

BEFORE

THE PUBLIC UTILITIES COMMISSION OF OHIO

In the Matter of the Application)
of Columbus & Southern Ohio Elec-)
tric Company for Authority to Amend)
and Increase Certain of its Rates)
and Charges for Electric Service,) Case No. 81-1058-EL-AIR
Amend Certain Terms and Conditions)
of Service and Revise its Depreci-)
ation Accrual Rates and Reserves.)

In the Matter of the Regulation of)
the Rates, Terms and Conditions of)
Public Utilities Having Pole)
Attachments Relating to 47 USC Sec-) Case No. 82-654-EL-ATA
tion 224 Pursuant to the Ohio Re-)
vised Code Sections 4905.71 and)
4905.72.)

OPINION AND ORDER

The Commission, coming now to consider the above-entitled application filed pursuant to Section 4909.18, Revised Code, the exhibits filed therewith, the Staff Report of Investigation issued pursuant to Section 4909.19, Revised Code, and the testimony and exhibits introduced at public hearing; having appointed Attorney Examiners Rebecca S. Haney and Helen L. Liebman, pursuant to Section 4909.18, Revised Code, to conduct the public hearing and to certify the record directly to the Commission; and being fully advised of the facts and issues in these cases, hereby issues its Opinion and Order.

APPEARANCES

Messrs. Porter, Wright, Morris & Arthur, by Messrs. Samuel H. Porter, William J. Kelly, Jr., and Daniel R. Conway, 37 West Broad Street, Columbus, Ohio 43215, and Mr. James L. Reeves, 215 North Front Street, Columbus, Ohio 43215, on behalf of the Applicant, Columbus & Southern Ohio Electric Company.

Mr. William J. Brown, Attorney General of Ohio, by Messrs. James R. Bacha and Harris S. Leven, Assistant Attorneys General, 375 South High Street, Columbus, Ohio 43215, on behalf of the Staff of the Public Utilities Commission of Ohio.

Mr. William A. Spratley, Consumers' Counsel, by Ms. Gretchen J. Hummel and Mr. Bruce J. Weston, Associate Consumers' Counsel, 137 East State Street, Columbus, Ohio 43215, on behalf of the residential consumers of the Columbus & Southern Ohio Electric Company.

Mr. Gregory S. Lashutka, City Attorney, by Mr. John C. Klein, Assistant City Attorney, 90 West Broad Street, Columbus, Ohio 43215, on behalf of the City of Columbus, Ohio.

Bell and Randazzo, Co., L.P.A., by Messrs. Langdon D. Bell, Samuel C. Randazzo and John W. Bentine, 21 East State Street, Columbus, Ohio 43215, on behalf of the Industrial Electric Consumers.

Messrs. Vorys, Sater, Seymour and Pease, by Mr. William S. Newcomb, Jr., 52 East Gay Street, Columbus, Ohio 43215, and Messrs. Hogan and Hartson, by Mr. Gardner Gillespie, of Counsel, on behalf of Ohio Cable Television Association.

Messrs. Vorys, Sater, Seymour & Pease, by Mr. Sheldon A. Taft, 52 East Gay Street, Columbus, Ohio 43216, on behalf of Buckeye Steel Castings, Division of Worthington Industries, Inc.

HISTORY OF THE PROCEEDING

The Columbus & Southern Ohio Electric Company (hereinafter C&SOE, the Company or the Applicant) is an Ohio corporation engaged in the business of generating and supplying electric service to approximately 473,000 customers in Franklin County and all or part of 24 other counties in Ohio. C&SOE is an electric light company and a public utility within the definitions of Sections 4905.02 and 4905.03(A)(4), Revised Code, and, as such, is subject to the jurisdiction of this Commission pursuant to Sections 4905.04, 4905.05 and 4905.06, Revised Code.

The Company's current rates and charges were established by Order of this Commission in Case No. 78-1438-EL-AIR, issued on December 12, 1979. Since that time, C&SOE has become an operating subsidiary of American Electric Power Company (AEP). The acquisition was declared in effect on May 9, 1980, when more than 88% of the shares of C&SOE had been tendered. By December 31, 1981, all of C&SOE's shares were owned by AEP.

On September 4, 1981, C&SOE filed with the Commission a notice of its intent to file an application, pursuant to Section 4909.18, Revised Code, for an increase in rates throughout its service territory. Along with the notice, the Company proposed a date certain of December 31, 1981, and a test period of the twelve months ending September 30, 1983. By Entry of September 30, 1981, the Commission permitted the Company to file data for its proposed fully-projected test period, but also required the filing of data for a test period of the twelve months ending June 30, 1982.

On November 2, 1981, C&SOE requested a waiver of certain of the Commission's Standard Filing Requirements as set forth in the Appendix to Rule 4901-7-01, Ohio Administrative Code. The motion was granted by Entry of November 25, 1981.

The Company's rate increase application was filed on December 31, 1981, and was accepted for filing as of that date by Entry of January 27, 1982. That Entry also approved, with modification, the proposed notice for newspaper publication.

In accordance with the provisions of Section 4909.19, Revised Code, the Staff of the Commission conducted an investigation of the matters set forth in the application and the related filings. A written report of the results of the investigation was filed on May 20, 1982. Service of the Staff Report was made in accordance with Section 4909.19, Revised Code. Objections to the Staff Report were timely filed by the Applicant, and by the Office of the Consumers' Counsel (OCC), the City of Columbus (City), Industrial Electric Consumers (IEC), Buckeye Steel Castings (Buckeye), and the Ohio Cable Television Association (OCTVA), all of whom had previously been granted leave to intervene.

By Entry of June 9, 1982, in Case No. 82-654-EL-ATA, the Commission approved for initial implementation pole attachment tariffs filed by C&SOE pursuant to an Entry of March 31, 1982 in Case No. 81-1109-AU-UNC. The Commission also consolidated Case No. 82-654-EL-ATA with Case No. 81-1058-EL-AIR, indicating that the pole attachment tariff should be reviewed concurrently with the rate case. C&SOE filed on June 16, 1982 a notice of dismissal and withdrawal of Case No. 82-654-EL-ATA; by Entry of June 21, 1982, the Attorney Examiner ruled that Case No. 82-654-EL-ATA not be dismissed, and that the Company comply with the Commission's June 9 Entry.

The Commission set these matters for hearing by Entry of June 2, 1982. The hearing began on June 25, 1982, for the taking

of public testimony. The taking of expert testimony began on June 28, 1982, and continued for 25 days.

Initial post-hearing briefs were filed by the parties on September 17 and September 24, 1982;* reply briefs were filed on October 1, 1982. Amicus briefs on the pole attachment issue were filed by the Ohio Telephone Association and Toledo Edison Company, pursuant to Attorney Examiner's Entry of July 23, 1982.

COMMISSION REVIEW AND DISCUSSION

By its application, filed pursuant to Section 4909.18, Revised Code, C&SOE requests authority to increase its rates and charges for electric service to all jurisdictional customers. The Company alleges that its current rates are unjust, unreasonable and insufficient to yield just compensation for the services rendered, and seeks approval of rates which would increase annual revenues by approximately \$100,838,000, based on its analysis of test year operations. The Commission must evaluate the evidence presented at hearing to determine whether C&SOE's existing rates are inadequate. If the Company sustains its burden of proof, then the Commission must establish rates which will afford the Company the opportunity to earn a fair rate of return.

ALLOCATIONS

Because not all of the Company's electric sales are affected by this application, it is necessary to allocate property and accounts to insure that the rates ultimately authorized reflect the cost of providing jurisdictional electric service. Based on the results of its investigation, the Staff found the Company's allocation factors to be reasonable and appropriate for the purposes of this proceeding (Staff Ex. 1, p. 4). No party filed any objections to the Staff's conclusion in this area. Consistent with the Staff recommendation, the Commission finds the jurisdictional allocation factors proposed by the Company to be reasonable and proper.

RATE BASE

The Company and the Staff each provided testimony in support of its analysis of the elements of the rate base which should be approved in this proceeding. The following table compares the two initial estimates of the value of C&SOE's property used and useful in providing service as of the date certain of December 31, 1981. OCC generally concurred in the Staff's recommendations, and differed with the Staff only on the issues of the construction work in progress and working capital allowances. Subsequent adjustments and relevant objections will be discussed on an item-by-item basis below.

Jurisdictional Rate Base (000's Omitted)

	<u>Applicant</u> ¹	<u>Staff</u> ²
Plant in Service	\$ 1,297,343 ⁽³⁾	\$ 2,186,629
Less: Depreciation Reserve	336,685	332,594
Net Plant in Service	\$ 960,658	\$ 954,035
Plus: CWIP	206,046	190,974
Working Capital	82,814	47,122
Plant Held for		
Future Use	13,382	
Cancelled Projects	1,805	

* The first initial briefs (cited as Br. I) covered all issues but operating income, which was addressed in the second briefs (Br. II).

Less: Company Garage	1,257	
Other Items	<u>27,170</u>	<u>46,291</u>
Jurisdictional Rate Base	\$ <u>1,236,278</u>	\$ <u>1,145,840</u>

- ¹ Co. Ex. 4, Sch. B-1 Updated
- ² Staff Ex. 1, Sch. 7
- ³ Reflects a mathematical error

Plant In Service

Land Exclusions

Consistent with its customary practice, the Staff conducted a selective sample of land parcels owned by the Applicant in order to determine if the property in question satisfied the statutory used and useful criteria. The inspection resulted in a recommendation that portions of 20 parcels be excluded from plant in service as not being used and useful (Staff Ex. 1, p. 22 and Sch. 1-8.2C). The Company objected to these exclusions which total \$666,919.

The Company does not dispute the fact that the portions excluded are not actually being used by the utility, but argues that it is not feasible for a utility to purchase exactly the required amount of land. The Company contends that the standard for inclusion in rate base should be whether the acquisition was reasonably necessary for the construction of facilities to render electric service, rather than a determination of whether the land is physically occupied by a facility.

The Company's argument that a prudent purchase makes the land used and useful is not convincing and we do not believe such a standard is contemplated by Section 4909.13(A), Revised Code. We do not dispute the wisdom of the Company's purchase but we must conclude based on the evidence that the land is not currently used and useful. As an alternative objection Applicant asserts that if the Commission accepts the Staff's exclusion, it should calculate the amount to be excluded on the fair market value rather than the pro rata portion of the original cost. The issue of what value to assign to excluded portions of land has been addressed in other Commission decisions (See Cleveland Electric Illuminating Co., Case No. 81-146-EL-AIR, et al., [Opinion and Order, March 17, 1982] and Cincinnati Gas and Electric Co., Case No. 81-66-EL-AIR, et al. [Opinion and Order, January 27, 1982]). In those cases the property was found to be not used and useful but there was no evidence of record to substantiate the Company's claims that the exclusion should be calculated in a different manner. Such is the case again in this proceeding as we have no evidence of record to assign a different value to the land in question. Consequently, we find that the Staff properly excluded the amounts in question.

The Applicant has also objected to the Staff's findings on land exclusions claiming that the Staff excluded a portion of the Hayden Substation twice. The evidence on this issue indicates that the Applicant was ordered in the last rate case to transfer fifty percent of the Hayden Substation to plant held for future use. The Company transferred only a portion of the land to plant held for future use, leaving about 15 percent improperly classified as plant in service (Staff Ex. 2, p. 13). The Staff's exclusion in this case properly transfers the remaining 15 percent to the correct account. The Applicant's objection should be overruled.

Plant Held for Future Use

C&SOE's plant in service valuation includes \$13,382,000 of investment attributable to plant held for future use (Co. Ex. 4, Sch. B-1; Co. Ex. 11A, pp. 7, 8). The Staff recommends exclusion of this amount on the grounds that plant held for future use should not be included in rate base until it is actually placed in service and becomes used and useful (Staff Ex. 2, pp. 7, 8). The Company objected to this exclusion, arguing that the Federal Energy Regulatory Commission (FERC) has determined that property held for future use should be included in rate base, that the Company's holding of this land ultimately benefits the customers and that the property should be considered as used and useful. The Company's arguments are not persuasive. The fact that the property may eventually be used to provide service to customers does not make the land currently used and useful for ratemaking purposes. Ohio law does not permit the inclusion of property held for future use in rate base, and the FERC practice in this regard has no impact on the Commission's decision as to whether the land should be included in plant in service. Thus, we find that the Staff's exclusion is appropriate and the Company's objection is overruled.

Cancelled Projects

The Company proposed an addition to rate base of \$1,805,000 which represents the cost of certain cancelled construction projects (Co. Ex. 5, pp. 4, 5 and Schs. B-1, B-1.1). These production and transmission projects were cancelled after the acquisition of the Company by American Electric Power because they were no longer considered necessary (Co. Ex. 11, p. 7). The Staff has excluded this addition to rate base, citing as authority Consumers' Counsel v. Pub. Util. Comm., 67 Ohio St. 2d 153 (1981). The Applicant has objected, arguing that Consumers' Counsel dealt with the allowance of a test year expense rather than inclusion of the amount in rate base.

We cannot agree with the Company's argument. The Consumers' Counsel case held that the costs of terminated nuclear generating stations could not be amortized over a ten year period because recovery of such costs from the utility's ratepayers would be inconsistent with the ratemaking formula contained in Section 4909.15(A)(4), Revised Code. That section provides that the Commission shall fix just and reasonable rates based upon "[t]he cost to the utility of rendering the public utility service for the test period." The Court held that the costs of an investment that never provided any service to the utility's customers were not proper costs within the meaning of this section. Thus, the rationale of Consumers' Counsel is that consumers should not be paying for items which are not used to provide utility service. We believe that principle as set forth in Consumers' Counsel applies whether the cost is included as an expense item or a rate base item. The Company's objection to this Staff exclusion should be overruled.

Stand-by Reserve Units

The Staff has excluded from plant in service a number of generating units which the Applicant had classified as stand-by reserve in 1981 (Staff Ex. 1, p. 21 and Sch. I-8.2a). The Company transferred all seventeen of these peaking units to stand-by reserve in the spring of 1981 prior to the test year (Tr. X, p. 17). It was the Company's classification as such which prompted the Staff to initially consider the units as not used and useful. This assumption was verified by a field inspection which confirmed the Staff's opinion that the units were not used and useful (Tr. X, p. 10). The Company objects to the Staff's exclusions, claiming that some of the units had been used during the test year, that the units that the Staff identified as

being for sale has not yet been sold, and that those units which needed repair could be made operational and could be used.

The units in question are "stand-by" in the sense that they are not intended to be used on a day to day basis. Company witness Vassell testified that the units are useful because, in addition to providing peaking capacity, they can be used either for voltage stabilization and emergency power in isolated portions of the transmission system, or to provide a "black start" capability at the Company's generating stations (Co. Ex. 9A, pp. 1-2; Tr. II, pp. 55-56). It is clear that the used and useful standard cannot be strictly applied to stand-by equipment as it is not meant to be used daily; the Company should not be penalized because it does not have emergencies which necessitate the frequent use of this equipment. However, we do not believe it is appropriate to include such units in plant in service solely on the assertion that they may someday be used, or that a particular unit has been used on rare occasions.

The Company itself excluded these units from its exhibit showing generating capacity in service (Co. Ex. 9, GS Attachment 3). Several other factors elicited during these proceedings indicate that the Company will not be using these facilities even in a stand-by reserve capacity. First of all, the evidence indicates that of the seventeen units in question, only nine are immediately operational, two could be operational within a short time and the remaining six would take anywhere from a week to several months to become operational because of the need for repairs or parts (Staff Ex. 2, pp. 9-11; Tr. X, pp. 10, 11, 20-22, 80). C&SOE has indicated that the Addison and Pedro diesels were intended as transmission backup in an exposed area (Tr. II, p. 62). However, the testimony of Company witness Vassell indicates that as of around the date certain, December 31, 1981, transmission backup was not needed in the Addison area and that by the end of 1982 the Pedro diesels will not be needed as transmission backup (Tr. II, pp. 63, 64).

Additionally, the Company intends to sell the majority of these stand-by reserve units. Active negotiations are taking place for the sale of several of the units (Tr. II, p. 64) and the Company is considering selling many of the others (Tr. II, pp. 60, 61, 65).

The obvious implication of these facts is that the units are not used and useful to the Applicant. We believe some showing must be made as to the necessity of stand-by plant. In this case, the evidence for the most part does not even indicate that the units could be operated for their stated purpose since many of the units are not operational and need repairs. Nor does the evidence indicate that the Company has a real need to use the units or that C&SOE actively expects to operate them in the future, particularly in light of the stated intention to sell many of them. Consequently, upon review of the record on this issue, we believe that the Staff's recommendation to exclude these stand-by reserve units is reasonable.

Company Garage

Both the Staff and the Applicant proposed an exclusion from plant in service for the non-utility portion (employee rented parking spaces) of the Company garage. The amount proposed by the Applicant on a total company basis was \$1,317,000 (Co. Ex. 4, Sch. B-1.1). The Staff's exclusion on the same basis is \$2,728,132 (Staff Ex. 9). The Company objects to the amount of the Staff's adjustment.

Originally, the Staff's adjustment was computed by applying various allocation percentages to each of the five plant accounts involved (Staff Ex. 1, Sch. 1-8.2b; Tr. X, p. 39). This method resulted in a recommended exclusion of \$2,652,463 on a total

company basis. However, in his direct testimony, Mr. Fox recommended using a new, "simpler" methodology which resulted in the new figure of \$2,728,132. The Staff's revised method involves the use of a floor and parking space allocation. Mr. Fox developed this allocation by assigning 1/7 of the total cost of the garage to the Company since the basement floor (one of seven floors) is completely used for Company purposes (Tr. X, p. 43). The remaining 6/7 were allocated based upon the ratio of parking spaces used by the Company (569) (Tr. X, p. 43; Tr. XII, p. 2-4a). This allocation percentage (63.12%) was then applied to the total original cost of the garage (\$4,322,135) to derive the rate base exclusion of \$2,728,132 on a total company basis.

The Applicant's exclusion is based on the incremental garage investment associated with employee parking (Co. Ex. 11A, p. 9) and an analysis of direct costs (Co. Ex. 27, Sch. rebuttal WRF-2). The Company contends that its method was employed and approved by the Commission in C&SOE's last rate case (Case No. 78-1438-EL-AIR) and that the Staff's application of a single allocation percentage to the entire garage incorrectly assumes that the total investment is spread equally between the different floors and that office furniture, tools, and shop and garage equipment are used in the same proportion as the parking spaces. The Company asserts that only those costs comprising the investment in the garage which are parking-related, as opposed to service-related, should be used to derive the rate base exclusion.

