

BEFORE THE PUBLIC SERVICE COMMISSION
OF THE STATE OF MISSOURI

In the matter of Arkansas Power & Light)
Company of Little Rock, Arkansas, for)
authority to file tariffs increasing)
rates for electric service provided to)
customers in the Missouri service area)
of the Company.)

Case No. ER-85-265

REPORT AND ORDER

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Arkansas Power & Light Company
Case No. ER-85-265

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REPORT AND ORDER

On June 7, 1985, Arkansas Power & Light Company (Company) submitted to the Missouri Public Service Commission (Commission) revised tariffs designed to increase Company's rates for electric service provided to the customers in its Missouri service area bearing a proposed effective date of July 7, 1985. The tariffs were designed to increase the Company's Missouri retail jurisdictional revenue requirements by \$5,100,000 above the existing approved rate levels. In addition to the rates being filed to recover Company's contended base revenue requirement of \$41,627,000, the Company also filed a rate rider designed to recover \$12,177,000 of additional Missouri revenues associated with a 36 percent allocation by the Federal Energy Regulatory Commission (FERC) of the Grand Gulf 1 nuclear generating station. The total rates filed by Company were designed to recover a revenue requirement of \$53,804,000 representing an increase of \$17,178,000 over present rates.

On June 20, 1985, Company presented to the Commission a proposed settlement in the FERC Docket No. ER-82-616-000 which involved the 36 percent allocation of Grand Gulf 1 to Company. By an order issued on the 21st day of June, 1985, the Commission solicited comments concerning the proposed settlement from the parties to Company's last general rate case. By subsequent comments the parties rejected the proposed settlement.

By order issued July 3, 1985, the proposed tariffs were suspended to May 4, 1986, unless otherwise ordered by the Commission. The order established deadlines for the filing of applications to intervene, the filing of prepared direct testimony and exhibits, and the filing of rebuttal testimony and exhibits as defined therein. By subsequent orders the schedule of proceedings was modified.

The prehearing conference was convened on February 10, 1986. The hearing commenced on February 24, 1986, and concluded March 7, 1986. Pursuant to the briefing schedule established at the conclusion of the case, simultaneous initial

to recover all of its reasonable and necessary operating expenses, and in addition, is entitled to a reasonable rate of return on the value of its property used in public service. To arrive at the Company's revenue requirement it is necessary to establish the value of the Company's property and to establish a reasonable return to be applied to the value of that property or rate base which, when added to the allowable operating expenses, results in the total revenue requirement. By calculating the Company's reasonable level of revenues, it is possible to mathematically determine the existence and extent of any deficiency between its present earnings and the revenue requirement determined to be proper in this proceeding.

III. Contested Issues

The Company's initial filing seeks an increase in revenues of \$17,178,000, including the Grand Gulf costs. As a result of a number of contested issues to be discussed herein, the Commission Staff filed its case seeking a revenue reduction of \$7,815,196. Staff's case did not propose to allow in rates the Grand Gulf costs. Adjustments to the Company's operating revenues and expenses found to be proper generally represent a reduction or addition to the Company's net operating income. For the purposes of this order the Staff's proposed case will be used as the starting point from which adjustments are made.

IV. Revenues

A. Missouri Jurisdictional Revenues

To determine what deficiency exists in Company's revenues, it is first necessary to determine what level of revenue it would receive under the presently effective rates. Company used as its starting point the revenues from its books in the amount of \$34,425,083 for the 12-month period ending December 31, 1984. Company then repriced the actual sales in the test period using the currently approved rates and took into consideration customer growth by reflecting the number of year-end customers in the calculation for the entire year. Company also included a weather

briefs were filed by all parties on March 28, 1986, with simultaneous reply briefs being filed on April 7, 1986, with the exception of the Commission Staff which filed its brief on April 8, 1986. Also on April 8, 1986, the Staff filed its Motion For Leave To File Reply Brief One Day Out of Time, which the Commission hereby grants.

By Order issued on April 11, 1986, the Commission directed the convening of a settlement conference on April 15, 1986. On April 17, 1986, the conference was called to order for the making of a record. Because of the fairly explicit settlement negotiations described during the course of that proceeding, the Commission is of the opinion that the record of the conference should not be made a part of the record herein. The statements made during the course of the conference have not been used in the formulation of this Report and Order. No transcript of the conference is included in the record, and none will be included in the absence of objection by the parties within ten (10) days.

Findings of Fact

The Missouri Public Service Commission makes the following findings of fact based upon the competent and substantial evidence upon the whole record.

I. The Company

The Company is an investor-owned Arkansas corporation engaged in the generation, transmission and distribution of electric energy in the States of Arkansas and Missouri. As such, it is an electric corporation pursuant to Chapters 386 and 393, RSMo 1978, and is subject to the jurisdiction of this Commission. The Missouri portion of its service area is generally in the southeastern part of the State. Company is a wholly-owned subsidiary of Middle South Utilities, Inc., a public utility holding company, registered under the Public Utility Holding Company Act of 1935.

II. Elements of Cost of Service

The Company's authorized rates are based on its cost of service or its revenue requirement. As elements of its revenue requirement, Company is authorized

adjustment which was performed by an affiliated company using data from the weather station at Little Rock, Arkansas. It is the Company's position that the proper adjusted test year revenues should be \$36,625,863.

The Commission Staff employed a test year ending September 30, 1985, in an attempt to base the rates on the most recent information available since a true-up was not being advocated. Staff's calculation incorporated the Company's 1986 forecasted peak demand and its 1985 load factor. Although the Company's forecast shows an improvement in load factor the Staff employed the historical load factor to add conservatism to its approach. The Staff included in its adjustments reductions for the loss of load formerly used by the Reynolds Metals Company to incorporate the expected reduction in Reynolds' 1986 contribution to the system peak of only 14 megawatts. The Staff also made an adjustment to normalize the effect of the 1984 lead mine strikes at the Amax Mine and the St. Joseph Minerals Mine. Although strikes occurred at other lead mines in the Company's service area, the Staff adjusted the sale of only those two mines because their load levels recovered in 1985 to the load levels prior to the 1984 strikes. Staff's adjusted test year revenues are in the amount of \$38,238,540.

The Company has criticized the Staff's method in a number of ways, one of which is that the calculation is merely an estimate. Company also points out that a part of the difference of \$1,612,678 is due to the use of different test years.

Company also attacks the Staff's method because, although perhaps appropriate for a large utility, it is not appropriate to use because of the Company's small Missouri operation. It was not explained why a small portion of the service area of a large utility is greatly different from the rest of the utility's service area.

An additional criticism to the Staff's method is that it violates the concept of matching expenses and revenues and is merely a forecast not based on the

known and measurable concept. In the Commission's opinion it must be kept in mind that both methods are estimates and the Staff's method should be accepted.

The Commission is of the opinion that the more recent information should be used for setting rates for the future. Using that method, the Staff would almost invariably incur the criticism of out-of-period adjustments. The Staff's approach is consistent with that generally used in most recent rate cases in the absence of some unusual circumstance. Although the Company criticizes the Staff for going outside the test year it must be borne in mind the reason for using a test year in the first place is to construct a reasonable expected level of earnings, investment, and expenses for a future period. Neither of the methods of estimating expenses can employ known nor measurable changes since the sales on which the revenues are based obviously have not taken place. The Commission frequently approves the use of out-of-test year estimates to establish expenses or receipts as close as possible to the period when the rates in question will be in effect. The Company certainly has not lodged the same objection in its request for a forecasted fuel allowance.

The Commission has not traditionally employed a weather adjustment in determining electric revenues. In the instant case the foundation study for the adjustment at issue appears to have several infirmities. It was not performed by the witness sponsoring it and that witness acknowledged a lack of familiarity with it in several respects. There is no showing that the weather at Little Rock is consistent with the weather in the Missouri service area. The sponsoring witness also acknowledged that temperature retention in a densely populated area such as Little Rock is different from that in a less densely populated or rural area. We are also of the opinion that the Staff's normalization for the lead mine strike is a reasonable approach since the mines account for a substantial portion of the Company's load.

As a part of the revenue issue the Company has contended that the test year revenues must be calculated using its method or it will not be able to design rates

that will produce the Missouri jurisdictional revenue requirement determined by the Commission. It is the Company's contention that if a rate increase is calculated from the Staff's level of test year revenues and the Company's billing determinants are used to design rates, the amount of any increase needed will be understated or the amount of any decrease would be overstated. Staff witness Proctor has acknowledged that there is always a rate design issue respecting billing determinants whenever the Staff proposes a level of test year revenues different from that proposed by the Company. Proctor has stated that the billing determinant problem is not a new issue and that it can be worked out as it has been many times in the past. The typical solution was described as the Staff and the Company agreeing to use billing determinants based on a historical test year. According to Proctor, whether or not the billing determinants collect the final Commission determination of present revenues is not the issue. The issue is whether or not the proposed rates will collect the percentage increase in revenues allowed by the Commission.

B. Investment in System Fuels, Inc.

Company has a substantial investment in a company called System Fuels, Inc., (SFI) which it proposes as an inclusion in rate base. Company also proposes a corresponding inclusion in revenues of the income generated by this investment.

SFI is a fuel procurement company which purchases and maintains inventories of uranium for use at the Company's nuclear plant as well as oil inventory for production and backup use at the Company's fossil plants. SFI also purchases fuel handling and storage facilities used in the transportation and maintenance of inventory. Company owns 36 percent of SFI which has approximately \$151,765,000 of assets. At December 31, 1985, SFI's assets had a value of more than 3.6 times the level of the Company's investment.

It is conceded by the Commission Staff that if the Company did not have its investment in SFI it would have to purchase assets of the type owned by SFI used in

the Company's behalf. The SFI investment is less than the cost of such equipment and inventories should the Company be required to purchase them outright.

The Staff opposes the inclusion of the SFI investment because of the dispute involving the PROMOD Users Manual claiming that it was unable to analyze the Company's coal invoices in a timely manner. Both of these issues, although not pertinent here, are discussed later in this order. Because of the fuel issue the Staff has only included nuclear fuel in its calculation of fuel expense and has proposed to disallow SFI investment as not being nuclear related. This appears to be an untenable position because SFI's responsibilities include purchase and storage of nuclear fuel. It is also difficult to understand how the inability to analyze coal invoices could significantly affect the reasonableness of an investment in SFI. In the Commission's opinion the investment in SFI, as a substitute for facilities which would otherwise have to be owned, is proper for inclusion in rate base. It is also proper to include in Other Electric Revenues the Missouri jurisdictional portion of the interest income generated by the investment in question. This additional revenue is \$157,158. The result of that inclusion is a credit to the Company's revenue deficiency by the same amount.

V. Expenses

A. Net Fuel And Purchased Power Expense

The fuel expense originally proposed by the Staff was approximately \$4,128,025 less than sought by the Company. The Staff priced all fuel as if it were nuclear as a result of alleged Company created obstacles to verification of the reasonableness of the expenditures for coal fuel.

Company relied on a computer model called PROMOD to simulate the economic dispatch of the generating units of all of the Middle South Utilities, Inc. (MSU) system. The model is owned by a company named Energy Management Associates, Inc., (EMA). The computer runs are performed for the Company by another affiliate in the MSU system.

The Commission Staff had requested access to the PROMOD Users Manual and to coal invoices which include freight rates. Company refused to provide any of the Users Manual unless the members of the Commission executed a confidentiality agreement demanded by EMA in order to protect its trade secrets contained in the manual.

After a melange of pleadings and complaints by the Staff the Commission, on January 27, 1986, issued a protective order under which material in the Users Manual could be used only in proceedings of an in camera nature and could not be used outside the hearing process. Commission Staff was not furnished a copy of the manual until the first week in February after it had met the filing date of its direct case on January 23. The direct case of the Staff contained no proposal for coal fuel because of its inability to verify the reasonableness of the Company's expenditures. The Company had also refused permission to view coal invoices because of the confidential nature of the freight rates negotiated with various railroads. The Commission had issued an order making the coal invoices also subject to the protective order; however, the Staff also did not have access to the coal invoices in time to make use of them in preparation of its direct case.

