120] 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 [*121] 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 [*122] 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 cents 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 [*123] 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 [*124] 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 [*125] 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 customers 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 [*126] 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 cents per Mcf. n17 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.

n17 Although 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. [*127]

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 proposed 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 cents 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. [*128] 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 charge n18 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. [*129]

n18 The 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 [*130] 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 [*131] 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, [*132] 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 [*133] 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, [*134] 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 [*135] 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 [*136] 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 [*137] 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 [*138] 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 [*139] 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