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IOWA UTILITIES BOARD
DEPARTMENT OF COMMERCE

Final Order file

IOWA ELECTRIC LIGHT AND POWER COMPANY

Docket No. RPU-89-3
"FINAL DECISION AND ORDER"
Issued April 30, 1990

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The undersigned hereby certifies that the foregoing document has been served this day upon all parties of record in this proceeding by mailing, by first class mail, to each such party a copy thereof, in properly addressed envelope with charges prepaid.

Date: *04-30-90*

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I. PROCEDURAL HISTORY

On June 30, 1989, Iowa Electric Light and Power Company (Iowa Electric) filed a natural gas tariff, identified as TF-89-316, proposing revised rates designed to increase its gas revenues by approximately \$6,257,575, or 6.3 percent, over rates then in effect. On June 30, 1989, in an application identified as TF-89-315, Iowa Electric also proposed an interim increase which would produce additional gas revenue of approximately \$6,188,064. The Utilities Board (Board) issued an "Order Docketing Case, Setting Procedural Schedule, and Granting Intervention," commencing a formal investigation into the reasonableness of Iowa Electric's proposed rate increase, establishing a procedural schedule and granting intervention to Monsanto Chemical Company.

The Consumer Advocate Division of the Department of Justice (Consumer Advocate), on July 31, 1989, filed an objection to the application for temporary rate relief. On August 14, 1989, Iowa Electric filed a reply to Consumer Advocate's objection. On August 29, 1989, the Board issued an order granting intervention to the Iowa Industrial Energy Consumers (IIEC). The Board also granted intervention to Green Valley Chemical and Grain Processing Corporation who with Monsanto Corporation were called the Iowa Industrial Intervenors (III). On September 29, 1989, the Board issued an "Order Setting Temporary Rates and Approving Corporate Undertaking," approving temporary rates not to exceed \$101,433,346 in revenues, producing a temporary revenue increase of \$4,149,539, or 4.3 percent. Consistent with that order, Iowa Electric filed tariffs, identified as TF-89-426, to reflect the temporary rates. On October 20, 1989, Consumer Advocate filed

an objection to the tariffs filed by Iowa Electric, and on November 3, 1989, the Board issued an order approving the tariffs and scheduling the filing of additional testimony to address issues raised in Consumer Advocate's objection.

Consumer comment hearings were held in Atlantic and Ames on August 29 and August 31, respectively, to receive comments from the general public. The Consumer Advocate and intervenors filed prepared direct testimony on September 25, 1989, and rebuttal testimony on October 6, 1989. Iowa Electric filed rebuttal testimony on October 27, 1989, and on November 8, 1989, the parties filed a joint statement of issues. A prehearing conference was held on November 22, 1989. The Board granted Consumer Advocate's motion for admission of additional testimony on November 30, 1989.

Hearings for the purpose of cross-examination of all prefiled testimony were conducted beginning December 4, 1989, and continuing, with some interruptions, until December 21, 1989. Intervention for the limited purpose of presenting testimony during the hearing was granted to the Iowa Department of Natural Resources (DNR) on December 5, 1989. On January 25, 1990, the parties filed initial briefs, and on February 27, 1990, the parties filed reply briefs. The Board reopened the record on February 19, 1990, and on March 12, 1990, to receive additional evidence.

II. TEST YEAR

The test year is calendar year 1988.

III. RATE BASE

A. 13-MONTH AVERAGE

Iowa Electric witness Gabbianelli proposed an adjustment to the test year 13-month average rate base to include plant investments which were in service during the test year, but had not been reflected in Iowa Electric's accounts as "plant in service." (Tr. 1598). According to Iowa Electric, its property accounting system is primarily manual and finished plant is transferred to plant-in-service accounts only four times a year. (Tr. 1535). Consumer Advocate recommended the Board include only the 13-month average of the test period account balances, stating the back dating of plant additions may overstate the test period investment.

The Board will allow the adjustment as proposed by Iowa Electric. The calculation of rate base should include all plant which is in service during the test year. The fact that all plant had not been accounted for on Iowa Electric's books does not, in this instance, mean the plant was not in service during the test year. In this case, Consumer Advocate reviewed the records and found no incorrect in-service dates. (Tr. 1515).

The Consumer Advocate cites Iowa Electric, Docket No. RPU-85-31 (October 23, 1986), as authority for the proposition only the plant which is reflected on the company's books should be included in rate base. In that case, the Board stated:

Iowa Electric's thirteen-month average plant account balances reflected plant additions pro formed to the date they were placed in service. However, the thirteen-month average should only reflect the plant addition cost recognized at the in-service date. Any additional costs recognized beyond the in-service date should be added to the plant in the month they were recognized. Therefore, the adjustment proposed by the

Consumer Advocate properly reflects the thirteen-month average plant in service during the test year and is adopted.

It is unclear what adjustment was made in that case. To the extent it is interpreted to mean only the plant accounted for on the company's books should be recognized, the Board finds there is reason to deviate from that decision. For ratemaking purposes, the Board should determine whether the plant was in service, not whether an accounting entry had been made. The accounting entry has no ratemaking effect. See IOWA ADMIN. CODE 199-16.1(2) (1989). The Iowa Supreme Court has stated the prescription of the uniform system of accounts does not commit the Board for the purpose of making rates. Office of Consumer Advocate v. Utilities Board v. Union Electric, et al., S.Ct. No. 89-229 (February 21, 1990). For ratemaking purposes, all plant which was in service should be reflected in rate base. Iowa Electric's adjustment to include all plant in service in rate base will be allowed.

B. WORKING CAPITAL

For utility rate purposes, "working capital" is commonly defined as the amount of capital investors are required to put into a business, over and above investment in plant and intangibles, for the purpose of covering any time gap between cash expenditures incurred in production and delivery of the services and collection of revenues from service sales. Davenport Water Co. v. Iowa State Commerce Comm'n, 190 N.W.2d 583, 607 (Iowa 1971). The lead lag study is the mechanism by which this is measured.

1. Lead Lag Study

Iowa Electric witness Gabbianelli proposed a revenue lag of 35.2 days. (Ex. 9, Sch. 5). Consumer Advocate witness Kebede proposed a revenue lag of 33.6 days. (Ex. 103, Sch. A). The parties agree as to the calculation of the metering period and the bill processing period, but disagree as to the bill collection period. This period is the measurement of the time between bill rendering and the customer bill payment date.

Iowa Electric proposed a bill collection period of 18.1 days, which included .8 days for check float and .8 days for mail lag. (Tr.1601-2). Consumer Advocate proposed a bill collection period of 16.5 days, stating the check float period calculated by Iowa Electric is "one-sided" and unreliable because it was based on discussions with cash management people rather than a random sample study. (Tr. 1646). In addition, according to Consumer Advocate, Iowa Electric's calculation for mail lag is improper because a limited sample shows only 25 percent of payments are back dated. (Tr. 863).

The Board will include the .8 day calculation representing mail lag proposed by Iowa Electric. Iowa Electric witness Gabbianelli testified that in the most recent period, 82 percent of total revenues were received in the general customer office, and Iowa Electric back dates all payments received in this office by one day. (Tr. 1062). The remaining payments received in field offices did not reflect a mail lag, and Iowa Electric adjusted its proposal to reflect this. (Tr. 1602). This method of back dating allows Iowa Electric to avoid unnecessary disputes with its customers whether bills were paid on a timely basis. The fact that Iowa

Electric may lose minimal late payment revenue by this method is outweighed by the elimination of unnecessary friction with its customers.

The Board will not allow the .8 day calculation representing check lag proposed by Iowa Electric in the lead/lag study. The evidence Iowa Electric provided to support this adjustment is not persuasive. Instead of conducting a random sample study, Iowa Electric based this adjustment on self-serving discussions with its cash management people. (Tr. 1646-47). This is insufficient evidence to support an adjustment to the bill processing period for check float, and the adjustment will be denied.

2. Elimination of Reserves from Cash Working Capital

In addition, Consumer Advocate proposed to eliminate the injury and damage accruals and uncollectible account reserves from cash working capital. (Tr. 844). Iowa Electric opposed this adjustment, stating it had already deducted the 13-month average balance for those accounts from rate base. (Tr. 1602). As the Board determined in Iowa Public Service Company, Docket No. RPU-87-3 (June 17, 1988), these non-cash items must be deducted from both rate base and cash working capital. The deduction from rate base is the accumulated amount and the 13-month average balance of the amount deducted from cash working capital is the annual accrual. The expense component of reserve items should not be used for determining the cash working capital requirement. Iowa Electric has removed the accumulated reserves from rate base, but it is necessary to also remove the accruals from cash working capital. The Board will allow Consumer Advocate's adjustment.

C. ACCUMULATED DEFERRED INCOME TAX

Iowa Electric proposed recognition of the accumulated deferred income tax balances associated with contributions in aid of construction, arguing normalization accounting should be allowed for these amounts. (Tr. 1590). Consumer Advocate argued the accumulated deferred taxes associated with contributions in aid of construction should be eliminated in accordance with the "gross-up" method. (Tr. 1797). In accordance with the Board's decision in Section V, the accumulated deferred taxes associated with contributions in aid of construction for state income taxes will be eliminated and the accumulated deferred taxes for federal income taxes will not be eliminated.

IV. INCOME STATEMENT

A. OPERATING REVENUES

1. Grain Processing Corporation Adjustment

Iowa Electric proposed an adjustment to test year revenues to reflect a change in revenue because of Grain Processing Corporation's (Grain Processing) completion of a direct connection to Natural Gas Pipeline Company of America. (Tr. 881). Iowa Electric and Grain Processing have entered into a post-test year partial requirements contract. (Tr. 881). The terms of that contract are specific as to the level of deliveries that Iowa Electric will make to Grain Processing. (Tr. 881).

Consumer Advocate argued the adjustment should be rejected because it violates the matching principle. (Tr. 1721-25). Relying on Iowa Electric Light and Power Company, Docket No. RPU-85-31 (October 23, 1986), Consumer Advocate contended the proposed adjustment mismatches revenues, expenses,

and investments. In addition, Consumer Advocate asserted the amount is not known and measurable because Grain Processing is not limited to the contract amount. Consumer Advocate also provided evidence of a sales increase in 1989. (Ex. 160). Iowa Electric argued there had been a decrease in sales to the industrial class. (Tr. 905).

Grain Processing completed its connection to Natural Gas Pipeline Company in February 1989. (Tr. 954). The partial requirements contract provides Grain Processing will take a minimum of 4,000 dekatherms a day. (Ex. 4). The record is clear Grain Processing has reduced its take substantially. (Ex. 118). There is no question Grain Processing will be taking less in the future than it did during the test year.

However, the record shows an increase in overall sales through September 30, 1989. (Ex. 160). In addition, when the same 12-month periods ending in June are compared for 1988 and 1989, there is an increase in sales. (Ex. 56). When two successive and comparable 12-month periods are analyzed, the record evidence does not show a decrease in total company sales to Iowa customers. Although Iowa Electric argued there is a decrease in sales, it appears as if Iowa Electric is comparing the calendar test year revenues with the 1989 12-month period ending in June. Iowa Electric also pointed to a decrease in industrial sales. However, a decrease in industrial sales cannot be considered by itself because there are other factors, such as a switch from sales to transportation, which could cause the decrease. (Tr. 905).

The Board will deny the adjustment to revenues. Any overall decrease in sales is, at best, speculative. In fact, the more likely conclusion to

be drawn from the evidence is a tendency toward an overall increase in sales. (Ex. 54, 160). Iowa Electric has not demonstrated that the decrease in revenues which resulted from the partial loss of Grain Processing will not be offset by post-test year sales increases to all other customers. To decrease revenues by an amount to reflect the loss of Grain Processing would ignore the evidence of a net increase in sales and not provide a representative amount of revenues for the purpose of setting rates.

In addition, the proposed adjustment would result in a potential mismatch of revenues and expenses. In Iowa Electric Light and Power Company, Docket No. RPU-85-31 (October 23, 1986), the Board disallowed a proposed adjustment to reflect the conversion of two industrial customers from gas to coal, stating, in part, "the proposed adjustment to test year revenues would result in an improper matching of revenues and costs, is speculative, and will be disallowed." In the interest of designing prospective rates, the Board may, when appropriate evidence is provided, make adjustments to revenues and expenses. However, Iowa Electric did not provide persuasive evidence to demonstrate a decrease in total revenues. Even if sufficient evidence of a decrease in revenues had been provided, it would be necessary, in this instance, to make corresponding adjustments in order to prevent a mismatch of revenues and expenses. No such information was provided. Iowa Electric's proposed adjustment will be denied.

2. Flexible Rate Adjustment

Iowa Electric proposed an adjustment to reduce revenues by one-half of the increase in test year margin which resulted from additional sales made

pursuant to IOWA ADMIN. CODE 199-19.12 (1990). (Ex. 4, Sch. A, p. 4). Consumer Advocate argued the record does not show that increased sales occurred directly as a result of the flexible rates. Consumer Advocate stated IOWA ADMIN. CODE 199-19.12 (1990) and past precedent require only the increased net revenue should be recognized.

IOWA ADMIN. CODE 199-19.12(5) (1990) provides,

In a rate case, 50 percent of any identifiable increase in net revenues will be used to reduce rates for all customers; the remaining 50 percent of the identifiable increase in net revenues may be kept by the utility. If there is a decrease in revenues due to the discount, the utility's test year revenues will be adjusted to remove the effects of the discount by assuming that all sales were made at full tariffed rate for the customer class. Determining the actual amount will be a factual determination to be made in the rate case.

In Iowa Power and Light Company, Docket No. RPU-88-10 (October 23, 1986), the increase in sales due to flexible rates was determined by comparing test year sales to a base period of sales. In that case, the Board stated, in part,

If the utility recovers as much revenue as it did prior to granting the flexible rates, then there is no subsidization either way. The cost of serving the flexible rate customers would be covered and the utility would be made whole. By sharing the increased net revenue with other ratepayers, Iowa Power is actually subsidizing the other customers with the benefits that it has secured by offering the flexible rates. (Emphasis provided.)

Although Iowa Electric has presented evidence as to the flexible sales it made during the test year, Iowa Electric has not demonstrated an identifiable increase in net revenues as required by IOWA ADMIN. CODE 199-19.12(5). Only the net sales which have increased because of the provision

of flexible rates will be allowed the treatment prescribed by IOWA ADMIN. CODE 199-19.12(5). The record does not indicate increased sales have occurred directly as a result of the flexible rates. Iowa Electric did not provide a "base period" from which to compare each customer's sales. The semi-annual flexible rate reports do not support an increase in sales due to the flexible rates.

It is not enough to demonstrate that flexible rates have been offered in compliance with the rules; Iowa Electric must also show that there has been an increase in net revenues because flexible rates were offered. There is no evidence in the record of a net increase in sales due to the offering of flexible rates. Iowa Electric's proposed adjustment to revenues will be denied.

3. Weather Normalization Adjustment

Both Iowa Electric and Consumer Advocate proposed adjustments to reflect normal weather pursuant to IOWA ADMIN. CODE 199-7.4(6)"e"(22) (1990). Iowa Electric concurred with Consumer Advocate's proposal that sales to the commercial interruptible class not be weather normalized. Iowa Electric did not, however, revise its calculations to reflect this. Consumer Advocate witness Vitale provided a weather normalization adjustment which did not weather normalize large interruptible and contract customers. Iowa Electric also argued the revenues for Rate Codes 71 and 81, which are contract customers, should not have been weather normalized.

The Board agrees that the sales to the large interruptible and contract customers are not weather sensitive. The record shows, however, that Rate Codes 71 and 81, which are contract customers which are typically

not weather sensitive, have been included in the Consumer Advocate's weather normalization adjustment. (Ex. 6, Sch. 2, p. 2). The Board will allow the weather normalization adjustment proposed by Consumer Advocate, with the exception of Rate Codes 71 and 81.

B. OPERATING EXPENSES

In addition to the adjustments to expenses discussed below, the following adjustments were not contested by any party to the proceeding: adjustment to reflect an increase in IE Tower lease payments, adjustment to reflect increase in automobile insurance, adjustment to exclude certain expenses from the cost-of-service, adjustment to eliminate Strategic Decision Group costs, adjustment to eliminate Iowa Utility Association dues, and an adjustment to increase state unemployment taxes.

The Board will allow these adjustments as agreed to by the parties.

1. Former Manufactured Gas Plant Sites

For many years prior to the availability of natural gas, communities in Iowa used manufactured gas produced from coal and oil at local town gas plants. (Tr. 1437). As natural gas pipelines were extended to serve these communities, the manufacture of gas ceased because it was not economically competitive with natural gas. (Tr. 1438). Some manufactured gas plant sites continued to provide service into the 1950s.

Waste residue from former manufactured gas plant sites has since been discovered on plant sites and adjoining sites. (Tr. 600, 1438). Tars and oxide wastes were frequently left in place or covered during subsequent construction. (Tr. 601, 1438). Off-site residues have been attributed to

cooling water emulsion disposal and burial of spent purifier oxides. (Tr. 1438).

The problems posed by former manufactured gas plant sites came to the attention of state and federal environmental agencies during the 1970s. (Tr. 606-07, 1439). Only in the 1980s did agencies begin to devote resources to examining these problems. (Tr. 607-08). The magnitude of potential problems from these wastes are only now beginning to become apparent. (Tr. 1439). Constituents in coal tars, previously not thought to constitute a health risk, are now being identified as possible carcinogens. (Tr. 602, 1439). Buried residues have, in some instances, migrated through the subsoil and contaminated the immediate groundwater. Movement of contaminants through the groundwater can lead to contamination of larger areas, including aquifers used for public water supply. (Tr. 626, 1439). The passage of the Iowa groundwater protection act in 1986, IOWA CODE chapter 455E, has further enhanced the priority for cleaning up these sites. (Tr. 608).