The Commission recognizes that neither the Staff's nor the Applicant's exclusion represents an exact quantification of the costs associated with employee parking which should be excluded from plant in service. But the question remains as to which recommendation provides the more reasonable estimate of the non-utility portion of the garage. The Commission is of the opinion that there are several problems with the Applicant's approach which render it unacceptable for use. Company witness Forrester testified that the Company has not excluded any land associated with the garage (Tr. XII, p. 17), apparently on the assumption that all of the land is utility related. We do not believe this assumption is reasonable. Nor has the Company excluded any amount for equipment or facilities which are used to service the non-utility property and the employee parking function (Tr. XXII, p. 21). The Company's exclusion also fails to account for the labor costs of maintaining the parking portion of the garage and the costs associated with collection of the parking fees (Tr. XII, p. 19-21). We believe that the exclusion from plant in service should reflect these items and that the Applicant's proposal fails in this respect.

C&SOE argues that its proposed exclusion based on the incremental garage investment associated with the employee rented parking spaces was the method accepted by the Commission in C&SOE's last rate case and, on that basis, should be accepted again. We cannot agree. The method of calculating the exclusion for the non-utility portion of the Company garage was not raised as an issue in the last proceeding. Once the Staff questioned the Company's excluded amount in this case, the burden is upon the Applicant to establish the reasonableness of its proposal; the Company cannot merely rely on the fact that the method was not questioned before. We believe the Applicant has failed to establish the reasonableness of its proposed exclusion given some of the deficiencies brought out in the record. We recognize that the Staff's proposal may not precisely quantify the employee parking costs, but we believe that the Staff's estimate more closely approximates that portion of the garage which is related to the non-utility function. We will, therefore, adopt the Staff's recommended exclusion figure of \$2,728,132.

Excess Capacity

As part of its investigation in this proceeding, the Staff examined the Applicant's generating capability to determine if capacity exists which exceeds that reasonably required to meet the peak demand and to afford an adequate reserve margin. Based on its analysis, the Staff concluded that no adjustment to the Applicant's rate base for excess capacity is warranted (Staff Ex. 1, pp. 22, 23). OCC objected to the Staff's conclusion, OCC citing Staff witness Fox's testimony regarding the AEP system's capacity as a justification for an adjustment to rate base for excess capacity (Tr. XII, p. 143). While Mr. Fox did state that AEP's reserve margin may exceed the Staff's usual 20 percent standard, he also stated that AEP was able to sell the bulk of its reserve margin and that no adjustment for excess capacity was warranted (Tr. XII, p. 142). He also specifically testified that C&SOE does not have excess capacity (Tr. XII, p. 114). The Commission believes that the record in this case supports the Staff's recommendation that no adjustment to rate base for excess capacity is warranted. Hence, OCC's objection is overruled.

Depreciation Reserve

Section 4909.05(H), Revised Code requires that the Commission determine the proper and adequate reserve for depreciation to be deducted from the original cost of an applicant's used and useful property. As a part of its investigation, the Staff tested the company's booked reserve against a theoretical depreciation reserve level based on the Company's approved accrual rates. The difference between the theoretical and the booked reserves was determined to be well within the limits of estimation; the Staff therefore began with the booked reserve, adjusted for its plant in service adjustments. It then made a ratemaking adjustment of \$553,000 to reflect the effect on the reserve of the new accrual rates recommended in this case for operating income purposes; the \$553,000 represents six additional months of the actual annual increment in the depreciation expense (Staff Ex. 1, p. 24). As the new rates became effective on July 1, 1982, the effect of the Staff's adjustment would be to reflect the reserve as if the new rates were effective throughout the test period. The Company objected to this ratemaking adjustment, arguing that it would ignore the proper matching of revenue and expenses and would prevent the Company from ever recovering substantial depreciation costs associated with plant in service.

This same issue has previously been presented to the Commission, and the Commission has consistently approved rate base adjustments to reflect new accrual rates, most recently in Toledo Edison Co., Case No. 81-620-EL-AIR, (Opinion and Order, June 9, 1982); Ohio Bell Telephone Co., Case No. 81-436-TP-AIR (Opinion and Order, April 21, 1982) and General Telephone Co., Case No. 81-383-TP-AIR (Opinion and Order, April 26, 1982). We continue to believe that the adjustment is proper. We will overrule the Applicant's objection and approve the Staff's reserve figure.

Construction Work In Progress

Section 4909.15(A)(1), Revised Code provides that the Commission may, in its discretion, include in the rate base determination a reasonable allowance for construction work in progress (CWIP). Division (E) of that statute, however, limits eligibility for the allowance to projects which are at least 75 percent complete, and further prohibits authorization of such an allowance to the extent it would exceed 20 percent of the total valuation of the rate base not including this item. C&SOE has proposed four projects for inclusion in rate base as CWIP; three projects relate to the Zimmer Nuclear Plant and one project relates to Conesville. These four projects total approximately \$292,849,000 on a jurisdictional basis (Staff Ex. 1, Sch. I-10). However, the aggregate date certain cost of the projects exceeds

the 20 percent limitation, which when applied to the Commission's final rate base determination excluding the allowance for construction work in progress, limits the allowance to \$191,119,400 (See "Rate Base Summary" *infra*). Applicant seeks full utilization of the allowance to the 20 percent bound. The Staff has reviewed each of the proposed projects and determined that all of the projects exceed the 75 percent complete requirement and are eligible for inclusion in the CWIP allowance (Staff Ex. 1, p. 25). No party objected to inclusion of the Conesville project and we are of the opinion that the date certain jurisdictional cost of \$275,000 should be included in the CWIP allowance in this case (Staff Ex. 1, Sch. I-10).

Unfortunately, our task in evaluating inclusion of the Zimmer projects in the CWIP allowance is not nearly so simple. Zimmer Unit No. 1 is a nuclear generating facility being constructed by the CCD Companies, C&SOE, the Cincinnati Gas & Electric Company (CG&E), and the Dayton Power & Light Company (DP&L). CG&E is the managing utility and its share of the plant is 40 percent, while DP&L's share is 31.5 percent and C&SOE's portion is 28.5 percent (Tr. VIII, p. 42).

The Zimmer plant has been the focus of a great deal of controversy due to several factors. The construction of the plant has been plagued with numerous delays, resulting in postponed in-service dates and ever escalating revised budgets. The project was first scheduled to go into service in 1975 (Tr. VIII, p. 93; Tr. IX, p. 10) but the in-service date has been revised approximately nine times in the ten years the plant has been under construction (Tr. VIII, p. 93). The current estimated in-service date, testified to by Company witness Fenstermaker, is set in mid-1983, which means fuel loading would occur in December, 1982 (Co. Ex. 20, p. 2). These dates reflect a revision to the testimony as originally filed which had indicated a fuel load date of July, 1982 with commercial operation to occur in January 1983. The original total cost projected for Zimmer was approximately \$235,000,000 (Cincinnati Gas & Electric Co., Case No. 81-66-EL-AIR, Tr. X, pp. 205-215). The latest budget estimates reflect a cost of approximately \$1.5 billion for the total project, including allowance for funds used during construction (AFUDC) (Tr. VIII, p. 42). The record also reflects that for each month's delay in the in-service date, the costs increase by about one percent, or \$15,000,000, most of which is attributable to AFUDC (Tr. VIII, p. 42).

Obviously, given the amount of money associated with the construction of this nuclear facility, the impact of including this project in the construction work in progress allowance is significant from both the Company's and the consumer's viewpoint. Testimony on this issue alone involved approximately four hearing days, during which a total of eight witnesses testified.

Initially, the Commission must determine whether or not the Zimmer project is 75 percent complete before deciding whether all, part, or none of the dollars associated with the construction project should be included in rate base. Section 4909.15(A), Revised Code requires that a physical inspection of the project be made to determine that the project meets the 75 percent complete requirement. The record reflects that both the Applicant and the Staff conducted a physical inspection of the plant on or about date certain; the Company determined that the project was approximately 97 percent complete (Co. Ex. 20, p. 3). Company witness Fenstermaker testified that the Zimmer unit was about 97 percent complete as of date certain based on a physical inspection and an earned manhours expended test (Co. Ex. 20, p. 3). Staff witness Fox testified that the Zimmer unit was more than 75 percent complete at date certain and therefore eligible for further consideration by the Commission (Staff Ex. 2, p. 27). The Staff's approach in this case, as in all recent cases, is to make a finding as to whether a CWIP project is 75 percent com-

plete from an engineering standpoint. The Staff does not specifically recommend whether or not an eligible project should be included in the CWIP allowance but rather leaves to the Commission's discretion the determination of what, if any, projects or amounts should be included (Tr. XII, pp. 57-58). In this case, Mr. Fox testified that the Staff relied on a physical inspection test to determine that Zimmer was more than 75 percent complete and, thus, there was no need for the Staff to consider using any other test (Staff Ex. 2, p. 25; Tr. XIII, p. 61-62). However, Mr. Fox also testified that Zimmer was in excess of 75 percent complete under the elapsed time test (Staff Ex. 2, p. 26), although it did not meet the 75 percent complete requirement under the dollars expended test (Tr. IX, p. 126). However, the Staff's recommendation continues to be that Zimmer is eligible for inclusion in rate base as CWIP, despite the fact that it may not meet all possible "75 percent complete" tests, because the physical inspection test is the preferred method for determining eligibility. See, Cincinnati Gas and Electric Co., Case No. 81-66-EL-AIR, (Opinion and Order, January 27, 1982).

The Commission does not believe that a lengthy recitation of the various tests for determining whether a project is 75 percent complete is necessary in this case. We are of the opinion that the record adequately demonstrates that Zimmer is well in excess of 75 percent complete from an engineering standpoint. The evidence presented concerning the total expected cost of the project and the date the unit will actually go into service may be relevant to the Commission's exercise of its discretion in allowing all or part of this project in the CWIP allowance, but we do not believe that this evidence casts any serious doubt on the fact that Zimmer is 75 percent complete. While OCC witness Miller suggested that Zimmer failed the dollars expended test, we note that this test involved comparing date certain costs with recently updated budget figures, rather than using budget figures as of date certain, which results in an inherent bias against meeting the test. Mr. Miller addressed Zimmer's failure to meet the dollars expended test but the witness did not address the preferred and more liberal dollars obligated test. Nor did Mr. Miller specifically testify that he believed Zimmer was, in fact, less than 75 percent complete overall. Consequently, we find that the evidence presented in this case establishes that Zimmer is at least 75 percent and eligible for inclusion in rate base.

Having determined that Zimmer is eligible for inclusion in rate base, the Commission is confronted with the difficult decision as to what portion of the requested CWIP allowance is appropriate given the circumstances of this case. Normally, the Commission has recognized that inclusion of CWIP in rate base is beneficial to the Company and its customers because inclusion lowers the external financing requirements of the Company, results in a more even and gradual distribution to ratepayers of the costs of construction, and actually keeps the total costs to customers at a lower level due to the fact that inclusion of CWIP in the rate base stops the accumulation of AFUDC charges. However, in exercising its discretion regarding the inclusion of CWIP in rate base, the Commission has taken into account the prospects for the CWIP project to be in service during some portion of the time that the proposed rates will be in effect, along with other factors. Several witnesses testified in this proceeding regarding the past, present and future of the Zimmer Nuclear Plant, as detailed below.

Mr. Fenstermaker, testifying on behalf of C&SOE, indicated that the Company's current schedule calls for fuel loading in December 1982. Under this schedule, the unit is expected to be synchronized in the spring of 1983 with commercial operation around the middle of 1983 (Co. Ex. 20, p. 2). Mr. Fenstermaker reported that construction is proceeding at maximum effort toward completion of the final stages of the remaining work (Co. Ex. 20, p. 4). The witness stated that he believes the engineering

effort is essentially completed (Tr. VIII, p. 40). Regarding the licensing effort, Mr. Fenstermaker indicated that on June 21, 1982, the Atomic Safety and Licensing Board issued an initial decision which resolved all pending contentions in favor of licensing the plant, with the exception of issues concerning off-site emergency preparedness plans (Tr. VIII, p. 31). Mr. Fenstermaker also noted that the Nuclear Regulatory Commission (NRC) Region III had issued a Systematic Assessment of Licensee Performance report on June 29, 1982 which covered the period October 1, 1980, through March 31, 1982. The witness testified that nothing contained in these reports altered his opinion as to when the plant would be loaded with fuel or declared commercial (Tr. VIII, p. 43). He believes the Zimmer plant will be physically operational by the end of 1982 but recognizes that there may be delays because of federal regulatory matters (Tr. VIII, p. 41, 107). The witness stated that the Quality Confirmation Program (QCP) at the Zimmer plant was instituted in response to the NRC's concerns about verification of quality assurance and quality control (Tr. VIII, p. 110). The QCP, which consists of about ten tasks, is designed to confirm the documentation of construction reports; the program has to be completed by the fuel load date (Tr. VIII, pp. 90-91). Mr. Fenstermaker acknowledged that the program has involved some minor rework and that some additional rework may be required in the future (Tr. VIII, p. 91).

Mr. Earl Borgmann, Senior Vice-President of Engineering and Electric Production for CG&E, the company responsible for the construction of Zimmer, was called on cross by OCC. Mr. Borgmann testified that the target date for fuel loading is December, 1982 and that, from a construction standpoint, that date is achievable although it would require considerable overtime (Tr. IX, p. 12). Mr. Borgmann enumerated the critical paths which must be completed before fuel loading: construction, licensing, completion of the QCP, and pre-operational testing (Tr. IX, pp. 13, 25). Mr. Borgmann feels that the confirmation program has an excellent chance of being completed by December 31, 1982. However, Mr. Borgmann conceded that given the four critical paths which must be met, there is some question as to whether the Zimmer plant will meet the projected in-service date of mid-1983 (Tr. IX, pp. 25-26). The witness acknowledged that the QCP, which began in the summer of 1981, and the NRC investigations which led to the fine which was assessed against CG&E, delayed the projected fuel loading date in 1981 by about eight or nine months (Tr. IX, p. 111). Mr. Borgmann testified that from an economic standpoint it would be less expensive to intensify construction efforts than to incur additional AFUDC, but this course of action would only make economic sense if there were no licensing or regulatory delays after the construction was complete (Tr. IX, pp. 116, 120). Mr. Borgmann is of the opinion that fuel loading at Zimmer will certainly occur within 1983 (Tr. IX, p. 125).

Also appearing in this proceeding to testify regarding the Zimmer Project was Mr. Robert Warnick, Director of the Enforcement and Investigation Staff, Region III, of the U.S. Nuclear Regulatory Commission. Mr. Warnick testified pursuant to a request by Chairman Kelly of this Commission that a witness testify on behalf of the NRC. Mr. Warnick explained that before an operating license is granted for a nuclear plant, an inspection program must be completed; after that, the region would make a recommendation to headquarters that the license be granted by the NRC. There would also be a recommendation made by the Atomic Safety and Licensing Board (Tr. XI, pp. 15-16). Mr. Warnick testified that the Region III inspection has not yet been completed and will not be complete by the end of 1982 (Tr. XI, p. 16). Mr. Warnick specifically stated that fuel loading will not occur in December 1982, and agreed that it is unlikely that Zimmer can be placed in commercial operation during 1983 (Tr. XI, p. 17). A third-party audit of the Zimmer Project has been

considered by the NRC but Mr. Warnick was not sure whether such an audit is necessary at Zimmer (Tr. XI, pp. 21-23).

Regarding the quality confirmation program, Mr. Warnick testified that the program was based on problems that the NRC found at the construction site during its investigation and that the QCP addresses each of the identified problems (Tr. XI, p. 25). Mr. Warnick stated that the licensee (CG&E) had a very small quality assurance staff and was not sufficiently double checking what the contractors were doing. He further testified that the quality assurance manpower of CG&E was not sufficient to detect certain problems or to follow up on the problems that were found (Tr. XI, p. 26). The witness stated that Region III of the NRC found that CG&E had experienced a widespread breakdown of its quality assurance program (Tr. XI, p. 27; OCC Ex. 29). Region III will not recommend a license for Zimmer unless it is satisfied with the results of the quality confirmation program. As of the date of the hearing the QCP was not complete (Tr. XI, p. 29), the witness was not certain when it would be complete. The QCP was designed to verify work which had already been done, and a program involving 100 percent reinspection and other requirements was designed to control the ongoing work at Zimmer (Tr. XI, p. 34). Mr. Warnick testified that the NRC will not recommend issuance of a license until it is satisfied with the construction quality of Zimmer. As of the date of the hearing, the construction quality had not been verified to the satisfaction of the NRC (Tr. XI, p. 91). Mr. Warnick stated that the recommendation on licensing would not take long after completion of construction, the QCP, and pre-operational testing (Tr. XI, p. 96). The witness stated that the Zimmer construction program has been the biggest problem of the ten to fifteen nuclear power plants in Region III (Tr. XI, p. 51). The NRC is concerned that some of the construction components at Zimmer may not be verifiable with respect to quality because of a lack of documentation and there is a possibility that some components might need to be removed and replaced if the quality cannot be verified (Tr. XI, pp. 57-59).

Having determined that Zimmer is eligible for inclusion in rate base, and having reviewed the testimony of the witnesses regarding the status of the plant, we must now determine whether or not to include an allowance for this project in the rate base in this proceeding. The Staff has taken no position on this issue. The Company, of course, requests the full CWIP allowance up to the 20 percent limitation which is \$191,119,400. The Company contends that inclusion of the full amount authorized by the statute will benefit the Company and its ratepayers by allowing the Company to earn a return on its investments in this construction project, which will provide funds for needed replacements and repairs (Co. Br. I, p. 32). The Company also points out that if Zimmer construction costs are not included in rate base, AFUDC of nearly \$15 million a month will continue to accrue, resulting in higher total costs to consumers (Tr. IX, pp. 116-117; Tr. VIII, pp. 42-43). The Applicant further asserts that Zimmer will be physically capable of generating electricity in 1983 and that any potential delay will be due solely to regulatory delays imposed by the NRC. The Company claims that the record supports the conclusion that those delays, if any, will not be significant (Co. Br. I, p. 33). OCC, through its witness Miller, takes the position that Zimmer should be totally excluded from rate base but that if the Commission chooses to include Zimmer, it should do so at no more than 50 percent.*

* OCC states in its brief that the 50 percent figure should be applied to the statutory limitation (OCC Reply Brief, p. 3). However, we note that what OCC witness Miller actually testified to is that the 50 percent would be applied to the total jurisdictional cost of the Zimmer project resulting in an amount of \$146,562,000 as the total eligible CWIP (Tr. XVII, p. 58).

