BEFORE
THE PUBLIC UTILITIES COMMISSION OF OHIO

In the Matter of the Application of The Dayton Power and Light Company for Authority to Modify its Accounting Procedure for Certain Storm-Related Service Restoration Costs.	:	Case No. 12-2281-EL-AAM

THE DAYTON POWER AND LIGHT COMPANY'S APPLICATION FOR REHEARING

Pursuant to Ohio Rev. Code § 4903.10, and Ohio Admin. Code § 4901-1-35, The Dayton Power and Light Company ("DP&L") seeks rehearing of the Commission's December 19, 2012 Finding and Order. The Commission's Order is unreasonable and unlawful in the following respects: DP&L sought authority to defer all of its operational and maintenance expenses associated with a June 2012 Derecho storm that caused significant damage in DP&L's service territory. However, the Commission found that DP&L's recovery of those O&M expenses should be reduced by the 3-year average of O&M expenses associated with major storms. Order, ¶ 8. The Commission's denial of DP&L's request to defer all of its O&M expenses associated with the 2012 Derecho storm is unreasonable and unlawful.

Of counsel:

Charles J. Faruki (0010417)
FARUKI IRELAND & COX P.L.L.
500 Courthouse Plaza, S.W.
10 North Ludlow Street
Dayton, OH 45402
Telephone: (937) 227-3705
Telecopier: (937) 227-3717
Email: cfaruki@ficlaw.com

Respectfully submitted,

/s Judi L. Sobecki

Judi L. Sobecki (0067186)
Randall V. Griffin (0080499)
THE DAYTON POWER AND
LIGHT COMPANY
1065 Woodman Drive
Dayton, OH 45432
Telephone: (937) 259-7171
Telecopier: (937) 259-7178
Email: judi.sobecki@aes.com
randall.griffin@aes.com

/s Jeffrey S. Sharkey

Jeffrey S. Sharkey (0067892)
(Counsel of Record)
FARUKI IRELAND & COX P.L.L.
500 Courthouse Plaza, S.W.
10 North Ludlow Street
Dayton, OH 45402
Telephone: (937) 227-3747
Telecopier: (937) 227-3717
Email: jsharkey@ficlaw.com

Attorneys for The Dayton Power and Light Company

MEMORANDUM IN SUPPORT OF THE DAYTON POWER AND LIGHT COMPANY'S APPLICATION FOR REHEARING

During the last weekend of June 2012 (June 29th/30th and July 1st) a widespread, major line of thunderstorms called a Derecho, with heavy rain and wind gusts of up to 82 miles per hour, hit DP&L's service territory (among other areas and states from Illinois to the mid-Atlantic region), causing significant damage to DP&L's distribution and transmission system. The violent thunderstorms left over a million Ohioans without power during the hottest weather in two decades with record-high temperatures climbing into the 90s, which put Ohio in a state of emergency. The combination of heavy rain and strong winds wreaked havoc within DP&L's service territory, causing extensive damage to the Company's distribution and transmission system facilities. The storm system caused poles and other equipment to break as a result of the wind gusts, and trees to break and come into contact with power lines and equipment, causing significant damage.

Of the Company's approximately 515,000 customers, over 185,000 lost power due to the Derecho, followed by another 40,000 customers when a second wave of severe thunderstorms rolled through on July 1st. In DP&L's service territory, 700 workers from Indiana, Kentucky, Virginia, Tennessee, Georgia, Pennsylvania, Oklahoma and Wisconsin were deployed, along with 500 DP&L employees and 300 local contractors, to restore power. The damage to the system in DP&L's service territory was significant. Approximately 281 poles and 627 cutouts had to be replaced, and on the 12kV circuits, there were 246 breaker operations and 103 circuits locked out. The customer service call center answered over 217,000 calls during the five-day restoration effort. The Edison Electric Institute nationally recognized DP&L for its "outstanding recovery" following the Derecho with a 2012 Emergency Response Award.

DP&L asked the Commission to grant to it the following accounting authority:

> "DP&L requests authority to defer as a regulatory asset the total distribution-related Operation and Maintenance ("O&M") expenses associated with restoring electric service to its customers that were incurred as a result of the destructive storms taking place the final weekend of June 2012. The deferral of these costs should not be reduced by the three-year average service restoration O&M expense associated with non-major events as outlined in the original application."

October 19, 2012 Amended Application, ¶ 3.

The Commission found that DP&L's requests "to defer incremental O&M expenses associated with the June 2012 wind storm is reasonable and should be approved." Order, ¶ 6. However, the Commission stated that "DP&L's deferred O&M expenses should be reduced by the three-year average of O&M expenses associated with major storms." Id. at ¶ 8.