Considerable testimony on this subject was provided by Mr. Morris Preston, Supervisor of the Solid Waste Section, Environmental Protection Division, DNR. Iowa Electric has provided the DNR with a list of 20 potential former manufactured gas plant sites. In 1985, the United States Environmental Protection Agency (EPA) investigated Iowa Electric's sites at Fairfield, Belle Plaine, and Marshalltown extensively. In June 1988, EPA announced that the Fairfield site was being proposed as a national priorities list site under the Comprehensive Environmental Response, Compensation, and Liability Act (Super Fund). (Tr. 604, 622, 1439).

With the exception of the Fairfield site, the DNR is the lead agency for investigations and remedial actions. Iowa Electric keeps DNR fully informed and coordinates all work with that agency. (Tr. 1440). DNR, according to Mr. Preston, has taken an "aggressive approach" to dealing with the sites. (Tr. 608-09).

Iowa Electric signed an administrative consent order with the EPA, dated March 30, 1989, for the investigation, remedial action, and clean up of the Fairfield site. (Tr. 1440). An extraction well for a "pump and treat" water system was installed in the fall of 1989, and the system will begin clean up of on-site groundwater. (Tr. 1440). Iowa Electric is also currently working with DNR to finalize an administrative order for the Iowa Falls site. In addition, Iowa Electric is working with DNR to draft an administrative order for all remaining potential sites. (Tr. 610, 1440).

Iowa Electric proposes to place in rates a representative expense of \$672,566 for recovery of costs associated with clean up of manufactured gas plant sites. This is based on one-third of the total of test year 1988 expenditures of \$358,698 and estimated 1989 expenditures of \$1,659,000. Through November of 1989, Iowa Electric had expended approximately \$1.4 million for 1989. (Tr. 2076).

Consumer Advocate argued that there is nothing in the record to indicate why current utility customers should be responsible for these clean-up costs. Consumer Advocate claimed that the benefits of environmental clean up are irrelevant to consideration of a utility's operations carried out to benefit ratepayers. Consumer Advocate also

contends that since the costs are not related to current service, this is part of the risk included in past rate of returns.

While these clean-up costs relate to previous delivery of utility service, the costs are current costs and are legitimate costs of doing business as a utility. Iowa has a strong public policy with respect to clean water, and utilities must be environmentally responsible.

In addition to Iowa Electric's proposal to recover \$672,566 each year in rates, Iowa Electric proposed to defer any excess future related costs and recover them on a prospective basis in a subsequent rate case. (Tr. 157). The level of recovery would be adjusted each rate case to reflect any additional expenditures and adjusted to reflect any third-party recoveries.

The amounts Iowa Electric may be required to pay in the future for the clean up of manufactured gas plant sites are unknown. The magnitude of potential problems from these wastes is only now beginning to become apparent. The record shows that Iowa Electric is currently working with DNR to draft administrative orders for all of the remaining potential sites. (Tr. 1440). Iowa Electric witness Rehrauer testified that preliminary investigations and development of specific work plans are being accomplished at the rate of one site every six months. (Tr. 1440).

The Board will allow Iowa Electric to include a representative amount in its rates. Since the record shows that Iowa Electric has incurred, through November 1989, much more than its test year costs, including only the test year costs would not be a reasonable forecast of its costs. In addition, the testimony indicates the clean-up efforts will expand and

become substantially more extensive in the near future with approximately 20 sites yet to be addressed. Although Iowa Electric requested the Board to allow it to account for its future costs on a deferred accounting basis and recover them on a prospective basis, the Board cannot bind itself for purposes of setting just and reasonable rates in a future rate case. In addition, to set rates based on past costs could be deemed to violate the prohibition against retroactive ratemaking. Although it may prove to be inadequate in the future, the only option under this record is to set a representative amount. The Board will set the representative amount by including in Iowa Electric's rates one-half of the sum of Iowa Electric's test year costs and actual 1989 costs incurred through November 1989, the last known amount.

As to the remainder of Iowa Electric's proposal to defer any excess costs for prospective recovery in a future rate case, this Board cannot bind a future Board's determination of rates. The Board, thus, will not accept that portion of the proposal.

2. Salaries and Wages -- FICA Taxes

Iowa Electric proposed a \$54,761 labor cost adjustment to annualize the 1988 wage increases and a \$169,012 adjustment to annualize 1989 wage increases. Both of these wage increases were calculated using the 1988 gas labor ratio and have a corresponding FICA tax adjustment. Consumer Advocate does not object to the 1988 wage adjustment, but does contest the 1989 adjustment.

Consumer Advocate would deny the adjustment because the 1989 gas labor ratio should be used in calculating the 1989 wage increase adjustment, and

the 1989 gas labor ratio is unknown. Consumer Advocate argued that IE Industries' diversification became more intense in 1988, the results of which in 1989 were not yet known. Consumer Advocate also argued the gas labor ratio has been declining and that the Introspect Study (see Section IV, Part B.14) will realize lower gas wages.

It is clear that the amount of increased wages and FICA taxes for 1989 is known and measurable. The real issue is whether the Board has sufficient information to allocate the exact amount of the total increase to gas operations. The 1988 gas labor ratio is only 0.1 percent less than the 1987 ratio. (Tr. 1739). Also, the Introspect Study does not appear to result in net gas labor savings at least for the next three years. (Ex. 129).

The Board will accept Iowa Electric's adjustments for wages and FICA taxes. The decline in the gas labor ratio from 1987 to 1988 was insignificant, and the evidence was not persuasive that this trend will continue.

3. Medical Insurance Expense (Medicare Increase)

Medicare supplementary medical insurance premiums increased January 1, 1989. Iowa Electric proposed an adjustment to reflect this increase based on the number of participants as of June 30, 1989. Iowa Electric argued that the number of participants in June 1989 was more reflective of the cost for future periods, and noted that the trend was toward higher levels of participation. In September 1989, there were 369 participants versus 364 in June. (Tr. 1560).

Consumer Advocate argued that since Iowa Electric's proposed adjustment uses the 1988 gas labor ratio allocator, a mismatch of revenues and expenses results. Also, Consumer Advocate would base the adjustment upon average test year participants. (Tr. 1742).

As discussed in the previous section on salaries and wages, it is reasonable to use the 1988 gas labor ratio to allocate known and measurable 1989 increases. However, the test period average number of plan participants will be used rather than the actual number of June 30, 1989, participants, as it is not known whether the trend of an increasing number of participants will continue. The increase between June and September 1989 was small and could be an aberration. Also, use of average number of test year participants is consistent with the adjustment for 1989 salary and wage increases, which was derived by applying the 1989 percentage increases to 1988 base period wages. (Tr. 159-60).

4. Injuries and Damages

Iowa Electric proposed to recover over a three-year period the insurance policy deductible amount allocable to it, \$198,860, for a gas asphyxiation claim. Iowa Electric proposed to include one-third of the amount, \$66,287, in each year's rates. (Tr. 1561).

Iowa Electric argued that the claim "arose" during the test year, 1988, and this was not previously addressed in a rate proceeding. (Tr. 1560). Iowa Electric claimed it incurred this liability in an effort to have a cost effective insurance policy, and that if it is disallowed by the Board, then Iowa Electric will be encouraged to have lower deductible

limits to reduce future exposure. Generally, lower deductibles increase the amount of insurance premiums.

Consumer Advocate's witness testified that the accident in question occurred in October 1987. (Tr. 1742-43). Since the accident occurred prior to the test year, Consumer Advocate argued the amount should have been expensed in 1987. Consumer Advocate also argued that Iowa Electric has been fully compensated for this charge since they reported profits in both 1987 and 1988.

There is generally a time lapse between an accident occurrence and company knowledge that a claim has or will be filed. However, the record is incomplete in this regard. Iowa Electric's witness testified that the claim "arose" in 1988, but offered no explanation as to the meaning of the word. The best evidence available to the Board is Consumer Advocate's testimony regarding the actual date of the accident. Since it thus appears to be a pretest period expense, the prohibition against retroactive rate making directs the Board to disallow the expense. Iowa Electric's adjustment will be rejected, and the revenue requirement will be reduced by \$198,860, the full amount of the claim.

The Board, by rejecting Iowa Electric's adjustment, is not intending to encourage utilities to eliminate larger deductibles from insurance policies so as to avoid large deductible expenses. Rather, the Board encourages utilities to buy cost effective insurance. In this case, Iowa Electric did not use the accumulated reserve accounting system as it is intended, to insulate itself against this large, nonrecurring claim. The purpose of the reserve account is to level, or smooth out, widely

fluctuating expenses, in this instance injuries and damages expense, over time. Rates should not be based on an amount which is unrepresentative. The test year in this case is unrepresentative. Also, the evidence presented by Iowa Electric is not sufficient to indicate the date the company was made aware of the claim.

5. Liability Insurance Expense

Consumer Advocate proposed an adjustment to credit the ratepayers for the 1989 return of the cash reserve for directors' and officers' liability insurance. (Tr. 1748-49). Iowa Electric made a reserve payment of \$147,500 to its insurance carrier in 1987 to create a directors' and officers' liability insurance cash reserve. (Tr. 1562). Because the increased cost did not materialize, the carrier returned the payment in two installments -- \$29,500 was returned in 1988, the test year, and \$118,000 was returned in 1989. (Tr. 1562-63).

Cash reserves are different from general insurance premiums. The reserve payment is an amount that the carrier required in 1987 in addition to the insurance premium amount. The amount of the cash reserve paid was not charged to ratepayers. (Tr. 1562-63).

The Board will deny Consumer Advocate's proposed adjustment. Since the cash reserve paid in was not charged to ratepayers, the return of this reserve should not be credited to ratepayers. In addition, Iowa Electric has offered satisfactory proof that this will not be a recurring return of money, but is a one-time event based on the payment made in 1987. (Tr. 1563). While Consumer Advocate claimed that refunds from insurance companies are recurring events, there is nothing of record to apply this

argument to the instant issue. Unlike the factual situation in Iowa Electric Light and Power Company, 59 P.U.R.4th 167 (1984), here the return of the reserve payment was received after the test year, and Iowa Electric offered proof that it was nonrecurring.

6. Rate Case Expense

On March 13, 1990, Iowa Electric filed an itemized accounting of its actual expenses incurred in litigating Docket No. RPU-89-3 as required by IOWA CODE § 476.6(8) (1989) and IOWA ADMIN. CODE 199-7.3 (1990). Iowa Electric's total cost is \$159,022. The Board and Consumer Advocate expenses, through the filing of the reply brief, are \$242,673. Consumer Advocate did not object to the rate case expenses. The Board has reviewed the expenses and finds that they are reasonable. The Board will allow one third of the litigation expenses to be included in rates as a representative amount.

7. Hospitalization Insurance Expense

Iowa Electric proposed a \$37,780 adjustment annualizing an increase in hospitalization insurance costs. Consumer Advocate did not object to the adjustment, but argued that the adjustment should be calculated using the average number of participants during the test year. (Tr. 1754). Iowa Electric used the number of year-end participants for the adjustment. (Tr. 1566).

The increase in hospitalization insurance costs is known and measurable and an adjustment will be allowed. However, it is reasonable to utilize the test period average number of participants rather than the actual number of year-end participants, as it is not known whether the

trend of an increasing number of participants will continue. The use of average test year participants is consistent with the adjustment for 1989 salary and wage increases, which was derived by applying the 1989 percentage increases to 1988 base period wages. (Tr. 159-60). Therefore, the Board will use the average number of participants during the test year for calculating the adjustment.

8. Property Tax Expense

Iowa Electric proposed an adjustment to reflect the anticipated higher 1988 taxes, payable in September 1989, and March 1990, based on the January 1, 1988, valuations and projected 1989-1990 tax payments. Iowa Electric did not yet have its actual September 1989 property tax bill and thus did not know its actual liability at the time it submitted its original testimony. However, the actual figures for the September 1989 and March 1990 tax payments were provided to Consumer Advocate at a later date in response to a Consumer Advocate data request. (Ex. 9, Sch. 10).

Consumer Advocate argued that even though the increase in property taxes is known and measurable, this increase in expense, payable in 1989 and 1990, will be offset by Iowa Electric's increased 1989 revenues. (Tr. 1757-58). Thus, Consumer Advocate contends that the matching principle is violated.

The proposed Iowa Electric adjustment will be revised to include the latest actual property taxes payable in September 1989 and March 1990. These amounts are known and measurable, and they reflect the taxes due for property valuations as of January 1, 1988, which is the beginning of the test year. There is no mismatching of expenses and revenues as asserted by

Consumer Advocate. The Board will use the most recent property tax information available. See Iowa Public Service Company, Docket No. RPU-87-6, "Final Decision and Order," dated February 20, 1989.

9. Association Dues

Iowa Electric claimed as an expense \$20,275 paid to various Chambers of Commerce for membership dues. While Iowa Electric has listed some of the individual chambers to which dues were paid, a complete itemized breakdown was not provided. (Tr. 845). Consumer Advocate argued that the entire amount should be eliminated from test year expense because Iowa Electric has not itemized the expenditures and does not identify the lobbying expenses included in Chambers of Commerce dues.

The Board encourages utilities to become involved in organizations like the various Chambers of Commerce in their service territories, but IOWA CODE § 476.18(1) (1989) must be observed. That subsection provides that "public utilities subject to rate regulation are prohibited from including either directly or indirectly in their charges or rates to customers the costs of lobbying." Since there is no breakdown in the record of what amounts went directly or indirectly for lobbying expenses, the Board must deny the entire expense. Iowa Electric's argument that no breakdown was provided because it was not requested by Consumer Advocate does not have merit.

10. Bonuses/Compensation Plans

Consumer Advocate proposed to eliminate test year expenses for two forms of extra compensation which Iowa Electric has for its officers and employees. The first is the Management Incentive Compensation Plan (MICP)

and the second is the Outstanding Performance Award Program (OPAP). Consumer Advocate would eliminate \$47,588 of expenses for the former and \$30,878 in expenses for the latter.

Consumer Advocate objected to MICP because awards are based on overall corporate performance as well as individual performance. Also, Consumer Advocate claimed that MICP has the potential to award every eligible individual. In fact, Iowa Electric's witness testified that every eligible person received an MICP bonus the past two years. (Tr. 1677).

The MICP program is not based solely on individual performance, but is based on three factors: overall corporate performance, business unit performance, and individual performance. In determining awards under the plan, corporate performance is weighted at 25-35 percent, business unit performance at 30-40 percent, and individual performance at 35 percent. (Tr. 1572-73). The program has mixed objectives that benefit both ratepayers and shareholders.

The Board did not include a bonus program as a test year expense in Iowa Power and Light Company, Docket No. RPU-87-2 (April 25, 1988), because individual performance was not a factor. However, individual performance is a significant factor in Iowa Electric's plan. Iowa Electric's plan is superior to Iowa Power's because it involves both the individual's personal performance as well as the individual's business group performance. While the inclusion of an overall corporate performance factor is not improper per se, bonus programs which reward all eligible employees, as MICP has done the past two years, lead one to believe that individual performance may not matter. Because of this, the Board will allow 30 percent of

Consumer Advocate's proposed MICP adjustment, that percentage being the average percentage for the corporate performance factor for MICP.

The OPAP program was in effect during the test year, and a different program was substituted for it in 1989. This program awards exceptional achievement, and awards have been given for suggestions relating to, for example, PCB disposal costs and paperwork reductions. (Tr. 1575-76). Consumer Advocate argued these expenses should be disallowed because it is the obligation of the utility and its employees to perform at maximum efficiency.

The Board will reject Consumer Advocate's arguments with respect to incentive compensation. Additional incentive compensation is a practice engaged in by most businesses and by the State of Iowa for superior work. See IOWA ADMIN. CODE 581-4.5(3) (1990). It is reasonable to use the test year amount for the OPAP program.

11. Long-Term Incentive Compensation

Iowa Electric proposed two adjustments to its long-term incentive compensation program: one, elimination of a credit booked during 1988 to reverse a prior year's overaccrual; and two, annualization of expenses for this program projected on the first year award level.

Consumer Advocate did not object to the first adjustment, but resisted the second adjustment, claiming these costs are designed to enhance earnings for stockholders and, thus, should be paid by stockholders.

Consumer Advocate pointed out only one of the purposes of the compensation plan, to enhance earnings, but ignores the other purposes for the plan -- to attract and retain good employees and to encourage them to

perform in the best interests of the company, including customers and stockholders. (Tr. 1577). Individual performance is strongly determinative in this compensation plan. (Tr. 1577, 1767).

The record contains sufficient evidence to allow the program's expenses to be annualized. This is an appropriate incentive program designed to enhance employee performance. As was true with the other compensation issues discussed in the preceding section, Consumer Advocate has not objected to any individual's level of compensation or Iowa Electric's overall level of compensation. The Board rejects the argument that incentive compensation programs are inappropriate in regulated utility business and will allow Iowa Electric's adjustment.

12. Uncollectible Expense

Consumer Advocate proposed to adjust 1988 test year figures for bad debt by using 1989 annualized figures. During the test year, Iowa Electric had changed from the direct write-off method for bad debts to the reserve method. The direct write-off method expenses the actual dollar amount of bad debt expense for the year. The reserve method expenses an estimated annual amount of bad debts and charges the actual write-off against the accumulated reserve. At the end of 1988, the reserve balance was approximately \$100,000 less than the actual 1988 direct write off. The reserve was adjusted, leaving the test year amount equal to the actual direct write-off. (Tr. 1578).