As mentioned previously, the Commission is normally inclined to include an allowance for CWIP in rate base because of the overall benefits it can provide to the Company and its customers. However, we have also recognized that the exercise of the discretion vested in the Commission by the General Assembly in this area must be based on the specific facts of each particular case.

After carefully reviewing the record presented in this case and having given the matter careful consideration, we are of the opinion that it is reasonable in this case to include twenty-five percent of the total dollars associated with the Zimmer project in the CWIP allowance. We conclude that inclusion of one quarter of the Zimmer costs will provide some recognition of the fact that C&SOE has been involved in construction of this extremely expensive nuclear plant, which has been going on for about ten years and which has required a great deal of the Company's capital. At the same time, we believe inclusion of 25 percent of the costs will not unduly burden the Company's customers who continue to wait for this facility to begin producing electricity.

We recognize that our decision in the instant case varies from our treatment of this issue in C&SOE's last rate proceeding (Case No. 78-1438-EL-AIR [Opinion and Order, December 12, 1979]), and our other recent decisions regarding inclusion of the Zimmer project in the CWIP allowance (See Cincinnati Gas & Electric Co., Case No. 81-66-EL-AIR [Opinion and Order, January 27, 1982] and Dayton Power & Light Co., Case No. 81-21-EL-AIR [Opinion and Order, February 3, 1982]). However, we believe the record in this case warrants our decision to include Zimmer at only 25 percent. Specifically, in C&SOE's last rate case we determined that 50 percent of the Zimmer project should be included in CWIP based, in part, on the conclusion that Zimmer would be providing service for about half of the period during which the rates set in that case would be in effect. Obviously, that conclusion has not proven accurate. The assumption that Zimmer would be in service for a portion of the period the rates would be in effect was also made in the CG&E and DP&L cases, wherein the Commission accepted the Company's testimony regarding the in-service date. Again in those cases the assumption did not prove to be correct. We believe the testimony of Mr. Borgmann of CG&E and Mr. Warnick of the NRC indicates that C&SOE's projected fuel load date of December 1982, and in-service date of mid-1983 will not be met. Given this circumstance, we believe it is reasonable to limit the allowance for Zimmer to 25 percent of Zimmer's total costs.

Additionally, we note that the decision in C&SOE's last case was partially premised on the conclusion that "the delay in the in-service date for Zimmer and the additional projected expenditures on the project are due to factors that are not within the control of this Company, or even of the project leader, CG&E." Columbus and Southern Ohio Electric Company, Case No. 78-1438-EL-AIR [Opinion and Order, December 12, 1979], p. 10. Reluctantly, we must now acknowledge that this statement may no longer be applicable in the present circumstances. The testimony Mr. Warnick of the NRC evidences the fact that there were problems with CG&E's supervision and documentation of the construction program. Mr. Borgmann of CG&E testified that there had been some delay in the in-service date due to the NRC investigation and the quality confirmation program. Evidence concerning the cost of the NRC investigation and the quality confirmation program was not definitive in this proceeding but it is apparent that some additional costs have been incurred. Consequently, viewing the record in its entirety, we believe that the reasonable and appropriate allowance for construction work in progress should include only 25 percent of the total jurisdictional costs of Zimmer or \$73,144,000, and 100 percent of the Conesville costs or \$275,000 for a total allowance for CWIP of \$73,419,000.

The Commission is concerned about the constant slippage in the in-service date of the Zimmer plant, and the effect of that problem on the cost of the project. Although we have included an allowance for Zimmer, albeit a lesser amount than was requested, the Commission will not be inclined to allow continued accruals or inclusions in CWIP for the Zimmer plant if the situation there does not improve.

Management Audit

In connection with this proceeding, OCC, on December 11, 1981, filed a motion for a Management Audit of the construction costs of the Zimmer Plant. OCC suggests that the scope of the audit should be a thorough analysis of the "management policies, practices, and organization" employed by the Company during the construction of Zimmer (OCC Motion, p. 5, citing Section 4909.154, Revised Code). OCC further states that the objective of the management audit would be to determine whether additional costs have been incurred in connection with the construction of Zimmer as a result of imprudent management policies or administrative practices (OCC Motion, p. 5). OCC, as bases for its motion, refers to the substantial increases in the cost of the project and the length of time it has taken to construct the facility. OCC also expresses concern regarding the impact of the NRC investigation on Zimmer.

The Commission is of the opinion that the motion for a management audit should be denied. We addressed this very issue in Dayton Power & Light Co., Case No. 81-21-EL-AIR, *supra*, wherein we explained that it is the Cincinnati Gas & Electric Company that is responsible for the construction and operation of the Zimmer facility. Thus, a management audit of C&SOE, which has a 28.5 percent ownership interest in Zimmer, would shed little light on the areas OCC would apparently like to see addressed. OCC attempted to use the testimony of Mr. Donald Milan, Ohio's Chief Boiler Inspector, Mr. Richard Jagger, Assistant Director of Inspections for the National Board of Boiler and Pressure Vessel Inspectors and Mr. David Jones, to establish that there have been problems with the construction of the Zimmer Plant. We are of the opinion that this testimony is not persuasive in indicating a need for a management audit of C&SOE. We conclude that OCC's motion for a management audit of C&SOE should be denied.

Working Capital

Section 4909.15(A)(1), Revised Code, requires the Commission to determine a reasonable allowance for cash working capital and materials and supplies. The Applicant, the Staff, and Consumers' Counsel each proposed an allowance for working capital to be included in the rate base valuation in accordance with the provisions of Section 4909.15(A)(1), Revised Code. All three estimates were derived through the use of the formula method, but the parties disagree on the application of the formula with regard to several components of the allowance. The Company has requested an allowance of \$82,814,000 based upon its version of the formula method (Co. Ex. 4, Sch. B-5). The Staff initially recommended an allowance of \$47,122,000, but it should be noted that the Staff has made some corrections and adjustments to this figure (Staff Ex. 1, Sch. I-11). OCC's recommended allowance amounts to \$43,708,000 (OCC Ex. 1B, Sch. MRH 2.4). The parties' positions on disputed matters will be discussed below.

Cash Component

C&SOE objects to the Staff's exclusion of fuel expense from the cash component of the working capital calculation. This objection has been consistently rejected by this Commission (See Ohio Power, Case No. 81-782-EL-AIR [Opinion and Order, July 14, 1982]) and we will again overrule this objection.

The Company also objects to the Staff's operation and maintenance expense to the extent it reflects Staff adjustments to the various expense issues in the case. Staff witness Montgomery agreed that the determination on these issues should be reflected in the working capital computation (Tr. XVI, pp. 29-30) and we will find accordingly.

Fuel Expense Revenue Lag

The Staff has recently included a separate fuel expense revenue lag in the working capital allowance to account for the operation of the EFC rules now contained in Chapter 4901-1-11 Ohio Administrative Code (O.A.C.) (Staff Exs. 10, 10A, 10B). Staff witness Montgomery explained that prior to the implementation of the EFC rules, the Staff recognized the fuel expense revenue lag in the cost of service through annualization of fuel revenues and fuel expenses, which negated the need for a separate allowance in working capital (Staff Ex. 10, p. 13). However, since the EFC rules synchronize fuel revenues and expense, but ignore the timing differences between cost incurrence and revenue recovery, the Staff believes it is necessary to expressly provide for the recovery lag in working capital (*Id.*, p. 14). The Staff recommends a \$3,188,000 allowance in this proceeding (Staff Ex. 10B, Sch. RGM-3).

OCC objects to the recognition of this lag as an improper selective adjustment to the formula method and on the basis that the lead/lag study upon which the Staff relied did not take into account the joint operation of Conesville No. 4 and the reimbursements of fuel expense that C&SOE receives from the two other companies involved at Conesville. OCC witness Miller believes the payments to C&SOE from the other two companies need to be considered in the Company's lead/lag study (OCC Ex. 37, p. 6). However, Mr. Miller admitted during cross-examination, that if the lead/lag study reflected only the coal purchases at Conesville that were related to C&SOE's share of the coal, his proposal would not be necessary (Tr. XVII, p. 83). There is no evidence of record to indicate that the data used in the Company's lead/lag study reflects anything other than C&SOE's share of the coal at Conesville Unit No. 4. Consequently, OCC's objection to this aspect of the fuel expense revenue lag should be overruled. OCC's objection as to recognition of the lag in working capital should also be overruled. This objection has been previously addressed and rejected by the Commission in other recent decisions. See, e.g., Ohio Power Co., Case No. 81-782-EL-AIR (Opinion and Order, July 14, 1982); Cincinnati Gas & Electric Co., Case No. 81-66-EL-AIR, (Opinion and Order, January 27, 1982); Dayton Power and Light Co., Case No. 81-21-EL-AIR (Opinion and Order, February 13, 1982).

Deferred EFC Balance

The Staff has recommended an addition to working capital of balances resulting from the adoption of deferred fuel cost accounting in connection with the implementation of the Commission's Electric Fuel Component (EFC) Rules. The Company agrees that the deferred fuel balance should be recognized in some way, and that inclusion in Working Capital is one method (Tr. IV, p. 105). However, the Company has expressed a preference that the matter be treated as part of the EFC proceedings amending the rules as proposed in Case No. 80-928-EL-ORD (Co. Br. I, p. 43). OCC also urges the Commission to consider an EFC interest provision rather than including the deferred fuel expense in working capital (OCC Br. I, p. 21). Consistent with other recent decisions (See Ohio Power Co., Case No. 81-782-EL-AIR, [Opinion and Order, July 14, 1982]; Cleveland Electric Illuminating Co., Case No. 81-146-EL-AIR, [Opinion and Order, March 17, 1982]), we find that the deferred EFC fuel expense should not be included in working capital in this proceeding. The Commission is presently considering an EFC interest provision in the generic proceeding.

Fuel Inventory

As part of working capital, the fuel inventory component is intended to provide a reasonable allowance for the return on investor supplied capital which the utility required, as of date certain, to maintain the fuel inventory level needed for ongoing operations. The allowance is derived by multiplying the value of one day's supply to an appropriate number of day's supply representing a proper inventory level. In this instance, the Staff calculated a fuel inventory component of \$28,048,000 using a date certain coal price (derived from an average of prices for the two months on either side of the date certain) multiplied by a 56 day supply, based on an analysis of actual 1981 consumption at the Company's plants (Staff Ex. 2, pp. 24-25; Tr. XII, p. 36). OCC witness Haskins agrees with the Staff's methodology (OCC Ex. 1A, p. 5).

The Company objected to the Staff's method contending that it does not accurately reflect test year conditions as far as consumption or price and that a 75-day supply is a more appropriate inventory level. The Company's calculation of \$33,763,000 is based on the average daily value of fuel expense for the test period ending June, 1982 (to derive a value of one day's supply) multiplied by a target inventory of 75 day supply (Co. Ex. 11, pp. 12-13; Tr. IV, p. 97). The Applicant attempted to demonstrate in rebuttal that the 75 day level had been met but the document submitted by Company witness Forrester indicates that the 75 day level was only reached in the last month of the traditional test year (Co. Ex. 27, Sch. Rebuttal WRF-1). While Mr. Forrester testified that the 75 day supply was a goal set by the Company (Tr. IV, p. 97) the evidence does not substantiate the claim that the Company actually maintained a fuel inventory of 75 day supply during the test year. Staff witness Fox explained that the Staff does not take into account strike related abnormalities since they are not reflective of normal conditions and should not, therefore, be considered for working capital requirements (Staff Ex. 2, p. 24).

Applicant also argues on brief that the Staff's failure to recommend a 75 day supply is inconsistent with Ohio Power Co., Case No. 81-782-EL-AIR (Opinion and Order, July 14, 1982), in which the Commission found that a 75 day supply was an appropriate inventory level for Ohio Power Company, another AEP subsidiary. C&SOE states that since the 75 day goal is set by AEP (Tr. IV, p. 107), it would be inconsistent to allow that figure for one AEP subsidiary, but not another. We cannot agree with the Company's contention. The record in Ohio Power demonstrates that that company actually maintained a 77.89 day supply during the test year (Order at 13). Because the experienced inventory level exceeded the proposed level, the Staff and Commission found the proposed 75 day supply to be reasonable. The record in the instant case is not the same, as it shows that the 75 day supply was met in only one month of the test period and was not attained on a test year basis. Further, for the period of actual data utilized by the Staff, the Company only maintained an average of 55.97 days overall, thus accounting for the Staff's use of a 56 day average. We find this to be a reasonable inventory level and we overrule Applicant's exceptions to the fuel inventory of \$28,048,000 as calculated by the Staff. We find the date certain coal price to be proper and we believe the actual data utilized by the Staff, while it utilizes a 13 month period ending at date certain as opposed to the test period, is more appropriate than the six months actual and six months estimated fuel inventory that the Company used.

Prepayments and Equal Payment Plan Balances

The Company's working capital allowance includes a provision for prepayments and equal payment billing balances. The Staff has not proposed recognition of either of these items and the

Company objected. The Company argues that these items represent costs which must be paid in advance by the Company and which should, therefore, be recognized in working capital (Co. Ex. 11, pp. 3, 4). The Commission has determined that prepayments are improper for inclusion in the formula method. See Cincinnati Gas & Electric Co., Case No. 80-260-EL-AIR (Opinion and Order, March 18, 1981); Cleveland Electric Illuminating Co., Case No. 80-376-EL-AIR (Opinion and Order, May 1, 1981). Likewise, the Commission has decided not to recognize budget billing balances as an offset to working capital and the Commission decision on this point has been affirmed by the Supreme Court of Ohio in City of Cleveland v. Public Utilities Commission, 70 Ohio St. 2d 290 (1982). While the Applicant attempts to cite that case as authority for recognizing budget billing balances in working capital, we do not believe the Company's evidence concerning the constancy of budget billing balances warrants a finding that these balances should be included as an allowance in working capital. The Company's objections should be overruled.

Materials and Supplies

C&SOE's working capital allowance contains a materials and supplies component based on the 13 monthly balances for the test year ending June, 1982 (Co. Ex. 11, p. 13; Tr. IV, p. 95). Staff initially proposed using the 13 monthly balances ending December 1981, since the Applicant's balances contained sizeable unexplained increases for the forecasted portion of the test year (Staff Ex. 2, pp. 21-22). Both the Applicant and the Staff agree that actual test year balances are preferable to using either projected or an earlier 13 month period (Staff Ex. 2, p. 23; Tr. IV, p. 96). OCC advocates the use of a 13 month average but valued up through date certain rather than including any months beyond the date certain. As we are here determining a rate base item, we feel that OCC's and the Company's positions should be rejected. While we would prefer to use the actual 13 monthly balances for the test period, we have not been provided with the requisite data. Consequently, we will adopt the Staff's corrected figure of \$13,510,000 which represents the latest known actual data available.

Clinch River Liquid Metal Fast Breeder Reactor

Both the Staff and OCC have recommended an adjustment to rate base reducing working capital to reflect the amount of accruals remaining in a deferred accrued liability account established for payments which were to be made by the Applicant to the Breeder Reactor Corporation. Originally, the Staff had not included this adjustment in its rate base calculations but OCC objected and the Staff agreed that such an adjustment is warranted (Co. Ex. 10, p. 8). The Company was making payments to the Edison Electric Institute for research of the liquid metal fast breeder reactor (LMFBR) project. Company witness Forrester testified that C&SOE made yearly payments during the years 1972 through 1979, with the last payment being made in December, 1976. Because of the uncertainty of the project, the Company ceased making payments to the Edison Electric Institute but the Company accrued the liability in Account 242 and included its annual commitment as a test year expense in its last rate case (Tr. IV, p. 69). In December, 1981 the Company wrote off \$428,000 of accrued liability for the LMFBR project by debiting the liability and crediting expenses. Since these amounts were all accrued prior to January, 1980, the Company argued that the credit to expense should be excluded from the test period (Co. Ex. 11A, pp. 6-7; Tr. IV, pp. 69-71). The Company also argues that because the deferred accrued liability was not on the books at date certain it should not be reflected as a deduction from rate base (Tr. IV, p. 71).

The Staff and OCC both argue that the jurisdictional portion of the deferred accrued liability should be deducted from rate base since it is cost free capital which has been collected from

the ratepayers (Staff Ex. 10, p. 7; OCC Ex. 1, p. 36). OCC and the Staff also agree that the jurisdictional portion amounts to \$408,079. The Commission agrees with the Staff and OCC that a deduction from rate base of this amount should be made because this money is cost free capital which has been collected from the ratepayers and represents a non-investor source of funds. This rate base deduction is consistent with the Commission's treatment of this issue in Cincinnati Gas & Electric Co., Case No. 81-66-EL-AIR et al. (Opinion and Order, January 27, 1982).

Offsets to Working Capital

In calculating C&SOE's working capital requirement, the Staff deducted customer deposits and one-fourth of taxes other than income taxes, excluding FICA, and one-fourth of current federal income tax (Staff Ex. 1, p. 25). The Company objected that the Staff's customer deposit allowance was incorrect because it used the date certain balance rather than the 13 month average of test year customer deposits (Co. Ex. 11, p. 14; Tr. IV, p. 109). The Staff agreed with the Company's objection at the hearing and concurred with the Applicant's figure of \$2,159,000 (Staff Ex. 10, pp. 15-16). OCC objects, contending that the figure should be \$1,943,903 to reflect the 13 month balances ending on date certain (OCC Ex. 1B, Sch. MRH-2.4a). We find that OCC's objection should be overruled because the recommendation of the Company and the Staff is more consistent with the test year concept and compatible with other elements of working capital.

OCC has also objected to the Staff's failure to make an additional adjustment to working capital to reflect one-fourth of the gross receipts tax increase and rate surcharge imposed by Amended Substitute House Bill 694 (OCC Ex. 1, p. 34). However, Company witness Forrester and Staff witness Montgomery both explained that C&SOE receives no working capital benefit from the rate surcharge since the tax is paid in increments in January, March and June 1982 but is recovered through the rate surcharge throughout the entire year (Tr. IV, p. 108; Tr. V, pp. 58-59; Staff Ex. 10, pp. 20-21). Thus, the tax is paid in advance of full revenue compensation. Consistent with our other decisions on this issue (See Ohio Power Co., Case No. 81-782-EL-AIR, [Opinion and Order, July 14, 1982]; General Telephone Co., Case No. 81-383-TP-AIR, [Opinion and Order, April 26, 1982]), OCC's objection should be overruled.

Working Capital Summary

The following schedule presents in summary form the Commission's determination of the allowance for working capital to be included in rate base for the purpose of this proceeding. The figures take into account the adjustments necessary to reflect the disposition of other issues in this case which affect the working capital allowance.