The Staff's proposed fuel price is 8.38 mills per kwh which is based only on nuclear fuel costs. At the time of the hearing the Company was seeking an average cost of fuel of 13.971 mills per kwh.

There appears to be little doubt that the Users Manual does contain confidential trade secrets. It also appears clear that Company was under an obligation not to reveal the contents of the manual in the absence of the permission of EMA, its owner. It is the Company's contention that it offered a reasonable substitute for the Manual by offering to make computer runs for the Commission Staff and by being willing to furnish input and output summaries which were adequate for the Staff's purposes. The Staff contends that it had intended to use PROMOD to develop its proposed level of fuel expense with adjustments to the inputs or the

PROMOD program or both. Staff contends that it has not been given an adequate opportunity to audit the Company's fuel prices and offered as a substitute lower nuclear fuel costs because they are known and measurable.

The Staff moved to strike rebuttal testimony and schedules of Company witness Dennis Roach in Exhibit 90 and the surrebuttal testimony of the same witness in Exhibit 91, relative to determination of these issues which rely upon data developed through the use of the PROMOD model or which utilized coal prices. In the Staff's brief it was pointed out that striking the testimony related to the information improperly withheld from discovery is clearly authorized by Rule 61.01 of the Missouri Rules of Civil Procedure. Staff also cites authority for the proposition that this Commission in earlier cases has improperly restricted cross-examination based on a Company contention that contracts require them not to disclose certain information. The courts have acknowledged that in some circumstances the proprietary nature of information may shelter it from examination but that a company cannot hide behind the proprietary nature of the information to sustain its burden of proof. The following finding is appropriate here:

The Company proffered testimony and exhibits based on proprietary information. If it seeks to rely on proprietary information to carry its burden of proof and thereby, benefit from the use of such information, then it may not protect that information from scrutiny by claiming it need not disclose. Furthermore, when the subject matter under consideration is of such importance to the public welfare, we believe that the public interest requires full disclosure of relevant information on cross-examination. State ex rel. Utility Consumers Council of Missouri, Inc. v. Public Service Commission, 562 S.W.2d 688, 694 (Mo.App. 1978)

In the Commission's opinion the Staff's motion to strike should be granted. This is not to say that there are no legitimate trade secrets in the Manual in question. Simply stated, the Company cannot be allowed to maintain its burden of proof by the use of secret or unrevealed information, or delay producing the information so that it cannot be utilized or verified by the other parties, particularly the Commission Staff. It is the Company that filed the case and

utilized the model for fuel expense that cannot be verified by the Staff. It is the Company that has the burden of proof. That burden of proof cannot be met by assurances that all of the calculations were proper. In the Commission's opinion it would be an abdication of its responsibility to regulate only by consent of the regulated.

In the Commission's opinion the fuel runs constitute incompetent evidence since there was no witness competent to sponsor them. The fuel runs were performed by an affiliate, Middle South Services, and no representative of either Middle South Services or EMA appeared to testify.

The remainder of Staff's evidence concerning fuel costs results in a cost that is conservative. The Commission recognizes that the Company's entire generation is not through the use of nuclear fuel, but allowance of that level of fuel is a more realistic approach than denial of all fuel expense because of the Company's failure to meet its burden of proof. The Motions to strike Exhibits 90 and 91 are hereby granted and the Staff's calculation of fuel expense shall be employed for the purposes of this case. The amount associated with this issue is \$2,405,029 annually.

A portion of the northern most service area of the Company is not integrated with the rest of its system, but is served by purchasing power from Union Electric. During the course of the hearing the Staff advocated allowing only the last wholesale rate permanently approved by FERC. On April 7, 1986, the Staff filed its Notice Of Change In Position On Certain Fuel Issues in which it concedes the reasonableness of utilizing the current FERC rate which is subject to refund. As a result of the filing of that document the purchased power allowance for the isolated area is no longer a contested issue and the Company's position should be adopted for the purposes of this case. Any amounts collected under this authorization shall be held subject to refund to the extent that the final decision in the pending UE FERC rate case authorizes a lesser permanent rate.

B. North Antelope Coal Company (NACC) Mine

Company has included in its filed case the deferred first year mine costs at the NACC mine in rate base and the related costs as an expense item. The Missouri jurisdictional portion of the expense issue is \$2,159. The corresponding amount to be included in rate base is \$56,018.

When the NACC mine was opened in 1984, only a small number of tons of coal were mined making the first year per ton coal costs higher than normally expected. In Case No. ER-83-206, the Company was ordered to amortize these costs over the life of the mine based on the number of tons delivered each year in relation to the total tons to be mined.

Staff contends that the record contains conflicting testimony on whether the Company received recovery of the NACC costs in Case No. ER-83-206 in the forecasted fuel price used in that case. Staff proposes to disallow the NACC costs because those costs were fully amortized on the Company's books as of March, 1985, but it is conceded that the amortization does not indicate whether such costs were recovered from the ratepayers. In the Commission's opinion the Company's contention is sound that the disallowance proposed by Staff amounts to a modification of the Commission's order issued in Case No. ER-83-206.

What the Company has done on its books and records has no bearing on the ratemaking treatment previously ordered by the Commission. The Staff was unable to point to any rates which the Company had filed which would have recovered the Missouri portion of the amounts previously deferred. In the Commission's opinion the proposed expense and rate base treatment, previously ordered by the Commission, should be included in the Company's case.

C. Edison Electric Institute (EEI)

EEI is an association of investor-owned electric utilities. Company is a member of EEI and pays annual dues, two-thirds of which it is seeking to recover as

operating expenses in this case. Staff and Public Counsel propose the Commission disallow the entire amount of dues paid EEI.

Company recognizes that the Commission has consistently disallowed EEI dues because utility companies have been unable to quantify the benefits from the participation in EEI and apportion those benefits between ratepayers and shareholders. Company suggests it has added a new twist to the issue by only seeking to recover two-thirds of the dues. Company attempted through its evidence to quantify the benefits of its participation in EEI. Company contended its two-thirds proposal was within the range supported by the National Association of Regulatory Utility Commissioners (NARUC). Company also suggested the Commission should accept the two-thirds allowance and perhaps the issue would not be litigated in future rate cases.

Staff and Public Counsel take basically the same position on this issue. They contend that Company has failed to quantify the benefits of its participation in EEI and thus should not recover the amounts paid as dues. This position is supported by a line of Commission cases disallowing EEI dues. Public Counsel also points out that NARUC has not taken a position on the proper allocation of EEI dues between ratepayer and shareholder and Company's evidence on this point is in error. Staff points out that registration fees for EEI committees have not been disallowed, only the dues.

The Commission has reviewed the evidence in this case and reaffirms its previously stated position that a utility company must properly assign EEI dues based upon the respective benefit to the ratepayers and shareholders. Re: Kansas City Power & Light Company, 26 Mo. P.S.C. (N.S.) 104, 114 (1983). Company has failed to properly assign costs in this case as required. The Commission finds further that the evidence indicates that NARUC has not adopted the two-thirds standard as suggested by Company. The Commission would also suggest to Company that this issue would not be relitigated if Company would refrain from seeking recovery of EEI dues

until it can properly assign the benefits as required by the Commission. The Commission will adopt Staff's proposed disallowance.

D. Rate Case Expense

Staff and Company have agreed that \$99,495 is the proper amount of rate case expense to be included as an operating expense in this case. Public Counsel recommends that the rate case expense be shared between ratepayers and shareholders equally. The Mining Intervenors (Mines) argue that no rate case expense should be allowed.

Public Counsel proposes that since both ratepayers and shareholders benefit from a rate case, both should share the expense. Public Counsel contends that there is a direct shareholder benefit from a rate case unlike other operating expenses, and this should be recognized through a sharing of the expenses. Public Counsel points out that utility companies seek higher rates of return to benefit shareholders, while seeking recovery of expenses to provide safe and adequate service for ratepayers.

The Mines contend that there should be no recovery of rate case expense by Company since (1) the shareholders are the sole beneficiaries of rate cases and (2) Company should be denied recovery because of its frequent filings seeking large increases that are not granted. The Mines point out that Company has repeatedly sought large rate increases while the Commission has found a significantly smaller increase to be reasonable. The Mines' evidence indicates the rate case expense in this case includes four rate case filings within a nine month period.

The Commission has previously determined that the expenses incurred by a utility company in appearing before the Commission are proper expenses to be recovered in rates. In the past the Commission has usually accepted the rate case expense for the test year as the proper amount to be recovered. Recently, companies have been seeking recovery of rate case expense associated with rate cases involving nuclear power plants. These cases have been extremely complex and voluminous, and thus have greatly increased the expenses incurred to present these rate cases.

The Commission considers the rate case expenses associated with the nuclear power plants to be abnormal and not representative of normal rate case expense for a utility. In this case Company is seeking recovery for four rate case filings in one nine month period. This is not a normal occurrence. Company expenses have been increased due to its repeated filings and inability to predict the date of commercial operation of Grand Gulf. The Mines have proposed no recovery because of these frequent filings. The Commission does not believe this appropriate since Company must file with the Commission to seek rate increases and approval of other matters. The Commission, though, has determined that Public Counsel's proposal of a one-half sharing in this case has validity. The Commission can only conclude that the increased rate filings are an attempt by Company to protect shareholders from any regulatory lag. No benefit to ratepayers can be derived from these premature and frequent filings. The Commission would also point out that Company has incurred rate case expense by seeking recovery for expenses which the Commission has had a long and consistent history of disallowing.

The Commission considers the sharing of rate case expense appropriate in this case since Company has increased its rate case activity to protect the shareholders. It should be noted that the only shareholder of Company is Middle South Utilities. The regulatory procedure was established to balance shareholder and ratepayer interests. A company's reasonable attempt to meet its obligations under this procedure is expected. When, as in this case, a company exceeded the reasonable bounds it could only be to benefit the shareholders, and thus a sharing of the expense is appropriate. The Commission will therefore adopt Public Counsel's proposed disallowance of one-half of rate case expense.

E. Advertising and Sales

Company engages in advertising and related activities in its operations. The Commission, in past cases where advertising was an issue, had adopted a

modification of the New York rule. No party presented evidence based upon the New York rule and Staff proposes a change in the Commission's treatment of advertising expenses.

Company proposes that all advertising expenses included in its cost of service be allowed. Staff proposes to separate advertising into four categories and either allow or disallow advertising expenses based upon those categories. Staff also proposes to disallow expenditures associated with the advertising expenses it proposes to disallow. Public Counsel proposes that all advertising classified as promotional be disallowed.

Staff proposes to classify advertising as follows:

- 1) General Advertising - that advertising which provides the customer with the information necessary in order to receive adequate service;
- 2) Safety Advertising - that advertising which conveys to the customer ways to use electricity safely and avoid accidents;
- 3) Promotional Advertising - that advertising designed to encourage or promote the use of electricity;
- 4) Institutional Advertising - that advertising which is calculated to improve or enhance the public image of the company or its employees.

Staff proposes to allow all advertising which it considers necessary to provide safe and adequate service at the lowest possible cost. Following its classifications, Staff proposes to allow General Advertising and reasonable amounts of Safety Advertising. Staff proposes to exclude Promotional Advertising unless it can be shown that benefits from the advertising exceed the costs incurred. Staff proposes to disallow all Institutional Advertising.

There is no dispute in this case that advertising classified by Staff as either general or safety-related should be recovered. Likewise, there is no party to this case disputing that advertising classified as institutional should be excluded.

The area of dispute is how to treat those expenses associated with advertising classified as promotional.

The expenses in question are those associated with advertising of heat pumps and energy-saving homes. Company classifies these expenses as informational and concerned with the efficient use of electricity or conservation. Company contends its advertisements encourage the use of heat pumps and thus conserve energy. The same argument is used for advertising for energy-saving homes. Company contends the more customers who buy heat pumps and use energy-saving homes, the greater the benefit to all ratepayers. Thus, Company contends, the advertising expense should be allowed.