Consumer Advocate claimed that the adjustment was a one-time event and that the 1988 test year figure adjusted to equal direct the direct write-off amount is not representative. (Tr. 1768). Data collected through the

first nine months of 1989 show Iowa Electric will incur \$252,450 in 1989 uncollectible expenses. It is appropriate to use the adjusted test year amount. The use of 1989 annualized figures would violate the matching principle, as 1989 bad debts are directly associated with 1989 revenues.

13. Affiliated Transactions

a. Allocation Method

Iowa Electric's parent company, IE Industries, used a three-factor methodology with respect to non-directly assignable costs allocated and billed to Iowa Electric and its other subsidiaries. IE Industries begins by directly assigning all costs, including labor, to the extent practical to the subsidiary causing the costs. With respect to costs that cannot be directly assigned, IE Industries uses an allocation method based on total assets, operating revenues, and total payroll. Using this method, Iowa Electric receives 93.13 percent of IE Industries' allocated costs.

Consumer Advocate argues that the Board should allocate IE Industries' non-directly assignable costs on the basis of officer time rather than the three factors used by IE Industries. Consumer Advocate asserts this is in accordance with its recommendations and the Board's decision in Iowa Power and Light Company, Docket No. RPU-88-10 (June 1, 1989). Consumer Advocate believes that the primary resource IE Industries can provide its affiliates is the expertise of its officers and, therefore, the percentage of officers time spent on each affiliate is the ratio that should be used to allocate the cost of the parent. Consumer Advocate's allocation factor for Iowa Electric is 71.5 percent.

IE Industries' allocation policies and procedures for accounting for affiliate transactions are more satisfactory than any of the other holding companies' policies and procedures of Iowa utilities previously examined by the Board. Consumer Advocate's witness noted that he had no difficulty tracking the transactions between the holding company and affiliates and found no inappropriate transactions. In addition, Iowa Electric utilizes positive time reporting for its officers. In Iowa Power, supra, only a time exception reporting system was used. Also, Iowa Electric, whenever possible, has first directly assigned other costs. Iowa Electric and its parent should be commended for these steps which serve to insulate ratepayers from subsidizing non-utility operations.

However, the Board is concerned that using payroll expenses as one of the three factors will bias the allocation disproportionately toward utility operations. Also, as Consumer Advocate asserts, a principal resource a holding company has available to its subsidiaries is the talent and expertise of its officers. In view of this, the Board will accept Iowa Electric's three-factor methodology, but will substitute Consumer Advocate's corrected officer time allocation, 72.8 percent, for total payroll. The resulting three factors, total assets, operating revenues, and officer time, will be averaged to determine the allocator. Using this method, the allocation factor is 86.99 percent.

b. Airplane Costs

All of IE Industries' subsidiaries, including Iowa Electric, utilize aircraft leased by Iowa Land and Building Company (IL&B), an IE Industries'

subsidiary. All of IE Industries' subsidiaries pay identical rates for aircraft usage.

However, Teleconnect Company (Teleconnect) also entered into a contract to use aircraft leased by IL&B. Teleconnect pays a lesser overall charge for aircraft usage than the IE Industries' subsidiaries. While Teleconnect is not an IE Industries' subsidiary, IE Industries is an investor in Telecom Partners, which is an investor in Teleconnect. IE Industries had a 9 percent investment as of December 31, 1988. (Ex. 110, Sch. A, p. 2).

Iowa Electric argued that Teleconnect was charged a lesser rate because it received a different level of service than that received by IE Industries' subsidiaries. Iowa Electric alleged that Teleconnect did not have first call on the aircraft, and that the marginal available hours were leased to Teleconnect to obtain a contribution to fixed costs in order to lower the overall cost to subsidiaries, including Iowa Electric.

The record is clear that if Teleconnect had not been a user of the aircraft, all of IE Industries' subsidiaries would have paid more for air service because Teleconnect, pursuant to its agreement, made a \$42,000 payment to the fixed costs of the aircraft.

The record does not show, however, that there was any competitive bidding for air service or that there is even a formal agreement on aircraft charges between IL&B and the IE Industries' subsidiaries. There is no evidence in the record that the rate paid by the subsidiaries for aircraft use was the market rate.

The Board will disallow all aircraft costs over and above the rate paid by Teleconnect. The absence of evidence on competitive bidding leads to the Board's conclusion that the rate paid by Teleconnect, which was negotiated, is the best evidence in the record as to the market rate for aircraft costs.

IOWA CODE § 476.8(1989) provides in part,

The Board, in determining the value of material or services to be included in valuations or cost of operations for ratemaking purposes, may disallow any unreasonable profit made in the sale of materials to or services supplied for any public utility by any firm or corporation owned or controlled directly or indirectly by such utility or any affiliate, subsidiary, parent company, associate or any corporation whose controlling stockholder are also controlling stockholders of such utility. The burden of proof shall be on the public utility to prove that no unreasonable profit is made.

This section gives the Board the authority to disallow any unreasonable profit in transactions between the utility and the affiliate. Based on the evidence presented, any amount paid by Iowa Electric over the market rate is providing unreasonable profits to IL&B.

14. Introspect Study

Iowa Electric contracted for an outside examination of its organizational structure and operations (the Introspect Study). The results of that study were issued in April 1989. The cost of the study was \$311,775, of which \$77,289 was included in the test year representing the gas operation share. (Gabbianelli workpaper D-18). Iowa Electric proposed to eliminate test year Introspect Study costs. (Gabbianelli workpaper D-18). Iowa Electric chose to remove the costs of the Introspect Study since no demonstrable savings were known and measurable at the time of filing.

In addition, Iowa Electric argued that Introspect is essentially an electric operation study.

Consumer Advocate recommended a reduction of \$214,410 for annual savings that it alleges will occur in future periods. Consumer Advocate argued that if no adjustment is made, then only shareholders will receive the benefits of the Introspect Study, in the form of higher profits.

It appears that Consumer Advocate's claimed annual savings of \$214,410 is, at best, speculative. There are some additional salaries resulting from Introspect and overall, there is a slight increase in net costs. (Tr. 44-45, Ex. 129). While there may be the potential for savings on the gas side, it appears that any net savings will not be recognized for several years. The evidence does not show known and measurable savings at this time.

The Board will accept Iowa Electric's adjustment to remove the cost of the Introspect Study from the test year. The Board will deny Consumer Advocate's proposed adjustment to reflect savings that Consumer Advocate argues will occur in prospective periods.

15. Audit Workpapers

Consumer Advocate requested that the Board order utilities who contract with outside auditors to require the utilities to insist the auditors maintain a set of audit workpapers at the utility's offices. In this case, Consumer Advocate had some difficulty obtaining access to the workpapers of Arthur Andersen & Co., Iowa Electric's outside auditor. While Consumer Advocate was ultimately able to review the documents it requested, Consumer Advocate had to expend additional time and suffer

inconvenience by traveling to Chicago, Illinois, to review the documents. (Tr. 1804).

The Board believes that access to audit workpapers is important for Consumer Advocate in developing its case. The Board invites the Consumer Advocate to propose a rule making with respect to the responsibility of a utility employing an outside auditor to maintain a set of workpapers at the utility's offices. The problem identified by Consumer Advocate is more appropriately addressed in a rule making because any rule would have general applicability. For Iowa Electric's next gas rate case, the Board will require Iowa Electric to arrange that a set of audit workpapers be kept at Iowa Electric's main office.

V. INCOME TAXES

1. Unbilled revenues

The Tax Reform Act (TRA) of 1986 eliminated certain billing options for utilities. The TRA required utilities to begin accounting for tax purposes those amounts of gas which had been delivered but not yet billed. 26 U.S.C.A. § 451(f). (Tr. 1787). To alleviate effects of this accelerated recognition of income, I.R.C. § 821(b) (1989) allowed the utility to take this revenue into account ratably over a four-year period. Iowa Electric chose to record the \$4,815,640 of income from unbilled revenues in 1987 and the tax effect (\$367,674 in federal taxes and \$122,438 in state taxes) associated with unbilled revenue ratably from 1987 through 1990. (Tr. 777-82, 1788-89). Iowa Electric proposed to include the tax expense in the test year, but not the unbilled revenues. (Tr. 777-79).

Iowa Electric presented three arguments to support its proposed adjustment. First, Iowa Electric argued the unbilled revenues have already been reported below the line. Second, Iowa Electric contended the test year contains 12 months of expense and 12 months of revenue. Finally, Iowa Electric asserted it has not received any additional cash flow, just an earlier recognition of income. In addition, Iowa Electric pointed out the Illinois Commerce Commission rejected Consumer Advocate's type of adjustment asserting a mismatch of revenues and expenses. Iowa Electric argued the Arizona Corporation Commission also rejected a similar proposed adjustment. Iowa Electric contended that it has received the identical stream of revenues that it would have if the TRA was not in effect. Iowa Electric maintained the only effect of the TRA was to require Iowa Electric to make additional tax payments.

Consumer Advocate proposed the Board recognize both the unbilled revenues and the associated income taxes. (Tr. 1791). Consumer Advocate contended the adjustment should be to: 1) increase revenues by \$1.2 million; and 2) accept Iowa Electric's adjustment to eliminate the reversal of the deferred income taxes of \$615,559. Consumer Advocate argued this approach is consistent with the practice of three other gas utilities in Iowa and the Board's decision regarding accrual of compensated absences in Northwestern Bell Telephone Company, Docket No. RPU-88-6 (February 1, 1989). Consumer Advocate argued the unbilled revenues had not been reflected in previous years and that Iowa Electric by recording the entire unbilled revenues balance as extraordinary income and reporting one-fourth of that amount as income for tax purposes, created a tax/book timing

difference for the years 1987 through 1990. For the test year, Iowa Electric's action increased current income taxes by \$490,112, but did not include an increase in the proportionate amount of revenue for that year. (Ex. 101, Sch. 3, p. 2C, col. AA). The net effect was to increase the revenue requirement by \$1.2 million. Consumer Advocate also argued the change in accounting was a one-time, non-recurring event.

The TRA requires Iowa Electric to pay the tax on unbilled revenue earlier than under prior law and does not impose a new or additional cost of furnishing service for unbilled revenues. The tax is, therefore, an accelerated recognition of income. This view is consistent with In the Matter of the Petition of Interstate Power Company, 419 N.W.2d 803 (Minn. App. 1988). In that case, the Minnesota court affirmed the commission's decision refusing to include either the tax imposed on the company for unbilled revenues or the newly recognized revenues. The commission stated this would violate the matching principle because the test year would contain 365 days of cost, but more than 365 days of revenue.

In addition, the Minnesota commission found the tax on unbilled revenues is not a cost of providing service during the test year, but rather, represents a tax based on revenues generated outside the test year. That commission stated that, "because the unbilled revenue adjustment has been rejected, then logically the tax expense associated with the unbilled revenues is not an appropriate adjustment."

The Board will not make an adjustment for the unbilled revenues or the associated taxes. To include the taxes but not the revenues as requested by Iowa Electric would result in an inappropriate matching of revenues and

expenses in the test year. In addition, the inclusion of both the corresponding unbilled revenues and related taxes, as proposed by Consumer Advocate, would result in more than 365 days of revenues being matched with 365 days of expense.

2. Interest on Customer Deposits

Both Iowa Electric and Consumer Advocate included interest on customer deposits in the cost-of-service. (Ex. 2, Sch. C, 1. 6; Sch. D, 1.11; Ex. 101, Sch. 2, p. 1, 1.13; Sch. 3, p. 2A, col. I). The dispute is over the tax effect of this expense. Consumer Advocate witness Arndt's income statement adjustment included the income tax effect of interest on customer deposits, which had the effect of reducing income taxes. Iowa Electric's adjustment omitted the income tax effect. (Ex. 2, Sch. D, 1.11).

Iowa Electric contended its interest synchronization adjustment reflected the tax effect of interest on customer deposits. (Tr. 1562). Consumer Advocate argued Iowa Electric's adjustment for interest synchronization substituted the tax effect of the interest for the weighted debt component of cost of capital. (Tr. 1609-11). According to Consumer Advocate, this eliminates the deduction of customer deposit interest from interest used to calculate income taxes included in the revenue requirement. Consumer Advocate argued that if an interest synchronization adjustment is made as calculated by Iowa Electric and Consumer Advocate in this case, then an interest on customer deposit adjustment must be made to reflect the deduction for income tax purpose as any other expense adjustment.

The Board will allow an adjustment to include interest on customer deposits and its corresponding tax effects. The Board has previously approved adjustments this type of adjustment. See Iowa Power and Light Company, Docket No. RPU-88-10 (June 1, 1989); Iowa Power and Light Company, Docket No. RPU-87-2 (April 25, 1988); Iowa Electric Light and Power Company, Docket No. RPU-85-31 (October 23, 1986).

3. Interest Synchronization

The purpose of an interest synchronization adjustment is to synchronize the interest expense deduction for computing income tax expense with the cost of debt used to fund the appropriate portion of the rate base. The method is to take the weighted average cost of debt component used in the overall rate of return times the rate base. That product, an imputed utility interest expense that is deemed to represent the actual interest expense for debt used to fund rate base, is then compared to the interest expense deduction used to determine utility income tax expense. The tax effect of any difference is the interest synchronization adjustment.

Consumer Advocate witness Arndt included IE Industries' debt cost in his calculation consistent with the double leveraging approach. Consumer Advocate asserted that IE Industries' capital, including its long-term debt, finances all of IE Industries' capital investments, including its investment in IE common equity. The combination of Dr. Rasmussen's recognition of IE Industries' actual use of double leverage in his determination of Iowa Electric's cost of capital and witness Arndt's interest synchronization adjustment reflect the investment of some of IE

Industries' debt in Iowa Electric's rate base and the inclusion of tax-deductible interest on that debt in the revenue requirement. (Tr. 1785; Ex. 101, Sch. 3, p. 3; Ex. 109, Sch. C).

Iowa Electric contended Consumer Advocate's adjustment would be proper only if the holding company's debt were included in the debt component of the allowed overall return on rate base. (Tr. 1587). Iowa Electric argued that on a stand-alone income tax return basis none of the holding company's debt cost is deductible for tax purposes by the utility. Iowa Electric contended it received no deduction for the interest expense incurred on IE Industries' debentures.

In accordance with the discussion of double leveraging in Section VI, the Board will reject the Consumer Advocate's adjustment and will not include the parent's cost of debt in calculating the interest synchronization adjustment.

4. Deferred Income Tax

In a previous rate case, the Board ordered Iowa Electric to prorate over a fixed period of time certain deferred income taxes. The period of time is scheduled to expire June 30, 1990. (Tr. 167).

Iowa Electric proposed an adjustment to eliminate this proration of deferred taxes for final rates to recognize a change that will take place within 12 months of the commencement of this rate case. (Tr. 167; Ex. 2, Sch. D, 1. 22 & Sch. D-22). Iowa Electric argued that the deferred tax balances will be fully prorated on June 30, 1990, and therefore, allows the cost-of-service to be reduced by a full year's proration of deferred taxes for as long as final rates are in effect.

Consumer Advocate claimed that if final rates become effective on the date interim rates were placed into effect and the Board approves Iowa Electric's adjustment, customers would not receive the entire flowback of deferred income taxes ordered previously. (Tr. 2011). Consumer Advocate recommended the Board prescribe two sets of final rates, with the second set to be effective June 30, 1990, after the period of proration ended. Iowa Electric argued that Consumer Advocate's counter-proposal of filing two sets of rates is inappropriate and unnecessarily expensive.

The Board finds the evidence presented by Iowa Electric to be persuasive. The changes Iowa Electric would have to make in the customer billings would quickly overwhelm the purported benefit of \$12,000. In addition, there is no guarantee that an expense will be prorated over the entire term of a period. Iowa Electric's adjustment to eliminate the proration of deferred income taxes in final rates will be accepted.

5. PGA Income Tax Adjustment

Iowa Electric proposed an adjustment to exclude its provision for deferred income taxes applicable to the PGA and the effect of the PGA on operating expense. (Ex. 9A, Sch. 2, 1.4). Iowa Electric used normalization accounting for its PGA. Consumer Advocate accepted the adjustment proposed by Iowa Electric and also proposed an adjustment to eliminate the increase in booked current income taxes of the test year PGA adjustment tax/book difference reported by Iowa Electric on its 1988 income tax contained in its Schedule M. (Tr. 1793; Ex. 101, Sch. 3, p. 2, col. C, 1. 3 & p. 2C, col. BB; and Ex. 103, p. 2). Consumer Advocate contended

Iowa Electric failed to eliminate all of the effects (timing differences) on its booked income taxes of its adjustment.

The Board concurs with Consumer Advocate that there should be an adjustment for the tax timing difference created by the PGA. Each year there are under or overcollections in connection with the PGA. This leads to the booking of deferred income taxes, which because of "flow through" treatment, necessitates the need for a reversal. Iowa Electric's adjustment fails to eliminate all of the effects on its booked income taxes of its PGA adjustment. Iowa Electric omits the income tax effects of the expense adjustment and the test year Schedule M adjustment. Therefore, Consumer Advocate's proposed adjustment will be allowed.