Jurisdictional Working Capital Allowance (000's Omitted)

Cash Element (1/8 of Adjusted Operation and Maintenance Expense)	\$ 17,560
Fuel Expense Lag	3,188
Materials and Supplies	13,510
Fuel Inventory	28,048
Less:	
Customer Deposits	2,159
1/4 of Operating Taxes, excluding F.I.C.A. and Deferred Taxes	<u>11,812</u>

Jurisdictional Working Capital
Allowance

\$ 48,335

Other Rate Base Deductions

The Staff reduced the rate base by the jurisdictional portions of the date certain balance of deferred taxes resulting from accelerated amortization, liberalized depreciation, other deferred income taxes, and the accumulated unrestricted investment tax credit (exclusive of Investment Tax Credits [ITC] on qualified property additions placed in service after December 31, 1980). The Staff also reduced the rate base by the jurisdictional portions of the customer advances for construction balances as of the date certain (Staff Ex. 1, p. 25; Sch. I-12). Applicant took exception to Staff's deduction of \$19,121,000 which represents the unrestricted 4% portion of the deferred ITC balances from rate base, claiming that such a deduction frustrates the intent of the law, which is to allow the Company and its customers to share the benefit of the tax credits (Co. Ex. 12, pp. 14-15). This same issue was presented in C&SQE's last rate case and the Staff position was upheld (See Case No. 78-1438-EL-AIR [Opinion and Order, December 12, 1979], pp. 15, 16). The Staff's deduction from rate base of the 4% portion of the deferred investment tax credits is consistent with other Commission decisions and should be adopted.

Rate Base Summary

Taking into account the disposition of the issues as discussed above, the Commission finds the jurisdictional statutory rate base as of the date certain, December 31, 1981, to be as follows:

<u>Jurisdictional Rate Base</u> (000's Omitted)	
Plant in Service	\$ 1,286,555
Depreciation Reserve	332,594
Net Plant In Service	\$ 953,961
Plus: CWIP	73,419
Working Capital	48,335
Less: Deferred Taxes and Other Deductions	46,699
Jurisdictional Rate Base	<u>\$ 1,029,016</u>

OPERATING INCOME

Test Period

Pursuant to the Commission's Entry of September 30, 1981 in this case, the Company filed data for a traditional "six and six" test period, the twelve months ended June 30, 1982 (Period I), along with the data for its proposed fully-projected test year, the twelve months ending September 30, 1983 (Period III). Those data were filed on December 31, 1981 along with the application (Co. Exs. 2 and 3). On March 1, 1982, the company filed updates of those data (Co. Exs. 4 and 5).

On June 18, 1982, ten days prior to the start of expert testimony, the Company filed data pertaining to the twelve months ending September 30, 1982 (Period II) (Co. Ex. 6). As the Company explains on brief, the filing of this data was prompted by the passage of Amended Substitute Senate Bill No. 378, which amends Section 4909.15(C), Revised Code, to prohibit the approval of any test period ending more than nine months after the filing

date of a rate increase application. This change in Section 4909.15(C) does not become effective until January 11, 1983, and the Company continues to maintain that the Commission can and should approve the requested future test year. The Company asserts that the Period III data "was presented for informational and comparative purposes only, and was not intended to constitute and additional proposed test year" (Co. Br. II, p. 2, citing Tr. IV, p. 116 and Tr. XXV, pp. 54-55).

The request to admit Company Exhibit 6 into the record drew vigorous objection by the City of Columbus and by OCC, regarding the timing of the submission of that data and the inability of their experts to review that data. In view of the Company's failure to request that the Commission approve a 3 and 9 test period and the vigorous opposition to the use of the Period III data as test year data, the Commission will not determine operating income on the basis of the Period III data.

Neither will the Commission approve the Company's proposed future test period. We do not disagree with the Company's assertion that we could do so under current law, as, indeed, we did in Cleveland Electric Illuminating Co., Case No. 81-146-EL-AIR (Opinion and Order, March 17, 1982). However, given the fact that the rates resulting from this Opinion and Order will be in effect for many months after the new law becomes effective, we do not believe it to be appropriate to approve rates based on a projected test period only two months before the new law, which would prohibit their approval, becomes effective. The Commission will therefore reject the use of the Company's proposed fully forecasted test period.

We fully appreciate that the use of the traditional test period will mean that the level of certain expense items, most notably labor expense, that is included in operating income will fall short of the level of expenses which will be incurred during the collection period. However, under the circumstances presented in this case, the "six and six" test period is the only appropriate choice.

Returned Check Charge Revenues

The Company proposes that a returned check charge be instituted in this case; the Commission will approve such a charge (See Rates and Tariffs, *infra*). The projected revenue from the charge has been included in the Company's test year operating income figures (Co. Ex. 4, Sch. C-3.4). OCC agrees with such an adjustment. The Staff, however, does not; its position is that the projected revenue is not test year revenue and should not be reflected in operating income. However, the Staff has included that revenue in its pro forma adjustments (Staff Ex. 8, p. 9), which is the method which this Commission approved in General Telephone Company of Ohio, Case No. 81-383-TP-AIR (Opinion and Order, April 26, 1982), and United Telephone Company. We will approve the Staff's method here, too.

Annualization of Fuel Revenues and Expenses

The Staff initially adopted the Company's revenue and expense annualizations, but provided revised figures at hearing. The Staff's adjustment to fuel revenues, to reflect the latest known EFC rate, decreases fuel revenues by \$1,659,000, and the annualization of fuel and purchased power expenses reduces those expense figures by \$2,238,000 (Staff Ex. 10B). The Company indicated on brief that those figures are not unreasonable, and OCC has not challenged those figures. The Staff's adjustments will be adopted.

Buckeye Power Delivery Charges

The discussion of this item in the briefs indicates some confusion about the Staff's proposed adjustment for Buckeye Power Delivery Charges. The Company records revenues for Buckeye Power as month end set-ups, in situations in which the exact amount is not known when the books are closed, and then reverses those entries the following month, when the exact amount does become known. The Staff, in an attempt to arrive at the figures applicable to the test year, reversed the Company's reversal; the Company objected.

In his testimony, Staff witness Hines agreed that its original adjustment to reverse the month-end set-up charge was not required; he instead, requested the actual payments received from Buckeye for the first six months of the test year. The use of these figures was termed a "revised adjustment."

OCC insists that the Staff's "original adjustment" be approved, since it is consistent with the Commission's treatment of a similar item in Ohio Power Co., Case No. 81-782-EL-AIR (Opinion and Order, July 14, 1982); the Staff insists that its "revised adjustment" is correct. What makes all of the argument, in the original briefs and in the replies, so ridiculous is that the "original adjustment" and the "revised adjustment" both provided the same end result (Staff Ex. 1, Sch. I-3.3; Staff Ex. 11, Rev. Sch. I-3.3). The adjustment, whichever one wants to pick, is necessary to arrive at test year expenses; the Company's objection is overruled.

RCS Revenues and Expenses

The Company included in its operating income figures revenues and expenses for the residential conservation service (RCS) program. The revenue amount was included in other electric revenue (Tr. IV, p. 154). The expense figure of \$545,882 was made up of six months of actual expense, and an estimated figure for the second six months of the test year (Tr. IV, p. 147). The Staff made no adjustment to those figures (Staff Ex. 8, p. 9).

Consumers' Counsel argues that the RCS revenues and expenses should be adjusted to reflect the Company's actual experience. It points to the fact that the estimated portion of the expense figure was based on a four to five percent anticipated response level, while the Company's experience has been less than a one percent response level (Tr. IV, p. 148), and argues that the Company's estimate will overstate expenses.

OCC witness Haskins proposes that only \$214,674 be included in test year expenses for this item (OCC Ex. 1B, Sch. MRH-5.15). He used the actual number of audits completed in the first nine months of the test year, and multiplied that by the cost per audit, provided by the Company, of \$639 for a Class A audit and \$179 for a Class B audit (*Id.* at 17). OCC argues that Mr. Haskins' calculation results in a very conservative adjustment to the Company's expense figure, because the \$639 per Class A audit amount seems very high (OCC Br., p. 13).

While we have no way of knowing if the customer response to this program will increase as much as the Company has estimated, neither do we know if the actual number of audits for the nine month period July 1, 1981 through March 31, 1982 is representative of the demand for audits during the collection period. No testimony was presented on whether the response to the RCS program is increasing or decreasing. Mr. Haskins did not indicate why he felt that actual figures for a nine month period should be used without annualizing.

We believe that we must rely on the judgment of the Staff in this regard. Mr. Hines testified that the amount included in test year expenses was "not unreasonable when compared to other

electric and gas utilities of similar size investigated by the Staff" (Staff Ex. 8, p. 9). The Company's figure will be accepted, and OCC's objection, overruled.

Labor

Three issues have been raised regarding labor expense; the parties have differing positions on the issues.

The Company adjusted test year labor expense to annualize an estimated six percent increase in wages of bargaining unit labor, which was anticipated to be effective some time after the July 15, 1982 expiration of the union contract (Co. Ex. 4, Sch. C-3.11; Co. Ex. 11A, p. 2). The Staff excluded that adjustment, because it was not effective during the test year (Staff Ex. 8, p. 5). The Company objected.

The Commission has, in recent cases, denied post-test year labor adjustments, as well as other post-test year adjustments, as a result of the Supreme Court's decision in Consumers' Counsel v. Pub. Util. Comm., 67 Ohio St. 2d 372 (1981). However, the Company attempts to distinguish that case from the facts presented here, relying on language from the Consumers' Counsel decision, as cited in Bd. of Commrs. v. Pub. Util. Comm., 1 Ohio St. 3d 125 (1982), to the effect that post-test year adjustments would be allowed in certain circumstances. In Bd. of Commrs., the Court affirmed a decision of the Commission including an adjustment for implementation of a tree trimming program, although the expense had not been incurred during the test period, finding that where the Commission ordered a utility to adopt a specific plan to assure continued safe and efficient service, a post-test year adjustment could be made. While the Company here argues that its proposed adjustment should fall within the exception carved out in the Bd. of Commrs. case, there is absolutely no reason to believe that the Consumers' Counsel case should not govern, as the facts are almost identical to those in this case. The Company's objection will be overruled.*

Another adjustment to labor expense made by the Company was for a 9% increase, applicable to each salaried employee, which was to be effective throughout 1982 (Tr. IV, p. 142). That adjustment was effectuated by applying a 9% increase to actual labor expense for July through December of 1981 (Id.).

OCC witness Haskins excluded that adjustment, because in his view it constitutes a post-test year adjustment (OCC Ex. 36, p. 4). He retained the 9% increase in the forecasted months of the test year, but eliminated it from the first six months.

The Staff did not exclude the Company's adjustment. On brief, the Staff provided its explanation of why the Company's expense figure does not reflect a post-test year adjustment. The Company's adjustment was an annualization to June 30, 1982 levels, and not an inclusion of post-test year increases. The 1981 increases were not themselves annualized, and the increases are scattered throughout the year. We agree with the Staff's view that "the post-test year aspect of the Applicant's adjustment is a mathematical convention to effectuate a proper annualization" (Staff Reply Br., p. 13). Mr. Haskin's adjustment is not necessary.

A third aspect of the labor expense is the proper employee level on which to base the annualization of this expense item. OCC witness Haskins proposed an adjustment to labor expense to account for a variance between the budgeted and the actual number

* The Staff did agree that its original adjustment unintentionally excluded officer's wages, and that a correction should be made (Staff Ex. 8, pp. 5-6). We concur.

of employees for the last six months of the test year (OCC Ex. 36, p. 2).

The Company opposes such an adjustment. Mr. Forrester testified that the variance is attributable to the fact that the Company was in a hiring freeze, and the employee level was being reduced due to attrition (Tr. IV, p. 141). The Company argues that the depressed employee level does not represent normal operations, nor is it indicative of employee levels which are to be expected during the collection period (Co. Br. II, p. 16). OCC disputes that assertion, pointing out that Mr. Forrester could not testify when the hiring freeze will be lifted (Tr. IV, p. 141).

The Staff did not feel that an adjustment was necessary, presumably, since it did adjust for Period III when the variance was greater, because the magnitude of the variance was not sufficient to warrant such an adjustment.

As OCC points out on brief, the Commission has in past cases approved adjustments such as the one advocated by OCC. Dayton Power and Light Co., Case No. 80-687-EL-AIR (Opinion and Order, July 15, 1981); The Ohio Bell Telephone Co., Case No. 81-436-TP-AIR (Opinion and Order, April 21, 1982). Given the Commission's view that a difference between actual and forecasted data is not, of itself, a reason to discard the projections, there must be particular circumstances which warrant an adjustment to the projected figures. We believe the facts in this case are in line with those previous cases in which adjustments have been made. Here, where the hiring freeze has not yet been lifted, and no end is in sight, an adjustment appears to be warranted; although the reduced number of employees may not reflect normal operations, it is at this point the best indicator of collection period employee levels.

The variance between the budgeted and actual number of employees ranged from 96 in January 1982 to 150 in June 1982 (OCC Ex. 36, Sch. MRH-5.4b). Mr. Haskins used the average variance (70) to calculate his adjustment. We believe his adjustment to be reasonable, and will adopt it for purposes of determining labor expense.

Service Corporation Fees

The Company proposes a \$1,358,000 annualization adjustment for AEP Service Corporation billings (Co. Ex. 4, Sch. C-3.15). The Staff agrees with such an adjustment; it proposes an increase to operating expenses of \$727,000 (Staff Ex. 11, Rev. Sch. I-3.9). That figure reflects the elimination of a billing lag for this item, and also excludes \$1,995 in lobbying expenses which had been included in the budgeted portion of the test year (Staff Ex. 8, pp. 11, 12-13).

OCC opposes this adjustment, because there has been no corresponding recognition of the reduction in costs resulting from the acquisition of C&SOE by AEP (OCC Br. II, pp. 16-17). OCC witness Miller pointed out that the Securities and Exchange Commission had permitted the allocation of service corporation fees to the Company at a gradually increasing level between July 1, 1980 and January 1, 1982, and relied on that fact in concluding that there was some possibility of a duplication of costs during the acquisition of C&SOE by AEP (OCC Ex. 1, pp. 43, 46). OCC argues that the SEC order recognizes "the increasing effect of the AEP acquisition through the first six months of the test year" (OCC Br. II, p. 17).

We disagree that the "phase-in" period used by SEC can be said to track the period over which the effects of the acquisition were actually experienced; there is no indication that there is a direct correlation. OCC has not provided any evidence of specific cost savings which resulted from the acquisition; if

there were labor cost savings during the test year, as OCC seems to suggest by citing Mr. Forrester's testimony on cross-examination (see OCC Br. II, p. 17), they might, as the Staff suggests (Staff Reply Br., p. 14), be taken care of by our adjustment for the variance between budgeted and actual employee levels (*supra*). We do not believe that the speculation as to cost savings is sufficient reason to disallow the annualization adjustment. OCC's objection should be overruled.

Company Garage

The Company, Staff and OCC agree that the revenues and expenses associated with the non-utility portion of the Company garage should be excluded. The Staff has recommended that all employee parking revenues be considered jurisdictional and be excluded from test year operating income figures. The Staff has also recommended that the garage expenses should correspond to its recommended rate base exclusion.

The Company disagrees with the Staff's treatment of employee garage revenues as entirely jurisdictional, arguing that there is no reason for distinguishing these revenues from "other operating revenue" for which jurisdictional allocation is made (Company Br. II, p. 10). Considering the lack of any evidence on this point, we can only conclude that the Company has not met its burden of proof, and that its objection should be overruled. The Staff's revenue adjustment will be accepted.

The same is true for the expense adjustment. Having accepted the Staff's allocation of the rate base for the garage, we believe it to be reasonable to accept the adjustment of garage expenses on the same basis (Staff Ex. 11, Rev. Sch. I-3.2). The Company's objection should be overruled.

Cancelled Projects

The Company proposed an adjustment to amortize over ten years the costs of certain cancelled construction projects. The Staff did not make such an adjustment and the Company objected. The elimination of such expense adjustment is required by Consumers' Counsel v. Pub. Util. Comm., 67 Ohio St. 2d 153 (1981). The Company's objection must be overruled.

Interest on Customer Deposits

OCC objected to the Staff's determination of interest on customer deposits (OCC Obj. No. 18), but did not pursue the matter at hearing or on brief. The objection should be overruled.

As noted in Mr. Montgomery's testimony, the figure which appears in the Staff Report should be revised to \$108,000, to reflect the Staff's revised working capital deduction for customer deposits (Staff Ex. 10, p. 16).

Property Insurance

The Company proposed an adjustment to annualize the cost of property insurance to end of test year levels (Co. Ex. 4, Sch. C-3.18). The Staff agreed that an annualization was appropriate, but used the premiums as of February 1982, the latest known and measurable figures, to make its adjustment (Staff Ex. 8, p. 6).

It is argued by the Company that absent some showing that the estimate of year end levels is inaccurate, the Staff's selection of February 1982 was arbitrary and inappropriate (Co. Brief II, p. 18). We disagree. The Commission has long held that annualizations should be made only when the increased price levels are known with specificity. See, e.g., Columbia Gas of Ohio, Inc., Case No. 76-704-GA-CMR (Opinion and Order, June 29,

1977), aff'd sub nom. Welfare Rights v. Pub. Util. Comm., 55 Ohio St.2d 1 (1978). The Company's objection should be overruled.

Depreciation

The Company's proposed depreciation expense is based on its proposed accrual rates, and reflects adjustments to amortize the variance between book and theoretical reserves, and the amortization of cancelled projects. The Staff made adjustments to remove the amortization of the reserve variance, the amortization of cancelled projects, and the depreciation expense associated with land rights, and to reflect its exclusion of certain property from the rate base (Staff Ex. 1, Schs. I-3.18 and I-9.1).

The Company objects to the Staff's refusal to assign an accrual rate to land rights. The Staff agrees that such investments are depreciable, but Staff witness Fox assigned them a zero accrual rate, because such rights are granted in perpetuity, and because he found no retirement experience that would indicate a shorter useful life (Staff Ex. 2, pp. 13-14). The Commission has agreed with the Staff's position on this matter in past cases under similar circumstances (See, e.g., The Dayton Power and Light Co., case No. 81-21-EL-AIR [Opinion and Order, February 3, 1982]) and will do so again here.

The Company also objects to the Staff's failure to include in the depreciation expense the amortization of the cancelled nuclear plants and the reserve variance. On the first item, the Company has provided no compelling argument. Consistent with all of our recent decisions regarding the cancelled nuclear plants, the Company's objection should be overruled.