Staff classifies the advertisements concerning heat pumps and energy-saving homes as promotional, and proposes the expenses be disallowed since the benefits have not been shown to exceed the costs. Staff's position is that all advertising is informational and the purpose of the advertising must be addressed to determine if the expense should be allowed. Staff states that advertising which encourages the use of heat pumps and energy efficient homes is clearly designed to increase the use of service provided by Company. This is particularly true of heat pumps, where, in Arkansas, Company offers a \$250 rebate to customers who purchase and install a heat pump. Staff also points out that whether or not a heat pump is efficient involves many variables which render Company's general assertion concerning the benefit to all ratepayers invalid.

Public Counsel takes basically the same position as Staff. Public Counsel contends all promotional advertising should be excluded from cost of service. Public Counsel emphasizes further that any support for promotional advertising for an electric utility would begin an escalation of ratepayer-financed advertising as gas companies began seeking recovery of promotional advertising expenses to counter the electric companies' advertisements.

Since no party has taken the position that the New York rule should determine the appropriate amount of advertising expense, the Commission will not follow that rule in this case. The Commission has considered Staff's classifications and finds they are reasonable and more fully reflect the proper standards by which to decide this issue than do Company's classifications. The focus in this case is whether the advertisements in question should be classified as promotional.

In this case the advertising related to heat pumps and energy-saving homes is clearly promotional. It is designed to encourage the increased use of electricity or electric services. Company has not presented evidence that the benefits of these advertisements exceed the costs. Company's contention that the increased use of heat pumps and energy-saving homes benefits all ratepayers is not sufficient to meet the cost/benefit requirement. The Commission also agrees with Public Counsel that the ratepayers should not fund a campaign to attract customers currently using gas. The Commission will therefore adopt Staff's classification of advertisements and the proposed disallowance.

F. Committee on Energy Awareness (CEA)

Company states that CEA is a coalition of investor-owned utilities and major industrial firms created to oppose the antinuclear sentiment which developed after the Three Mile Island incident. CEA attempts to inform the public that an adequate and reasonably priced supply of electric energy is in the public interest. Company proposes to include the amount of its contributions to CEA in its operating expenses.

Staff and Public Counsel agree with the purpose of CEA as stated by Company, but propose to disallow the contributions. Staff contends CEA is basically involved in political advertising and lobbying in support of nuclear power. Public Counsel's position is similar to Staff's and emphasizes the political nature of CEA's program. Both point out that these expenses have been disallowed in other cases by

the Commission. In addition, Company has failed to quantify any benefits to the ratepayers of CEA's efforts.

The Commission, in a Kansas City Power & Light Company rate case, denied CEA expenses. In that case the Commission found that the efforts of CEA appeared to be almost entirely lobbying or political advertising. The Commission stated: "[E]xpenses of this nature must have a demonstrated and quantifiable benefit to the ratepayers to warrant inclusion in service." Re: Kansas City Power & Light Company, 26 Mo. P.S.C. (N.S.) 104, 116 (1983). The Commission has consistently applied this standard to attempts to include these types of activities in operating expenses. The Commission can find nothing in this record to show CEA's purpose or activities have changed. Company has not quantified the benefits to ratepayers from CEA activities. Since Company has failed to meet the established standard, the Commission will disallow the contributions of Company to CEA.

G. Deloitte Haskins & Sells (DHS)

DHS performed an external audit of Company's financial condition. Company has included in its cost of service the payments to DHS for the external audit. Company has refused to allow Staff access to the external audit work papers. Company asserts the external audit work papers are privileged under the accountant-client privilege established in Section 326.151, R.S.Mo. 1978.

Staff has proposed to disallow the payments to DHS for the external audit. Staff states the payments should be disallowed, since Staff was unable to audit the work papers to determine if the payment was reasonable.

Upon learning of Staff's proposed disallowance, Company obtained a Preliminary Order In Prohibition from the Cole County Circuit Court ordering the Commission to refrain from disallowing the DHS expenses or directly or indirectly penalizing Company for exercising its evidentiary privilege. Whether the Preliminary Writ should be made permanent is still before the circuit court. Company agreed to allow

this issue to be heard by the Commission pending the outcome of the circuit court action.

Although there are various side issues, the dispute concerning the recovery of the payment to DHS for the external audit boils down to a basic question of regulation. Staff asserts that under Chapter 393, R.S.Mo. 1978, it is authorized to review all of a company's books and records. Without access to a company's books and records, it cannot review the expenses sought to be recovered by a company to determine if they are justifiable and reasonable. Staff asserts, further, a company has the burden of showing the reasonableness of the expenses it seeks to recover, and where it refuses to provide the underlying documents to support all expenses, it cannot carry that burden.

Company contends that it can exercise its evidentiary privilege under Section 326.151 and still recover the payments to DHS. Company contends that the reasonableness of the payments can be determined from the testimony of its witnesses and since an external audit is necessary, those costs should be recoverable.

The Cole County Circuit Court on April 22, 1986, modified its preliminary writ. The modification permits the Commission to determine the ratemaking effect of the refusal of Company to allow Staff to audit DHS work papers. The Commission believes that the UCCM case establishes the proper standard for resolving this question. (See Section V, A. p. 9). The Court in UCCM held that if a company seeks to recover expenses it must carry its burden of proof for those expenses. The Court stated that a company could not protect the information necessary to carry its burden from disclosure.

The Commission finds that the work papers of DHS are the necessary basis for a determination of the reasonableness of Company's expenditures. Without these work papers no assessment can be made concerning the reasonableness of the expense and they are therefore unauditable. Since the expenses are unauditable the Company cannot recover those expenses from ratepayers. The DHS payments will be disallowed.

The Commission does not believe Company's rate of return should be reduced for asserting the accountant-client privilege. The Company gives up the recovery of these expenses by not providing the work papers. The Commission has determined no additional adjustment is appropriate in this case for failure to provide the work papers. The Commission has also determined that it should not compel Company to disclose the DHS work papers as a result of this case, nor will it take any action arising out of Company's refusal to produce the work papers in this case.

H. Directors' Fees

Company has included in its cost of service the test period amount of \$354,440 for directors' fees. Public Counsel has proposed the Commission disallow \$144,440 of this amount. This amount is a \$5,027 proposed adjustment on a Missouri jurisdictional basis.

Public Counsel has proposed this adjustment based upon a comparison of Company's directors' fees with certain other electric utilities. Public Counsel contends its study shows Company's directors' fees are significantly higher than comparable Missouri utilities or other Middle South System utilities. Public Counsel asserts that Company did not show the reasonableness of these fees or the reasonableness of the number and frequency of board meetings. Public Counsel also questions the need for 25 directors. Company states its Board of Directors is involved in the management of the Company and recent management decisions have been increasingly complex and serious. Company points out that Public Counsel's evidence focuses only on the dollar figure and not on the similar operation of the companies.

The Commission does not believe a comparison with other utilities' directors' fees provides a reasonable basis for disallowing a portion of the fees paid by Company. Each company chooses its own method of management, and the Commission has determined it should only look at the expenses incurred by Company's directors to determine whether those expenses were not actually incurred or were unreasonable for the work performed. A comparison with other utilities merely indicates a range of

reasonableness, but is not conclusive. Company's directors fees are within the range of other utilities. Public Counsel's proposed disallowance will therefore not be adopted.

I. Capitalized Interest on CWIP, Payroll Taxes, Pensions And Property Taxes (Schedule M Deductions)

The Commission Staff proposes a deduction of the capitalized interest on construction work in progress (CWIP), payroll taxes, pensions and real and personal property taxes, commonly referred to as Schedule M deductions, as a current reduction to taxable income. Company has elected, for both book and tax purposes, to capitalize these items on construction projects commenced after 1982. Company contends that the capitalization will benefit Missouri ratepayers in the form of depreciation over the life of the assets. It is the Staff's position that the items should be taken as Schedule M tax deductions in order to reduce the Company's tax liability. Since the Company did not deduct these items on Schedule M the income tax benefits claimed by the Staff are nonexistent.

The Company describes Schedule M deductions as those used in the calculation of taxable income which is not included in the calculation of book income.

Company commenced capitalization of these items in 1983 because the Tax Equity and Fiscal Responsibility Act (TEFRA) eliminated the 100 percent deduction for taxes and interest capitalized on real property. Instead, a 10 percent deduction in the year the expense is incurred is allowed, with the remaining 90 percent being taken over a nine-year period after an asset is placed in service.

The Commission Staff conceded that if it prevails on this issue and the Company does not change its position and continues with its present approach, then there would exist a double recovery in favor of the taxpayer in that these items are being deducted currently and would again be deducted in the future through depreciation. Under the Company's present policy, Missouri ratepayers will earn

investment tax credits on the costs. If the items are deducted currently, there will be no investment tax credit.

In the Commission's opinion the Internal Revenue Service normalization requirement makes the Company's treatment proper. We are of the opinion that if the Staff's approach is approved and we order a current tax reduction for taxes, interest and pensions, which will be depreciated on the Company's income tax return over 10 or 15 years under the Accelerated Cost Recovery System, then the Company will not be in compliance with the normalization requirements unless deferred income taxes are calculated on the current deduction.

The Staff's proposed adjustment should be rejected since the claimed income tax benefits are nonexistent and the Company actually does not appear to have this election available to it pursuant to the Internal Revenue Code.

J. Property Insurance Reserve

The Company's books and records reflect \$2,327,882 on a total Company basis as a property insurance reserve. The reserve is maintained to pay for storm damage in lieu of purchasing insurance for that purpose. The amount requested by the Company on a Company-wide basis represents the amount expended for storm damage in the worst year in the last ten-year period. During 1985 the Company actually spent \$300,000 for system-wide storm damage.

The Staff proposes the use of a five-year average as an allowance for storm damage. During the past five years the Company has expended approximately \$6 million for storm damage. The Staff's proposed allowance on a total Company basis is \$1,141,404 for storm damage. Under either proposal the ratepayers will prepay storm damage expense. The Company has not proposed any corresponding reduction in rate base related to the prepayments.

This Commission has found it reasonable in many cases in the past to employ a five or a ten year average to calculate a reasonable level of future expenses for items that obviously cannot be known and measurable. At times the Commission has

used weighted averages to give greater weight to more recent years in the average. In the instant case, the Company has adjusted the expenses during the worst year in the last ten for increases in the Company's total utility plant and for inflation. Ordinarily using a weighted average would work toward the same goal. In the instant case, however, the amount arrived at by the Staff's simple average appears to be more realistic and it would not appear necessary to increase the amount by the use of weighted averages.

In the Commission's opinion it is unreasonable to charge the ratepayers to prepay storm damage at a level that equals Company's worst experience in ten years. In the Commission's opinion it would be just as logical to assess the ratepayers on the basis of the best experience in the same period. The Staff's approach is logical and reasonable and will be accepted for the purposes of this case as it has many times in the past. The Missouri jurisdictional portion of the Staff's proposed allowance is approximately \$34,163. In the Commission's opinion that allowance is reasonable and is the reasonably anticipated amount of storm damage in the Missouri jurisdiction during the period of time that the rates to be set herein will be in effect.

VI. Forecasted Fuel

Company seeks an allowance of forecasted fuel and purchased power expense based on May, 1986, unit fuel prices and developed utilizing the PROMOD dispatch method. The Company proposes to recover the forecasted fuel expense and to provide for the timely true-up and refund of any overcollections and modification or termination of the charges ordered by the Commission. The Commission Staff is opposed to any provision of forecasted fuel and purchased power expense primarily based on the previously discussed difficulty in receiving the PROMOD Users Manual and the fuel invoices. That controversy has been adequately discussed earlier and need not be revisited here.

The Company's evidence in support of forecasted fuel prices is very insignificant and unpersuasive. In addition, the request for the allowance is based on a 1984 forecast. In the Commission's opinion there is simply inadequate support in this record for what is generally deemed to be an extraordinary ratemaking authorization justifiable in only extraordinary circumstances.

The Commission Staff has frequently recommended forecasted fuel allowances in the past in times of rapid inflation and volatile fuel prices. Under those conditions the time required to handle even an emergency interim case will assure that the collection of fuel, one of the largest items of expense, will always be deficient. The Commission generally disfavors the use of totally forecasted or estimated test years, however, the use of forecasted fuel allowances has been a commonly accepted ratemaking principle to protect the Company's earnings from the ravages of rampant inflation.