6. Accounting for Income Taxes

Consumer Advocate proposed several adjustments for non-property related tax/book timing differences to match income taxes included in the revenue requirement with expenses included in the revenue requirement. Consumer Advocate claimed that in the past it had overstated its position regarding flow-through versus normalization accounting, a position accepted by the Board. According to Consumer Advocate, all property-related tax/book timing differences which are continuously recurring and slowly reversing should be "flowed-through." However, tax/book timing differences which are not continuously recurring and slowly reversing are usually not related to property and are of shorter duration. (Tr. 1790-91; 2045). In these instances, the expense item should be matched with current income taxes included in the income statement. (Exs. 144, 146, 150, 152, 154, and 156). Consumer Advocate contended that otherwise, the revenue requirement

will be overstated. However, Consumer Advocate maintained for book purposes, utilities should be required to use "flow-through" accounting rather than normalization "to avoid the creation of mythical balances of accumulated deferred income taxes ... not reflected in utility rates." Consumer Advocate asserted that in Iowa Electric's rate case in Docket No. RPU-83-23, the Board did follow this procedure for rate case expense amortization. Consumer Advocate set forth six examples in this case where Iowa Electric used flow-through accounting which will produce a revenue requirement substantially in excess of the actual costs to be recovered. (Exs. 143, 145, 147, 149, 151, 153, and 155).

Iowa Electric argued Consumer Advocate is being inconsistent solely to secure a lower revenue requirement. Iowa Electric argued the Board should use normalization accounting in all cases. However, Iowa Electric contended if normalization is not used, then the Board should adopt an approach that can be articulated in a "comprehensible fashion and applied in a uniform manner across and within rate cases." Iowa Electric asserted that if the Board doesn't require flow through or normalization accounting consistently, there will be extensive litigation on each tax/book timing difference.

The Board finds the evidence presented by Consumer Advocate to be persuasive. In Iowa Electric Light and Power Company, Docket No. RPU-83-23 (March 26, 1984), the Board stated that flow-through adjustments for all tax/book timing differences for federal income tax purposes not prohibited by law should be adopted. As Consumer Advocate points out, flow through accounting, while meritorious in property-related circumstances, produces

unwarranted results in certain cases. A review of Consumer Advocate Exhibits 145-156 shows Iowa Electric's use of flow through accounting produces a higher than necessary revenue requirement. Therefore, the Board will adopt Consumer Advocate's position. Where permitted by law, utilities will be required to use flow-through accounting for tax/book timing differences that are property-related. However, for non-property type book/timing differences, the Board will require utilities to use the accounting procedure that produces the most accurate revenue requirement (i.e., the amount allowed will produce the actual revenues needed to cover the item + taxes). The following issues are tax/book timing differences which will be resolved in accordance with the preceding discussion.

a. Gas In Storage

For income tax purposes, Iowa Electric is required to capitalize, rather than deduct as an expense, a portion of demand costs related to gas injected into storage. A timing difference is created because the demand costs are expensed for book purposes. (Tr. 1793). As a result, higher income taxes were paid. Since Iowa Electric was normalizing the tax effect, it decreased its provision for deferred federal income taxes by \$202,533. (Tr. 1794; Ex. 103, p. 4). For ratemaking purposes, Iowa Electric proposed to treat this as "flow-through" and reversed the decrease in deferred income taxes. (Tr. 1794-95, 784; Ex. 2, Sch. A-2, 1.3).

Consumer Advocate asserted that the amount of the timing difference for gas in storage varies dramatically from year to year. Consumer Advocate contended that Iowa Electric's adjustment overstated Iowa Electric's revenue requirement by failing to match the \$595,000 gas cost

with the income tax deduction for that cost. (Ex. 145). Consumer Advocate proposed to eliminate both the current and deferred income tax effects of the gas in storage timing difference. (Tr. 1795-96; Ex. 101, Sch. 3, p. 2C, col. CC).

Iowa Electric's adjustment would include \$1,004,000 to recover a \$595,000 expense. Because gas costs are tax deductible, Iowa Electric needs only to collect one dollar for each dollar of gas costs. Iowa Electric should not procure a higher revenue requirement than is needed for this expense. Therefore, in accordance with the discussion in Section 6, the Board will accept Consumer Advocate's adjustment.

b. Insurance Reserve

For book purposes, Iowa Electric estimated its injuries and damages liabilities and expenses consistent with the amount placed in the insurance reserve. For income tax purposes, Iowa Electric cannot deduct the expenses until they are paid. In the test year, Iowa Electric expensed \$227,000 for the reserve that was not currently deductible for income tax purposes. (Tr. 1796).

Consumer Advocate proposed an adjustment to properly match the expense that would be charged to ratepayers with income taxes that would be charged to ratepayers. (Tr. 1796-97; Ex. 101, Sch. 3, p. 2D, col. DD). Consumer Advocate asserted the adjustment to account for the tax/book timing difference would result in Iowa Electric's revenue requirement matching the reserve expense. (Ex. 150).

Iowa Electric's proposed treatment of the tax/book timing difference would produce a revenue requirement of \$383,000, which is higher than the

actual expense of \$227,000. (Tr. 806, 812-13; Ex. 149). Therefore, in accordance with the discussion in Section 6, the Board will accept Consumer Advocate's adjustment.

c. Rate Case Expense

Iowa Electric prorated rate case expenses of \$89,006 over a fixed period of time which were not deducted for income tax purposes in the test year. Consumer Advocate contended an adjustment must be made to income taxes to reflect a tax deduction for the amount of expense prorated over a fixed period of time in the tax year. (Tr. 1798; Ex. 103, p. 2). Consumer Advocate argued that failure to make an adjustment would result in ratepayers not receiving the benefit of the tax deduction.

Iowa Electric's tax adjustment to reduce income tax reflects only the amount of the increase over the test year. Consumer Advocate's adjustment adds the tax effect of the entire test year expense for rate case expense. This properly matches rate case expense and income taxes included in the revenue requirement. Therefore, in accordance with the discussion in Section 6, the Board will accept Consumer Advocate's adjustment.

d. Estimated Liability

Iowa Electric continues to accrue interest on its estimated liability to pipelines for take-or-pay costs it is accruing. (Tr. 1728, 1799). The test year interest was not deductible for tax purposes in 1988. Iowa Electric normalized the tax/book timing difference and for ratemaking purposes considered it to be a "flow-through." (Tr. 784, Ex. 2, Sch. A-2, 1.3)

Consumer Advocate proposed an adjustment to eliminate the current income tax effect. (Tr. 1799-1800; Ex. 101, Sch. 3, p. 2D, col. 66). In rebuttal, Iowa Electric made an additional adjustment to increase federal taxes to eliminate the effect on federal income taxes of deducting state income taxes paid in the test year for amended return. (Tr. 1585-86; 1620-21).

In accordance with the discussion in Section 6, the Board will accept Consumer Advocate's adjustment and Iowa Electric's adjustment made in rebuttal.

e. Other Tax/Book Timing Differences

Iowa Electric had three additional tax/book timing differences for which Iowa Electric used normalization accounting for its books. These are deferred compensation, restricted stock, and bond redemption expense. Each represents a cost which is deducted for tax purposes at a different time than the expense is recognized on the books. (Tr. 816-18). Iowa Electric proposed flow-through accounting for these tax/book timing differences. Consumer Advocate proposed an adjustment to recognize the tax deduction and match income taxes with expense. (Tr. 802-03; Ex. 101, Sch. 3, p. 2D, col. II & JJ; p. 2E, col. KK).

In accordance with the discussion in Section 6, the Board will accept Consumer Advocate's adjustment.

7. Contributions in Aid of Construction

Contributions in aid of construction (CIACs) are amounts contributed to a public utility by a customer or potential customer to pay for extensions necessary to enable them to be serviced by the public utility.

The Tax Reform Act of 1986 requires that CIACs be reported as current income for income tax purposes. For book purposes, utilities generally do not account for it this way but account for it as a reduction of the cost of plant under construction. This creates a tax/book timing difference in that CIAC will be taxed when received but will not be accounted for as revenue on a utility's books.

Iowa Electric argued that CIACs represents taxable income in the year received and normalization accounting is mandated by the IRS. (Tr. 1590). Iowa Electric witness Gabbianelli stated it was his interpretation of federal law that Iowa Electric is required to continue normalizing for the amounts it has already collected. (Tr. 2078). Iowa Electric asserted normalization should be followed until the Board's rule making Income Taxes on Construction Advances, Docket No. RMU-89-26, is resolved so that Iowa Electric's ability to claim accelerated depreciation for income tax purposes is not jeopardized.

Consumer Advocate argued for ratemaking purposes, the federal and state income tax effects of CIAC should be accounted for using the "gross-up" method permitted by IRS Notice 87-82. (Tr. 1717-18). Consumer Advocate contended this is actually flow-through accounting but taxes are charged to the CIAC contributor by "grossing-up" the amount of the CIAC to include the income taxes. Consumer Advocate maintained the "gross-up" method is consistent with the Board's proposed rulemaking and rate design principles.

The Board has further reviewed IRS Notice 87-82 and the applicable federal tax laws. Section 824 of the Tax Reform Act changed the treatment

of CIACs received after December 31, 1986. The IRS Notice 87-82 was issued on December 3, 1987. Although Section VI of the Notice provides for three acceptable methods of accounting to avoid a normalization violation, it appears only the normalization option was available to Iowa Electric because of the lag between the effective date of the Tax Reform Act and the publication of the Notice outlining acceptable methods of accounting. Therefore, the Board, after giving due consideration to the alternatives available under the IRS Notice 87-82, will allow Iowa Electric to normalize federal taxes until the April 25, 1990, the effective date of the Board's rule making, Income Taxes on Construction Advances, Docket No. RMU-89-26. Failure to normalize federal taxes during the period between the effective date of the Tax Reform Act and the implementation of gross-up could violate normalization and jeopardize Iowa Electric's use of accelerated depreciation. However, Iowa Electric will be required to "gross-up" for CIACs received after the effective date of the Board's rule making in Docket No. RMU-89-26.

The IRS Notice 87-82 is only applicable to the treatment of federal taxes. The Internal Revenue Service has no jurisdiction over state income taxes. Normalization of state taxes associated with CIACs is not required. See IOWA CODE § 422.93 (1989). In ratemaking, the Board attempts to assign costs to the cost causer. Rates are to be based on the cost-of-service. The Board has carefully considered the alternatives and determined that all ratepayers should not be asked to bear the tax-related costs of the CIACs because the property constructed is not used to provide utility service to all customers. Therefore, the state tax associated with CIACs will not be

included in the cost-of-service. The Board will require Iowa Electric to use the gross-up method for state taxes.

VI. RATE OF RETURN

A. CAPITAL STRUCTURE

1. Double Leveraging

Iowa Electric argued that it has provided adequate proof to show that double leveraging does not exist for Iowa Electric because there is no investment by the holding company, IE Industries, in Iowa Electric. Iowa Electric stated the following factors disprove the fact that double leverage exists for Iowa Electric:

1. All of IE's common equity at 6/30/86 had nothing to do with the formation of IE Industries;
2. IE Industries has sold only one fixed capital issue since its inception;
3. IE Industries became a holding company on 7/1/86 and all shares were sold to IE's common shareholders through company stock plans. No new common stock has been sold since then; and
4. The only increase in common equity since inception has been through an increase in IE's retained earnings.

(Tr. 250-51).

Iowa Electric contended there is no connection between the creation of IE Industries and Iowa Electric's common equity since IE Industries has sold no new common shares since July 1, 1986, the date of its formation, and the only increase in Iowa Electric's common equity has been through an increase in retained earnings. (Tr. 250-51). According to Iowa Electric, the application of the double leverage concept will penalize shareholders

and doubly reward ratepayers because there are lower fixed costs through the Iowa Electric -- IE Industries structure and, also, a lower cost of common equity.

According to Consumer Advocate, the double leverage method is based on the proposition that the parent makes economic use of its capital resources. Consumer Advocate argued Exhibit 36 shows the proceeds of IE Industries' debentures were used, in part, to finance utility operations. Consumer Advocate stated since funds are fungible and not traceable, IE Industries overall capital cost must be used as the cost of IE's book equity whether IE Industries' debentures were used to directly purchase Iowa Electric common equity, or not.

In both United Telephone Co. v. Iowa State Commerce Commission, 257 N.W.2d 466 (Iowa 1977), and General Telephone Co. of the Midwest v. Iowa State Commerce Commission, 275 N.W.2d 364 (Iowa 1979), the Iowa Supreme Court affirmed the Board's use of the double leveraging method. In United Telephone Company, the Iowa Supreme Court discussed the double leverage theory at length. In that case, the company had challenged the Commission's use of the theory stating it was not supported by the record and that it was discriminatory in that it only applies to utilities wholly-owned by parent corporations. In upholding the Commission's decision, the Court reasoned, in part,

As stated earlier, the Commission pointed out the Company is a wholly owned subsidiary of a holding company. The Commission determined because of this relationship the Company's capital structure must be reflective of the capital structure of the holding company. If it was not made reflective the Company, a wholly owned subsidiary of a holding company, would

earn a higher rate of return, as affected by capital structure, than any company not in such a position.

The Court affirmed the Board's use of double leveraging in that instance, and stated in response to United Telephone's contention that certain factors should have been considered,

While we express no opinion as whether these factors would affect the parent's debt-equity ratio, we find the Company's contention to be without merit. As noted earlier, it is the Company which bears the burden to prove its rate increase was reasonable. If the Company felt these factors were important, it should have presented proof as to them.

In the United Telephone case, the Court upheld the Board's use of double leveraging, but stated the company could have provided proof to show that double leveraging did not exist. In this case, Iowa Electric has presented proof. (Tr. 250-51). The record indicated Iowa Electric's common equity did not increase, other than an increase in retained earnings. (Tr. 251). The money Iowa Electric received from the sale of its subsidiaries went only to retire debt and preference stock. (Tr. 251).

The Board will not use double leveraging in calculating the capital structure for Iowa Electric. The facts in this case warrant an exception to the application of the double leverage concept. Iowa Electric has demonstrated the IE Industries' debt does not result in an increase in Iowa Electric's common equity. Therefore, double leveraging does not exist. This finding is a narrow exception to the general rule that double leveraging exists when a holding company of a utility has debt in its capital structure. If other utilities which are subsidiaries of holding companies are to qualify, they must be able to demonstrate that the parent's debt, as here, does not support their capital structure.

2. New Issues and Redemptions

During the test year, Iowa Electric redeemed two series of debt. The Series V was redeemed on April 1, 1988, and the Series T was redeemed on November 1, 1988. (Tr. 297). Also during the test year, Iowa Electric issued two new series of debt. Series W was issued on March 16, 1988, and Series X was issued on October 25, 1988. Consumer Advocate made an adjustment to the long-term debt to reflect the two debt issues which were retired during the test year. (Tr. 704). Consumer Advocate included the new issue in the capital structure from the actual day of issuance and included the 13-month average of the redeemed issues. (Tr. 704). The amounts refinanced were rolled over at the cost rate. Consumer Advocate argued when an average rate base is utilized, the total financing in capital structure must match the total investment in rate base and the new debt should not be recognized for the entire year because it would result in a mismatch of costs and corresponding assets within that test period.

Iowa Electric argued the new issues should be included for the entire test year and the redeemed series should be removed. Iowa Electric stated Consumer Advocate's argument that inclusion of new issues and redemptions creates a "mismatch" should be rejected because the adjustment is known and measurable and long-term debt as of the end of the test year will continue into the future to support utility operations.

The Board will treat the redeemed and new issued debt in the manner proposed by Consumer Advocate. However, the 13-month average should be used to calculate the amount of debt for the new debt as was done for the

retired debt. The use of the 13-month average is in accordance with Board precedent and corresponds to the Board's calculation of rate base.

3. Unamortized Debt Discount and Premium

Iowa Electric included the entire principal amount of unamortized debt discount and premium expense in determining its capital ratios. (Tr. 298). According to Iowa Electric, by excluding unamortized debt discount and premium, Consumer Advocate failed to measure the rate of earnings necessary to support the outstanding capital in the hands of investors.

Consumer Advocate argued since Iowa Electric does not receive the entire principle because of discounts and expenses, only the net amount available should be included in the capital structure.

The unamortized balances should be excluded from the capital ratios. Only the net amount should be included. This is consistent with the traditional method of calculating the cost of debt and preferred/preference stock and is consistent with the Board's prior precedent.

B. COST OF SENIOR SECURITIES

1. Long-Term Debt

According to Iowa Electric, the cost of debt is 8.55 percent. Iowa Electric argued the yield-to-maturity method should be used to calculate debt and preferred stock because it is recommended by corporate finance textbooks, and used by Wall Street analysts, a majority of state commissions and the Federal Energy Regulatory Commission (FERC). In addition, Iowa Electric's calculation of debt included the recapture of and return on the unamortized call premiums and issue expenses related to the redeemed issues.

Consumer Advocate used the "traditional" method and calculated the cost of debt to be 8.481 percent. The traditional method uses the amortization of premium, discount and issuance expense, and unamortized balances as actually reported in Iowa Electric's books. Consumer Advocate argued the "traditional" method has been consistently favored by the Board.

In Iowa Power and Light Company, Docket No. RPU-87-2 (April 25, 1988), the Board stated, "The Board has consistently used the traditional method because all of the information needed to calculate properly the embedded cost of debt can be found and verified in the company books." The Board will not deviate from this precedent and will continue to use the traditional method, as recommended by Consumer Advocate. The Board will, however, direct its staff to investigate and prepare a report which discusses the relative merits of the traditional approach and the yield to maturity approach. Staff should consider the respective methods' abilities to account for the cost of money and should explore the use of the two methods in other jurisdictions.