Company witness Aikman provided testimony on the second item (Co. Ex. 14B), and Staff witness Fox provided testimony in support of his position on the issue (Staff Ex. 2). According to Mr. Aikman, the magnitude of the reserve variance is \$21.6 million by his calculation, and \$18.4 million using Staff figures (Co. Ex. 14B, p. 2). He argues that the variance is attributable to increasing removal costs associated with retired property, and that because it takes several years to discern a trend in salvage and removal cost history, as well as life experience, he disagrees with Mr. Fox's position that reserve variances can generally be ignored (Id. at p. 5).

We are not sure we understand what one thing has to do with the other; presumably he is arguing that because the variance was created through no fault of the Company, the variance should not be ignored. That argument has little merit. We agree with Mr. Fox that the depreciation expense determined for this case should "allow for capital recovery at a rate as nearly representative of the actual consumption of the property during the test period as possible," and that the amortization of the reserve variance is inappropriate here, where the theoretical and book reserve, as percentages of the Company's total plant investment are "in excellent agreement" (Staff Ex. 2, p. 21). The Company's objection should be overruled.

Rate Case Expense

The Company proposes that the total amount of its rate case expense be included in test year operating expenses (Co. Ex. 3, Sch. C-3.2), and objected to the Staff's two year amortization of this expense item. Staff witness Hines testified that the Staff is reluctant to accept a one year amortization period, in view of the Company's filing history. Mr. Forrester testified that he believes C&SOE in the future will have to file annually, the long period between this and the Company's last case having been caused by the initial, beneficial impact of joining the AEP system (Co. Ex. 11A, p. 2). Despite that testimony, we will accept the Staff's recommendation; until it is clear that the Company will, in fact, be filing annually, we will not approve

the inclusion of the full amount of rate case expense in test year operating expenses.

The Standard Filing Requirements show an estimated rate case expense of \$450,000 (Co. Ex. 3, Sch. C-9). After the conclusion of the hearing, the Company submitted a late-filed exhibit showing actual rate case expense as of August 31, 1982 of \$356,000, and remaining estimated expenses of \$94,000, for a total of \$450,000. OCC argues that because the actual expense reported through August 31 was lower than the total original estimate, only the actual figure of \$356,000 should be used, if any rate case expense is to be included (OCC Reply Br., p. 19).

In support of its position, OCC argues that the Commission, in Dayton Power and Light Co., Case No. 81-21-EL-AIR (Opinion and Order, February 3, 1982), "found the actual rate case expense incurred through the end of the hearing to be a reasonable amount for inclusion in test year operating income" (OCC Reply Br., p. 18). A careful reading of that Opinion indicates that the amount included in test year operating income comprised not only the costs as of the end of the hearing, but also subsequent payments and estimated additional costs (Opinion and Order, at 22). The Company's rate case expenses do not end with the last day of hearing and it would be unreasonable to use that date to determine the rate case expense to be included here. We must reject OCC's suggestion, and accept the Company's rate case expense figures.

Advertising

Although OCC did not withdraw its initial objection to the Staff's failure to exclude \$23,000 of CCD advertising, its witness adopted the Staff's adjustment to advertising expenses shown on Schedule I-3.5 of the Staff Report (Staff Ex. 1), agreeing that the Company and the Staff had properly excluded the institutional and promotional advertising expense items (OCC Ex. 1A, p. 12). OCC's objection should be overruled.

Charitable Contributions

The Company objected to the Staff's elimination of charitable contributions, and offered testimony on the benefits which those expenditures provide (Co. Ex. 11A, pp. 5-6). That testimony is irrelevant to this issue, however; the exclusion of these expenses is required as a matter of law. Cleveland Electric Illuminating Co. v. Pub. Util. Comm., 69 Ohio St. 2d 258 (1982). The Company's objection must be overruled.

Nuclear Expenses

The Company objected to the Staff's exclusion of \$36,000 of nuclear expenses included in administrative and general expenses, which represents C&SOE's share of the Zimmer public acceptance program (Staff Ex. 1, Sch. I-3.16). The Company pointed out that those dollars were also excluded as a part of the advertising expense adjustment, shown on Schedule I-3.5 of Staff Exhibit 1.

The Staff agreed that those same dollars had been eliminated twice, and that a correction should be made (Staff Ex. 8, p. 7; Staff Ex. 10, p. 10). The Commission will order that Schedule I-3.16 be eliminated.

Clinch River Liquid Metal Fast Breeder Reactor

During the test year, a credit entry of \$427,680 was made to Account 930.2 to write-off the Company's accrued liability applicable to the Clinch River project. The liability had been accrued on C&SOE's books in December 1979 and in prior months.

The Company proposes that an out of period adjustment be made to eliminate this item from test year expenses. The Staff

does not agree that an out of period adjustment is appropriate, but Mr. Montgomery does support a write-off of the accruals, as C&SOE does not anticipate making any further payments for the Clinch River project (Staff Ex. 10, p. 7). He therefore recommends a two year write-off of the accruals, believing that to be the expected life of the rates established in this proceeding (Id.). OCC supports this proposal (OCC Brief II, p. 7). We believe that the Staff's proposal is reasonable, and should be adopted.

PUCO and OCC Maintenance Assessments

The Staff used the actual 1982 assessments to compute the PUCO and OCC maintenance expenses; the Company used the actual amounts paid in 1982. OCC agrees with the Staff's use of the 1982 assessments, but objects to the Staff's failure to consider the credits available to the Company for 1982 (OCC Ex. 1, p. 49).

The Commission has rejected OCC's argument on numerous occasions (See, e.g., Dayton Power and Light Co., Case No. 81-21-EL-AIR [Opinion and Order, February 3, 1982]; Toledo Edison Co., Case No. 81-620-EL-AIR [Opinion and Order, June 9, 1982]), and must do so again here. Any attempt to determine the existence or amount of any credit in the future is speculative, and the credit which OCC witness Miller proposes relates to a prior year and is not a proper offset to the test year obligation (Staff Ex. 10, p. 23). We believe that the test year assessment provides the appropriate basis for determining a reasonable allowance for this expense item. OCC's objection should be overruled.

Excise Tax Rider

The Company has requested approval of a temporary rate surcharge to recover \$4,848,000 in gross receipts tax payments made pursuant to a temporary one percent tax increase imposed by Amended Senate Bill No. 448 (Co. Ex. 11, p. 28). The Staff recommends against such a tariff rider, and the Commission agrees. Beginning with our decision in Columbia Gas of Ohio, Inc. (13 Municipalities), Case No. 80-1155-GA-AIR, et al. (Opinion and Order, December 23, 1981), we have excluded the temporary one percent excise tax increase from allowable expenses, finding that the temporary increase would not be in effect during the collection period and represented a past liability.

The Staff does believe that the Company's request for permission to amortize the balance of the associated deferred expense should be granted, relying, as did the Company, on the Commission's Opinion and Order in Ohio Power Co., Case No. 81-782-EL-AIR (July 12, 1982). However, OCC believes that reliance to be misplaced, arguing that the Ohio Power decision was based on the "bizarre" timing problem involved with that company (OCC Reply Br., p. 15). Although the circumstances in this case are not the same as those in Ohio Power, we believe here, too, that it would be inappropriate to require the write-off of the entire deferred balance in a single accounting period. We believe that the revenues authorized herein would permit the amortization of the deferred balance over a period not to exceed 36 months, and we will grant the Company's request.

Taxes Other than Income Taxes

Property Tax

The Company objected to the Staff's calculation of utility property tax expense (Co. Obj. I.B. 7). Staff witness Hines agreed that the Staff's calculation should be revised to reflect the exclusion of the non-utility property valuation as of December 31, 1980, and to reflect the use of the latest known tax rates (Staff Ex. 8, pp. 7-8). A revised figure was provided (Staff Ex. 11, Rev. Sch. I-3.19a), which should be adopted.

F.I.C.A. Taxes

The Company's objection to the Staff's calculation of F.I.C.A. tax expense was based not on its methodology, but on the labor expense used by the Staff (Co. Ex. 11A, pp. 4-5). The F.I.C.A. tax calculation should be based on the labor expense approved supra.

Federal Income Tax

Interperiod Tax Allocation

The Company currently normalizes the tax effects of liberalized depreciation, Class Life ADR depreciation, deferred fuel costs, accelerated amortization feedback, and investment tax credits. The proposal made by the Company would expand its normalization practices to include ACRS depreciation, and taxes, pensions, and thrift and savings plans capitalized (Co. Ex. 12, pp. 7-8). The Staff accepted the Company's proposal, and no objections were raised. The Company's normalization proposal should be approved.

Economic Recovery Tax Act

The Company and Staff proposals also reflect the normalization requirements of the Economic Recovery Tax Act (ERTA), and no objection has been raised to those proposals. The Commission finds that C&SOE has met the normalization requirements of ERTA, and the Company is authorized to normalize the tax benefits of the accelerated cost recovery system of depreciation and the investment tax credit on its recovery property placed in service after December 31, 1980.

Gross Receipts Tax Differential

OCC objected to the Staff's failure to include a gross receipts tax differential as a tax reconciling item. Staff witness Montgomery explained that the Staff calculates the gross receipts tax on test year taxable revenues rather than on the gross receipts from a different period (Staff Ex. 10, p. 24). He observed that the Staff's tax treatment of this item is consistent with its recommended working capital calculation; both calculations stem from the view that gross receipts taxes are paid in arrears. In Mr. Montgomery's view, OCC's recommendation regarding the tax calculation is consistent with the view that gross receipts taxes are prepaid; were the Commission to accept OCC's recommendation, consistency would require eliminating gross receipts taxes from the calculation of the working capital tax offset (Id.).

We accept Mr. Montgomery's explanation of this item, and maintain our consistent position that no tax reconciling item is necessary. OCC's objection should be overruled.

Parent Company Loss

OCC also objected to the Staff's failure to allocate a portion of the parent company loss to C&SOE in the federal income tax calculation. Mr. Montgomery explained the Staff's position on this matter, a position which was adopted by the Commission in Ohio Power Co., Case No. 81-782-EL-AIR (Opinion and Order, July 14, 1982). Interest charges are calculated by imputing an interest expense based on the capital structure of the parent company; the Staff believes that such a method provides additional interest in lieu of tax savings (Staff Ex. 10, p. 25). In addition, federal income taxes are calculated as if C&SOE were a separate entity; there is no need to allocate parent company loss, because the tax calculation takes into consideration all of the tax benefits available to the Company (Id.). OCC's objection should be overruled.

Allowance for Borrowed Funds Used During Construction

Although the Company originally proposed normalizing an amount for the allowance for borrowed funds used during construction for units 5 and 6 at its Poston Generating Station, Company witness D'Onofrio agreed at hearing that this item should not be normalized (Tr. V, p. 68). This is consistent with the position taken by the Staff and OCC (OCC Ex. 1, p. 53) on this issue, which position will also be adopted by the Commission.

Investment Tax Credit Feedback

The Company used a 35 year average life to determine the feedback of investment tax credits (ITC) (Tr. V, p. 82). That number was the result of a study performed some years ago by the Company's Construction Accounting Group. That study resulted in a finding that the average useful life of the relevant property was 33.9 years; the Company used a 35 year figure to ensure that the feedback of ITC occurred no more rapidly than ratably, in accordance with Option 2 of the Internal Revenue Code (Id.).

Although the Staff originally used the Company's proposed 35 year life, Mr. Montgomery revised his position in his testimony (Staff Ex. 10, p. 26), to agree with OCC witness Miller's recommendation of the use of a 30 year life (OCC Ex. 1, p. 56). Both Mr. Miller and Mr. Montgomery indicate that the 30 year life is that which results from the implementation of the Company's new depreciation accrual rates. The Company continues to argue that the average service life is 33.9 years, and objects that the use of a 30 year life might result in the loss of tax benefits (Co. Br. II, p. 28). However, the Company has provided no clue as to why it believes that the Internal Revenue Service would use a 33.9 year life, determined in 1975, rather than the latest estimate of 30 years. The Commission agrees that the 30 year life should be used. The Company's objection should be overruled.

Operating Income Summary

Consistent with the foregoing discussion, the Commission finds the Company's jurisdictional adjusted operating income for the test period, July 1, 1981 to June 30, 1982, to be as follows:

(000's Omitted)

<u>Operating Revenues</u>	\$ 588,651
<u>Operating Expenses</u>	
Operation and Maintenance	366,900
Depreciation	42,575
Taxes Other Than FIT	48,897
Federal Income Tax	26,609
<u>Total Operating Expenses</u>	\$ 484,981
<u>Net Operating Income</u>	\$ 103,670

PROPOSED INCREASE

A comparison of jurisdictional test year operating revenue with allowable jurisdictional expenses indicates that under its present rates, the Applicant realized income available for fixed charges in the amount of \$103,670,000 based on adjusted test year operations. Applying this dollar return to the jurisdictional rate base results in a rate of return of 10.07 percent under present rates. This rate of return is below that recommended as reasonable by either of the expert witnesses testifying on this subject. The Commission, therefore, finds that the Company's present rates are insufficient to provide it reasonable compensation and return for the electric service rendered customers affected by this application. Rate relief is required at this time.

Under the rates proposed by the Company, additional gross revenues of \$100,346,000 would have been realized based on test year operations as analyzed herein. On a proforma basis, which assumes necessary expense adjustments calculated in a manner consistent with the Commission's findings, this increase in gross revenues would have yielded an increase in net operating income of \$51,785,000 resulting in income available for fixed charges of \$155,455,000. Applying this dollar return to the jurisdictional rate base results in a rate of return of 15.11 percent. Although it is apparent that the present rates are inadequate, the increase requested by the Applicant results in a rate of return which is higher than that recommended by any witness testifying on this issue. The Commission must therefore examine the various rate of return proposals submitted in this proceeding in order to determine a fair rate of return for purposes of establishing just and reasonable rates.

RATE OF RETURN

Two witnesses presented cost of capital analyses to be considered as evidence by the Commission in establishing a fair rate of return for purposes of this proceeding. Mr. Forrester, on behalf of the Applicant, determined the cost of capital to the Company to be 12.95 percent (Co. Ex. 4, Sch. A-1). Staff witness Hedman, as a result of his study, arrived at a cost of capital recommendation of from 11.91 to 12.25 percent (Staff Ex. 12). The difference between the positions of the Applicant and the Staff results almost entirely from the question of the cost to be assigned to the equity component of the capital structure.

Capital Structure

This is the first proceeding in which C&SOE has applied for rate relief as a subsidiary of the AEP system. Hence, this is the first instance wherein the issue of a consolidated capital structure has arisen for C&SOE. Both the Staff and the Company witnesses employed the AEP consolidated capital structure as a starting point for their individual cost of capital analysis (Co. Exs. 7A, 7B, 7C; Staff Ex. 12). The Applicant argues somewhat lamely on brief that its own capital structure could appropriately be used, but recognizes that Commission precedent leans the other way (Ohio Power Co., Case No. 78-676-EL-AIR, [Opinion and Order, April 16, 1976]; Ohio Power Co., Case No. 81-782-EL-AIR [Opinion and Order, July 14, 1982]). The use of a consolidated capital structure is consistent with the application of market measures in the cost of capital determination. Given the established Commission precedent and the use of a consolidated capital structure by both the Applicant and the Staff, we will adopt the use of AEP's consolidated capital structure.

At the hearing, Company witness Maloney and Staff witness Hedman each amended his respective party's original proposal to update AEP's capital structure to May 31, 1982 (Co. Exs. 7A, 7B, 7C; Staff Ex. 12). The Staff's capital structure differs from the Company's in that the Staff's does not include jurisdictional deferred investment tax credits (JDIC) and the Applicant's does. The Commission has never included JDIC in capital structure determinations, but, in any event, the Applicant has stated on brief that it does not object to the use of the capital ratios contained in Staff Ex. 12 (Co. Br. I, p. 51). Thus, the Commission finds that the capital structure recommended by Mr. Hedman, consisting of 56.3 percent long term debt, 10.4 percent preferred stock, and 33.3 percent common equity should be adopted for purposes of the cost of capital determination in this case.

Cost of Debt and Preferred Stock

No dispute exists with respect to the cost rates to be assigned the long term debt and preferred stock components of the capital structure, as each of the witnesses recommended that the

actual embedded cost of these senior securities, updated to May 31, 1982, be used in determining the weighted cost of capital (Co. Ex. 7B, 7C; Staff Ex. 12). Accordingly, the Commission finds the embedded cost of long term debt to be 10.12 percent and the embedded cost of preferred stock to be 10.33 percent.

While the Applicant accepts the use of the AEP consolidated capital structure and cost of senior capital for purposes of this case in setting an overall rate of return, the Company contends that the actual embedded cost of this capital for C&SOE is greater than AEP's cost on a consolidated basis. Thus, the Company urges the Commission to recognize this in setting the overall rate of return (Co. Br. I, p. 52). The Applicant has presented no evidence to substantiate this contention and we must reject it.

Cost of Common Equity

As previously mentioned, the primary controversy in the rate of return area focused on the cost to be assigned the equity component of the capital structure. We have long recognized that the cost of common equity can only be estimated, unlike the costs of debt and preferred stock which are derived through a largely mechanical process. There are a number of valid approaches to the cost of equity determination, but in the final analysis, the results under all these approaches are heavily influenced by the judgments and assumptions of the sponsoring witnesses. Obviously the Commission must use its discretion in adopting the recommendation that we believe to be the most appropriate in light of the evidence presented. Applicant's witness Benore recommends a cost of equity of at least 18.5 percent. Staff witness Hedman has determined the cost of equity to be between 15.43 and 16.45 percent. Mr. Benore's cost of equity is a composite of the results produced by his application of the discounted cash flow (DCF) comparison with the common stock of selected industrial companies, risk premium, and financial integrity methodologies (Co. Ex. 8, pp. 8, 48, 54). Mr. Hedman's range is based only upon a DCF analysis (Staff Ex. 4, p. 6).

The wide two to three percent variance in the witnesses' recommendations is not attributable solely to judgmental decisions in the use of data but rather reflects the fact that the Staff utilized a cost of capital approach which measures investor's required returns, while Mr. Benore adopted a model designed to achieve certain results as embodied in his financial integrity test.