In the instant case Staff's evidence establishes that contract coal prices have not been rising significantly in the recent past and there appears to be no need for such an allowance. Staff's evidence also indicates that the price of bituminous coal under contract to steam electric utilities rose less than one percent between September, 1984 and September, 1985, and that price had fallen almost 1.5 percent from September, 1985 to January, 1986. On the merits of the proposition, there is simply no persuasive reason why the Commission would feel the necessity to make a forecasted fuel allowance even if the Staff had recommended such an allowance, which is not the case. Even in the absence of countervailing evidence the Company's support for the forecasted fuel request is inadequate to warrant approval.

VII. Rate Base Adjustments

A. System Fuels, Inc.

For the reasons discussed in Section IV-B, Company's investment, on a Missouri jurisdictional basis, in System Fuels, Inc., in the amount of \$1,456,091 is a proper inclusion in the Company's rate base.

B. North Antelope Coal Company (NACC) Mine

For the reasons previously discussed in Section V-B the Missouri jurisdictional portion of investment in NACC in the amount of \$56,018 should be included in the Company's rate base.

C. Coal Inventory

The Company seeks as an inclusion in its rate base a coal inventory on a total Company basis of \$28,918,401. The Missouri jurisdictional portion of this inclusion is \$1,021,687. The amount of inventory sought by the Company is a requirement for operating the Company's coal-fired generating plants for 45 days at 100 percent of the rated capacity. The Company priced the required inventory at the September, 1985 cost per ton.

The Commission Staff does not recommend a level of coal inventory because of the PROMOD and coal invoice controversies previously alluded to. Because of those controversies the Staff objected to the introduction of any evidence by the Company on the value of the coal inventory. That objection is hereby overruled.

There is no dispute that the Company has coal inventories which are used to fuel its owned coal-fired plants. A Staff witness conceded that there are various methods to determine a proper coal inventory level without using the PROMOD Users Manual.

The Commission is also of the opinion that the element of conservatism in the Company's request will offset any inherent dangers in not being able to precisely verify the Company's cost per ton. The 45-day level can be contrasted with the 90-day inventory found to be reasonable in Re: Kansas Power & Light Company, 26 Mo. P.S.C. (N.S.) 104 (Case No. ER-83-49, 1983).

Even allowing for a difference in the method of calculating the level of fuel inventory in the Kansas City Power & Light Case, the Commission is of the opinion that the conservatism of the Company's request in this matter justifies the level of coal inventory sought.

D. Cash Working Capital

The Company's filed case included an allowance for cash working capital (CWC) in the amount of \$222,000 representing the Missouri jurisdictional portion of the Company's total CWC requirement of \$5,964,595. The Commission Staff's case recommends a negative cash working capital allowance of \$1,720,000. Both positions were based on lead/lag studies which have, for some time, been accepted as a proper method of calculating CWC. The study for the Company was performed by the independent accounting firm of Deloitte Haskins & Sells.

The major items that compose the difference between the positions of the Staff and the Company are: 1) treatment of depreciation and the deferred portion of income tax expense in the amount of \$374,000; 2) fuel and purchase power expense of \$521,000; 3) treatment of other CWC components not related to the income statement of \$600,000; and 4) treatment of interest expense and other components of operating income as a negative offset of \$308,000.

The Staff's lead/lag study appears to be conducted in accordance with principles and practices approved by this Commission in many recent cases. Staff's study appears to represent the prevailing Commission attitude regarding the proper inclusion of elements of the study and method of its conduct.

In one of the areas of major dispute, that of depreciation and deferred taxes, the Commission is still of the opinion there is no cash outlay required for those items. As such, they do not require CWC allowance when it is kept in mind that cash working capital is the amount of cash necessary for a utility to pay its day-to-day expenses.

The Company concedes in its brief that the Commission Staff is relying on Commission precedent in this issue, and that the Company is requesting the Commission to reexamine those precedents and recognize that many of the utility commissions have addressed these different issues with a different result.

Although the Staff's lead/lag study should generally be accepted for the purposes of the CWC calculation, its calculation of a nuclear fuel expense lag should be rejected. The Company calculated a nuclear fuel lag of 71.85 days based upon an analysis of the year 1984. The Staff's lag is proposed to be 76.38 days. The Company's expense lag includes recognition of payments for nuclear fuel which are in advance of the regular quarterly payments, which occur when the fuel lease has reached its limit. In the Commission's opinion it is proper to recognize these prepayments which have a rate base effect of \$57,309.

VIII. Jurisdictional Cost Allocations

The issues involved in this section are the proper allocation of total Company costs to Missouri. Different allocation factors are developed for production demand, transmission and energy. Staff has also raised an additional issue of the proper classification of certain 34.5 kv lines.

A. Production Demand Allocation Method

✓ Company has proposed the Commission adopt a jurisdictional production demand allocation factor based upon the average and peak (AP) method. The AP method is based on the concept that production plant is built to meet customer demand the entire year. The AP method allocates production plant based upon this capacity utilization throughout the year. Company states the most appropriate method of allocating cost would be based upon customer usage during each hour of the year. Without the load data necessary to allocate hourly usage, Company has proposed the adoption of the AP method as a proxy.

✓ Company points out that Staff has proposed the capacity utilization method for allocation among Missouri classes. The logical justification for the capacity utilization for class allocations, Company asserts, is the same for allocation between jurisdictions. Company therefore opposes Staff's proposed coincidental peak method for jurisdictional allocations.

✓ Staff has proposed the Commission adopt a one coincidental peak (1CP) method for allocating production demand costs between jurisdictions. The 1CP method allocates production plant based upon each jurisdiction's contribution to the highest hourly peak on the system during the year. Staff proposes the adoption of the 1CP method based upon what it refers to as a "needle peak" on Company's system and the contention that Company has justified the addition of plant to meet this peak.

✓ Staff contends there is no inconsistency between its position on class allocations and jurisdictional allocations. Staff argues that the objections which it has expressed to the use of the 1CP method for class allocation purposes do not apply to its use for jurisdictional allocations. Staff states that the 1CP method can be utilized for jurisdictional allocations, since those allocations have traditionally been based upon an assignment of property rights to joint capacity used to meet system loads. Staff contends further that pricing is not a consideration for allocating between jurisdictions as it is for class allocations.

The Mining Intervenors (Mines) support the 1CP method for allocating production demand between the jurisdictions. The Mines state basically the same position concerning the 1CP method as does Staff. The Mines add that the 1CP method will allocate the same costs per kilowatt to each jurisdiction. The Mines also argue that Company's witness who testified concerning the AP method is less qualified than Staff's witness.

✓ In Case No. ER-81-364 the Commission rejected the 1CP method for the allocation among Company's customer classes. Re: Arkansas Power & Light Company, 25 Mo. P.S.C. (N.S.) 101, 113 (1982). The Commission rejected the 1CP method for class allocation purposes because the Commission found it did not properly represent class causation of production plant costs. The Commission in that case accepted the AP method as a proxy for the time of use method it found most properly reflected class causation of costs. Staff recommended the use of the AP method for jurisdictional allocations in Case No. ER-81-364. All issues except class allocations and

rate design were settled in that case, so no decision was made concerning the proper method for allocating production demand costs to the jurisdictions.

✓ The Commission has reaffirmed its decision adopting the AP method for allocation of costs among customer classes in more recent cases. Re: Kansas City Power & Light Company, 25 Mo. P.S.C. (N.S.) 605 (1983), and Re: Union Electric Company, 27 Mo. P.S.C. (N.S.) 183, 285 (1985). The Commission, though, has been recently confronted with the argument that jurisdictional allocations should be allocated by the same method as class allocations.

✓ The Commission still considers a method which allocates costs to customer classes based upon usage during each hour of the year as the appropriate class allocation method. The Commission has adopted proxies such as the AP method where the hourly load data is not available. These methods more properly reflect the causation of production plant costs for a company's system. The Commission believes it is proper to move toward this type of method for jurisdictional allocations, where appropriate. The Commission, though, is faced with considerations concerning the allocation between jurisdictions in this case that prevent adopting the AP method.

✓ The Commission considers the question of jurisdictional allocations in this case to be somewhat unique. Missouri customers make up less than five percent of Company's customers. Missouri customers have a higher load factor than Company's other customers. The AP method would shift a significant amount of the costs of production plants on Company's system to Missouri customers. These costs include production plants which are not needed to serve Missouri customers.

✓ The Commission does not believe it is reasonable to adopt an allocation method which shifts costs of unneeded plant to Missouri ratepayers. The Arkansas Public Service Commission (APSC) adopted the average and excess method for Company in a previous decision. Company proposed the AP method for jurisdictional allocations in its last Arkansas rate case. That case was settled so no decision was made concerning the proper jurisdictional allocation. The ICP method, of those proposed

in this case, is most similar to the final result reached by the average and excess method. By adopting the LCP method the Commission is maintaining some consistency between jurisdictions. The Commission cannot accept the settlement in the last Arkansas case as an enunciated position of the APSC. Where no agreement between jurisdictions has been reached concerning the proper allocation method, this Commission must determine the proper method based upon the characteristics of Missouri customers. The characteristics of usage of Missouri customers indicate the LCP method is more appropriate than the AP method for jurisdictional allocations.

✓ The Commission has determined it will adopt the LCP method in this case for jurisdictional allocations as the best method for this company, based upon those methods presented. The Commission considers the factors presented by this case to be unique and is adopting the LCP method based upon those factors.

B. Adjustments to System Peak

Having adopted the LCP method for allocating production demand costs in Missouri, the Commission must now determine the proper figure for the system peak. The calendar year system peak demand for Company occurred on August 1, 1985. The peak was 3,681 MW. Company and Staff propose adjustments to this figure to arrive at their respective proposed system peaks. Once the proper system peak is established, the production demand allocation factor is then determined by using Missouri's 102 MW demand.

1. Conway, West Memphis, Osceola and Thayer

Company contends that the 108.5 MW of Conway, West Memphis and Osceola (Co-owners) should be subtracted from the 3,681 MW. Company contends that Co-owners' 108.5 MW should be removed because Co-owners own part of the Company's White Bluff and Independence Steam Electric Station (ISES) coal plants and thus generate their own power. Company states Co-owners' demand is included in Company's system peak for internal purposes only and it is inappropriate to consider them part of Company's peak load.

Company takes the same position concerning the 1.4 MW of Thayer. Thayer's demand is wheeled over Company's system but the 1.4 MW is actually supplied by the Southwestern Power Administration (SPA). Here again Company contends it is inappropriate to consider Thayer's demand as part of Company's system peak.

Staff did not subtract Co-owners or Thayer from Company's system peak because Staff considered the cities to be firm customers. Staff bases this assessment on the fact that Company would furnish power to the cities if their power source failed. This guarantee, Staff contends, means these customers should be included in determination of Company's load requirements.

The Commission has considered this issue and the two positions. The Commission believes that the underlying consideration is the reliability Company provides to the cities. Company would supply the demand needs of the cities if their sources failed. This reliability provided Co-owners and Thayer places the same requirement on Company's system as other customers and so this demand is a part of Company's system peak demand.

2. Reynolds Metals Company (Reynolds)

Both Company and Staff agree that the 3,681 MW should be adjusted to reflect the reduced load on the system due to Reynolds' contract cancellation. They disagree about the correct adjustment to make. Reynolds was taking about 248 MW at the time of peak as measured at the production level, while its metered demand was 245 MW. Reynolds is operating at about 14 MW at this time.

Staff subtracted the 245 MW from system peak rather than the 248 MW. Company contends 248 MW is the proper adjustment. The MW difference is due to losses incurred in supplying Reynolds. Staff did not include losses in its other calculations and so used the metered figure of 245 MW for Reynolds. Company contends this is inappropriate since Company's peak is measured at production level.

Staff did not use losses in its calculation of other portions of the system peak. To be consistent, since the Commission is adopting some of Staff's

adjustments, the Commission will adopt Staff's adjustment for the cancellation of the Reynolds contract. This will reduce the 3,681 MW system peak by 231 MW (245 - 14 = 231).