As demonstrated below, the Commission should grant rehearing on its decision that DP&L's deferral of its O&M expenses associated with the 2012 Derecho should be reduced by the three-year average of O&M expenses associated with major storms, for two separate and independent reasons: (1) Commission precedent shows that DP&L's current rates do not include recovery for major storm damage; DP&L should thus be permitted to defer all costs associated with major storms; and (2) the Commission's decision is inconsistent with the Stipulation and Recommendation in DP&L's most-recently approved Electric Security Plan proceeding.

1. DP&L's current rates do not include recovery of O&M costs for major storms: DP&L's last distribution rate case was in 1991, In the Matter of the Application of The Dayton Power and Light Company for Authority to Amend Its Filed Tariffs to Increase the Rates

and Charges for Electric Service, Case No. 91-414-EL-AIR. Starting with DP&L's 1999 Electric Transition Plan case, DP&L's distribution rates have been frozen by a series of Stipulations.[1]

DP&L's 1991 rate case was settled via what the parties called a "black box" Stipulation. That Stipulation established that DP&L's then-existing rates would be increased by a specified amount, but did not identify the specific costs that it was designed to recover. Jan. 22, 1992 Opinion and Order (Case No. 91-414-EL-AIR) (describing and attaching Stipulation). There is thus no way to review that Stipulation to determine how it treated major storm costs.

However, Commission precedent around that time demonstrates that it was the Commission's practice to exclude from the test year costs associated with major storms. Specifically, in determining a utility's test-year expenses, the Commission stated that "Test year operating income should be reflective of the results of normal operations for the company. The impact of unusual or nonrecurring events should be excluded from the determination of expenses if they are not reflective of what the company is reasonably expected to experience." In the Matter of the Application of The Ohio Edison Company to Increase Certain of Its Filed Schedules, Case No. 82-1025-EL-AIR, 1983 Ohio PUC LEXIS 40, at *89 (PUCO Sept. 14, 1983) (copy attached at Exhibit 1).

The Commission applied that rule to exclude major storm costs from DP&L's test-year expenses in DP&L's 1983 rate case. In the Matter of the Application of The Dayton Power and Light Company for Authority to Modify and Increase Its Rates, Case No. 82-517-EL-AIR, 1983 Ohio PUC LEXIS 70, at *69 (PUCO Apr. 27, 1983) (copy attached at Exhibit 2). In

[1] Stipulation and Recommendation, ¶ 18 (Case No. 08-1094-EL-SSO).

that case, "[t]he Staff proposed to reduce test year operating expenses by $1,224,032 to account for the abnormally high level of storm damage expense included by the company. . . ." Id. The Commission approved that recommendation. Id. at *72. Accord: In the Matter of the Application of The Ohio-American Water Company to Increase Rates, Case No. 79-1343-WW-AIR, 1981 Ohio PUC LEXIS 3, at *18-19 (PUCO Jan. 14, 1981) ("The record in this case indicates that the severe storm occurred in 1977 that generated the expense at issue and there have not been recurring storms of such a nature every year. Thus, the Commission can only conclude that this was an unusual and non-recurring expense and should be excluded from the cost of service of the Applicant.") (copy attached at Exhibit 3).

In short, the Commission's practice around the time of DP&L's 1991 rate case was to exclude major storms from test-year expenses. The Commission should therefore conclude that DP&L's current distribution rates thus do not include cost recovery for major storms. Since DP&L's current rates do not include recovery for major storms, the Commission should further conclude that it is reasonable for DP&L to defer its O&M expenses associated with the 2012 Derecho without reduction.

2. DP&L's ESP Stipulation permits recovery of storm expenses without reduction: The terms of the ESP Stipulation that was in effect in 2012 state:

> "DP&L's distribution base rates will be frozen through December 31, 2012. This distribution rate freeze does not limit DP&L's right to seek emergency rate relief pursuant to Section 4909.16, Revised Code, or to apply to the Commission for approval of separate rate riders to recover the following costs:
>
> a. The cost of complying with changes in tax or regulatory laws and regulations effective after the date of this Stipulation; and
>
> b. The cost of storm damage."

Stipulation and Recommendation, ¶ 18 (Case No. 08-1094-EL-SSO).