2. Preferred Stock

Iowa Electric calculated a cost rate for preferred stock of 6.75 percent. In making this calculation, Iowa Electric used the yield to maturity method for the same reasons it was used to determine the cost of debt. As was done for debt, the calculation of the preferred/preference cost rate included the recapture of and a return on the unamortized call premiums and issue expenses related to issues redeemed early. In addition, Iowa Electric recommended an adjustment to represent the 13-month average

balance of the unamortized call premiums related to the 10/1/86 redemption of preferred stock.

Consumer Advocate proposed a cost rate of 6.132 percent. According to Consumer Advocate, the "traditional" method approved by the Board in Iowa Electric's last rate case proceeding should be used. Consumer Advocate argued Iowa Electric's adjustment to reflect recovery of call premiums and issuance expense related to 1986 retirements is inappropriate.

In accordance with the Board's decision as to debt, the Board will use the traditional method proposed by Consumer Advocate to calculate the cost of preferred stock. However, the Board will modify Consumer Advocate's calculation to include \$3,920, the amortized balance of net proceeds less than par, in the traditional model, as well as allow the recovery of the costs to redeem the five series of preference stock in 1986.

The Board will allow Iowa Electric's proposed adjustment to the equity amount to represent the 13-month average balance of the unamortized call premiums related to the 10/1/86 redemption of preferred stock. This adjustment should be made to restore Iowa Electric's retained earnings for ratemaking purposes. Iowa Electric should not, in effect, be penalized for redeeming the preferred stock early. In addition, the Board will allow \$27,208 to be removed from the equity amount and added to the amount of preferred/preference stock, as proposed by Iowa Electric.

C. RATE OF RETURN ON COMMON EQUITY

Iowa Electric proposed the Board adopt a rate of return on common equity of 13.1 percent. (Tr. 322). Iowa Electric supported this proposal

with the testimony of two witnesses: Mr. Hanley and Mr. Harris. The proposed rate of return was based on averaging two calculations: 13.3 percent derived from a risk premium calculation, and 12.9 percent derived from an infinite horizon DCF. (Tr. 322).

Iowa Electric witness Hanley testified since Iowa Electric is a combination gas and electric utility and part of a holding company, its cost of common equity could not be directly measured and, therefore, a proxy group of gas utilities was chosen and analyzed as a surrogate for its gas business. (Tr. 244). The proxy group was selected based on seven criteria. (Tr. 244). The infinite horizon DCF analysis of the proxy group resulted in a 12.9 percent return on common equity. (Ex. 7, Sch. 5, p. 1).

Stating that it would be ill-advised to rely solely upon a DCF analysis, Iowa Electric witness Hanley also performed a risk premium analysis and derived a cost rate of 13.3 percent. (Ex. 7, Sch. 7). The analysis was done using the average of the next five quarterly estimates of A-rated seasoned public utility bonds of 9.3 percent. Three different equity risk premiums were used ranging from 3.4 percent to 4.4 percent to arrive at a risk premium of 4 percent. (Ex. 7, Sch. 7). As a check on the other results, Iowa Electric witness Hanley also performed a finite horizon DCF using the nine surrogates. This produced a rate of return on common equity of 15 percent. (Tr. 320).

Consumer Advocate witness Dr. Rasmussen proposed the Board adopt a rate of return on common equity of 11.25 percent. (Tr. 703). Dr. Rasmussen's data showed a range of reasonableness of 8.4 percent to 11.7 percent. Dr. Rasmussen's recommendation of 11.25 percent was based on two

analyses: a continuous DCF analysis performed for IE Industries and a CAPM analysis. Using the indicated dividend of \$2.04 and the average price of \$23.66, Dr. Rasmussen computed a dividend yield of 8.622 percent. (Tr. 689, Sch. A). Consumer Advocate analyzed various data, including IE Industries' weighted historic growth rate, growth rates published by Zachs, IBES and other analysts, and Iowa Electric's growth rates granted in its last three rate proceedings, to yield a growth rate range of 2.5 to 3.0 percent. (Tr. 692). This data within the continuous DCF model yielded a common equity of 11.12 to 11.62 percent for IE Industries. (Tr. 693). Consumer Advocate then used an updated dividend yield of 7.6 percent producing a cost of common equity of 10.1 to 10.6 percent. (Ex. 135).

Using the Capital Asset Pricing Model (CAPM), Consumer Advocate witness Rasmussen calculated a 11.39 percent and a 10.57 percent cost of common equity, respectively, using a spot estimate and an average estimate of the risk free rate. (Tr. 693). Consumer Advocate used 30-day Treasury bill yields as the basis for the risk free rates and used a beta of 40 percent for IE Industries as calculated on the holding period returns for the Standard & Poor's 500 composite companies. (Tr. 693). In addition, the DCF stock cost rates for several years were regressed on the average yields on Iowa utility bonds to determine the relationship between the DCF based cost of equity and the long term utility debt in Iowa. The recent bond level of 10.22 percent indicated a common cost of 10.78 percent and a 0.56 percent risk premium. (Tr. 694-95).

1. DCF Model

Iowa Electric witness Hanley used the discrete form of the traditional Constant Growth Infinite Horizon DCF model to reflect the quarterly receipt of common dividends by investors. (Tr. 261, 269). The model used by Iowa Electric is very similar to the model which has been accepted by the FERC, except one growth rate, rather than two, is used in the FERC model.

Consumer Advocate used its "standard discounted cash flow model," a continuous form of the DCF model. (Tr. 684, 690). In the analysis of IE Industries, the difference in the results of the parties' two models was only ten basis points as reflected by Mr. Hanley's dividend growth components of his dividend yield. (Ex. 7, Sch. 5, p. 1).

As a basis for its initial calculation, the Board will use the model proposed by Iowa Electric, modified by using only one growth rate as does FERC. This model has gained acceptance in the regulatory community as providing a reasonable tool for analysis. The Board will not, however, use the proxy group of gas companies proposed by Iowa Electric. Consumer Advocate is correct in stating the proposed proxy group of gas utilities is an inappropriate surrogate for Iowa Electric. Iowa Electric is a combination gas and electric utility and approximately 71 percent of its operating revenues come from the sale of electricity. A proxy group of combination gas and electric utilities would be a better surrogate.

2. Dividend Yield

The dividend yield in the DCF formula is the result of dividing the dividend per share by the market price per share. All of the parties agree the annual dividend per share for IE Industries is \$2.04. (Ex. 3, Sch. B;

Ex. 109, Sch. A). An average market price per share can be calculated by finding an average of weekly prices for June 27, 1988, through June 19, 1989, as shown in workpapers filed by Consumer Advocate witness Rasmussen. This results in an average market price per share of \$23.22. The Board finds this price and dividend per share results in a dividend yield of 8.79 percent.

3. Growth Rate

The Board will adopt a growth rate of three percent. This is based on Consumer Advocate's analysis of various data, including IE Industries' weighted historic growth rate, forecasted growth rates published by Zachs and IBES, and the ten-year dividend per growth rate of 3.2 percent. (Ex. 109, Sch. A). This three percent growth rate is a blended approach which recognizes both historic and forecasted data. See, Iowa Power and Light Company, Docket No. RPU-88-10 (June 1, 1989).

4. DCF Results

Utilizing Iowa Electric witness Hanley's quarterly discrete DCF formula with the dividend yield of 8.79 percent, dividend growth component of 0.1 percent, and the growth rate of 3.0 percent produces an allowable return on equity of 11.9 percent. Integration of a small flotation adjustment, as recommended by Consumer Advocate, raises the calculation to 12 percent.

5. Risk Premium

In order to test the reasonableness of this return, the Board has previously employed a risk premium analysis by adding a 2.5 to a 3.0 percent risk premium to the A-rated utility bond rate of 9.6 percent.

Based on Mr. Hanley's testimony, the Board is persuaded the upper bound should be 3.5 percent to reflect the risk premiums found in the market. (Sch.7, p. 1). This risk premium amount is between the risk premium ranges of Consumer Advocate witness Rasmussen (0.56 percent - 1.43 percent) and the risk premium recommended by Iowa Electric witness Hanley (3.4 percent - 4.4 percent). (Ex. 7, Sch. 7). The Board's estimates of the risk premium yields a cost of common equity from 12.1 percent to 13.1 percent.

6. Return on Equity

This 12.1 to 13.1 percent range coupled with the 12 percent result of the DCF calculation supports a return on equity at the lower end of the risk premium range. While the DCF model is the preferred model, it must be applied with judgment, especially here where its result falls outside, albeit marginally, of the range suggested by the risk premium analysis. The Board agrees with Iowa Electric that the DCF method may understate the return on equity in some circumstances. (Tr. 263).

Because the 12 percent result of the DCF model is outside the range of the risk premium indications, the Board will select 12.3 percent, at the lower end of the risk premium range. In addition, an additional 15 basis points should be added to that amount to reflect the current volatility in the gas industry. The result is a cost of common equity of 12.45 percent.

VII. CLASS COST-OF-SERVICE STUDY

Iowa Electric, Consumer Advocate, III, and IIEC all filed proposed class cost-of-service studies in this case. Iowa Electric's study is the basic model used by the Federal Energy Regulatory Commission (FERC). The studies performed by III and IIEC also used the FERC model and were similar

to the study performed by Iowa Electric. The intervenors modified the study proposed by Iowa Electric as to the issues of the distribution allocation method and the direct assignment of distribution main costs.

The Board will adopt the class cost-of-service study prepared by Iowa Electric. The FERC model has been accepted by the Board in a previous rate case. Iowa Electric, Docket No. RPU-85-31 (October 23, 1986). However, the Board will modify Iowa Electric's cost-of-service study as to several issues. The following is a discussion of the modifications to Iowa Electric's cost-of-service study and a discussion of some additional issues which have been presented by the parties. The Board will require Iowa Electric to file a revised class cost-of-service study which incorporates all of the modifications specified in this order.

1. Actual or Design Day Demand -- Residential and Small Firm Classes

All parties used a non-coincident peak demand method to allocate demand related, or capacity costs. The parties disagreed as to the appropriate noncoincident peak demands to be used for various classes. Consumer Advocate witness Rasmussen used the actual unadjusted test year peak demand for each class, and Iowa Electric witness Dana made wind and weather (or design day) adjustments to the peak demands of Residential and Small Firm/Interruptible classes, which resulted in an 11 percent increase in demand allocations to these customers. (Ex. 111, Sch. C).

According to Iowa Electric, the system capacity is designed to serve firm customers on days of extremely cold weather and the estimated peak demands of weather sensitive residential and small firm customers should be

adjusted for "design day" or coldest day temperatures rather than average or normal cold day temperatures. (Tr. 83). Iowa Electric argued the Consumer Advocate's reliance on the actual usage for January is inappropriate because the entire month is not as relevant as the weather on the day of peak demand. (Tr. 83). According to the Iowa Electric witness, distribution capacity is required at levels which ensure that firm customers are served on very cold days and, therefore, allocation of peak day demands should be determined under the same assumption. (Tr. 83). To support this argument, Iowa Electric stated the design day levels used have actually occurred an average of two times in the last eight years. (Tr. 83).

According to Consumer Advocate, these adjustments should be rejected because they are not representative of normal operating conditions. (Tr. 1047, 1062). Consumer Advocate argued actual demand should be used so that capacity costs will be allocated directly on the basis of how each class uses the system. According to Consumer Advocate, a non-coincident peak demand method, as proposed in this proceeding, recognizes the diversity of customer loads.

In addition, Iowa Electric proposed the Residential and Small Firm/Interruptible class demand estimates be further adjusted to reflect the effects of wind on the coldest days. (Tr. 85-86). To support this proposal, Iowa Electric cited a Board staff report (Ex. 111, Sch. A) that concludes wind can have a significant effect on the usage of weather sensitive customers. (Tr. 85). Consumer Advocate witness Rasmussen argued no adjustment should be made for wind because the adjustment is

unrepresentative of normal operating conditions, and Iowa Electric did not provide testimony to show whether the test year winds were above or below normal.

The Board will adopt Iowa Electric's proposed design day temperature demand for the Residential class. It is clear that the system must be built to accommodate this weather sensitive load's coldest day peak demand. In fact, the design day level has been reached twice in the past eight years. (Tr. 83). However, because the wind factor impact cannot be removed from the design day adjustment for the Small Firm/Interruptible class using the evidence in the record, Consumer Advocate's actual peak demand will be used for this class.

The Board will reject the wind adjustment proposed by Iowa Electric. Iowa Electric did not provide adequate evidence to support a wind adjustment. Iowa Electric provided no evidence as to whether the wind factor was above or below normal for the test year and no data to support the adjustment actually proposed. The staff report cited by Iowa Electric suggests that wind can have an effect on usage by weather sensitive customers; however, Iowa Electric still must provide enough evidence to substantiate an adjustment in this case. A similar adjustment was rejected in Iowa Electric's last case. Iowa Electric, Docket No. RPU-85-31 (October 23, 1986).

2. Actual or Contract Demand -- Large Firm; Actual or Zero Demand -- High Load Factor

Iowa Electric proposed to use the contract demand level for Large Firm customers and to not assign any demand to the high load factor customer.

(Tr. 84, 86). Consumer Advocate proposed the use of actual peak demand amounts for these customers. (Tr. 1047; 1050-51). Iowa Electric witness stated actual peak demand does not reflect the conditions under which Iowa Electric determines its capacity requirements since the test year was not a record cold year and capacity was not fully utilized. (Tr. 84). According to Iowa Electric, firm customers with contracts become interruptible customers at levels above their contract demands because they are not guaranteed takes above their contracted levels. (Tr. 84). In addition, Iowa Electric provided testimony that the High Load Factor customer does not use any of Iowa Electric's facilities. (Tr. 86).

Consumer Advocate argued Iowa Electric's proposed Large Firm customer demand is inconsistent with the use of noncoincident peak demands. According to Consumer Advocate, under normal operating conditions, Large Firm customers demand much more gas during peak periods than their contract demand amounts and a non-coincident peak demand method recognizes the diversity of customer loads.

The Board will use the actual peak demand, rather than the contract demand level for the Large Firm customer class. There is no evidence the system was designed to serve only the adjusted peak demand of small customers and the contract demands of large firm customers. In addition, there is no evidence that Iowa Electric has insufficient capacity to deliver more than the contract demand amounts. However, since there is convincing evidence that no Iowa Electric facilities are used by the High Load Factor customer, no demand costs should be assigned to it.

3. Allocation of Costs Associated with Distribution Mains

Distribution mains make up the system of pipes which carries gas from pipeline delivery points to the customers' individual service lines and meters. The distribution mains represent about 40 percent of Iowa Electric's rate base. Both Iowa Electric and Consumer Advocate recommended that the costs related to the distribution mains be allocated based on demand. The intervenors recommended that these costs be divided into a customer component and a demand component and allocated using a minimum system pipe methodology. In rebuttal, Iowa Electric stated it can accept either a demand or a customer/demand methodology as a reasonable basis for allocating distribution mains. (Tr. 891). III concluded that only 30 percent of distribution main costs are customer related costs; IIEC used an 80 percent figure instead. (Tr. 1121). III uses a 3/4-inch diameter pipe method and IIEC uses a two-inch diameter pipe method for determining the customer component.

Consumer Advocate argued the intervenors' method should be rejected because the use of a minimum distribution system to reflect customer costs is arbitrary and leads to differing results depending on the analyst. Consumer Advocate contended the minimum distribution method is based on the false premise that distribution costs are directly related to the number of customers served by the system. In addition, according to Consumer Advocate, the minimum distribution method double counts the capacity costs for the small use customers. Consumer Advocate witness Rasmussen stated since small use customers' demands are satisfied using the minimum system, including an additional demand component is duplicative. (Tr. 1125-26).

Consumer Advocate states if the Board does adopt the minimum system advocated by the intervenors, no more than 30 percent of the costs should be considered customer related.

The Board will adopt a minimum size methodology for the distribution of allocation main costs. The intervenors' argument that a portion of the distribution mains should be allocated on a customer basis rather than solely on a distribution basis is persuasive. Customers must be connected to the distribution system with at least the minimum size pipe if they are to receive any service. Above that minimum level, the demand level of customers' usage comes into play.

According to III witness Rosenberg, the basic premise of the minimum system allocation methodology is that the cost of a minimal system necessary to connect customers to the gas system should be allocated to the customer component of costs and the remainder to the demand component. (Tr. 1154-56). III witness Rosenberg contended the demand allocation studies presented by Iowa Electric and Consumer Advocate failed to recognize the customer related component of distribution main investment and over-allocates costs to customers whose share of demand exceeds their share of the number of customers. (Tr. 1155). The witness stated although the size of mains is a function of peak day volumes, the lineal feet of mains is dependent on the number of customers served. According to III, using a 3/4-inch main "inch-foot" method to represent the minimum system, roughly 30 percent of Iowa Electric's mains should be classified as customer related. (Tr. 1156).

IIEC witness Dahlen recommended the use of a minimum system approach with a two-inch main. (Tr. 1327). According to the witness, a two-inch system represents 80.9 percent of Iowa Electric's distribution mains investment. (Tr. 1328). IIEC stated Consumer Advocate's argument that the minimum distribution system double counts capacity costs for small use customers is false because there is some component of costs that is customer related and some that is demand-related.