3. 640 MW Adjustment

Staff proposes that Company's system peak be adjusted upward by 640 MW to reflect payments made under the 1982 Middle South System Agreement (1982 Agreement). These payments are made by Louisiana Power & Light Company (LP&L) and New Orleans Public Service Inc. (NOPSI) to Company under the 1982 Agreement to equalize Middle South Utilities, Inc. (MSU) system reserves among the four operating subsidiaries. Company has capacity reserves in excess of MSU's system average. LP&L and NOPSI must therefore make payments to Company. Staff contends this arrangement is a firm power sale and thus the 640 MW are a firm demand and should be added to Company's system peak.

Staff contends that since the 1982 Agreement does not designate a specific unit to LP&L and NOPSI, then Company's entire system is providing the reliability for the 640 MW. This system reliability, according to Staff, means LP&L and NOPSI receive the same reliability as other firm customers. Because of this reliability Staff proposes the 640 MW be treated as demand and added to Company's system peak.

Company states that the addition of the 640 MW to system peak is inappropriate. Company points out that LP&L and NOPSI did not contribute to system peak on August 1, 1985. Company states no energy flowed from Company to LP&L and NOPSI at the time of system peak.

Company contends that Staff's proposed adjustment is based upon a misunderstanding of the 1982 Agreement. The 640 MW, Company points out, is the reserve equalization capacity based upon the MSU system. The payments under the 1982 Agreement do not constitute demand, but are only equalization payments for the reserve capacity. Company asserts there is no energy entitlement to LP&L or NOPSI associated with these reserve equalization payments.

The Commission cannot accept the 640 MW adjustment as proposed by Staff. The Commission does not believe an adjustment to system peak for the reserve equalization payments is proper. The Commission does not believe LP&L and NOPSI are firm customers of Company since the evidence indicates that neither LP&L nor NOPSI took energy from Company at system peak and the payments are not associated with energy entitlement.

The Commission finds that no adjustment to system peak based upon payments under the 1982 Agreement is supported by the record. The Commission therefore will not make the 640 MW adjustment to system peak proposed by Staff.

4. Allocation Factor

Taking the adjustments for the system peak as approved above, the Commission finds the proper allocation factor for production plant is 2.95 percent. This is the allocation factor accepted by the parties in the Hearing Memorandum (Exhibit 1) based upon the adjustments approved above.

C. Transmission Allocation Factor

Company, Staff and the Mines agree that the LCP method should be utilized in determining the proper transmission allocation factor. The only dispute is Staff's contention that the 640 MW discussed in B.3. above should be added to the system peak to determine the proper allocation factor. Based upon the Commission's decision concerning that issue, the Commission determines the proper transmission allocation factor is 2.29 percent.

D. Energy Allocation Factor

The parties have agreed to the proper energy allocation factor and so this is not a disputed issue in the case.

E. 34.5 kv Lines

This issue revolves around the proper classification of certain 34.5 kv lines located within Company's Missouri jurisdiction. The question presented is

whether the 34.5 kv lines should be classified as distribution lines or transmission lines. If they are classified as distribution lines the costs associated with the lines are assigned to the Missouri jurisdiction. If they are classified as transmission lines the costs are allocated to the Missouri jurisdiction based upon the transmission allocation factor discussed above.

Staff proposes to classify the 34.5 kv lines as transmission lines. Staff states that the Commission has established precedent that requires the treatment of these lines as transmission lines. Staff points out that the standard for determining how a line is classified is set out in Case No. ER-82-52. Re: Union Electric Company, 25 Mo. P.S.C. (N.S.) 194, 212 (1982). This standard, Staff states, is that a line should be classified as a transmission line if it provides a transmission function under any conditions. Only those lines which serve a customer or customers truly isolated from the integrated system should be classified as distribution. Staff contends that the evidence in this case indicates that these lines do not meet the criteria for being classified as distribution lines.

Company contends the lines serve customers and that they physically cannot haul the bulk power necessary for them to be considered transmission lines. Company states it reclassified the 34.5 kv lines as distribution when it became responsible for the Missouri jurisdiction books. The function of the lines, Company states, changed long before the change on the books. Company asserts the lines ceased being used as transmission lines in the 1960s.

Company describes a transmission line as one that can be integrated into the transmission grid of the system. If the line can only serve customers in a specific local area, then it is a distribution line. The lines in question, Company contends, meet the requirement of distribution lines because they provide direct access to customers.

The Commission reaffirms its position on the standard for classifying a 34.5 kv line as either transmission or distribution. Although Company asserts the

lines cannot function within its transmission grid, the Commission finds the evidence is not convincing that the 34.5 kv lines are not part of Company's transmission grid. The evidence is not persuasive that the lines only serve customers within an isolated area. The Commission therefore finds the costs associated with these lines should be allocated as transmission line costs.

F. Demand Meters

Staff has requested the Commission order Company to place demand meters on four 34.5 kv lines which cross from Arkansas to Missouri. Staff points out that demand meters were ordered to be installed in Case No. ER-81-364. A Staff witness testified these four lines also should be metered. Company states this issue was not part of those listed in the Hearing Memorandum so it should not be addressed in this case.

The Commission understands that this issue was not listed as a contested issue in the Hearing Memorandum. The Commission, though, is of the opinion that the installation of the additional four meters would complete the installation of demand meters from Case No. ER-81-364. The Commission has determined these meters should be installed and does not believe an additional proceeding is warranted.

IX. Functionalization And Classification Of Costs

A. Allocation of General Plant

The Company and the Commission Staff are in substantial disagreement as to the proper method of developing a jurisdictional allocation factor for the Company's plant which is not production, transmission, or distribution plant. The Staff developed an allocator for general plant based upon the ratio of Missouri jurisdictional distribution, transmission and production plant to total Company distribution, transmission and production plant. Those ratios were then applied to general plant. Company is critical of the Staff's method because of the contended erroneous assumption that general utility plant investment is made up of the exact weighting of production, transmission and distribution plants. The Company contends

that the Staff's method totally ignores other areas of the Company's business such as customer accounts and in the Company's opinion the Staff's method lacks precision.

Company presented the results of a "functionalization analysis" which developed an allocation factor for each general plant account. Staff is critical of the Company's study because the only documentation is the breakdown of the final results. The study was performed to some extent by oral conversations with Company department heads to determine the exact use of certain elements of the general plant. The Staff is also critical of the Company's method because it involves substantial resources and the Company should show significant benefits of using the more detailed method.

Staff witnesses conceded that both methods are recognized allocation methods, however, the Company's method involves more resources, and due to its subjective nature it is difficult to verify. The Company responded to this criticism by pointing out that the work papers supporting their study were available to the Staff at the time of their audit, however, the Staff chose not to examine the work papers.

In the Commission's opinion either of the methods presented would be a satisfactory basis for the allocation of general plant. There is no information in the record from which to determine the value of the other issues based on the Commission's adoption of the Company's position on allocation of general plant. For that reason the Staff's position and its allocation factors for general plant must be adopted.

B. Allocation of Production Maintenance Expense

The Company and the Commission Staff took a substantially different approach to the allocation of maintenance expense incurred at the Company's generating facilities. Company assigned the expenses according to the energy allocator which is the relationship of the Missouri kilowatt hours sold to the total Company sales. Company treats all production operation expense, excluding fuel and

purchased power, as demand related, and all production maintenance expense as energy related. Company's approach is simply that the maintenance expenses are directly related to the extent to which the generating plants are operated to produce kilowatt hours.

The Commission Staff used the demand allocation factor and apportioned expenses in the same manner as plant. The manager of the Commission's electric department pointed out a number of areas wherein it can be established that maintenance expense is in response to how a plant is used, not the total amount of energy produced. If maintenance is directly related to kilowatt hours of production, plants which produce no energy or plants used for immediate load following and cycling duties should have maintenance expense levels less than that of base load units. This is not, however, generally the case. The Staff's evidence also established that some plants which did not run at all in 1985 and others which did not run in 1985 or 1984 incurred a total of \$237,000 in production and maintenance expense during the first nine months of 1985. This evidence certainly appears to refute the contention that maintenance expense is directly related to kilowatt hours of production.

The Company moved to strike portions of the surrebuttal testimony of Chris Rogers, manager of the Commission's electric department, in Exhibit 89 on the grounds that testimony for the first time identified the Staff's method of dealing with production maintenance expense. In the Commission's opinion that motion to strike should be denied since Staff witness Zimmerman's direct testimony, although not elaborate on the subject, adequately states that it is the Staff's position that expenses should be apportioned in the same manner as plant, and in this case, as in previous rate cases the Staff has followed the premise that expenses follows plant, and the allocation factors in regard to the Staff's method appeared on the Staff's income statement.

In recent rate cases the Commission has generally allocated production expense on the demand allocation factor. In the instant case the evidence of record appears to bolster the justification for continuing to adopt that method. Staff's proposed adjustment to the revenue requirement should be adopted.

X. Excess Capacity

In its filed case, the Company seeks an inclusion in rate base of generating capacity which the Staff and the intervenors consider excess. Company's position is based on a 1980 study by Energy Management Associates (EMA) which justifies a reserve margin of up to 70 percent purely for economic reasons. A loss of load probability (LOLP) study performed by MSU purports to justify a reserve margin for reliability purposes of from 45 to 54 percent based on a one-day in ten year probability.

The Commission Staff employs the system planning margin of 25 percent as the basis for their calculation of excess capacity. The Staff's study shows that, even excluding Grand Gulf, the Company has excess capacity and will have excess capacity for approximately 10 more years. On the basis of this excess capacity the Staff recommends a phase-in of the incremental costs of the Company's excess capacity from its most recent coal units, as well as carrying costs, until such time as the plants are actually needed to fill the Company's 25 percent reserve margin.

The Company at one time had generation capacity which was substantially gas and oil fired. Company engaged in the decision to build base load capacity which was coal fired because of expected long run benefits of anticipated savings in variable cost which would exceed the fixed cost of those base load units. Some of the considerations from which this expectation was based were higher forecasted and actual demands for electricity, lower forecasted than actual capacity costs for coal units, higher forecasted than actual costs for oil and natural gas, and the assumed unavailability of natural gas. Most of these expectations have not materialized and the cost of operating the coal-fired units are not significantly enough lower than

the operation of the gas and oil units to offset the cost of construction of the newer units.

It is the Company's contention that no excess capacity adjustment is justified in this case as it would be impossible, based on the record, to find that the Company did not prudently commence the construction of coal-fired plants. In the Commission's opinion it is unnecessary to address the prudence of the construction.

In addition to the recent coal-fired plants, the Company was engaged in the construction of two nuclear generating units at Arkansas Nuclear One (ANO). Company adopts the stance with regard to the question of whether or not its coal units are used and useful, that the Commission must find that they are. Company concedes that although there are times during the year when it does not need the entire capability of all four units to serve retail customers, there are nonetheless substantial benefits flowing to its customers from these units to an extent which makes it impossible for the Commission to reasonably find that they are not used and useful. Company's brief does not enumerate those benefits nor does it cite the record where the benefits are enumerated.

In the Commission's opinion acceptance of the system 25 percent reserve planning margin is reasonable and proper as recommended by the Staff. This is certainly more generous than the commonly authorized 18 to 22 percent reserve margin for other utilities. Such a decision is also consistent with our determination that a portion of a generation station should be excluded from rate base when the Company contended that a 20 to 25 percent reserve margin was reasonable, although its power pool contractual arrangement required only a 15 percent reserve margin. Re: Kansas City Power & Light, 23 Mo. P.S.C. (N.S.) 474 (1980). Simply put we find little credence in reserve capacity margins of 45 to 70 percent.