Mr. Benore's first test, the risk premium test, attempts to measure the return necessary on AEP's common equity relative to alternative returns available in the bond market by measuring the spread between the yield on lowest risk capital, or long term U.S. Government Bonds, and the return to the investor in AEP common stock (Co. Ex. 8, p. 36). The determination of the spread is, in Mr. Benore's test, obtained from historical data and from the results of surveys on investor risk premium requirements conducted by Paine Webber Mitchell Hutchins Inc. (Co. Ex. 8, p. 38). For historical data, Mr. Benore utilized a study entitled "Stocks, Bonds, Bills and Inflation: Historical Returns (1926-1978)" by Ibbotson and Sinquefeld, which computed the difference in such returns based on Standard & Poor's 500 Company Composite Index over the period 1926-1978. Mr. Benore used the study to demonstrate that annual returns on common stocks over this period exceeded returns on long term U.S. Government Bonds by 5.7 percentage points, according to the geometric measure. Mr. Benore added this return difference (5.7 percentage points), or risk premium, to the current yield on long term U.S. Government Bonds for the last 12 months (he used 13.0 percent) to derive a total return requirement for common stocks of 18.7 percent (5.7 percent + 13 percent) (Co. Ex. 8, p. 39). Mr. Benore feels that the 18.7 percent return requirement is applicable to AEP because the risk of investing in AEP is equal to that of common stocks

generally (which was examined in the Ibbotson-Sinquefeld study), and because in his view the risk of AEP exceeds electric utilities and common stocks generally due to AEP's below-average financial integrity and higher than average return volatility (Co. Ex. 8, pp. 39-40).

Mr. Benore's principal risk premium test results from a survey of investors concerning the risk premium required for the common stock of a double A rated utility over the yield of double A rated, newly issued utility bonds (Co. Ex. 8, p. 40). Based on the results of this test, Mr. Benore concluded that the risk premium requirement for AEP, which is rated Baa or BBB on balance, would be 5.7 percentage points. Summing this risk premium of 5.7 percentage points with a 13 percent yield on long term U.S. Government Bonds (average of the last 12 months was 13.8%) results in a recommended 18.7 percent total return requirement for investors in AEP common stock (Co. Ex. 8, p. 41).

A second test used by Mr. Benore to determine AEP's cost of common equity capital involved a discounted cash flow comparison with industrial common stocks, as represented by the Standard & Poor's 400 Industrials. In this analysis, Mr. Benore has determined that the cost of common equity for companies comparable in risk to the S&P 400 is 17.5 percent. This figure results from a current yield for the S&P 400 Industrials of about six percent and a prospective earnings growth rate of 11.5 percent (Co. Ex. 8, p. 50). Mr. Benore took this 17.5 percent figure and adjusted it by five percent for market pressure and issuance costs to derive a cost of common equity for AEP of 18.4 percent (Co. Ex. 8, p. C 32). Under Mr. Benore's DCF model, AEP's growth component is 6.1 percent with a current yield of 11.4 percent (Co. Ex. 8, p. C 52). Mr. Benore notes that AEP's bond ratings are close to those of C&SOE and consequently, C&SOE's risk is comparable to AEP's. Hence, C&SOE's cost of common equity capital is at least 18.5 percent (Co. Ex. 8, pp. 53, 54).

The final test used by company witness Benore in determining C&SOE's cost of common equity capital is an analysis to determine whether the cost of common equity capital as determined from the previous two tests will enable C&SOE's financial integrity to achieve a satisfactory level. The standards set forth by Mr. Benore for "financial integrity" indicate a condition which:

- 1) generates cash flow to construction of at least 50%;
- 2) supports a double A bond rating;
- 3) allows AEP to sell common stock at least at book value;
- 4) allows C&SOE sufficient financial strength and flexibility;
- 5) results in a fair return of good quality on its common equity so that capital can be raised on reasonable terms; and
- 6) achieves a satisfactory level of financial integrity while maintaining rates that are fair to its customers.

(Co. Ex. 8, p. 54)

Assuming an 18.5 percent realized return on common equity, Mr. Benore applied these criteria to C&SOE and AEP to determine whether AEP and C&SOE would attain financial integrity as determined by these standards (Co. Ex. 8, p. 54). Mr. Benore concluded that on balance, C&SOE would come close to a satisfactory level of financial integrity despite the fact that several of the indicators of financial integrity would be below a reasonable

level. Thus, Mr. Benore is of the opinion that the financial integrity test confirms that C&SOE's cost of common stock equity is at least 18.5 percent (Co. Ex. 8, p. 55).

In reviewing Mr. Benore's recommendation that the cost of C&SOE's common equity is at least 18.5%, and the three tests that he utilized to arrive at that figure, the Commission is of the opinion that Mr. Benore's approach cannot be relied upon as a reasonable approximation of the cost of common equity to the Company. We feel there are significant problems, as discussed below, with each of Mr. Benore's three tests and that none of the three can be relied upon individually or combined to provide a solid basis for establishing the equity cost component in this case.

Mr. Benore's risk premium analysis attempts to measure the risk premium through the use of historical data and the results of an investor survey. We have serious reservations about determining an appropriate risk premium based upon an investor survey which is of questionable accuracy and validity and which may be prone to bias. We cannot accept any risk premium based upon the use of such survey results. Nor do we believe the historical data relied upon by Mr. Benore produces a reliable result. We have on past occasions indicated our reluctance to use a risk premium, noting that the method may not produce reliable results where the risk premium is based on data from a period in which interest rates were significantly different than those which currently exist or in cases where the current rates are extremely volatile (See, e.g., Toledo Edison Co., Case No. 81-620-EL-AIR, [Opinion and Order, June 9, 1982, at p. 25]). In this instance, Mr. Benore's exhibits disclose substantial fluctuations in the spread of stock returns over bond returns and his testimony was revised at the hearing to reflect a change in the current interest rates (Co. Ex. 8, Ex. CAB-1, p. 30; Tr. III, p. 54). Also, given a period of changing interest rates, we consider it particularly important that some showing be made that the base value to which the risk premium is applied is appropriate. Finally, the historic returns on equity utilized by Mr. Benore may not be representative of the historic cost of equity actually associated with the stock analyzed. As Staff witness Hedman explained, the actual cost of equity to the S&P 500 is most likely to be below the historic return since the market to book ratio of market aggregate groups usually exceeds 1.0 (Staff Ex. 4, pp. 17-18). Consequently, Mr. Benore's estimated cost of equity using this methodology is overstated.

The DCF methodology employed by Mr. Benore incorporated allegedly comparable companies consisting of the Standard and Poor's 400 Industrials. This test indicated a return of 17.5 percent, and 18.4 percent after adjusting for market pressure and issuance costs (Co. Ex. 8B, p. 53). Mr. Benore's model incorporates a yield component of 11.4 percent and an expected rate of growth of 6.1 percent (Co. Ex. 8B p. 52). We find that Mr. Benore's methodology is a misapplication of the DCF formula and is essentially a mutated form of the comparable earnings test. The DCF methodology assumes an efficient market and results in a rate of return equal to returns which can be earned on investments of comparable risk by determining the cost of common equity of a unique and distinct company rather than the average of many allegedly comparable companies. The comparability of returns on other companies is implicit in the derivation and application of the model to a specific company and the use of a "comparable" index is not necessary (Staff Ex. 4, p. 17). Mr. Benore's use of a growth rate of 6.1 percent further indicates that Mr. Benore's approach no doubt estimates what investors might like to see rather than what they can reasonably expect (Tr. III, pp. 102-109). Mr. Benore continually asserts in his testimony that AEP should be regarded as equal to industrials in risk (Co. Ex. 8, pp. 51-52) but the market does not reflect this fact. Mr. Benore's methodology does not use information specific to AEP but rather uses information for other entities whose similarity to

AEP's comparability has not be adequately established. We have in other cases rejected such modified DCF analyses and we must reject Mr. Benore's as well. See East Ohio Gas Co., Case No. 79-535-GA-AIR, (Opinion and Order, July 9, 1980).

Finally, addressing Mr. Benore's primary test which is the financial integrity test, we are not of the opinion that the standards set forth by Mr. Benore for financial integrity are the legal standards specified by F.P.C. v. Hope Natural Gas Co., 320 U.S. 591 (1944) and Bluefield Waterworks and Improvement Co. v. Pub. Serv. Comm., 262 U.S. 679 (1923). Certainly, investors and utility companies might hope for the standards set forth by Mr. Benore, but it has not been adequately demonstrated that these "goals" need actually be realized for the company to be considered as having been granted a fair and adequate return. Mr. Benore's approach in this respect is clearly outcome oriented and attempts to measure the amount of rate relief which would be necessary to achieve certain bond ratings, etc. In determining the cost assigned the equity component of the capital structure, the Commission considers market measures of investor return requirements, not the amount of rate relief which would produce certain results (See Toledo Edison Co., Case No. 81-620-EL-AIR, [Opinion and Order, June 9, 1982] and Cleveland Electric Illuminating Co., Case No. 79-537-EL-AIR, [Opinion and Order, July 10, 1980]). Thus, while Mr. Benore's testimony and Mr. Fayne's rebuttal testimony is informative as an overview of the Applicant's financial condition, it does not reasonably reflect investor requirements and does not comport with the cost of capital approach preferred by the Commission. Thus, the Commission's review of the testimony of record leads us to the conclusion that Mr. Benore's analysis is inappropriate in all respects and his recommendation of 18.5 percent for the cost of C&SOE's common equity must be rejected. We must now turn our attention to the cost of equity as determined by Staff witness Hedman.

Staff witness Hedman utilized the DCF method to reach his recommended range for the cost of equity of between 15.43 and 16.45 percent. Under the DCF formula, the cost of equity equals the sum of the current dividend yield and the expected rate of growth in dividend (Staff Ex. 1, p. 42). Mr. Hedman calculated his yield component by dividing the current annualized dividend of 2.26 by the \$16.8042 average price of common stock for the twelve month period ending June, 1982 (Staff Ex. 4, p. 7; Tr. XIV, p. 37). The calculation produced a recommended yield component of 13.45 percent.

With regard to the growth component of the DCF formula, Staff witness Hedman estimated the growth component by use of the "b x r" approach, with "b" equalling the retention rate of earnings and "r" representing the earnings on the common equity funds retained (Staff Ex. 1, p. 28). For the five year period of 1977 to 1981, Mr. Hedman determined that the "b x r" averaged less than one percent (Staff Ex. 4, Table 2). This result, coupled with a low earnings growth during the same period and with an approximate three percent realized growth in dividends per share over the past five and ten year periods, led the Staff witness to conclude that 1.50 percent is a fair and reasonable estimate of the investors' expected growth in dividends (Id., p. 8, Table 2).

We believe that Mr. Hedman's 1.5 dividend growth estimate represents a reasonable "g" value for purposes of the DCF calculation. Combining this figure with Mr. Hedman's yield determination of 13.45 percent produces an indicated base line cost of equity of 14.95 percent.

The Staff recommends that the baseline cost of equity of 14.95 percent be multiplied by the customary adjustment factors of 1.032 and 1.100 in order to account for issuance costs, dilution, and the need for financing flexibility (Staff Ex. 4, p. 8). Although OCC registered its usual objection to the Staff's

adjustment, it also recognized that the Commission has consistently rejected its argument in this area and thus did not pursue the matter in direct testimony or on brief. For the same reasons as set forth in Dayton Power and Light Co., Case No. 80-687-EL-AIR (Opinion and Order, July 15, 1981, pp. 34-36), we find that the Staff's proposal should be adopted herein. This adjustment produces a recommended cost of equity range of 15.43 and 16.45 percent.

After combining the appropriate factors and adjusting them accordingly, we are presented with a range of 15.43 percent to 16.45 percent for a return on common equity. The Staff traditionally adjusts its recommendation of a return on equity to present the Commission with an appropriate range rather than one specified point as an estimation. This method allows the Commission to exercise its discretion in selecting a specific point within that range to enable the rate of return to reflect specific facts and circumstances of the case presented. In selecting a point within the determined spread, the Commission finds factors present which persuade us that our judgment should fall in the upper end of the range.

As reported by the Staff, AEP has exhibited negative cash retained earnings per share for a period of some years, indicating that AEP has been forced into excessive reliance on AFDC earnings to fund its dividend (Staff Ex. 1, pp. 29-32). Although we might concur with the Staff's observation that a policy of increasing dividends without adequate earnings support is unlikely to have any positive effects on the Company's poor market-to-book ratio, the fact remains that this Company's financial picture has been somewhat bleak. We also recognize that C&SOE is involved in the construction of a nuclear generating plant and that such a program requires substantial amounts of capital for construction and carries the increased burden and risk associated with federal regulation and licensing. We are of the opinion that the increase in the investor's perceived risk associated with construction and operation of a nuclear facility should be reflected in the return on equity granted in this case. Consequently the Commission concludes that 16.20 percent, which is the midpoint of the upper half of Staff's recommended range, represents a reasonable estimate of the cost of equity capital to this utility.

Attrition Adjustment

Applicant's witness Benore proposes an additional adjustment to the overall cost of capital otherwise determined by the Commission in this proceeding as an allowance for attrition (Co. Ex. 8, pp. 63-64; Tr. III, pp. 111-114). Attrition refers to the shortfall or difference between the allowed and earned return on common equity, due to rising costs or revenues being less than anticipated, or because of changes in the embedded costs of debt and preferred stock and changes in the mix of capital. The Staff is opposed to the proposed attrition adjustment (Co. Ex. 4, p. 18).

The Commission has previously considered requests for attrition allowances and has generally rejected adjustments of this type, whether presented as an augmentation to the rate of return, as advanced in the instant case, or as an adjustment to test year expenses, on the basis that such adjustments are inconsistent with the test-year concept of rate regulation (Columbia Gas of Ohio, Inc. [Columbus], Case No. 76-704-GA-AIR [Opinion and Order, June 27, 1977], aff'd sub nom. Franklin County Welfare Rights Organization v. Public Utilities Commission, 55 Ohio State 2d 1 [1978]). We do not find any special circumstances in this case which warrant the granting of the proposed attrition adjustment; thus, we will deny it.

Rate of Return Summary

The following table presents the Commission's findings regarding C&SOE's cost of capital:

	<u>Amount</u>	<u>% of Total</u>	<u>Cost</u>	<u>Weighted Cost</u>
Long-Term Debt	\$ 5,627,560	56.3%	10.12%	5.70%
Preferred Stock	1,045,041	10.4	10.33	1.07
Common Equity	<u>3,329,179</u>	<u>33.3</u>	<u>16.20</u>	<u>5.39</u>
	\$10,001,780	100.0%		12.16%

The Commission concludes that a 12.16 percent rate of return is sufficient to provide C&SOE reasonable compensation for the electric service it renders customers affected by this application.

AUTHORIZED INCREASE

A rate of return of 12.16 percent applied to the jurisdictional rate base of \$1,029,016,000 approved for purposes of this proceeding results in an allowable return of \$125,128,000. Certain expenses must be adjusted if the gross revenues authorized are to produce this dollar return. These adjustments, which have been calculated in a manner consistent with the findings herein, result in an increase in federal income tax of \$18,279,000, in state excise tax of \$1,639,000, and in the allowance for uncollectibles of \$204,000. The net effect of these adjustments is to increase allowable expenses to \$505,103,000. Adding the approved dollar return to these allowable expenses results in a finding that applicant is entitled to place rates in effect which will generate \$630,231,000 in gross annual operating revenue. This represents an increase of \$41,580,000 over the rates which are currently in effect.

CURTAILMENT

C&SOE has proposed that the Commission permit a downward adjustment to pro forma revenues attributable to the residential class of \$6,013,985 for Period I to recognize the price elasticity of demand for electricity (Co. Ex. 4, Schs. E4, E4a). The Staff, Consumers' Counsel, IEC, and the City all opposed this adjustment. The Company objected to the Staff's recommendation.

The Company presented the testimony of Dr. Hendrick Hou-thakker, a theorist in the field of consumer demand analysis, and Dr. Daniel Mahoney, an expert in the application of analytical techniques used to assess electricity price demand relationships, to develop a model which estimates the price elasticity of demand for electricity. Based on the study, which he directed, Dr. Mahoney concluded that the price elasticity of demand for electricity for residential consumers with electric heat is -.399 and is -.125 for residential consumers without electric heat (Co. Ex. 18, p. 3). As expected, the study showed that customers with electric heat exhibit greater responsiveness to changes in the price of electricity than those without electric heat, which results in a different price elasticity of demand for each of the two classes of residential customers (Co. Ex. 18, p. 5).

These elasticity coefficients were estimated by Dr. Mahoney through the use of a statistical analysis which modeled the impact of changes in the price of electricity on the average KWH usage per customer by regressing explanatory influences on the demand for electricity against the average usage (Co. Ex. 18, p. 5). Four influences were measured in the model: the price of electricity, a general measure of all consumer prices, the saturation of electric appliances, and the weather (Id., p. 5). The price measure which was used by Dr. Mahoney in this study was the marginal price concept as opposed to the average price or typical bill (Id., p. 5). The saturation of electric appliances

represents the joint impact of consumer income and weather on the demand for electricity, and the temperature variable is used to explain the responsiveness of weather sensitive appliances to changing weather (*Id.*, p. 5). The study also attempted to test several other formulations of the demand relationship by including an additional explanatory variable of real personal per capita income and a second formulation in terms of real per capita income using the dynamic adjustment process. Dr. Houthakker's and Dr. Mahoney's testimony indicates that theory suggests that variations in real per capita income would affect demand, but that their econometric models did not produce statistically significant results using the real per capita income variables (*Id.*, p. 10). Data Resources, Inc. (DRI) which conducted the statistical analysis, performed several diagnostic tests to analyze the validity of the results obtained from the econometric model used. Based on the data presented to it by C&SOE, DRI concluded that the models produced estimates of the price elasticity of demand which were appropriate for use in measuring curtailment for the Company's two residential classes of service (Co. Ex. 18, pp. 10-11).

Staff witness Wissman reviewed and analyzed the Applicant's proposed curtailment adjustment based on the following four separate and distinct elements: 1) economic theory; 2) the method employed in determining the physical curtailment; 3) given the physical curtailment, the method of determining the avoided costs; and, 4) the method of determining the avoided costs. The Staff recommends that any revenue curtailment adjustment be approved only after all four elements are satisfactorily presented and justified (Staff Ex. 1, p. 36). In the instant proceeding, Staff recommended against the proposed curtailment adjustment noting that items 2) and 4) above had not been adequately presented and justified by the Company (Staff Ex. 5, p. 2; Tr. XV, p. 22). Mr. Wissman identified several problems with respect to the models used by the Applicant. Specifically, Mr. Wissman noted that the models did not contain an express income variable; the base weights used in the construction of the appliance stock variable were based on a study using Houston area data and used demand data (KW) as a proxy for consumption (KWH); and the appliance stock variable is based on too few actual saturation observations and too many assumptions. In addition to these concerns regarding the models used to estimate the curtailment effect, the Staff was also concerned that C&SOE proposed a curtailment adjustment for only the residential class and not other classes and that the Applicant's approach is one-sided, in that the approach estimates the loss of revenue due to an increase in price but fails to consider the reduction in costs due to the reduction in sales (Staff Ex. 3, p. 2).