The Board will adopt the 3/4 inch "inch-foot" minimum system methodology recommended by III witness Rosenberg. A portion of the distribution mains should be allocated on a customer basis, rather than solely on a demand basis. It is clear the distribution system must connect each customer to the overall system as well as be sufficient for peak demand. Although Consumer Advocate is correct in stating the minimum system is subject to the application of judgment, all methods designed to allocate these costs, including the demand method utilized by Consumer Advocate, are necessarily subject to judgment. Also, the Consumer Advocate assertion that the minimum system double counts was refuted by testimony which established that small use customers could not be adequately served by a system comprised solely of 3/4-inch or two-inch pipe. The allocation of a portion of these costs on a customer basis rather than solely on a demand basis is a more accurate model of how these costs should be allocated. The 3/4 inch "inch-foot" minimum system proposed by Dr. Rosenberg is the better of the proposed minimum distribution systems because it provides a better balance between the concepts of connecting all customers versus meeting peak demand.

4. Direct Allocation of Distribution Main Costs

III witness Rosenberg also proposed to assign directly distribution main costs to the two Large Firm customers. III argued that direct assignment should be preferred over other allocation methods. The proposed assignment would assign nine miles to these two customers, rather than the 16 miles which would be allocated through other methods. (Tr. 1183). Dr. Rosenberg contended this adjustment does not result in "vintaging" of distribution systems because average costs were used rather than specific costs. (Tr. 1183). Consumer Advocate argued this direct assignment is inappropriate because the mains serve other customers besides the Large Firm. (Tr. 1127).

The Board will not assign these costs directly. Although direct assignments are preferable where a direct and exclusive cost causation relationship exists, it is not appropriate in this case. A distribution system is interdependent and interrelated. The pipe III wishes to directly assign is used by other customers. III has not presented a clear case for direct assignment. Accordingly, the Board will reject this proposed adjustment to the class cost-of-service study.

5. Separate Transportation Class

Consumer Advocate witness Rasmussen proposed a separate class for transportation customers. (Tr. 1103). According to Consumer Advocate, a separate class should be created because the service provided to transportation customers is different than the service provided to all other customers. Consumer Advocate stated unless the costs are separated, there is no way of knowing whether their costs are different.

Iowa Electric argued the only difference between a supply customer and a transportation customer is the source of the gas consumed, not the non-gas costs of serving the customer. (Tr. 895). In addition, Iowa Electric stated, all transportation customers are put into one class in Consumer Advocate's study, ignoring distinct class differences among the transportation customers. (Tr. 895). III argued certain costs relating to the gas component of rates -- the gas prepayments component of cash working capital and uncollectible expense -- should be allocated differently to transportation service. III proposed gas prepayments should not be allocated to transportation and that uncollectible expense be allocated on the basis of total class revenue, not just the non-gas portion. (Tr. 1157-58).

The Board will reject Consumer Advocate's proposed separate transportation class. The record does not demonstrate there are materially different load and cost characteristics between transportation and sales customers. The Board will, however, adopt III's proposed allocation of the gas prepayments component of cash working capital and uncollectible expense to transportation customers. In addition, for comparative purposes the Board also directs Iowa Electric to prepare an additional class cost-of-service study with a separate transportation class for its next rate case.

6. Gas Load Research

Consumer Advocate argued the Board should require Iowa Electric to conduct gas load research in order to provide a more accurate cost-of-service study. Iowa Electric responded this would be unnecessary and expensive. Since Iowa Electric will most likely be directed to conduct

load research in connection with the implementation of plans for energy efficiency, the Board will not direct it to conduct research in connection with this rate case.

VIII. RATE DESIGN

The parties have presented two rate design issues. First, the parties disagree as to the size of the customer charge increase. Second, the parties disagree as to whether a flat rate or a seasonal declining block rate structure should be used.

1. Customer Charges and Class Revenues

Iowa Electric proposed to increase the customer charge for residential customers by 50 percent. (Ex. 4, Sch. D). This would increase the charge for residential customers from \$5.00 to \$7.50. In Iowa Electric's study, the customer charges for other classes would range from \$15.00 to \$45.00. (Ex. 4, Sch. D).

Consumer Advocate proposed an increase of 30 percent for residential customers. (Tr. 1110-11). The customer charge would be raised from \$5.00 to \$6.45 for residential customers and would range from \$19.60 to \$290.00 for other customers. According to Consumer Advocate, its study shows that insufficient revenues are being collected from the Residential, Small Firm, and Small Interruptible classes and excess revenues are being collected from the Large Interruptible, Large Firm, and Transportation classes. (Tr. 1105). Consumer Advocate's recommendations reflect changes only to the Residential, Large Interruptible, and Large Firm classes because, Consumer Advocate argued, the gap between actual revenues for the Small Firm and Small Interruptible is insignificant. (Tr. 1105). In addition, Consumer

Advocate argued the rates for the Transportation class should not be reduced, in order to provide revenue security.

The Board finds the customer charges and class revenues in Iowa Electric's study to be the more reasonable. Although both Iowa Electric's residential customer charges and Consumer Advocate's customer charges recover nearly 100 percent of the customer costs allocated to the residential class, Consumer Advocate proposed an 850 percent increase to the Large Interruptible class. (Tr. 899-900). This is not reasonable and could possibly force some customers off Iowa Electric's system. The Board will adopt the customer charges proposed by Iowa Electric. However, to avoid an abrupt increase to Iowa Electric's residential customers, the Board will direct Iowa Electric to phase in the increased customer charge at \$6.45 initially, increasing to \$7.50 after one year with corresponding reductions to the volumetric rates.

2. Flat Rate or Seasonal Declining Block Rate Structure

Iowa Electric proposed continuation of its existing flat block rate structure. (Tr. 900-01). Consumer Advocate proposed a declining three block seasonal differentiated rate structure for the residential and small firm/interruptible classes. (Tr. 1112). Iowa Electric's proposed rate structure is non-seasonal and Consumer Advocate's proposed rate structure would retain the existing non-gas seasonal differential. (Tr. 883-84; 1112).

Iowa Electric stated declining block rates had been eliminated in Iowa Electric, Docket No. RPU-85-31 (October 23, 1986)), based on Iowa Electric's demonstration that load factors did not improve as usage

increased. (Tr. 901). Iowa Electric argued since non-gas costs are fixed, a non-seasonal, flat non-gas rate is necessarily implied. According to Iowa Electric, in earlier cases, a seasonal differential was approved because, at that time, gas prices did not reflect seasonal differences. Since that time, market forces have created a seasonal pricing pattern for gas costs.

According to Consumer Advocate, under Iowa Electric's proposal, customers using small amounts of gas would not pay enough to cover their fixed costs while customers with higher usage would pay more. (Tr. 1112-13). The Consumer Advocate witness testified a three-block rate structure is more appropriate because the fixed costs of non-gas rates are ignored by using one block. (Tr. 1114).

The Board will adopt the rate design proposed by Iowa Electric. The single block is more appropriate in this case. The Board will not retain the non-gas cost seasonal differential proposed by Consumer Advocate. It is clear gas costs sufficiently track the seasonal differential.

IX. FINDINGS OF FACT

1. It is reasonable to adjust rate base to reflect all plant-in-service during the test year.
2. It is reasonable to include a .8 day period to represent mail lag in calculating the bill collection period for purposes of the revenue collection lag.
3. The evidence does not support the adoption of a .8 day period to represent check float in calculating the working capital.

4. In this proceeding, Iowa Electric's revenue collection lag is 34.4 days.

5. It is reasonable to remove the injury and damage accruals and uncollectible account reserves from cash working capital in rate base.

6. It is unreasonable to eliminate from rate base the accumulated deferred federal income taxes associated with contributions in aid of construction.

7. It is unreasonable to adjust revenues to reflect a change in revenue due to Grain Processing Corporation's completion of a direct connection to Natural Gas Pipeline Company of America.

8. The evidence does not support an adjustment to reduce revenues to reflect an increase in test year net revenues resulting from flexible rate discounts.

9. With the exception of all large interruptible and contract customers, it is reasonable to adjust revenues to reflect normal weather.

10. It is reasonable to set a representative amount in rates for recovery of the costs of former manufactured gas plant sites by including the sum of one-half of test period costs and actual 1989 expenses.

11. It is reasonable to adjust test year salaries and wages to reflect the annualization of 1988 and 1989 wage increases.

12. It is reasonable to adjust test year FICA tax expense to reflect the annualization of 1988 and 1989 wage increases.

13. It is reasonable to adjust test year medical insurance expense using the test year average number of participants to reflect an increase in medicare premiums.

14. The evidence does not support an adjustment to test year injuries and damages expense to reflect the deductible amount Iowa Electric paid for a single claim.

15. The evidence does not support an adjustment to test year liability insurance expense to reflect the 1989 return of a cash reserve refund for director's and officer's liability insurance.

16. It is reasonable to allow Iowa Electric to collect one-third of the total actual rate case expense.

17. It is reasonable to adjust test year hospitalization insurance expense using the test year average number of participants to reflect an increase in hospitalization insurance costs.

18. It is reasonable to adjust property taxes to reflect the property taxes payable in September 1989 and March 1990.

19. The evidence does not show lobbying expenses have been excluded from membership dues to various chambers of commerce; therefore, it is reasonable to reduce test year expenses by the total amount of the dues.

20. It is reasonable to reduce test year expense by 30 percent of the expenses associated with the Management Incentive Compensation Plan to reflect the average percentage factor of the expense associated with corporate performance.

21. It is reasonable to include the test year expense related to the Outstanding Performance Award Program.

22. It is reasonable to eliminate a credit to the long-term incentive compensation program booked during 1988 to reverse a prior year's overaccrual.

23. It is reasonable to include an annualization of the expenses of the long-term incentive program.

24. It is unreasonable to use 1989 annualized amounts for bad debt expense.

25. It is reasonable to use 86.99 percent, the average of total assets, operating revenues, and officer time, as the allocator for non-directly assignable costs allocated and billed from IE Industries to Iowa Electric.

26. The evidence supports an adjustment to disallow as a test year expense all aircraft costs over and above the average rate paid by Teleconnect.

27. It is reasonable to adjust test year expense to remove the costs of the Introspect Study since the evidence shows it is primarily an electric operations study and will not result in net savings for the gas operations in the foreseeable future.

28. It is reasonable to match 12 months of income tax expense with adjusted test year revenues.

29. It is reasonable to adjust expenses to reflect the interest on customer deposits and the income tax effect of that interest.

30. It is reasonable to calculate interest synchronization utilizing the weighted cost of debt included in the rate of return.

31. It is reasonable to eliminate the collection of deferred income taxes since the deferred tax balance will be fully prorated by Iowa Electric on June 30, 1990.

32. It is reasonable to match the income taxes associated with the PGA expense with the amount included in the cost of service.

33. It is reasonable to require the use of flow-through accounting for tax/book timing differences that are property-related where permitted by law.

34. It is reasonable to match the income taxes associated with the gas in storage expense with the amount included in the cost-of-service.

35. It is reasonable to match the income taxes associated with the insurance reserve expense with the amount included in the revenue requirement.

36. It is reasonable to match the income taxes associated with the rate case expense with the amount included in the revenue requirement.

37. It is reasonable to match the income taxes associated with the estimated liability expense with the amount included in the revenue requirement.

38. It is reasonable to match the income taxes associated with the deferred compensation, restricted stock, and bond redemption expense with the amount included in the revenue requirement.

39. It is reasonable to allow Iowa Electric to normalize federal taxes associated with CIACs until the effective date of Income Taxes on Construction Advances, Docket No. RMU-89-26.

40. It is unreasonable to include the state taxes associated with CIACs in the cost-of-service.

41. The evidence shows that double leveraging does not exist for Iowa Electric and IE Industries.

42. It is reasonable to include in the capital structure the 13-month average balances of new debt and redeemed debt.

43. It is reasonable to roll over the redeemed debt at the new cost rate.

44. It is reasonable to exclude the unamortized debt discount and premium expense in the capital structure.

45. Using the traditional method, the cost of debt is 8.504 percent.

46. It is reasonable to remove \$27,208 from the equity amount and add it to the preferred/preference stock.

47. Using the traditional method, the cost rate for preferred stock is 6.722 percent.

48. It is reasonable to include the unamortized balance of net proceeds less than par in calculating the cost of preferred stock.

49. It is reasonable to add to the equity amount the 13-month average balance of the unamortized call premiums related to the October 1, 1986, redemption of preferred stock.

50. It is reasonable to consider the DCF formula in determining the cost of equity.

51. It is unreasonable to perform the DCF calculation using a proxy group of gas utilities.

52. It is proper to use a risk premium analysis to test the reasonableness of the return on equity.

53. The proper dividend yield for use in this proceeding is 8.79 percent.

54. A reasonable growth rate is three percent.

55. The application of a risk premium to the rate for Iowa Electric supports a range of 12.1 to 13.1 percent.

56. The evidence supports a return on equity of 12.3 percent.

57. It is reasonable to adjust the return on equity by 15 basis points to reflect the volatility of the gas industry.

58. It is reasonable to utilize the design day temperature demand proposed by Iowa Electric for the Residential class.

59. It is reasonable to use actual peak demand for the Small Firm/Interruptible customer classes.

60. The evidence does not support a wind adjustment for purpose of the class cost-of-service study..

61. It is reasonable to use actual peak demand for the Large Firm customer class.

62. It is reasonable not to assign demand costs to the High Load Factor customer class.

63. It is reasonable to use the 3/4 inch "inch-foot" minimum size methodology for the allocation of distribution main costs.

64. It is unreasonable to assign directly distribution main costs to Large Firm customers.

65. The evidence does not support the creation of a separate transportation class.

66. The customer charges in Iowa Electric's rate design study are reasonable.

67. It is reasonable to design rates using a single block methodology.

68. The evidence does not support a non-gas rate seasonal differential.

69. Iowa Electric's revenue requirement is \$101,874,273.

70. Iowa Electric's rate base is \$40,814,488.

71. Iowa Electric's proposed tariffs, identified as TF-89-316 and TF-89-315, are unjust and unreasonable.

X. CONCLUSIONS OF LAW

The Board has jurisdiction of the parties and subject matter of this proceeding pursuant to the provisions of IOWA CODE ch. 476 (1990).

XI. ORDERING CLAUSES

IT IS THEREFORE ORDERED:

1. The proposed tariffs filed by Iowa Electric Light and Power Company, identified as TF-89-316 and TF-89-315, and made subject to investigation as part of this proceeding are declared to be unjust, unreasonable, and unlawful.

2. On or before the expiration of 45 days from the date of this order, Iowa Electric Light and Power Company shall file a revised cost-of-service study and revised tariffs setting schedules of gas rates in

compliance with each of the findings of this order and the summary attachments and schedules attached to and incorporated by reference. The numbers in the attachments and schedules have been rounded. The compliance tariffs shall become effective upon approval by the Board.

3. Within 60 days from the date of this order, Iowa Electric shall submit for the Board's consideration and approval, a plan by which refunds shall be made to customers in accordance with the findings contained in this order.

4. Commencing 90 days from the date of this order, Iowa Electric shall submit a report on expenditures and third party recovery related to former manufactured gas plant sites. Iowa Electric shall file reports on a quarterly basis thereafter.

5. One year from the date of this order, Iowa Electric shall submit a report on the status of negotiations with government agencies regarding former manufactured gas plant sites. Iowa Electric shall file an annual report thereafter.

6. Motions and objections not previously granted or sustained are denied or overruled. Any argument in the initial or reply briefs not addressed specifically in this order is rejected either as not supported by

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Page 79

the evidence or as not being of sufficient persuasiveness to warrant
comments.

UTILITIES BOARD

Annis J. Nagel

Paul Truesdell

ATTEST:

Raymond H. Carter
Executive Secretary

Nancy Shumanek Boyd

Dated at Des Moines, Iowa, this 30th day of April, 1990.

Iowa Electric Light and Power Company
Index of Schedules Attached to the Final Decision and Order
Docket Number RPU-89-3

| | |
|------------------------|---|
| Schedule A - 1 Page: | Revenue Requirement Calculation |
| Schedule B - 1 Page: | Adjusted Total Rate Base |
| Schedule C - 1 Page: | Rate of Return |
| Schedule D - 1 Page: | Adjusted Income Statement |
| Schedule E - 2 Pages: | Adjustments to the Rate Base |
| Schedule F - 11 Pages: | Adjustments to the Income Statement |
| Schedule G - 1 Page: | Calculation of Interest Synchronization |

Schedule A
Final Rates

Iowa Electric Light & Power Co.
Revenue Requirement
Test Year Ending 12/31/88
RPU-89-3

| Line No. | Description | Amounts |
|----------|----------------------------------|-------------------------------|
| 1 | Rate Base | \$40,814,488 |
| 2 | Rate of Return | 10.34% |
| 3 | Required Return | <u>\$4,219,859</u> |
| 4 | Less: Adjusted Operating Income | \$2,103,641 |
| 5 | Net Operating Income Deficiency | <u>\$2,116,218</u> |
| 6 | Income Tax | \$1,453,048 |
| 7 | Revenue Deficiency | <u>\$3,569,266</u> |
| 8 | Plus: Adjusted Test Year Revenue | \$98,305,007 |
| 9 | Revenue Requirement | <u>\$101,874,273</u> ===== |

NOTE: The rate of return is rounded to the nearest one hundredth of a percent. Therefore, the numbers may not precisely mathematically compute due to rounding.