In the Commission's opinion a more reasonable assessment of the Company's excess generating capacity is contained in the study performed by Staff witness Proctor in Exhibit 9 portraying the Company's excess capacity for years 1986 through

1995. The Commission is of the opinion that, in an effort toward conservatism, it should use the calculation of excess capacity for the year 1989. This forward look would allow the Company some period for adjustment and planning. The use of 1989 is a further effort at conservatism since the study shows that in 1990 265 megawatts of ISES 2 capacity will be returned to the Company thereby increasing the excess capacity. Proctor's study shows the excess capacity in 1989 to be 1,501 megawatts which is the lowest capacity from 1966 through 1991. For reasons later discussed, the 405 megawatt assignment of Grand Gulf will not be considered excess capacity and should be excluded from this calculation. This results in an excess capacity of 1,096 megawatts above the 25 percent reserve capacity herein accepted as reasonable. If Grand Gulf capacity was included as a part of Company's generating system the excess capacity would be substantially higher.

No matter what the origin of capacity the simple fact remains that the Company intentionally overbuilt its generating needs to improve its fuel diversification. The question for the Commission's resolution is whether the ratepayers suffer for the unfortunate results of increased capacity costs if the expansion was not originally imprudent. In the Commission's opinion a substantial portion of the Company's generating plant is not used and useful for public service.

Disallowance of that portion of the generating capacity unnecessary to ensure reliability is consistent with previous decisions of this Commission as well as other Commissions. The Pennsylvania Public Utility Commission has applied a two-part test requiring (1) that the investments were prudent when made, and (2) that the property invested in will be used and useful during the time the rates will be in effect. In Pennsylvania Public Utility Comm. v. Pennsylvania Power & Light Company, 67 P.U.R.4th 30 (1985) that Commission stated at page 43:

The primary meaning of "useful" in the present context is that the plant and its associated capacity contribute no more than necessary to system reliability in the accepted, technical sense. In other words, the question is whether the company's total capacity, including the plant in question, is commensurate with

the requirements for peak demand plus a reasonable reserve margin relative to the company's own system and to its PJM obligation.

This is the heart of any excess capacity determination. It means, among other things, that the company's alternative definitions of "reliability" as fuel diversity or available capacity are peripheral. If there is excess capacity in the primary reliability sense, then the threshold condition for an adjustment has been satisfied. (Id. at 43)

Public Counsel's brief cites extensive authority for the proposition that the requirement that property must be used and useful in public service to be included in rate base has been followed in a long line of cases commencing with Smyth v. Ames, 69 U.S. 466 (1898). In the instant case, the generating capacity in question simply is incapable of being used for the necessity or convenience of the ratepaying public.

The Commission Staff and the Public Counsel disagree as to the proper method of treating any excess capacity. In the Commission's opinion the Staff proposal to defer any recovery, but eventually make the Company whole, in reality is not a disallowance.

Public Counsel witness Thompson recommends that risk sharing be imposed between the shareholders and the ratepayers as a result of any excess capacity determination. Thompson's proposal is that risk sharing could be accomplished by denying one-half of the equity return associated with the Grand Gulf plant until such time as Grand Gulf's capacity is needed. As previously noted, the Commission will not declare Grand Gulf as excess capacity in this case but we are of the opinion that it is proper to apply Mr. Thompson's proposal to the non-Grand Gulf excess capacity which we have found. The Public Counsel's brief cites ample authority for the imposition of this risk sharing concept.

We are further persuaded that an excess capacity adjustment is proper because of a current generating station retirement program which might be considered premature. Proposed retirements are identified on The Middle South Utilities Additions and Retirement Schedule which considers plants that are 25 years of age or

older. Guidelines developed by the Middle South Production Committee assigned a 35-year useful life to the generating plant unless otherwise designated. The study does not provide an economic analysis of a decision to retire its generating unit but only considers the mechanical and operating conditions of the unit and the projected cost of maintaining it for reliable operation. Even though a unit may be 35 years old or older, there remains some useful life. Some units may require major overhaul but some are expected to continue to operate without unusual expenditures. As an example, the summary shows that the Jim Hill unit was 35 years old in 1983 and had 12 years of useful life without unusual expenditures. The Commission agrees with the opinion of Staff witness Ketter that the decision to retire a unit should be based on an economic evaluation of the variable cost and fixed cost of operation and that the maintenance cost and capital cost associated with extending the life of a unit should be included in the evaluation. There should be quantification of costs, absent here, to determine the economic obsolescence of a generating plant.

Because of the allocations decision some of the components of Thompson's calculations in Exhibit 21, Schedule 3, have been revised. We have determined that 1,096 MW of capacity is excess. That amount is a margin of 18.18 percent above the 25 percent herein found to be reasonable. The revenue adjustment of \$326,251 has been calculated according to the following table:

1. Common equity component of overall rate of return	4.45%
2. Overall rate of return	11.71%
3. Common equity proportion of overall rate of return [(1)/(2)]	38.%
4. Net Production Plant Investment - Missouri jurisdictional	\$42,351,651
5. Total annual return [(2) x (4)]	\$ 4,959,378
6. Common equity portion of return [(3) x (5)]	\$ 1,884,564

7.	Available generating capacity	6027
8.	Excess capacity	1096
9.	Excess capacity margin [(8)/(7)]	18.18%
10.	Equity return subject to risk sharing [(6) x (9)]	\$342,614
11.	Shareholder risk-sharing proportion	50%
12.	Proposed annual shareholder disallowance [(10) x (11)]	\$171,307
13.	Revenue Conversion Factor - Taxes	1.904483
14.	Proposed annual revenue adjustment [(12) x (13)]	\$326,251

XI. Rate of Return

The overall rate of return for a company is calculated based upon the weighted cost of long term debt, preferred stock and return on common equity. The parties have accepted Staff's calculation of the weighted cost of long term debt and preferred stock. There is disagreement concerning the return on common equity.

Company has calculated the required return on equity to be 16.31 percent. Company originally calculated the return on equity to be 17.05 percent. The 16.31 percent was Company's updated calculation based upon late 1985 data. The 16.31 percent includes .06 percent for flotation costs.

Company used an analysis of the returns required by stockholders of firms comparable to Company's parent, MSU, to determine the required return for Company. The return required by MSU was used for comparison since Company's stock is not publicly traded, while MSU's stock is publicly traded. Company used a discounted cash flow (DCF) share valuation theory to calculate the required return. The DCF theory, Company states, specifies the price which investors pay for a share of stock is equal to the discounted cash flow accruing to stockholders. The future cash flows are represented by dividends when a company is viewed as a continuous economic entity.

The DCF formula used to determine the return is: $k = \frac{D}{P} + g$. k is the required return. P is the current market price of common stock. D is the dividend yield. g is the rate of growth in dividends per share expected by investors.

Company applied the DCF theory to a sample of firms it determined to be comparable in risk to MSU. Dividend, price and growth data for a large number of electric utilities was used. Company used a risk/return relationship to find which of 96 firms it considered comparable to MSU in risk. Data for the first quarter of 1985 was used for each of 96 firms. Based upon its analysis, Company chose two firms as comparable in risk to MSU. These two firms were Philadelphia Electric (PE) and Kansas Gas and Electric Company (KGE). Hypothesizing that similar firms should have similar costs of common equity, Company arrived at its "bare bones" cost of common equity. Company then added its .06 percent flotation to arrive at the 16.31 percent proposed in this case.

Staff developed its range of required returns on equity using the same DCF theory. Staff also used MSU as Company's surrogate since Company's stock is not publicly traded. Staff points out that certain problems were encountered in using MSU data. MSU discontinued its dividend in August 1985 due to cash flow problems. These cash flow problems occurred because of regulatory resistance to the inclusion of the costs of Grand Gulf into rates. Staff stated it had to determine whether this cash flow problem was short term or long term to decide what figure to use in the DCF formula.

Staff chose to use the dividend yield from June and July 1985 of 12.27 percent in its formula. This yield was used, Staff states, because it represents the most recent dividend yield prior to the discontinuance of the dividend. Staff points out the sharp reduction in stock price once knowledge of the discontinuance was available as evidence of the reasonableness of the June/July yield.

Staff then used forward-looking data to determine the growth portion of the formula. Staff projected dividend growth through 1989 using compounded interest over

a five-year and ten-year period. Staff then compared the projected growth with the growth projected by Value Line and Salomon Brothers, Inc., two widely used investor services. Value Line projected dividend growth at 2.0 percent from the period 1982-1984 to the period 1988-1990. Salomon Brothers' projection was a five year normalized rate of 3.0 percent. Salomon Brothers has since ceased projecting MSU dividend growth. Staff stated it utilized the most forward-looking data in its DCF formula due to the recent completion by MSU of two nuclear power plants. Staff utilized the 1986 and 1989 ten year compound interest growth on dividends. The figure for 1986 is 2.87 percent and for 1989 is 1.83 percent. Placing these figures in its DCF formula, Staff arrived at its range of required returns on equity of 14.17 percent to 15.2 percent.

Staff, to demonstrate the reasonableness of its range, did an analysis of 22 utilities with nuclear power plants in operation. Staff then chose three indicators to find the firms similar in risk to MSU. Following its analysis, Staff chose Pennsylvania Power & Light (PPL), Union Electric Company and Dominion Resources as firms comparable in risk to MSU. Staff then compared the three firms with MSU and concluded its DCF range was reasonable.

Public Counsel proposes the Commission adopt the lower end of Staff's range. Public Counsel asserts that only the lower return on equity is justified due to Company conduct during the proceedings and management inefficiency. Public Counsel argues that Company's actions with regard to Grand Gulf were only for the benefit of its shareholder MSU, not the ratepayers. Public Counsel proposes further that if the Commission finds a higher return on equity reasonable, then a negative 300 basis point adjustment should be made to the return found to be reasonable. This would leave Company still financially viable, Public Counsel asserts.

The Mines contend both Company and Staff have proposed excessive rates of return. The Mines argue that Company's activities with regard to capacity planning were risky and speculative and the ratepayers should not be made to bear the higher

rate of return necessary to fund these speculative actions. The Mines also propose a penalty for mismanagement and lack of attention to Missouri ratepayers. The return on equity should be no more than 11.16 percent due to these considerations.

The Commission has in recent cases adopted the DCF theory as the most reasonable method for determining the return on equity for a public utility company. This theory provides a reasonable estimate of investors' expectations of a return on equity based upon a company's dividend yield and dividend growth rate. The Commission prefers to utilize the actual data for the company in question in reaching its determination. Where, as here, a company's common stock is not publicly traded, a proxy must be used. Since the parties have used MSU as Company's proxy, the Commission will accept MSU as the appropriate proxy.

Company has used a comparison of firms it found to be of comparable risk to MSU to which it applied its DCF analysis. The Commission finds such an analysis useful but not determinative since the comparison of risks is based upon many judgments about the data used and comparisons made. Comparisons and statistical analyses of other companies provide some basis for judging whether a required return recommended is reasonable, but are not the Commission's first choice for making a decision on the required return on equity. The Commission must therefore look elsewhere to determine the appropriate return on equity.

Staff has provided the Commission a DCF calculation based upon MSU historical and projected data. Staff also provided an analysis of comparable firms to demonstrate the reasonableness of the range derived from the DCF formula. The comparison analyses performed by Staff and Company were equally dissected and proven to be suspect. The Commission finds that Staff's data concerning MSU provides a more reasonable basis for determining the required return on equity of Company.

Staff's data indicates MSU's yields have fluctuated from as low as 10.50 percent to a high of 15.82 percent from January 1982 to July 1985. This data provides a good perspective for determining if Staff's use of the June/July yield of

12.27 percent is reasonable. The period from 1982 to July 1985 includes the years of MSU's nuclear construction and the resulting financial pressures placed upon MSU. The data shows the yield continued to decline throughout 1985 until the dividend was canceled. Grand Gulf went on line in July 1985. The dividend was canceled due to cash flow problems because of regulatory reluctance to pass through Grand Gulf costs to ratepayers. Since the June/July figures include the completion of Grand Gulf and are prior to the cancellation of dividends, the Commission finds they reflect the reasonable yield of MSU once dividends are resumed. The Commission considers the discontinuance of dividends to be short term since the MSU operating companies are now receiving rate relief for the nuclear projects. This rate relief will improve MSU's cash flow. The Commission finds it reasonable to project that MSU's yields will return to the June/July 1985 level once dividends are resumed.