OCC witness Reinbergs objects to the proposed curtailment adjustment on two of the same bases as does Mr. Wissman, those being that the adjustment is applied to only the residential class and because it ignores the associated cost savings to the Company (OCC Ex. 2, pp. 24-25). The City also agrees with the Staff's criticism of the Applicant's proposed adjustment. Additionally, the City contends that C&SOE, in its allocation of rate base items to the residential class on the basis of peak contribution, has not made an allowance for the reduced KW demands that would result from a price increase (City Ex. 1, p. 28; City Br. I, p. 4). Further, the City believes that the Company did not take into account the effect of alternate energy sources and their relative price, and that Dr. Mahoney's elasticity coefficients are suspect because they differ from those which were originally used by AEP's System Planning Department (City Ex. 1, pp. 28-29; City Br., p. 5).

Based upon all of the evidence of record, the Commission concludes that the proposed curtailment adjustment should be denied. We believe that the econometric model used to derive the elasticity coefficients is deficient in several major respects. First of all, no explicit income variable was used in the model.

Each of the three witnesses testifying on curtailment expressed the opinion that income is one of the most important determinants of consumer's purchases of goods and services (Co. Ex. 19, p. 7; Co. Ex. 18, p. 4; Staff Ex. 1, p. 36). The applicant's model contains no express income variable (Tr. VII, p. 31). The applicant implies that income is accounted for in the appliance stock variable and Dr. Mahoney claims that income affects the purchase of appliances but not the consumers' use of those appliances (Co. Ex. 18A, p. 2). Common sense tells us that this contention is not true. It may have been the case in the days of cheap electricity but, given today's cost, it is unreasonable to assume that people's use of electric appliances (particularly major users, such as heating and cooling) is not influenced by the cost of operating those appliances. Thus, we believe the Applicant's model is deficient in this respect.

The Commission is also of the opinion that there was not sufficient data utilized in the model to accurately allow the price elasticities to be derived. Dr. Houthakker testified that reasonable estimations of elasticity can only be derived if sufficient data for periods in which income and prices have actually changed is available and that "the reason for unsatisfactory estimation results is usually a lack of independent variation in the underlying data which comes from various points in time" (Co. Ex. 19, p. 23). He also notes that "[m]ore data spanning a greater period generally provide more independent variation, thus making for better estimates of the effects (Id.). In the instant case we believe the actual historical data used was insufficient to engender much confidence in the results obtained. For example, the appliance stock variables for the heat and non-heat models were constructed using saturation data based on only three surveys (only two for several appliances) and only one survey contained a heat and non-heat breakdown (Staff Ex. , p. 5). Consequently, numerous assumptions had to be made because of the paucity of data available (See Tr. VII, pp. 59, 66, 72). Other examples which cause us to question the validity of the data used in the models are the use of Houston data for the C&SOE area and the use of demand data as a proxy for consumption data. To derive reliable elasticity coefficients, the underlying data must be sufficient in quantity, time period spanned and comparability. In this proceeding, we believe that the model presented by the Applicant contains several deficiencies as discussed above which lead us to conclude that it cannot be relied upon to accurately estimate the curtailment effect.

Furthermore, the Commission continues to be concerned about the application of the price elasticity for electricity to only the residential class. The Staff notes that elasticity of demand is a phenomenon which affects all customer classes but the Applicant has chosen to estimate this factor for only the residential class. While all revenue from various classes will be curtailed to some degree, the Applicant has proposed that only the residential customers be required to offset some of the deficiency. The Company tries to counter this argument by suggesting that its proposal is attempting to impose upon the residential class only the revenue responsibility allocated to it and that the return currently earned from the residential class is less than the Company's overall return (Co. Br. I, pp. 86-87). This argument may explain why the residential class should have a curtailment adjustment imposed upon it, but it does not address the issue of discrimination among the various customer classes. There is basic agreement that price elasticity exists in economic theory and that curtailment does occur. The Commission's concern in this case is that the curtailment effect was only estimated for one customer class and not for other classes which are also affected. The Company's explanation is that sufficient data did not exist to estimate the curtailment effect for industrial or commercial customers (Tr. VII, p. 25). The Company's inability to estimate curtailment for the other classes of customers does not render the proposed application of the adjustment to only the residential class reasonable.

The Company also argues in brief that the Commission has approved curtailment adjustments in other cases where the curtailment was applied to only selected customer classes, citing Ohio Bell Telephone Company, Case No. 79-1184-TP-AIR (Opinion and Order, December 3, 1980) and Cincinnati Bell Telephone Company, Case No. 80-476-TP-AIR (Entry on Rehearing, July 15, 1981). The Commission has approved curtailment adjustments in telephone cases for particular types of service or pieces of equipment as opposed to a general class of customer. The Applicant argues that this is a distinction without a difference, but we cannot agree. While we recognize that a residential customer receives a somewhat different "type of service" than an industrial or commercial customer, we do not believe the analogy can be made to telephone cases where completely different types of equipment and service are offered, and where the pricing considerations and curtailment effects are entirely different. We must reject this aspect of the Company's argument. We find that the Applicant's proposed curtailment adjustment has not been adequately justified and that Applicant's objection to the Staff's finding on this matter should be overruled.

RATES AND TARIFFS

A number of questions have been raised with regard to rate structure, the design of specific rates, and certain other tariff matters. The analysis of these issues is, to some extent, affected by the fact that the revenue authorized is significantly less than the amount which the proposed rate schedules were designed to generate. Thus it will be necessary to speak in terms of general principles rather than specific rate levels. Consistent with our customary practice, the extent to which the total relief authorized is less than the requested increase should be recognized through a proportionate reduction to the demand and energy charges in all rate schedules, except the G-4 rate, for which the Staff recommended that only the demand charges be adjusted for a lower revenue increase (Staff Ex. 1, p. 54). The tariffs filed pursuant to this Opinion and Order will be carefully reviewed prior to final approval to ensure that the Commission's intent has been carried out. We adopt the Staff's proposals on any matters not specifically addressed in this Order.

Revenue Distribution

The Company performed a class cost of service study to determine the costs incurred in serving each retail customer class and the rate of return earned by C&SOE from each retail class during the test year (Co. Ex. 17, p. 4). Costs were assigned using "the standard industry three-step approach of functionalization, classification and allocation" (Id.). The Company proposed a distribution of the revenue increase among customer classes in a manner which would move toward the gradual equalization of class rates of return, limiting the maximum rate increase to any class to approximately 25%, giving recognition to the rate design principle of gradualism (Id., p. 12).

The Staff reviewed the Company's study, and then ran its own, using the Company's information as a data base (Staff Ex. 1, p. 47). The conclusion reached was that the results of the study are representative of the costs imposed by the various customer classes. However, the Staff expressed some reservations regarding the data used by the Company.

The residential load data used by C&SOE was load research data from Ohio Power Company residential customers for the twelve months ended February 1980 (Tr. VI, p. 36). That data was then weighted for appliance saturation levels and the billing frequency usage patterns for C&SOE (Tr. VI, p. 36). The Company is in the process of conducting a load survey of its own residential customers, and contends that the results of that study are very similar to those of the "hybrid" data (Co. Br. I, pp. 6-7).

However, the Staff, making the same comparison, found "differences which may be considered significant for some months" (Staff Ex. 1, p. 48).

Both OCC and the City ask the Commission to reject the proposed revenue distribution. OCC witness Reinbergs used what he termed an "opportunity cost approach" to arrive at a revenue distribution proposal; he allocated production and transmission costs by the twelve coincident peak method used by the Company, but constrained the production and transmission demand component to the capital cost of a peaking unit, because, in his view, capital costs of production expended above the cost of a peaker are made in order to realize fuel savings and are therefore related to energy (OCC Ex. 2, pp. 7, 8).

Although Mr. Reinbergs would not agree that his approach was a marginal cost method (Tr. VIII, p. 19), Staff witness Groves apparently would view it as such; he provided testimony on why such an approach would not be appropriate (Staff Ex. 7, pp. 7-8). As the Staff and the Company point out, however, Mr. Reinbergs' method produces a revenue distribution which is not significantly different than the Company's (Co. Br. I, p. 68; Staff Br. I, p. 31). Taking that fact into account, and in view of the questions raised as to the appropriateness of his method, we must reject Mr. Reinbergs' proposal.

The City's proposal on this matter is to maintain the current non-fuel revenue distribution, and to wait for C&SOE's own load research data before changing that revenue distribution (City Br., p. 10). City witness Rothey provided testimony on why he believes it "unreasonable and inaccurate" to use the Ohio Power data for this purpose, raising questions as to the reliability of using only the heating/non-heating customer saturation and strata weightings to adjust the Ohio Power data for use by C&SOE (City Ex. 1, pp. 41-47). He suggested that other factors, such as the price of electricity, rate structure, and weather could affect usage characteristics (*Id.*).

We believe that Mr. Rothey's analysis, and the Staff's comparisons of the "hybrid" data and the C&SOE load data, raise sufficient doubt about the Company's revenue distribution proposal to warrant taking a prudent course and maintaining the current revenue distribution. In view of the fact that the Company should have its own load research data available at the time of its next case, we believe this to be the most reasonable course in this proceeding. In designing its tariffs, the Company should maintain the current non-fuel revenue distribution.

Mr. Groves testified that no adjustment to revenue needs to be made to account for the revenue decrease from pole attachments which will occur as a result of this decision (Staff Ex. 7, p. 15). We will accept his recommendation.

Residential Customer Charge

The Company proposes to retain the current \$5.00 residential customer charge (Co. Ex. 3, Sch. E-3). Although the Staff's calculation produced a \$3.77 figure, the Staff concurs with the Company's recommendation, believing that "retention of the \$5.00 customer charge is not unreasonable based on customer understanding and continuity of rates." The Staff also believes that its figure "closely approximates" the Company's (Staff Ex. 1, p. 50).

OCC opposes both the existence and the proposed level of the customer charge. OCC witness Reinbergs recommends that, for consistency, the Commission approve the \$1.50 customer charge that was approved in Ohio Edison Co., Case No. 80-1139-EL-AIR (Opinion and Order, March 17, 1982) and Cleveland Electric Illuminating Co., Case No. 81-146-EL-AIR (Opinion and Order, March 17, 1982) (OCC Ex. 2, p. 44). On brief, OCC argues that if the Commission is concerned with customer understanding, it

should recognize the customer opposition to the customer charge voiced at the public hearing, citing CEI, supra, as precedent.

We believe OCC's desire for consistency with the Ohio Edison and CEI cases to be misplaced. In Ohio Edison, the \$1.50 charge was proposed in a stipulation, which the Commission adopted, although recognizing that the "minimal customer charge" did not cover all customer charges as defined by the Staff (Order, at 9). And in CEI, the \$1.50 charge was the charge which the company reluctantly proposed, preferring to have no customer charge at all. We note, also, that the Staff's standard methodology in the CEI case produced a recommended \$2.62, while that same methodology in this case led to a \$3.77 charge. That fact indicates that the customer charge cannot be expected to be consistent from company to company, and that such a concept is meaningless.

We do recognize that customer opposition to this charge is not isolated in CEI's service territory. There was testimony in this proceeding regarding the customer charge from several witnesses, indicating the opposition to such a tariff provision among C&SOE's customers. Taking that into account, and in view of the Staff's calculation of the charge using its uniform method, we believe that a \$4.00 charge, rather than the Company's proposed \$5.00 charge, should be approved.

RR-1 Rate

In its application, the Company proposed to begin phasing out the difference between its residential rate schedules RR and RR-1. Currently, the RR-1 rate offers a 21% discount from the RR rate, and is available to customers whose monthly consumption during the summer months is less than 700 KWH. This rate schedule was approved at C&SOE's request in Case No. 77-545-EL-AIR (Opinion and Order, March 31, 1978), and was again approved, at the Company's request, in Case No. 78-1438-EL-AIR (Opinion and Order, December 12, 1979). The rate was implemented in May 1978, and currently 200,000 customers, nearly half of the company's residential customers, are on this rate. The Company's proposal is to reduce the RR-1 rate discount to 10% in this case, and to eliminate the discount in the next case.

The Staff agrees with the Company's conclusion that the rate is not cost supported, and recommends that the Company's proposal to reduce the differential in this proceeding be accepted (Staff Ex. 1, p. 50). However, it also recommends that "this differential be maintained in Applicant's next proceeding at which time the issue should be reexamined and reevaluated based on costs and customer impact" (Id.).

Pointing to the Staff's "expressed reservation" about the proposed elimination of the RR-1 rate in the next proceeding, the City, which opposes the Company's proposal in this case, claims that the Staff's recommendations are inconsistent: if there is insufficient information to recommend the elimination of the differential, claims the City, then there is insufficient information to recommend its reduction as well (City Br., p. 12).

OCC also argues for the retention of the current RR and RR-1 differential, and both OCC and the City presented evidence in support of that position. OCC witness Reinbergs offered his opinion that the Company had not sufficiently justified the reduction in the differential, although he had performed no independent analysis (Tr. XVIII, p. 33). City witness Rothey examined the evidence presented by the Company, and concluded that the load data used by the Company produced an erroneous result.

Company witness Jahn testified that his analysis of the load data indicate that load factors of low use customers are not higher than those of high use customers, and that the low use discount is not cost justified (Co. Ex. 17, pp. 23-24). Mr.

Rothey's analysis led him to the conclusion that "as Kwh consumption increases the load factor declines" (City Ex. 1, p. 35). Both witnesses disputed the statistical analyses performed by the other. See Co. Ex. 30, City Ex. 4.

Sufficient doubt has been raised on this issue to make the Commission wary of making any change to the RR-1 rate on the basis of the information provided. Upon review of the evidence presented, and in light of the proportion of C&SOE's residential customers who would be affected by any change in this rate, the Commission believes that the current differential should be maintained. Any move to eliminate the RR-1 rate will have to be supported by a more reliable cost study.

General Service Rates

The Staff recommended several changes to the Company's proposed GS-1 and GS-2 rates, and Industrial Electric Consumers (IEC) objected to portions of the Staff Report relating to the GS-2 rate.

At hearing, the Company, IEC and the Staff offered a stipulation and recommendation (Jt. Ex. 1) concerning the GS-2 rate. This stipulation and recommendation proposes to replace the former GS-2 tariff with two new tariffs, which separate the medium general service category by voltage category. The proposed tariffs for the GS-2 and GS-3 customer classes, as contained in Joint Exhibit 1, are reasonable and should be approved.

The stipulation also eliminates the demand ratchet from the medium general service rate, a step which was recommended by the Staff for both the GS-1 and GS-2 rates (Staff Ex. 1, p. 52). The Company indicates in its brief that it accepts the Staff's recommendation as to the GS-1 rate, also (Co. Br. I, p. 73).

The Commission believes the stipulation and recommendation to be reasonable, and finds that it should be adopted. In addition, the Commission finds that the demand ratchet should be eliminated from the general service rate schedules as proposed by the Staff.

Interruptible Rate

The Company proposes to apply a greater than average increase to its interruptible power rate; one, in fact, that is nearly twice the average. The Staff did not agree with the Company's allocations to the interruptible class, and made adjustments to the Company's cost study (Staff Ex. 1, pp. 55-56). Staff witness Groves indicated that he eliminated the assignment of production plant to the interruptible customer, but did use a demand allocator that included transmission plant (Tr. XIII, pp. 27, 83).

Buckeye Steel Castings (hereinafter Buckeye), C&SOE's only interruptible customer, intervened in this proceeding. Buckeye opposes what it terms a "disproportionate" increase, and requests that the Commission require the elimination of the demand ratchet from the interruptible tariff, the elimination of the demand charge, and the reduction of the current base rate by 1.48¢/KWH (Buckeye Br., p. 25). Buckeye also requests that the Commission "confirm again" the principles adopted in Detrex Chemical Industries, Inc., Case No. 72-832-E, for the negotiation of an interruptible rate.

Buckeye's position is based on the premise that interruptible power is simply a by-product of the Company's operating reserve, and that the interruptible rate should therefore be based only on the "out-of-pocket fuel, operation and maintenance expenses necessary to transform the operating reserve required for firm service into 1-P service" (Buckeye Br., p. 9). Buckeye also claims that C&SOE does not build generating capacity for

Buckeye's benefit, and that therefore capacity costs should not be allocated to the interruptible customers.

C&SOE's Schedule I-P contains several conditions of service, on which Buckeye relies in support of its argument that the Company is not "caused" to construct additional capacity for rendering I-P service. The tariff reads, in part:

5. The Company will not be obligated to take any of the following actions to continue service provided under this schedule.
 - a. Purchase power.
 - b. Start additional generation in excess of that necessary to provide reserve for firm power customer unless the customer agrees to pay the incremental cost of such generation including the start-up cost.
 - c. Serve with power from the Company's so-called 'fast-start' peaking units.

The tariff also provides that interruption may occur without notice, and may be of unlimited duration.

The Company concedes that the tariff on its face would support Buckeye's argument, but contends that that is not the way C&SOE operates.

Company witness Vassell testified that at times of capacity deficiencies, the interruptible load is dropped in order to allow time for the Company to arrange for emergency power from other utilities (Tr. II, pp. 157-158). When "help" is obtained the interruptible load is restored; it is not C&SOE's policy to keep the interruptible load off the system for the duration of the capacity deficiency (Id., pp. 158, 162).

In addition, both Mr. Vassell and Mr. Jahn testified that interruptible loads are taken into account in C&SOE's planning process (Tr. III, pp. 20, 43; Tr. XXIII, pp. 27, 35). Consequently, the Company argues, it would be inappropriate to design a rate that assigns no demand costs to the interruptible customer.

Although the recent history of Buckeye interruptions is clear, the future is not. Buckeye was interrupted for 27½ hours in 1979, but had no interruptions in 1980, 1981 and thus far in 1982 (Tr. XXII, pp. 47-48). Because C&SOE is now a part of the AEP system, interruptions on that system would now affect Buckeye. Company witness Helbling testified that there were interruptions on the AEP system in 1980 and 1981, that there are currently fewer interruptions on the system, but that such interruptions will not stop (Tr. XXII, p. 50).

We agree with the view shared by the Staff and Buckeye that no allocation of production plant should be allocated to interruptible customers. While the Company may plan capacity taking the interruptible load into account, it is not obligated under its tariff to do so. If the Company wishes to offer an unrestricted interruptible tariff, it cannot then treat its interruptible customers as if they were firm customers for cost allocation purposes. If a customer chooses to take the risk of interruption as set forth in the Company's tariff, it has a right to the benefit of a rate that reflects that risk.