Schedule B
Final Rates

Iowa Electric Light & Power Co.
Adjusted Total Rate Base
Test Year Ending 12/31/88
RPU-89-3

| Line No. | Description | Adjusted Rate Base |
|----------|--|----------------------------|
| 1 | Utility Plant in Service | \$72,417,887 |
| 2 | Accum. Depreciation & Amortization | (\$27,606,139) |
| 3 | Net Utility Plant in Service | <u>\$44,811,748</u> |
| 4 | Accumulated Deferred Taxes | (\$5,902,038) |
| 5 | Accumulated Deferred 3% ITC | (\$142,187) |
| 6 | Customer Advances for Construction | (\$269,405) |
| 7 | Customer Deposits | (\$527,319) |
| 8 | Unclaimed Property | (\$78,678) |
| 9 | Accum. Provision for Uncollectibles | (\$58,679) |
| 10 | Accrued Liab. for Injuries & Damages | (\$75,559) |
| 11 | Accrued Pension Fund Contributions | (\$24,076) |
| 12 | Accrued Employee Deferred Compensation | (\$35,499) |
| | Working Capital: | |
| 13 | Cash Working Capital Requirements | (\$1,761,596) |
| 14 | Materials and Supplies | \$541,672 |
| 15 | Prepayments | \$4,279,325 |
| 16 | Reaquired Debt | (\$1,916) |
| 17 | Connection Fees | \$40,736 |
| 18 | CIAC's | \$17,959 |
| 19 | Total Rate Base | <u><u>\$40,814,488</u></u> |

Iowa Electric Light & Power Co.
Rate of Return
Test Year Ending 12/31/88
RPU-89-3

Iowa Electric Light and Power Company Capital Structure

| Line No. | Description | Amount (A) | Ratio (B) | Rate (C) | Weighted Rate (D) |
|----------|------------------|---------------|-----------|----------|-------------------|
| 1 | Long-Term Debt | \$234,891,896 | 46.08% | 8.50% | 3.92% |
| 2 | Preferred Equity | \$26,025,428 | 5.11% | 6.72% | 0.34% |
| 3 | Common Equity | \$248,802,345 | 48.81% | 12.45% | 6.08% |
| 4 | Total | \$509,719,669 | 100.00% | - | 10.34% |

NOTE: The percentages are rounded to the nearest one hundredth of a percent. Therefore, the numbers may not precisely mathematically compute due to rounding.

Iowa Electric Light & Power Co.
Adjusted Income Statement
Test Year Ending 12/31/88
RPU-89-3

| Line No. | Description | Adjusted Income Statement |
|----------|-----------------------------|---------------------------|
| 1 | Operating Revenues | \$98,305,007 |
| | Operating Expenses | |
| 2 | Gas Purchased for Resale | \$78,614,238 |
| 3 | Change in PGA | \$0 |
| 4 | Other Operation Expenses | \$13,496,832 |
| 5 | Maintenance Expenses | \$894,552 |
| 6 | Depreciation & Amortization | \$2,088,076 |
| 7 | Property Taxes | \$1,446,402 |
| | Income Taxes | |
| 8 | Federal-Current | (\$561,653) |
| 9 | State-Current | (\$81,735) |
| 10 | Deferred | \$8,436 |
| 11 | Investment Tax Credits | (\$120,624) |
| 12 | Miscellaneous Taxes | \$416,842 |
| 13 | Total Operating Expenses | \$96,201,366 |
| 14 | Operating Income (Loss) | \$2,103,641 |

Iowa Electric Light & Power Co.

Rate Base

Test Year Ending 12/31/88

RPU-89-3

Schedule E

Page 1 of 2

Final Rates

| Line No. | Description | 13 Month Average of Booked Amounts (A) | Cash Working Capital Adjustment (B) | Affiliate Allocation Adjustment (C) | Plant in Service not Booked (D) | Adjusted Total (E) |
|----------|--|--|---|--|--|--------------------------|
| 1 | Utility Plant in Service | \$71,968,023 | | | \$449,864 | \$72,417,887 |
| 2 | Accum. Depreciation & Amortization | (\$27,853,624) | | | (\$247,485) | (\$27,606,139) |
| 3 | Net Utility Plant in Service | \$44,114,399 | | | \$697,349 | \$44,811,748 |
| 4 | Accumulated Deferred Taxes | (\$5,902,038) | | | | (\$5,902,038) |
| 5 | Accumulated Deferred 3% ITC | (\$142,187) | | | | (\$142,187) |
| 6 | Customer Advances for Construction | (\$269,405) | | | | (\$269,405) |
| 7 | Customer Deposits | (\$527,319) | | | | (\$527,319) |
| 8 | Unclaimed Property | (\$78,678) | | | | (\$78,678) |
| 9 | Accum. Provision for Uncollectibles | (\$58,679) | | | | (\$58,679) |
| 10 | Accrued Liab. for Injuries & Damages | (\$75,559) | | | | (\$75,559) |
| 11 | Accrued Pension Fund Contributions | (\$24,076) | | | | (\$24,076) |
| 12 | Accrued Employee Deferred Compensation | (\$35,499) | | | | (\$35,499) |
| | Working Capital: | | | | | |
| 13 | Cash Working Capital Requirements | (\$1,661,056) | (\$100,540) | | | (\$1,761,596) |
| 14 | Materials and Supplies | \$541,672 | | | | \$541,672 |
| 15 | Prepayments | \$4,284,801 | | (\$5,476) | | \$4,279,325 |
| 16 | Reacquired Debt | (\$1,916) | | | | (\$1,916) |
| 17 | Connection Fees | \$40,736 | | | | \$40,736 |
| 18 | CIAC'S | \$17,959 | | | | \$17,959 |
| 19 | TOTAL RATE BASE | \$40,223,155 | (\$100,540) | (\$5,476) | \$697,349 | \$40,814,488 |

| Source: | Exhibit(s) | 101 | Board | Board | 9 | Board |
|---------|-------------|-----|-------|-------|---|---------|
| | Schedule(s) | 2 | E | F | 4 | E |
| | Page(s) | 1 | 2 | 9 | | 1 |
| | Column(s) | B | I | O | | SUM A-D |
| | Line(s) | | 29 | 26 | | |

Iowa Electric Light & Power Co.
Rate Base-Working Capital
Test Year Ending 12/31/88
RPU-89-3

Schedule E
Page 2 of 2
Final Rates

| Line No. | Description | Rev. | Exp. | Net | Amount | Expense | Cash | Adjustments to Test Year | Expense | Cash |
|-------------------------------------|---------------------------------|---------|----------|----------|--------------|-------------|-----------------|--------------------------|-------------|-----------------|
| | | Lag (A) | Lead (B) | Days (C) | | Per Day (E) | Requirement (F) | | Per Day (H) | Requirement (I) |
| Labor | | | | | | | | | | |
| 1 | Field Bi-weekly | 34.4 | 13.0 | 21.4 | \$3,671,595 | \$10,032 | \$214,678 | | \$0 | \$0 |
| 2 | Gen. Office Bi-weekly | 34.4 | 6.0 | 28.4 | \$340,827 | \$931 | \$26,447 | | \$0 | \$0 |
| 3 | Semi-monthly | 34.4 | 8.6 | 25.8 | \$2,845,246 | \$7,774 | \$200,567 | | \$0 | \$0 |
| | | | | 23.6 | \$6,857,668 | \$18,737 | \$441,691 | \$223,773 | \$611 | \$14,413 |
| Pipeline Suppliers: | | | | | | | | | | |
| 4 | Northern Natural | 34.4 | 39.3 | -4.9 | \$46,505,102 | \$127,063 | (\$622,609) | | \$0 | \$0 |
| 5 | Natural Gas Pipeline | 34.4 | 33.3 | 1.1 | \$10,182,943 | \$27,822 | \$30,604 | | \$0 | \$0 |
| 6 | ANR | 34.4 | 33.3 | 1.1 | \$1,708,839 | \$4,669 | \$5,136 | | \$0 | \$0 |
| | | | | | | | | | \$0 | \$0 |
| Spot Gas Suppliers | | | | | | | | | | |
| 7 | Colony Energy | 34.4 | 40.3 | -5.9 | \$15,282,914 | \$41,757 | (\$246,364) | | \$0 | \$0 |
| 8 | Mobile Natural Gas | 34.4 | 35.3 | -0.9 | \$1,409,170 | \$3,850 | (\$3,465) | | \$0 | \$0 |
| 9 | PSI Inc. | 34.4 | 35.3 | -0.9 | \$1,158,247 | \$3,165 | (\$2,848) | | \$0 | \$0 |
| 10 | LADD Gas Marketing | 34.4 | 40.3 | -5.9 | \$202,740 | \$554 | (\$3,268) | | \$0 | \$0 |
| 11 | Midcon Marketing | 34.4 | 35.3 | -0.9 | \$227,046 | \$620 | (\$558) | | \$0 | \$0 |
| 12 | Total Natural Gas | | | -4.0 | \$76,677,001 | \$209,500 | (\$843,373) | \$509,631 | \$1,392 | (\$5,605) |
| Other Operation & Maint. | | | | | | | | | | |
| 13 | Total Oper. & Maint. | | | | \$94,031,540 | | | (\$3,190,567) | | |
| 14 | Less: Labor | | | | \$6,857,668 | | | | | |
| 15 | Less: Natural Gas | | | | \$76,677,001 | | | | | |
| 16 | Less: Uncollectibles | | | | \$346,877 | | | \$0 | | |
| 17 | Less: Injuries & Damages | | | | \$198,860 | | | \$198,860 | | |
| 18 | Less: Rate Case Expense | | | | \$85,644 | | | (\$48,238) | | |
| 19 | Total Other O & M | 34.4 | 21.8 | 12.6 | \$9,865,490 | \$26,955 | \$339,632 | (\$3,039,945) | (\$8,306) | (\$104,654) |
| Other | | | | | | | | | | |
| 20 | Property Taxes | 34.4 | 365.1 | -330.7 | \$1,344,042 | \$3,672 | (\$1,214,412) | \$102,360 | \$280 | (\$92,488) |
| 21 | Federal Income Taxes | 34.4 | 23.8 | 10.6 | \$1,274,700 | \$3,483 | \$36,918 | (\$746,299)* | (\$2,039) | (\$21,614) |
| 22 | State Income Taxes | 34.4 | 137.8 | -103.4 | \$599,886 | \$1,639 | (\$169,476) | (\$318,626)* | (\$871) | \$90,016 |
| 23 | Interest on L-T Debt | 34.4 | 91.5 | -57.1 | \$1,705,730 | \$4,660 | (\$266,113) | (\$106,267) | (\$290) | \$16,579 |
| 24 | Preferred Dividends | 34.4 | 45.8 | -11.4 | \$117,176 | \$320 | (\$3,650) | \$22,905 | \$63 | (\$713) |
| 25 | FICA Taxes | 34.4 | 16.6 | 17.8 | \$365,124 | \$998 | \$17,757 | \$17,099 | \$47 | \$832 |
| 26 | Fed. Unemploy. Taxes | 34.4 | -33.9 | 68.3 | \$7,419 | \$20 | \$1,384 | | \$0 | \$0 |
| 27 | State Unemploy. Taxes | 34.4 | -15.0 | 49.4 | (\$10,488) | (\$29) | (\$1,416) | \$19,966 | \$55 | \$2,695 |
| 28 | Total Other | | | | \$5,403,589 | \$14,764 | (\$1,599,006) | (\$1,008,862) | \$101 | (\$4,694) |
| 29 | Total | | | | | | (\$1,661,056) | | | (\$100,540) |
| ===== | | | | | | | | | | |
| Source: | Exhibit(s) | 101 | Board | 9 | Board | Board | Board | Board | Board | Board |
| | Schedule(s) | 2 | E | 5 | E | E | ALL | E | E | E |
| | Page(s) | 2 | 2 | 1 | 2 | 2 | | 2 | 2 | 2 |
| | Column(s) | F | A-B | | D/366 | C*E | | G/366 | | C*E |

* Includes additional taxes associated with the increase in revenues.

Iowa Electric Light & Power Co.
Adjusted Income Statement
Test Year Ending 12/31/88
RPU-89-3

Schedule F
Page 1 of 11
Final Rates

| Line No. | Description | Unadjusted Actual Test Year Ending 12/31/88 (A) | Total Adjustments (B) | Adjusted Test Year (C) |
|----------|-----------------------------|---|-----------------------|------------------------|
| 1 | Operating Revenues | \$101,942,149 | (\$3,637,142) | \$98,305,007 |
| | Operating Expenses | | | |
| 2 | Gas Purchased for Resale | \$83,104,607 | (\$4,490,369) | \$78,614,238 |
| 3 | Change in PGA | \$3,342,863 | (\$3,342,863) | \$0 |
| 4 | Other Operation Expenses | \$13,136,114 | \$360,718 | \$13,496,832 |
| 5 | Maintenance Expenses | \$879,201 | \$15,351 | \$894,552 |
| 6 | Depreciation & Amortization | \$2,088,076 | \$0 | \$2,088,076 |
| 7 | Property Taxes | \$1,344,042 | \$102,360 | \$1,446,402 |
| | Income Taxes | | | |
| 8 | Federal-Current | \$1,274,700 | (\$1,836,353) | (\$561,653) |
| 9 | State-Current | \$599,886 | (\$681,621) | (\$81,735) |
| 10 | Deferred | (\$4,315,825) | \$4,324,261 | \$8,436 |
| 11 | Investment Tax Credits | (\$100,945) | (\$19,679) | (\$120,624) |
| 12 | Miscellaneous Taxes | \$379,777 | \$37,065 | \$416,842 |
| 13 | Total Operating Expenses | \$101,732,496 | (\$5,531,130) | \$96,201,366 |
| 14 | Operating Income (Loss) | \$209,653 | \$1,893,988 | \$2,103,641 |

| | | | | |
|---------|-------------|------|-------|-------|
| Source: | Exhibit(s) | 101 | Board | Board |
| | Schedule(s) | 3 | F | F |
| | Page(s) | 1 | 6 | 1 |
| | Column(s) | B | AT | A - B |
| | Line(s) | 1-14 | 1-14 | |

Iowa Electric Light & Power Co.
 Adjustments to the Income Statement
 Test Year Ending 12/31/88
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 Final Rates

| Line No. | Description | Revenue Adjustments (A) | Not Used (B) | Eliminate Estimated Liability to Pipeline Suppliers (C) | Not Used (D) | Gas Cost Adjustments (E) | Manufactured Gas Site Assessment & Cleanup Costs (F) |
|----------|-----------------------------|----------------------------|-----------------|--|-----------------|-----------------------------|---|
| 1 | Operating Revenues | (\$3,637,142) | | | | | |
| | Operating Expenses | | | | | | |
| 2 | Gas Purchased for Resale | | | (\$5,000,000) | | \$509,631 | |
| 3 | Change in PGA | | | | | (\$3,342,863) | |
| 4 | Other Operation Expenses | | | | | | \$520,651 |
| 5 | Maintenance Expenses | | | | | | |
| 6 | Depreciation & Amortization | | | | | | |
| 7 | Property Taxes | | | | | | |
| | Income Taxes | | | | | | |
| 8 | Federal-Current | (\$1,110,783) | | | | \$865,269 | (\$159,007) |
| 9 | State-Current | (\$369,897) | | | | \$288,140 | (\$52,950) |
| 10 | Deferred | | | \$2,035,500 | | | |
| 11 | Investment Tax Credits | | | | | | |
| 12 | Miscellaneous Taxes | | | | | | |
| 13 | Total Operating Expenses | (\$1,480,681) | \$0 | (\$2,964,500) | \$0 | (\$1,679,823) | \$308,694 |
| 14 | Operating Income (Loss) | (\$2,156,462) | \$0 | \$2,964,500 | \$0 | \$1,679,823 | (\$308,694) |

| Source: | Exhibit(s) | Board | 101 | 101 | Test Year |
|---------|-------------|-------|-----|-----|--------------|
| | Schedule(s) | F | 3 | 3 | Amount Plus |
| | Page(s) | 10 | 2 | 2 | 1989 Amount |
| | Column(s) | C | D | C | Divided by 2 |
| | Line(s) | 8 | | | |

Iowa Electric Light & Power Co.
Adjustments to the Income Statement
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Final Rates

| Line No. Description | Salaries & Wages (G) | Medicare Supplementary Medical Ins. (H) | Injuries & Damages (I) | Not Used (J) | Interest on Customer Deposits (K) | Directors' and Officers' Liability Insurance (L) | Rate Case Expense (M) |
|-------------------------------|----------------------------|--|------------------------------|--------------------|---|---|--------------------------------|
| 1 Operating Revenues | | | | | | | |
| Operating Expenses | | | | | | | |
| 2 Gas Purchased for Resale | | | | | | | |
| 3 Change in PGA | | | | | | | |
| 4 Other Operation Expenses | \$208,422 | \$3,418 | (\$198,860) | | \$70,179 | (\$37,994) | \$48,238 |
| 5 Maintenance Expenses | \$15,351 | | | | | | |
| 6 Depreciation & Amortization | | | | | | | |
| 7 Property Taxes | | | | | | | |
| Income Taxes | | | | | | | |
| 8 Federal-Current | (\$68,340) | (\$1,044) | \$60,732 | | (\$21,433) | \$11,603 | (\$14,732) |
| 9 State-Current | (\$22,758) | (\$348) | \$20,224 | | (\$7,137) | \$3,864 | (\$4,906) |
| 10 Deferred | | | | | | | |
| 11 Investment Tax Credits | | | | | | | |
| 12 Miscellaneous Taxes | | | | | | | |
| 13 Total Operating Expenses | \$132,675 | \$2,027 | (\$117,904) | \$0 | \$41,609 | (\$22,527) | \$28,600 |
| 14 Operating Income (Loss) | (\$132,675) | (\$2,027) | \$117,904 | \$0 | (\$41,609) | \$22,527 | (\$28,600) |
| ===== | | | | | | | |
| Source: | Exhibit(s) | 9 | 101 | 101 | 101 | 9 | Reverse TY |
| | Schedule(s) | 2 | 3 | 3 | 3 | 2 | \$85,644 |
| | Page(s) | 1 | 2 | 2 | 2A | 1 | Plus 1/3 of |
| | Column(s) | 6 | G | H | I | 11 | \$401,645 |
| | Line(s) | | | | | | |