Staff's data concerning the dividend growth rate indicates MSU's dividend growth rate had been declining each year prior to the discontinuance. The projections on Staff's data show a continued decline in the dividend growth rate. The Commission finds this to be a reasonable projection based upon the long term difficulties MSU faces. The Commission finds, based upon the evidence, that rate relief should allow MSU to resume its dividend but that dividend growth will not be above 2.0 percent. Based upon this determination, the Commission finds the low end of Staff's projections is reasonable.

The low end of Staff's range is also appropriate because of the completion by MSU of two of its nuclear plants. The completion of nuclear projects has been recognized by the Commission as a significant factor reducing the return on equity needed to attract capital. Re: Union Electric Company, 27 Mo. P.S.C. (N.S.) 183, 269 (1985). The Commission will not allow flotation costs since Company will not be issuing stock and the ratepayers should not have to pay for MSU costs. The Commission finds a reasonable return on equity to be 14.25 percent.

legitimate and actual operating expenses for ratemaking purposes. Narragansett Electric Co. v. Burke, 119 R.I. 559, 381 A.2d 1358, 1362 (1977), cert. denied, 435 U.S. 972 (1978). Company also cites a number of cases wherein Narragansett has been followed. In Narragansett an electric company included in its rate request the increased cost of power purchased from an affiliated company under a Federal Power Commission tariff which had been filed but not finally approved. Although the Rhode Island Commission was without authority to set the rate at which wholesale power was sold, it ruled it could disallow a pass through of costs which were "strikingly" or "glaringly" unreasonable. The Rhode Island Supreme Court determined that the commission must treat the Federal Power Commission filed rate as a reasonable operating expense. Extensive citation is offered of cases following the Narragansett doctrine.

Company also cites in its brief authority for the proposition that, even in the absence of the Federal Power Act, Congress may prohibit state regulation affecting interstate commerce under the Commerce Clause of the Constitution. Public Utilities Commission v. Attleboro Steam & Electric Co., 273 U.S. 83 (1927). It was in response to the Court's decision in Attleboro that Congress enacted the Federal Power Act. Extensive authority is cited in support of the Commerce Clause principle, however, it need not be pursued at length. Typical of the cases cited in this regard is Eastern Edison Co. v. Department of Public Utilities, 388 Mass. 292, 446 N.E.2d, 684 (1983), wherein it was determined that wholesale rates charged under the Federal Power Act must be just and reasonable. A right to a reasonable rate was described as the right to the rate which the FERC filed or fixes.

The parties contending that the Commission has the authority to disallow a FERC ordered cost rely on Pike County Light & Power Company v. Pennsylvania Public Utilities Commission, 77 Pa. Commw. Ct. 268, 465, A.2d, 735 (1983). The Company contends that the case is easily distinguishable. In Pike County the Court held that although the Commission was precluded from passing on the propriety of the FERC rate,

it may ascertain whether the purchasing utility exercised prudence in deciding to purchase power at the approved rate. The Court observed that whereas FERC determines the reasonableness of a particular wholesale rate by analyzing the supplier's cost, the state commission determines whether it is reasonable for the buyer to purchase power at that price in light of the other available sources. In effect, the Court appeared to be saying that FERC approval only indicated that it was reasonable for those rates to be charged to the supplier, not that it was reasonable for the purchaser to incur the expense. Pike County involved the choice between two federally approved wholesale rates.

In the Commission's opinion it is unnecessary to address the question whether or not Narragansett is controlling or whether or not the apparent Pike County exception may be applied. We are of the opinion that in the face of the decision of the District Court for the Western District of Missouri in Arkansas Power & Light Company v. Missouri Public Service Commission, supra, we lack the jurisdiction to deny a pass through of the Grand Gulf costs. But for the Grand Gulf issue, the resolution of this case would result in a revenue decrease.

We are actively pursuing judicial review of the District Court's order. However, in the absence of the order being overturned, or a reversal of FERC Order 234, we are of the opinion that the decision and reasoning of the Court is sufficiently broad to require a pass through of Grand Gulf on a permanent basis. The District Court stated therein:

Turning to APL's complaint, the Court finds MPSC's refusal to recognize APL's interim rate request to impermissibly interfere with the regulation of wholesale utility rates. Id. at p. 7

The Court further observed:

While regulatory lag may not amount to a deprivation of constitutional rights, the facts of this case make it abundantly clear that the MPSC's refusal to allow APL interim rate relief is an unlawful interference with the FERC's regulation of wholesale utility rates.

APL's Grand Gulf allocation was imposed upon them by FERC Order No. 234-- the original UPSA had allocated zero Grand Gulf power

Based upon its finding that 14.25 percent is the required return on equity for Company, the Commission can determine the overall rate of return for Company. That determination is made by utilizing the capital structure agreed to by the parties and adding the 14.25 percent for common equity. The structure is:

<u>Type of Capital</u>	<u>Capital Structure</u>	<u>Cost (%)</u>	<u>Weighted Cost (%)</u>
Long Term Debt	58.54	10.80	6.32
Preferred Stock	10.22	9.15	0.94
Common Equity	<u>31.24</u>	14.25	<u>4.45</u>
Total	100.00		11.71

The Commission finds that Company's overall rate of return requirement is 11.71 percent.

XII. Grand Gulf Costs

Company seeks inclusion in its rates of the costs assessed by FERC Opinion No. 234 issued on June 13, 1985, which allocated 36 percent of the power and associated costs of a nuclear generating station known as Grand Gulf Unit No. 1 to the Company. The Commission Staff, Public Counsel, and intervenors, propose a disallowance of those costs.

The history of the Grand Gulf project was exhaustively treated in the evidentiary presentation as well as the briefs filed in this matter. Because of the result reached herein we are of the opinion that it is unnecessary to recount that history in detail.

Originally the two units of Grand Gulf were to be the projects of two of the other operating companies in MSU. Because of perceived difficulties in financing the Grand Gulf project by the two operating companies, MSU formed another wholly-owned subsidiary called Middle South Energy, Inc. (MSE) for the purpose of financing, constructing, and owning the Grand Gulf project. The Company entered into a series of agreements and commitments designed to satisfy the financial backers of the project. One of the agreements entered into by the Company was with the other operating companies of MSU to the effect that the Company would not receive, and

therefore would not pay for, any of the power to be generated by Grand Gulf. The ultimate agreement of significance was a Reallocation Agreement executed on July 28, 1981, by Company and the other operating companies of MSU. Under that agreement APL was to take no power from either of the Grand Gulf units, with the three other operating companies taking all of the power in varying percentages.

The FERC Opinion No. 234 rejected the agreement of the operating companies and allocated 36 percent of the power and associated costs of Grand Gulf to the Company. Under that order the Company has been incurring costs of approximately \$1 million per day since July 1, 1985, on a systemwide basis. The amount of these costs allocated to the Missouri retail customers allocated by the Company was approximately \$1 million per month. By various modifications those costs presently stand at \$10,598,000 on an annual basis according to the Company. On February 4, 1986, the Company filed an action in the United States District Court for the Western District of Missouri, Central Division, in response to this Commission's denial of the Grand Gulf costs on an interim basis in Case No. ER-85-265. The Commission was ordered to allow the Grand Gulf costs on an interim basis in Arkansas Power & Light Company v. Missouri Public Service Commission, Docket No. 86-4067-CV-C-5 (March 10, 1986). Grand Gulf costs included in rates for the Missouri portion of the Company's service area are presently \$10,598,000 annually, subject to refund. Because of the manner in which we have disposed of the allocation issues in this case, the Grand Gulf costs at issue are \$9,033,000 on an annual basis.

The Company's inclusion of Grand Gulf costs is generally resisted by all other parties on the grounds that the FERC order does not preclude the Commission from disallowing the Grand Gulf costs if it is determined that the Company was imprudent in participating in the Grand Gulf project to support its parent and sister companies with no apparent advantage to be gained for its ratepayers.

The Company's brief refers us to the Narragansett Doctrine for the proposition that state regulatory commissions must treat rates established by FERC as

to APL. Pursuant to the FERC order, APL began incurring these costs -- costs which in some form will ultimately be incorporated into APL's retail [Missouri] rates -- immediately upon the effective date of the FERC order. Moreover, given the prohibition on retroactive rate-making, the costs incurred by APL until the MPSC finally resolves the "permanent" rate case will be effectively unrecoverable. Id. at p. 8

The Court concluded its Opinion by stating:

Accordingly, the Court concludes that MPSC's failure to recognize APL's interim rate request impermissibly ignores the FERC-ordered allocation on Grand Gulf power and interferes with the federal regulation of wholesale utility prices. APL is incurring real costs, pursuant to a FERC order, that MPSC should not be allowed to ignore under the guise of regulatory lag. Id. at p. 9.

The Grand Gulf costs at issue in the permanent case are the same costs at issue in the interim case. By subsequent order issued in Cause No. 86-4067-CV-C-5, the United States District Court for the Western District of Missouri modified its Order, but only to the extent of stating that it was not determining the Missouri portion of the Grand Gulf costs being incurred or the procedure by which the costs should be recovered. We are actively pursuing reversal of FERC Order No. 234 as well as District Court Order in Docket No. 86-4067-CV-C-5. Absent those reversals, we are of the opinion we must pass through the Grand Gulf costs.

XIII. Cost of Service/Rate Design

The Commission is presented in this case with cost of service studies and various rate design proposals by Company, Staff, Public Counsel and the Mines. Cost of service studies are used to allocate among the various classes the revenue requirement approved for Company. Rate designs or rate structure proposals are developed to generate the individual class revenue requirement which has been allocated by the cost of service studies.

In Case No. ER-81-364 the Commission adopted the average and peak (AP) method for cost of service and rate design for Company. Re: Arkansas Power & Light Company, 25 Mo. P.S.C. (N.S.) 101 (1982). The Commission approved the AP method as a proxy for a time of use (TOU) method where hourly load data was not available. The

Commission has reaffirmed its support of the underlying considerations of the TOU/AP method in other cases.

Company has proposed that the current class cost allocations and rate design be maintained and any increase granted in this case be distributed equally to all classes and rate components except the Lighting class. Company proposes that Lighting only receive the increase in rates attributable to Grand Gulf, but no increase for non-Grand Gulf costs. Company has maintained the same rate classes in its cost of service study. These are Residential, Small General Service, Large General Service and Large Power. The current rates also have special tariffs for Cotton Ginners. Company proposed any rate increase due to Grand Gulf be recovered through a tariff rider. The Grand Gulf increase would be allocated equally to all classes and rates.

The cost of service study proposed by Staff is based upon Staff's capacity utilization allocation method. Staff's capacity utilization method allocates the costs of capacity to each customer or class based upon the capacity utilized in each hour of the year. This method is similar to the TOU method proposed by Staff in Case No. ER-81-364. The Staff utilized a monthly AP method for allocating costs since hourly load data was not available. The results of Staff's cost of service study shift significant amounts of the revenue requirements among the classes. Staff therefore proposed several alternatives to reduce the impact of the shift. Staff proposed the Commission determine the emphasis it places on customer impact in deciding how far to move toward the class allocations its cost of service study indicates are proper.

Staff also proposes some significant changes in the rate design of the various classes. Staff generally proposes an increase in the summer rates for all classes and a facilities charge and hour of use rates for the General Service class and Large Power class. Staff combined Small General Service and Large General Service into one General Service class. Staff proposed a decrease in Lighting rates.

Additionally, Staff proposes Grand Gulf costs be allocated based upon Staff's class allocation and rate design proposals. This, Staff states, would preserve the rate differential established by the rate design.

Public Counsel proposes a TOU/AP method be used for allocating all costs, including Grand Gulf. Public Counsel presents a cost of service study and rate design similar to Staff except for certain disagreements with specific allocations. Public Counsel proposes any increase be limited to 125 percent of the system average for individual customers.

The Mines generally have accepted the Commission's adoption of the TOU/AP method for allocating costs. The Mines, though, attack Staff's proposal as based upon pricing and not cost causation. The Mines propose that the Large Power class receive 3 percent less of an increase in rates than the system average increase. The Mines also propose the retention of the current rate design for the Large Power class, and the adoption of an interruptible tariff.