However, we think Buckeye asks for too much, and find that the Staff's position, which excludes production capacity but includes transmission capacity in its allocators, properly reflects the service received by an interruptible customer. We

will, therefore, accept the Staff's recommendation with regard to the revenue distribution to the interruptible customer.

Buckeye has also proposed the elimination of the demand ratchet from the interruptible tariff. Staff witness Groves, in his prepared testimony, indicated that a 100% ratchet provision would be "inappropriate" for the interruptible schedule (Staff Ex. 7, p. 12). Although the Company attempts to show that Mr. Groves would find some virtue in a demand ratchet under certain circumstances, the cross examination on that point began with a reference to the Staff Report discussion of demand ratchets in the Company's GS-1 and GS-2 rates (See Staff Ex. 1, p. 52). In that cross-examination, Mr. Groves conceded nothing with regard to the 100% demand ratchet in the interruptible tariff. We believe that the 100% demand ratchet should be eliminated from the interruptible tariff, and that the maximum demand provision in the Company's G-4 schedule (Co. Ex. 4, Sch. E-1, p. 18) should be included in the I-P schedule.

Returned Check, Collection Trip and Reconnection Charges

The Company has proposed the addition of a new paragraph to Section 13 of its Rules and Regulations which would impose a \$6.00 charge for checks returned because of insufficient funds (Co. Ex. 3, Schs. E-1, p. 1 and E-3, p. 1). The Staff believes such a provision, which imposes the charge on the customer responsible for the cost incurrence, is reasonable, and determined, after investigation, that the \$6.00 charge is reasonable (Staff Ex. 1, p. 44). The Commission will approve the \$6.00 returned check charge.

Upon review of Section 13, the Staff questioned the provision regarding collection trip charge, because no maximum charge was specified (Staff Ex. 1, p. 44). The Staff also recommended that the Company file a tariff provision covering its reconnection charge. The Company did submit proposed tariff provisions and supporting cost data for these two items (Co. Ex. 11A, p. 12 and exhibits), which Staff witness Groves found to be not unreasonable and which he recommended be adopted (Staff Ex. 7, p. 13). The Commission agrees. The \$3.50 collection trip charge and the proposed charges for reconnection of service should be approved.

Special Cost Study

The Staff reviewed AEP system load data, and concluded that the possibility exists that a significant amount of capacity would be available during off-peak periods as a result of C&SOE's integration into that system (Staff Ex. 1, p. 56; Staff Ex. 7, p. 10). It, therefore, recommended that the Company perform a special cost study to determine whether lower rates would be appropriate during seasonal off-peak periods, and that the results of such study be submitted in C&SOE's next rate case.

In its Objection Number 44, OCC suggested that such a study include a review of the optimization of the plant maintenance schedule and a review of the monthly capacity deficient days. Mr. Groves testified that consideration of those factors was inherent in his recommendation (Staff Ex. 7, p. 10).

The Commission will adopt the Staff's recommendation, and will order that the special cost study be undertaken and that it be filed in the Company's next rate case. The study should address the matters raised by OCC.

Pole Attachment Tariffs

History

Pursuant to Section 6, 47 USC Section 224, the Federal Communications Commission is required to regulate the rates, terms and conditions for pole attachments by cable television systems except where such matters are regulated by a state. Amended House Bill No. 223, effective November 2, 1981, enacted Sections 4905.71 and 4905.72 of the Revised Code, which vest jurisdiction in this Commission to regulate the charges, terms and conditions for the attachment of wires or cables to utility poles. On October 21, 1981, in Case No. 81-1109-AU-ORD, the Commission indicated that it would regulate pole attachments of all utility companies in Ohio, and that it would so certify to the FCC.

By Entry of February 10, 1982 in Case No. 81-1109-AU-ORD, the Commission ordered all regulated utilities to file tariffs showing charges, terms and conditions for pole attachments, and certain specified information in support of those tariff provisions. The Entry also indicated that an evidentiary hearing would be scheduled subsequent to the submission of the filings. However, by Entry of March 31, 1982, the Commission indicated that the proposed tariffs filed pursuant to the Entries in that proceeding would be deemed sufficient if they contained rates, charges, terms and conditions consistent with all attachment agreements or contracts in effect on July 1, 1981.

The tariffs filed by C&SOE pursuant to the March 31 Entry were docketed by the Commission in Case No. 82-654-EL-ATA. By Entry of June 9, 1982, the Commission approved those tariffs for initial implementation, but indicated that the tariffs should be reviewed concurrently with Case No. 81-1058-EL-AIR, and consolidated the two cases for hearing.

On June 16, 1982, C&SOE filed in Case No. 82-654-EL-ATA, a Notice of Dismissal and Withdrawal, arguing that it had not made any application to the Commission to establish pole attachment rates, and that it was not taking the position by its filing of tariffs pursuant to the March 31, 1982 Entry that the rates which were contained therein constituted just and reasonable rates. By Entry of June 21, 1982, the Attorney Examiner refused to dismiss the case, and ordered C&SOE to comply with the June 9 Commission order.

C&SOE also filed on June 16, 1982 an application for rehearing with respect to the June 9 Entry. By Entry of June 30, 1982, the Commission denied the rehearing application.

The Company also argued in its memorandum in opposition to the petition to intervene filed by the Ohio Cable Television Association (Association) on May 28, 1982, that the issues regarding the pole attachment rates, rules and regulations, were not properly at issue in this case. By Entry of June 11, 1982, the Attorney Examiner granted the Association leave to intervene, finding the Company's arguments to be without merit.

The Ohio Telephone Association (OTA) filed a petition to intervene on July 12, 1982. The Attorney Examiner, by Entry of July 23, 1982, denied the petition, but did grant permission to interested parties to file briefs on the legal issues relating to the Commission's regulation of pole attachment tariffs, by Entry of July 23, 1982. Such briefs were filed by OTA and by Toledo Edison Company.

Jurisdictional Question

The Company and Toledo Edison argue that Sections 4905.71 and 4905.72, Revised Code, are unconstitutional. The Company argues that Section 4905.71 effects a taking of property, for

private and not public use, without providing for just compensation, in violation of the Fourteenth Amendment of the United States Constitution and Article I, Section 19 of the Ohio Constitution (Co. Br. I, pp. 88-92). C&SOE and Toledo Edison also claim that the fixing of a rate by the Commission different from that which currently is fixed by contract would violate the constitutional prohibition against the impairment of contractual obligations (*Id.*, p. 92). Because the Commission is without authority to determine the constitutionality of the statutes which it administers, we must proceed to the other jurisdictional argument which has been raised.

Both the Company and OTA argue that the Commission lacks jurisdiction to set pole attachment rates in this case, because there has been no attempt by the Company to change its charges for pole attachments. Although the language of Section 4905.71 would seem to grant the Commission broad discretion to regulate pole attachment rates, they argue that Sections 4905.71 and 4905.72 must be read in pari materia. It is their contention that the General Assembly intended to freeze the contract rates for pole attachments until July 1, 1986 unless the utility attempted to change the rate, and that Section 4905.72 is a limitation on the broad authority granted to the Commission in Section 4905.71(B) until the former expires of its own terms.

Whatever the legislature may have intended, the language of Sections 4905.71 and 4905.72 does not require that interpretation. The Commission has taken the position, and continues to believe, that Section 4905.71 gives the Commission broad authority, and that the purpose of Section 4905.72 is to set out the guidelines which must be applied if the utility attempts to change the pole attachment rate during the period July 1, 1982 to July 1, 1986. Therefore, despite the fact that the Company did not attempt to change its pole attachment rates,* we believe it was proper for the Staff to review the filing made by the Company pursuant to the Commission's March 31, 1982 Entry, and for the Commission to examine the reasonableness of the pole attachment rate in the context of this proceeding.

The Rate

There were three proposals made regarding the rate itself. The Company presented testimony in support of an \$8.15 rate (Co. Ex. 25, p. 11); the Staff recommends a range of \$1.01 to \$2.63 (Staff Ex. 3, Att. 1 and 2); and the Association proposes a rate of \$2.04 (OCTA Ex. 2, p. 10).

All of the witnesses providing testimony on this issue based their recommendations on an analysis of the cost of providing space for pole attachments, and all began their cost analyses with the basic formula outlined in Section 4905.72, Revised Code, consisting of three components: the pole cost, the annual carrying charges, and the percentage of usable space occupied by the pole attachment. The Staff and the Association then applied a percentage reduction to the fully allocated cost formula.

Agreement ended with the formula; the values to be given to the components of the formula occasioned considerable debate. Although the Company and the Staff substantially agree on the net

* Although we do not disagree with the Company's assertion that its filing did not constitute an attempt to alter its pole attachment rate and thereby trigger the operation of Section 4905.72, Revised Code, we do disagree with its claim (Co. Br. I, p. 95) that the filing did not constitute a tariff. Section 4905.71(A) requires all telephone and electric companies to have tariffs on file; the February 10 and March 31, 1982 Entries were intended to effectuate that statutory provision.

cost per pole and on the amount of usable space on the pole, they disagree as to the carrying charge and the space on the pole which is occupied by the pole attachment. The Association stands alone on all components except the space occupied, where it argues with the Staff. The Commission has been presented with various arguments, and more testimony than it thought possible, regarding the usable space on utility poles, how much space is used by a cable attachment, who should be responsible for the 40 inch clearance space between power and communications lines required by the National Electric Safety Code, and which accounts should be included in the determination of the annual carrying charges.

The guidelines specified in Section 4905.72, Revised Code, which have generally been followed by the witnesses presenting testimony on this issue, are very similar to those used by the FCC, which were established following a rulemaking proceeding and several complaint cases (Staff Ex. 3, p. 5; OCTA Ex. 2, p. 3). The FCC uses the same basic formula; it then uses a standard method and applies certain presumptions to determine the values to be assigned to the components of the formula (OCTA Ex. 2, pp. 11, 14, 17, 18). In the view of Association witness McDaniel, "[t]he FCC has...accepted the principle that pole attachment rate setting methodology should be simple and geared to reducing the potential for dispute" (OCTA Ex. 2, p. 15).

Given the time and effort devoted to the assignment of a value to the components of the formula, we have determined to use the FCC formula and its assumptions regarding the components of that formula to determine the pole attachment rate; furthermore, no reduction factor will be applied. Our decision is bolstered by the range of the recommendations of the witnesses providing testimony on this subject. Pursuant to Section 4905.71(B), the Commission must determine "just and reasonable charges" for pole attachments, and we believe that the FCC formula, and the FCC presumptions, will, under most circumstances, produce a just and reasonable result. We hope, and expect, that this decision will simplify the process of determining pole attachment rates, without sacrificing the reasonableness of the result.

The FCC formula yields an annual rate per attachment per pole of \$2.34. The formula is specified on Attachment 1 to this Opinion and Order. The Company should file tariffs incorporating this pole attachment rate. Staff witness Groves testified that no adjustment needs to be made to the revenue distribution to recognize the pole attachment classification, and we will follow that course.

Effective Date

Section 4909.42 of the Revised Code provides that if the Commission has not acted upon a rate application filed pursuant to Section 4909.18 of the Revised Code within 275 days of the date of filing, the applicant utility, upon the filing of an undertaking in an amount determined by the Commission, may place the proposed rates into effect, subject to the condition that amounts charged and collected in excess of those finally determined to be reasonable by the Commission shall be refunded. C&SOE has not attempted to place its proposed rates into effect by filing an undertaking, even though the 275 day time period has already expired. The Commission believes that basic principles of fairness dictate that the Company should not be penalized for its forbearance, and that the appropriate course in this case is to establish the effective date of the tariffs filed pursuant to this order as the date they are approved by Commission Entry. The customary notification requirement will be retained; the notice should be mailed to customers upon approval of its form by the Commission.

POWERPLANT PRODUCTIVITY

The Staff has recommended that C&SOE be required to continue to report quarterly on the immediate past performance of its generating units (Staff Ex. 1, p. 37). OCC objected to the Staff's "failure to recommend any meaningful incentives" for improved productivity (OCC Obj. 35), and requests the Commission to order the Staff to report on incentive mechanisms that could be adopted in the Company's next case, referring to a report provided to the Staff by a consultant which contains some discussion of incentive mechanisms (OCC Br. I, p. 35).

OCC has not shown such a step to be necessary. As the Staff noted, all four of the Conesville Units indicate an improved equivalent availability in 1981 compared to 1980 (Staff Ex. 1, p. 37). Although we do not rule out the possibility of expanding the program in the future, we do not believe that OCC's recommendation need be adopted at this time. The objection should be overruled.

COMPLIANCE

The Staff conducted a field inspection of C&SOE's facilities and operations and maintenance practices, to determine the quality of service provided and anticipated to be provided by the Company and to verify compliance with the Commission's rules and regulations. As a part of this compliance review, the Staff inspected the Conesville Generating Station; the results of the inspection were provided in this case (Staff Ex. 1, p. 68).

Although OCC objected to the Staff's "failure to conduct a properly detailed review of Conesville for compliance purposes" (OCC Obj. 47), neither the record nor the briefs provide any clue as to the basis for this objection, which should, therefore, be overruled.

FINDINGS OF FACT:

From the evidence of record in this proceeding, the Commission now makes the following findings:

- 1) The value of all of the Company's property used and useful for the rendition of electric service to the customers affected by this application, determined in accordance with Sections 4909.05 and 4909.15 of the Revised Code as of the date certain of December 31, 1981, is not less than \$1,029,016,000.
- 2) For the twelve month period ending June 30, 1982, the test period in this proceeding, the revenues, expenses, and income available for fixed charges realized by the Company under its present rate schedules were \$588,651,000, \$484,981,000, and \$103,670,000, respectively.
- 3) This net annual compensation of \$103,670,000 represents a rate of return of 10.07% on the jurisdictional rate base of \$1,029,016,000.
- 4) A rate of return of 10.07% is insufficient to provide to the Company reasonable compensation for the service rendered customers affected by the application.
- 5) A rate of return of 12.16% is fair and reasonable under the circumstances presented by this case and is sufficient to provide the Company just compensation and return on the value of its property used and useful in

furnishing electric service to its jurisdictional customers.

- 6) A rate of return of 12.16% applied to the rate base of \$1,029,016,000 will result in income available for fixed charges in the amount of \$125,128,000.
- 7) The allowable annual expenses of the Company for purposes of this proceeding are \$505,103,000.
- 8) The allowable gross annual revenue to which the Company is entitled for purposes of this proceeding is the sum of the amounts stated in Findings 6 and 7, or \$630,231,000.
- 9) The Company's present tariffs should be withdrawn and cancelled and the Company should submit new tariffs consistent in all respects with the discussion and findings set forth above.

CONCLUSIONS OF LAW:

- 1) The application herein was filed pursuant to, and this Commission has jurisdiction thereof under, the provisions of Sections 4909.17, 4909.18 and 4909.19 of the Revised Code; the Company has complied with the requirements of those statutes.
- 2) A staff investigation was conducted and a report duly filed and mailed, and public hearings were held herein, the written notice of which complied with the requirements of Section 4909.19 of the Revised Code.
- 3) The existing rates and charges as set forth in the tariffs governing electric service to customers affected by this application are insufficient to provide the Company with adequate net annual compensation and return on its property used and useful in the rendition of such service.
- 4) A rate of return of 12.16% is fair and reasonable under the circumstances of this case and is sufficient to provide the Company just compensation and return on its property used and useful in the rendition of electric service to its customers.
- 5) The Company should be authorized to cancel and withdraw its present tariffs on file with this Commission and to file tariffs consistent in all respects with the discussion and findings set forth above.

ORDER:

It is, therefore,

ORDERED, That the application of Columbus and Southern Ohio Electric Company for authority to increase its rates and charges be granted to the extent provided in this Opinion and Order. It is, further,

ORDERED, That the Company be authorized to cancel and withdraw its present tariffs and to file new tariffs consistent with the discussion and findings set forth above. Upon receipt

of three (3) complete copies of tariffs conforming to this Opinion and Order, the Commission will review and approve same by Entry. It is, further,

ORDERED, That the effective date of the new tariffs shall be the date said tariffs are approved by Commission Entry. It is, further,


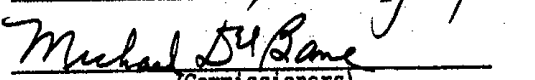
ORDERED, That the Company shall immediately commence notification of its customers of the increase in rates authorized herein by insert or attachment to its billings, by special mailing, or by a combination of the above. The Company shall submit a proposed form of notice to the Commission when it files its tariffs for approval. The Commission will review the notice and, if it is proper, will approve it by Entry. It is, further,

ORDERED, That the Company undertake the special cost study described in the Rates and Tariffs section of this Opinion and Order, and file the study in its next rate proceeding. It is, further,

ORDERED, That all objections and motions not specifically discussed in this Opinion and Order, or rendered moot thereby, be overruled and denied. It is, further,

ORDERED, That a copy of this Opinion and Order be served on all parties of record.

THE PUBLIC UTILITIES COMMISSION OF OHIO


(Chairman)
Herman Pines, dissenting in part

(Commissioners)

HLL/RSB;geb

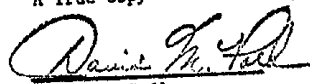
I dissent from the Commission's decision concerning the adjustment to depreciation reserve (p. 8), the pole attachment rate (p. 46), and failure to recognize and make appropriate decisions to counter the indications that the deterioration of this Company's financial condition may lead to a financial emergency situation, once again. In my opinion, the recent cessation of emergency rate relief requests benefitted customer and company alike and a return to the period of such requests, of a few years ago, would not be beneficial.

Herman Pines

Entered in the Journal

NOV 5 1982

A True Copy


David M. Polk
Secretary

Attachment 1

Columbus and Southern Ohio Electric Company
Case No. 81-1058-EL-AIR
Summary Calculation of Pole Attachment Rate

(1) Cost of Poles (Account 364)	\$ 33,375,238
(2) Number of Poles	239,459
(3) Gross Cost per Pole [(1) divided by (2)]	\$139.38
(4) Depreciation Reserve @ 34.50%	48.09
(5) Net Cost per Average Pole [(3) - (4)]	91.29
(6) Carrying Charge Percentage	34.64%
(7) Annual Carrying Charge Amount [(5) x (6)]	31.62
(8) Ratio of Used Space to Usable Space $\frac{1'}{13.5'}$	0.0741
(9) Annual Pole Attachment Rate [(7) x (8)]	\$2.34