Iowa Electric Light & Power Co.
Adjustments to the Income Statement
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Final Rates

| Line No. | Description | IE Tower Lease Payments (N) | Auto. Insurance (O) | Hospitalization Costs (P) | Long-Term Incentive Compensation (Q) | Misc. Costs Eliminated (R) | Property Tax Expense (S) | FICA Taxes (T) |
|----------|-----------------------------|-----------------------------|---------------------|---------------------------|--------------------------------------|----------------------------|--------------------------|----------------|
| 1 | Operating Revenues | | | | | | | |
| | Operating Expenses | | | | | | | |
| 2 | Gas Purchased for Resale | | | | | | | |
| 3 | Change in PGA | | | | | | | |
| 4 | Other Operation Expenses | \$4,786 | \$6,516 | \$27,615 | \$114,760 | (\$214,885) | | |
| 5 | Maintenance Expenses | | | | | | | |
| 6 | Depreciation & Amortization | | | | | | | |
| 7 | Property Taxes | | | | | | \$102,360 | |
| | Income Taxes | | | | | | | |
| 8 | Federal-Current | (\$1,462) | (\$1,990) | (\$8,434) | (\$35,048) | \$65,626 | (\$31,261) | (\$5,222) |
| 9 | State-Current | (\$487) | (\$663) | (\$2,808) | (\$11,671) | \$21,854 | (\$10,410) | (\$1,739) |
| 10 | Deferred | | | | | | | |
| 11 | Investment Tax Credits | | | | | | | |
| 12 | Miscellaneous Taxes | | | | | | | \$17,099 |
| 13 | Total Operating Expenses | \$2,838 | \$3,863 | \$16,373 | \$68,041 | (\$127,405) | \$60,689 | \$10,138 |
| 14 | Operating Income (Loss) | (\$2,838) | (\$3,863) | (\$16,373) | (\$68,041) | \$127,405 | (\$60,689) | (\$10,138) |
| Source: | Exhibit(s) | 101 | 101 | 101 | 9 | 9 | Transcript | 9 |
| | Schedule(s) | 3 | 3 | 3 | 2 | 2 | P. 1569 | 2 |
| | Page(s) | 2A | 2A | 2A | 1 | 1 | Line 5 | 1 |
| | Column(s) | L | M | N | 16 | 18 | | 21 |
| | Line(s) | | | | | | | |

Iowa Electric Light & Power Co.
Adjustments to the Income Statement
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Final Rates

| Line No. | Description | State Unemployment Taxes (U) | Eliminate Deferred Taxes Being Amortized Over 7 Years (V) | Interest Synchronization (W) | Strategic Planning Costs (X) | Assoc. Dues (Y) | Bonuses (Z) |
|----------|-----------------------------|------------------------------|---|------------------------------|------------------------------|-----------------|-------------|
| 1 | Operating Revenues | | | | | | |
| | Operating Expenses | | | | | | |
| 2 | Gas Purchased for Resale | | | | | | |
| 3 | Change in PGA | | | | | | |
| 4 | Other Operation Expenses | | | | (\$40,136) | (\$39,023) | (\$14,276) |
| 5 | Maintenance Expenses | | | | | | |
| 6 | Depreciation & Amortization | | | | | | |
| 7 | Property Taxes | | | | | | |
| | Income Taxes | | | | | | |
| 8 | Federal-Current | (\$6,098) | | \$32,454 | \$12,258 | \$11,918 | \$4,360 |
| 9 | State-Current | (\$2,031) | | \$10,807 | \$4,082 | \$3,969 | \$1,452 |
| 10 | Deferred | | \$12,098 | | | | |
| 11 | Investment Tax Credits | | | | | | |
| 12 | Miscellaneous Taxes | \$19,966 | | | | | |
| 13 | Total Operating Expenses | \$11,838 | \$12,098 | \$43,261 | (\$23,797) | (\$23,137) | (\$8,464) |
| 14 | Operating Income (Loss) | (\$11,838) | (\$12,098) | (\$43,261) | \$23,797 | \$23,137 | \$8,464 |
| Source: | Exhibit(s) | 101 | 9 | Board | 101 | 101 | Tr. 1763 |
| | Schedule(s) | 3 | 2 | G | 3 | 3 | |
| | Page(s) | 2B | 1 | 1 | 2B | 2B | \$47,588 |
| | Column(s) | Q | 23 | A | R | S | x .3 |
| | Line(s) | | | 6-7 | | | |

Iowa Electric Light & Power Co.
 Adjustments to the Income Statement
 Test Year Ending 12/31/88
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Schedule F
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 Final Rates

| Line No. | Description | Not Used (AA) | Not Used (AB) | Aircraft (AC) | IEI Costs (AD) | Unbilled Revenue (AE) | PGA Tax Adjust. (AF) | Gas in Storage Tax Adjust. (AG) |
|----------|-----------------------------|------------------|------------------|------------------|----------------------|-----------------------------|----------------------------|---|
| 1 | Operating Revenues | | | | | | | |
| | Operating Expenses | | | | | | | |
| 2 | Gas Purchased for Resale | | | | | | | |
| 3 | Change in PGA | | | | | | | |
| 4 | Other Operation Expenses | | | (\$74,164) | (\$24,528) | | | |
| 5 | Maintenance Expenses | | | | | | | |
| 6 | Depreciation & Amortization | | | | | | | |
| 7 | Property Taxes | | | | | | | |
| | Income Taxes | | | | | | | |
| 8 | Federal-Current | | | \$22,650 | \$7,491 | (\$367,674) | (\$908,691) | (\$181,922) |
| 9 | State-Current | | | \$7,542 | \$2,494 | (\$122,438) | (\$302,599) | (\$60,581) |
| 10 | Deferred | | | | | \$615,559 | \$1,410,438 | \$202,533 |
| 11 | Investment Tax Credits | | | | | | | |
| 12 | Miscellaneous Taxes | | | | | | | |
| 13 | Total Operating Expenses | \$0 | \$0 | (\$43,972) | (\$14,543) | \$125,447 | \$199,148 | (\$39,970) |
| 14 | Operating Income (Loss) | \$0 | \$0 | \$43,972 | \$14,543 | (\$125,447) | (\$199,148) | \$39,970 |

| | | | | | |
|---------|-------------|-------|-------|-----|-----|
| Source: | Exhibit(s) | Board | Board | 101 | 101 |
| | Schedule(s) | F | F | 3 | 3 |
| | Page(s) | 11 | 9 | 2C | 2C |
| | Column(s) | B | M | BB | CC |
| | Line(s) | 9 | 9 | | |

Iowa Electric Light & Power Co.
 Adjustments to the Income Statement
 Test Year Ending 12/31/88
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Schedule F
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 Final Rates

| Line No. | Description | Insurance | Rate | Estimated | Business | Deferred | Restricted | |
|-------------|-----------------------------|------------|------------|------------|------------|----------|------------|-----------|
| | | Reserve | Case | Liability | Meals | Comp. | Stock | |
| | Tax | CIAC Tax | Expense | Interest | Tax | Tax | Tax | |
| | Adjust. | Adjust. | Adjust. | Adjust. | Adjust. | Adjust. | Adjust. | |
| | (AH) | (AI) | (AJ) | (AK) | (AL) | (AM) | (AN) | |
| 1 | Operating Revenues | | | | | | | |
| | Operating Expenses | | | | | | | |
| 2 | Gas Purchased for Resale | | | | | | | |
| 3 | Change in PGA | | | | | | | |
| 4 | Other Operation Expenses | | | | | | | |
| 5 | Maintenance Expenses | | | | | | | |
| 6 | Depreciation & Amortization | | | | | | | |
| 7 | Property Taxes | | | | | | | |
| | Income Taxes | | | | | | | |
| 8 | Federal-Current | (\$69,522) | \$0 | (\$27,182) | (\$13,452) | (\$145) | (\$13,229) | (\$3,258) |
| 9 | State-Current | (\$23,151) | (\$14,944) | (\$9,052) | (\$4,480) | (\$48) | (\$4,404) | (\$1,085) |
| 10 | Deferred | | \$0 | \$17,932 | | \$17,633 | \$4,342 | |
| 11 | Investment Tax Credits | | | | | | | |
| 12 | Miscellaneous Taxes | | | | | | | |
| 13 | Total Operating Expenses | (\$92,673) | (\$14,944) | (\$36,234) | \$0 | (\$193) | \$0 | (\$1) |
| 14 | Operating Income (Loss) | \$92,673 | \$14,944 | \$36,234 | \$0 | \$193 | \$0 | \$1 |
| Source: | Exhibit(s) | 101 | 101 | 101 | 101 | 9 | 101 | 101 |
| | Schedule(s) | 3 | 3 | 3 | 3 | 2 | 3 | 3 |
| | Page(s) | 2D | 2D | 2D | 2D | 1 | 2D | 2D |
| | Column(s) | DD | EE | FF | GG | 24 | II | JJ |
| | Line(s) | | | | | | | |

Iowa Electric Light & Power Co.
 Adjustments to the Income Statement
 Test Year Ending 12/31/88
 RPU-89-3

Schedule F
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 Final Rates

| Line No. | Description | Bond Redemption Tax Adjust. (AO) | Out of Period Tax Adjust. (AP) | Not Used (AQ) | State Income Tax Paid on '79-'81 RAR (AR) | Not Used (AS) | Total Adjustments (AT) |
|----------|-----------------------------|----------------------------------|--------------------------------|---------------|---|---------------|------------------------|
| 1 | Operating Revenues | | | | | | (\$3,637,142) |
| | Operating Expenses | | | | | | |
| 2 | Gas Purchased for Resale | | | | | | (\$4,490,369) |
| 3 | Change in PGA | | | | | | (\$3,342,863) |
| 4 | Other Operation Expenses | | | | | | \$360,718 |
| 5 | Maintenance Expenses | | | | | | \$15,351 |
| 6 | Depreciation & Amortization | | | | | | \$0 |
| 7 | Property Taxes | | | | | | \$102,360 |
| | Income Taxes | | | | | | |
| 8 | Federal-Current | (\$3,568) | \$105,887 | | \$16,895 | | (\$1,836,353) |
| 9 | State-Current | (\$1,188) | (\$14,275) | | | | (\$681,621) |
| 10 | Deferred | \$5,973 | \$2,253 | | | | \$4,324,261 |
| 11 | Investment Tax Credits | | (\$19,679) | | | | (\$19,679) |
| 12 | Miscellaneous Taxes | | | | | | \$37,065 |
| 13 | Total Operating Expenses | \$1,217 | \$74,186 | \$0 | \$16,895 | \$0 | (\$5,531,130) |
| 14 | Operating Income (Loss) | (\$1,217) | (\$74,186) | \$0 | (\$16,895) | \$0 | \$1,893,988 |

| Source: | Exhibit(s) | 101 | 101 | | Board |
|---------|-------------|-----|-----|------------|-------------|
| | Schedule(s) | 3 | 3 | Transcript | F |
| | Page(s) | 2E | 2E | Page 1586 | 2-8 |
| | Column(s) | KK | LL | | Sum of A-AS |
| | Line(s) | | | | |

Iowa Electric Light and Power Company
 Affiliate Allocation Adjustment
 Test Year Ending 12/31/88
 RPU-89-3

Schedule F
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 Final Rates

| Line No. | Officer's Time in Lieu of Payroll % (A) | Assets (B) | Revenues (C) | Average (D) | Total Subsidiaries Amount (E) | I.E.'s Share @ 86.99% (F) |
|----------|---|------------|--------------|-------------|-------------------------------|---------------------------|
| 1 | 72.80% | 91.18% | 96.99% | 86.99% | \$1,993,083 | \$1,733,825 |

| | Total (G) | Allocator | | Realloc. | | Allocator | | Income Statement | | Rate Base |
|-------------------------------|-------------|-----------|----------------------|-------------|---------|------------------------|-------------|------------------|---------|-----------|
| | | Gas (H) | Allocated Amount (I) | Total (J) | Gas (K) | Reallocated Amount (L) | Amounts (M) | Items (N) | | |
| 2 Misc. & General 930.2 | \$1,381,651 | 24.79% | \$342,511 | \$1,282,724 | 24.79% | \$317,987 | \$24,524 | | | |
| 3 Labor 426.8 | \$96 | 21.57% | \$21 | \$89 | 21.57% | \$19 | | | | |
| 4 Outside Services 923 | \$240 | 24.79% | \$59 | \$223 | 24.79% | \$55 | \$4 | | | |
| 5 Labor 426.8 | \$1,697 | 21.57% | \$366 | \$1,575 | 21.57% | \$340 | | | | |
| 6 Prepayments-Ins. 165.100 | \$460,975 | 21.57% | \$99,432 | \$427,969 | 21.57% | \$92,313 | | | \$7,119 | |
| 7 Misc. Accrued Liab. 242.390 | \$22,884 | 21.57% | \$4,936 | \$21,245 | 21.57% | \$4,583 | | | | |
| 8 Totals | \$1,867,543 | | \$447,326 | \$1,733,825 | | \$415,297 | \$24,528 | \$7,119 | | |

9 Income Statement Adjustment (\$24,528)

| | Rate Base (O) |
|-------------------------|---------------|
| 10 December 1987 | \$0 |
| 11 January 1988 | \$0 |
| 12 February | \$0 |
| 13 March | \$7,119 |
| 14 April | \$7,119 |
| 15 May | \$7,119 |
| 16 June | \$7,119 |
| 17 July | \$7,119 |
| 18 August | \$7,119 |
| 19 Sept. | \$7,119 |
| 20 Oct. | \$7,119 |
| 21 Nov. | \$7,119 |
| 22 Dec. | \$7,119 |
| 23 13 month total | \$71,194 |
| 24 13 Month Ave. | \$5,476 |
| 25 Rate Base Adjustment | (\$5,476) |

Source: Ex. 110, Sch. B, Pgs. 1 & 2.

Iowa Electric Light and Power Company
Revenue Adjustment
Test Year Ending 12/31/88
RPU-89-3

Schedule F
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Final Rates

| Line No. | Description | Per Exhibit | Dollar | Adjusted Revenue (C) |
|----------|----------------------------|--------------------------------|---|----------------------|
| | | Schedule CEF-2 Page 8 of 8 (A) | Amount From Weather Normalizing 71 & 81 (B) | |
| 1 | Annualized Non-gas Revenue | \$19,409,974 | (\$6,405) | \$19,403,569 |
| 2 | Forfeited Discounts | \$267,866 | | \$267,866 |
| 3 | Misc. Revenue | \$6,658 | | \$6,658 |
| 4 | Other Revenue | \$12,676 | | \$12,676 |
| 5 | Total | \$19,697,174 | (\$6,405) | \$19,690,769 |
| 6 | Plus: Gas Costs | \$78,614,238 | | \$78,614,238 |
| 7 | Less: Book Revenues | \$101,942,149 | | \$101,942,149 |
| 8 | Revenue Adjustment | (\$3,630,737) | | (\$3,637,142) |

| | Weather Norm. Sales (D) | Actual Sales (E) | Difference in Sales (F) | Non-gas Rate (G) | Revenue Effect (H) |
|------------|-------------------------|------------------|-------------------------|------------------|--------------------|
| 9 Rate 71 | 295,972 | 289,560 | 6,412 | \$0.0309 | \$198 |
| 10 Rate 81 | 1,294,254 | 1,093,380 | 200,874 | \$0.0309 | \$6,207 |
| 11 Total | 1,590,226 | 1,382,940 | 207,286 | | \$6,405 |

* Per Ex. 105 Page 5 of 8

** Per Ex. 6 Sch. 2 Pages 2 & 3

Iowa Electric Light and Power Company
Aircraft Adjustment
Test Year Ending 12/31/88
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Schedule F
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Final Rates

| Line No. | Description | Amount (A) | Source (B) |
|----------|----------------------------------|-------------|-----------------------|
| 1 | I.E. Test Year Amount | \$1,073,059 | Trans. 1781 |
| 2 | I. E. Average Rate | \$5.28 | Trans. 1782 |
| 3 | Miles | 203,231 | L.1 x L.2 |
| 4 | Telecom*USA Rate | \$2.98 | Trans. 1782 |
| 5 | I. E. Amt. Based on Telecom Rate | \$605,628 | L.3 x L.4 |
| 6 | I. E. Gas Allocation | 15.87% | \$170,255/\$1,073,059 |
| 7 | I. E. Gas Amount | \$96,091 | L.5 x L.6 |
| 8 | I. E. Gas Test Year Amount | \$170,255 | * |
| 9 | Aircraft Adjustment | (\$74,164) | L.7 - L.8 |

* Ex. 101, Sch. 3, P. 2C, Col. X

Iowa Electric Light & Power Co.
Interest Synchronization
Test Year Ending 12/31/88
RPU-89-3

Schedule G
Page 1 of 1
Final Rates

| Line No. | Description | Amount (A) |
|-------------|--------------------------------|---------------|
| 1 | Rate Base | \$40,814,488 |
| 2 | Wtd. Cost of Long-Term Debt | 3.919% |
| 3 | Interest on Rate Base | \$1,599,463 |
| 4 | Test Period Interest Expense | \$1,705,730 |
| 5 | Difference (L.3 - L.4) | (\$106,267) |
| 6 | Federal Income Tax (@ 30.54%) | \$32,454 |
| 7 | State Income Tax (@ 10.17%) | \$10,807 |

Source: Workpaper D23-A