Cotton Ginners have historically had a separate tariff schedule designed to meet their specific needs. For cost of service purposes they have been treated as a part of the Small General Service class. Cotton Ginners propose the retention of the current rate design and that they receive the same increase as the Small General Service class. Cotton Ginners also propose that any increase to a class or subclass should not exceed 10 percent of the system average increase.

A review of the proposals for class allocation and rate design indicates the disparity between the proposals. Staff's proposal would make the most dramatic changes in class allocations and rate design. Staff, though, has indicated the Commission should decide the appropriate movement to the results indicated by its cost of service study by weighing customer impact and equity.

The Commission concurs in Staff's recognition of the importance of weighing customer impact and equity in determining the proper allocation of costs and rate design in this case. The Commission has followed Staff's lead in past cases in

moving toward allocations based upon hourly usage. The Commission still approves of this basic concept for class allocation and rate design. This case, though, presents different considerations to the Commission which make the Commission reluctant to adopt any changes without a more careful study of the consequences. The Commission does not believe the proposed changes can be justified in this case because of the potential impact on customers.

The Commission is granting a significant increase in rates in this case, as well as a phase-in of those rates. The precise economic impact of this rate increase is not readily discernible. The Commission is unwilling at this time to approve additional shifts in customer rates without first observing the effect of the increase. Using Staff's analysis, the Commission has determined impact should be given total consideration in setting rates in this case. This emphasis on impact, the Commission would note, is supported by Company, the Mines and Cotton Ginners. The considerations presented by those parties have also influenced the Commission's decision.

Based upon the concern about the impact on customers of the rate increase, the Commission has determined that all classes will receive an equal percentage increase from the increased revenue requirement authorized in this case. The Commission has determined that each rate within the classes should be increased an equal percentage as a result of the increased revenue requirement. The increase should be applied to the monthly customer charge as well. The Commission has also determined that Grand Gulf costs should be recovered through rates and not through a tariff rider. Grand Gulf costs should also be subject to refund as proposed by Staff. This refund would be with interest as calculated in 18 C.F.R. 35.19(a).

The Commission has determined it should not approve an interruptible tariff in this proceeding as sought by the Mines. If Company wishes to propose an interruptible tariff for the Mines, it may do so in a separate tariff filing.

XIV. Economic Impact On Area

The mining intervenors seek a rate determination that is based on costs and further request that such rates be fair, just, reasonable and competitive and that any subsidies now being paid by their customer class be eliminated.

The mines represent a substantial portion of the Company's load. The mines also represent a substantial economic factor in a 10-county area as major employers. There is little doubt that the mines as well as the entire 10-county area are in dire economic straights. In the instant case the Commission has attempted to balance its obligation to both the shareholders and the ratepayers in a number of areas. We have rejected rate design proposals which would place a heavier burden on the mining intervenors. We have carefully scrutinized the Company's cost of service and have disallowed unreasonable costs. The Company has also been held to a strict burden of proof in a number of areas. The requirement of setting fair and reasonable rates requires that Company's customers are entitled to service at rates that are based on costs plus a reasonable profit. In the instant case the Commission has attempted to reach that result with as much precision as possible. The rates herein found fair and reasonable are to be implemented under a phase-in to minimize as much as possible the financial impact on the mines and all of the ratepayers in the area served.

XV. Summary and Revenue Requirement

As a result of our resolution of the allocations issues, the figures on the Staff's case presented in the issue reconciliation attached to the Hearing Memorandum (Exhibit 1, Appendix B) have been revised. The following table sets forth those revisions.

DESCRIPTION	<u>RATE BASE</u>	<u>INCOME STATEMENT</u>	<u>REVENUE DEFICIENCY (REDUCTION)</u>
I. RATE BASE ISSUES			
A. Cash Working Capital			
1. AP&L Lead Lag	\$1,942,000	\$	\$ 317,925
2. AP&L Adj. to Staff			
a. Collection Lag	34,407		5,633
b. Nuc. Fuel Lag	57,309		9,382
c. Int. Exp. Lag	618,588		101,269
d. Minimum Bank Bal.	324,657		53,150
e. Return on Equity	250,049		40,935
f. Depr/Def. Tax Lag	407,276		66,677
g. Wholesale Rev.	167,752		26,463
h. Coal Expense Lag			
i. AECC Lag	92,168		15,088
j. Other CWC Items	481,537		78,833
B. SFI Investment	1,456,091		238,378
C. Coal Inventory	1,021,687		167,260
D. NACC Deferred Costs	56,018		9,172
II. REVENUES			
A. Missouri Jurisdictional Revenues		(1,612,678)	1,612,678
B. SFI Interest Income		157,158	(157,158)
III. OPERATING EXPENSES			
A. Net Fuel and Purch. Power			
1. Fuel & Purchased Power Net of NACC		2,394,278	2,405,029
2. Isolated Area Purchase			
a. Issue		1,659,296	1,666,745
b. Test Year Difference		72,292	72,616
B. NACC Cost		2,159	2,155
C. EEI Dues		4,508	4,501
D. Rate Case Expense - Public Counsel		(24,000)	(23,963)
E. Advertising/Sales Expense		37,073	37,017
F. CEA Dues		18,418	18,389
G. DH&S Fees		6,210	6,201
H. Directors' Fees - Public Counsel		5,034	5,027
I. Inc. Tax - Schedule M		297,263	265,884
J. Property Insurance Reserve		34,215	34,163
IV. JURISDICTIONAL COST ALLOCATION			
A. Production & Demand			
1. MSS-1, 640 MW (2.49% to 2.95%)			2,781,780
2. Co-owners (2.95% to 3.05%)			604,735
3. Avg. & Peak Method (3.05% to 3.40%)			2,116,572
B. 34.5 kv into Transmission	3,512,000		581,529
V. FUNCTIONAL/CLASSIFICATION OF COSTS			
A. Allocation of Gen'l Plant			
B. Allocation of Production O&M		488,602	477,853
VI. RATE OF RETURN (14.25%)			36,579
VII. EXCESS CAPACITY		(326,251)	(326,251)
VIII. GRAND GULF			9,033,000

As a result of all of the adjustments herein discussed, the Staff's base case requesting a revenue reduction in the amount of \$7,815,196 has been adjusted to a reduction of \$3,139,032. Allowance of the Grand Gulf costs, in the amount of \$9,033,000, which we feel is mandatory, results in an additional revenue requirement to be herein authorized in the amount of \$5,887,767.

XVI. Phase-in

The Commission has determined that Company should be allowed an increase in revenue of \$5,887,767. This would be approximately a 15.4 percent increase in rates to Missouri ratepayers. The Commission finds this is an unusually large increase in revenue which is primarily due to an unusually large increase in expense resulting from the FERC's regulation of expenses related to the Grand Gulf power plant. This increase would have a severe economic impact on the Missouri service area of Company. To reduce this impact and allow ratepayers time to adjust to the approved increase, the Commission has determined the revenue increase approved in this case should be phased in. The Commission has determined, that a five-year phase-in period is appropriate, with a 6.64 percent increase in year one and equal percentage increases in years two through five. Company shall also file tariffs reflecting a reduction in rates the year following the completion of the phase-in. The Company will also be allowed to recover carrying costs for the deferred amounts of 11.71 percent which is the overall rate of return found reasonable in this case. The phase-in is to be calculated in the same manner as the phase-in proposed by Staff witness Asphaugh in Exhibit 136, Schedule GTA-PIA (expensing option). The tariffs for the succeeding years are to be filed within thirty (30) days of the effective date of this Report and Order.

XVII. True-up

The Commission has determined no true-up is warranted in this case. Staff's test year date of September 30, 1985, brings Company's costs fairly current and no time was left after the hearings to conduct a true-up hearing.

Conclusions

The Missouri Public Service Commission has arrived at the following conclusions:

The Company is an electric corporation as defined by Section 386.020, RSMo 1978, and is subject to the jurisdiction of this Commission pursuant to Chapters 386 and 393, RSMo 1978.

The Company's tariffs, which are the subject matter of this proceeding, were suspended pursuant to the authority vested in this Commission by Section 393.150, RSMo 1978.

The burden of proof to show that the proposed increased rates are just and reasonable is upon the Company. That burden must be sustained by the presentation of competent and substantial evidence.

The Commission, after notice and hearing, may order a change in the rate, charge, or rental, and any regulation or practice affecting the rate, charge or rental, and it may determine and prescribe the lawful rate, charge or rental, and the lawful regulation or practice affecting such rate, charge or rental thereafter to be observed.

The Commission may consider all facts which, in its judgment, have any bearing upon a proper determination of the price to be charged with due regard, among other things, to a reasonable average return upon the capital actually expended and the necessity of creating reserves for surplus and contingencies. The Company's existing rates and charges for electric service are insufficient to yield reasonable compensation for electric service rendered by it in this state, and accordingly, revisions in the Company's applicable tariff charges, as herein authorized, are proper and appropriate and will yield the Company a fair return on net original cost rate base or fair value rate base. Electric rates resulting from authorized revisions should be fair, just, reasonable, and sufficient and not unduly discriminatory nor unduly preferential.

The Company should be able to file, in lieu of the proposed revised electric tariffs, new tariffs designed to increase gross electric revenues by

\$5,887,767 on an annual basis, exclusive of gross receipts and franchise taxes. This amount shall be recovered over a five-year period as more fully described in part XVI of this Report and Order.

It is, therefore,

ORDERED: 1. That the proposed revised electric tariffs filed by Arkansas Power & Light Company in this matter are hereby disapproved, and the Company is authorized to file in lieu thereof, for approval by this Commission, permanent tariffs designed to increase gross revenues by approximately \$5,887,767 on an annual basis, exclusive of gross receipts and franchise taxes.

ORDERED: 2. That the amounts authorized herein shall be recovered over a five-year period as more fully described in part XVI of this Report and Order.

ORDERED: 3. That the amounts to be recovered herein described as purchased power costs for the isolated area, and Grand Gulf costs will be collected subject to refund pending the outcome of any permanent FERC rate case or other proceeding which determines that those costs presently in effect by virtue of FERC orders are either in whole or in part excessive. Interest on any such refunds shall be calculated pursuant to 18 C.F.R. 35.19(a).

ORDERED: 4. That all motions previously not ruled on are hereby denied, and all objections previously not ruled on are hereby overruled.

ORDERED: 5. That within thirty (30) days from the effective date of this Report and Order, Arkansas Power & Light Company shall tender to its customers the refunds specified in Ordered: 3 of the Commission's Order issued and effective on March 11, 1986, in Case No. ER-86-52. Pursuant to the interim tariffs effective therein on April 8, 1986, the refund shall be with interest calculated pursuant to 18 C.F.R. 35.19(a) and shall be in the amount by which the interim rates exceed the aggregate revenues authorized herein. The refund shall be allocated to the classes in the same manner that the amount was charged in the interim tariffs and refunded based upon the billing units of the customer to which these amounts were applied

during the interim period. The refund shall be calculated by using as the authorized revenues herein the 6.64 percent increase for the first year under the phase-in.

ORDERED: 6. That the revenue increase approved in this Report and Order shall be allocated to the customer classes by an equal percentage and rates shall be increased by an equal percentage.

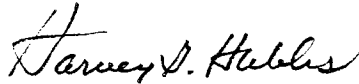
ORDERED: 7. That four demand meters shall be installed as determined in this Report and Order.

ORDERED: 8. That the tariffs for years two through five shall be filed within thirty (30) days of the effective date of this Report and Order. There shall also be filed tariffs reflecting a reduction in rates the year following the phase-in.

ORDERED: 9. That the Commission retains the discretion to review the phase-in tariffs approved herein on a prospective basis if the decision of the United States District Court for the Western District of Missouri, Central Division, Docket No. 86-4067-CV-C-5 issued March 10, 1986, is reversed on appeal.

ORDERED: 10. That this Report and Order shall become effective on the 4th day of May, 1986.

BY THE COMMISSION


Harvey G. Hubbs
Secretary

(S E A L)

Steinmeier, Chm., Musgrave, Mueller,
Hendren and Fischer, CC., Concur and
certify compliance with the provisions
of Section 536.080, RSMo, 1978.

Dated at Jefferson City, Missouri,
this 24th day of April, 1986.