That Stipulation thus expressly authorizes DP&L to recover "the cost of storm damage," but does not provide for the reduction of any amounts. The parties could have written that Stipulation to permit DP&L to recover "the cost of storm damage less the three-year average of storm expenses," but they did not do so. The Commission's order in this case -- which allowed DP&L to defer the cost of storm damage less certain amounts -- is thus inconsistent with the controlling Stipulation. The Commission should enforce the terms of that Stipulation, and permit DP&L to recover its O&M expenses from the 2012 Derecho without reduction. There is no reason to give less than full effect to the Stipulation.

Of counsel:

Charles J. Faruki (0010417)
FARUKI IRELAND & COX P.L.L.
500 Courthouse Plaza, S.W.
10 North Ludlow Street
Dayton, OH 45402
Telephone: (937) 227-3705
Telecopier: (937) 227-3717
Email: cfaruki@ficlaw.com

Respectfully submitted,

/s Judi L. Sobecki

Judi L. Sobecki (0067186)
Randall V. Griffin (0080499)
THE DAYTON POWER AND
LIGHT COMPANY
1065 Woodman Drive
Dayton, OH 45432
Telephone: (937) 259-7171
Telecopier: (937) 259-7178
Email: judi.sobecki@aes.com
randall.griffin@aes.com

/s Jeffrey S. Sharkey

Jeffrey S. Sharkey (0067892)
(Counsel of Record)
FARUKI IRELAND & COX P.L.L.
500 Courthouse Plaza, S.W.
10 North Ludlow Street
Dayton, OH 45402
Telephone: (937) 227-3747
Telecopier: (937) 227-3717
Email: jsharkey@ficlaw.com

Attorneys for The Dayton Power and Light Company

CERTIFICATE OF SERVICE

I certify that a copy of the foregoing The Dayton Power and Light Company's Application for Rehearing has been served via electronic mail upon the following counsel of record, this 18th day of January, 2013:

Melissa R. Yost, Esq., (Counsel of Record)
Larry S. Sauer, Esq.
Assistant Consumers' Counsel
Office of The Ohio Consumers' Counsel
10 West Broad Street, Suite 1800
Columbus, OH 43215-3485
yost@occ.state.oh.us
sauer@occ.state.oh.us

Attorneys for Office of the Ohio Consumers' Counsel

William Wright
Attorney General's Office
Public Utilities Commission of Ohio
180 East Broad Street, 6th Floor
Columbus, OH 43215
William.Wright@puc.state.oh.us

/s Jeffrey S. Sharkey
Jeffrey S. Sharkey

685589.1

EXHIBIT 1

In the Matter of the Application of Ohio Edison Company to increase certain of its filed schedules fixing rates and charges for electric service

82-1025-EL-AIR

PUBLIC UTILITIES COMMISSION OF OHIO

1983 Ohio PUC LEXIS 40; 55 P.U.R.4th 423

September 14, 1983

APPEARANCES:

Ms. Frances McGovern and Mr. Anthony J. Alexander, 76 South Main Street, Akron, Ohio 44308, on behalf of the Applicant.

Mr. Anthony J. Celebrezze, Jr., Attorney General, by Mr. Jonathan L. Heller, Ms. Marsha Rockey Schermer and Ms. Mary R. Brandt, Assistant Attorneys General, 375 South High Street, Columbus, Ohio 43215, on behalf of the Staff of the Public Utilities Commission.

Mr. William A. Spratley, Consumers' Counsel, by Messrs. Michael L. Haase, Richard P. Rosenberry and Lawrence F. Barth, Associate Consumers' Counsel, 137 East State Street, Columbus, Ohio 43215, on behalf of the residential customers of Ohio Edison Company.

Mr. Richard L. Goodman, 852 Ann Street, P.O. Box 312, Niles, Ohio 44446, on behalf of the Eastgate Development and Transportation Agency.

Messrs. Bell & Randazzo Co., L.P.A., by Mr. Langdon D. Bell, Mr. Samuel C. Randazzo, Ms. Judith B. Sanders and Mr. John W. Bentine, 21 East State Street, Columbus, Ohio 43215, on behalf of the Industrial Energy Consumers.

Messrs. Baker & Hostetler, by Mr. A. Charles Tell, 100 East Broad Street, Columbus, **[*2]** Ohio 43215, on behalf of the United States Steel Corporation.

Messrs. Bricker & Eckler, by Ms. Sally W. Bloomfield, 100 East Broad Street, Columbus, Ohio 43215, on behalf of Luntz Corporation and Ohio Cable Television Association.

PANEL: [*1]

Michael Del Bane, Chairman; William H. Brooks; Ashley C. Brown; Gloria L. Gaylord; Alan R. Schriber

OPINION: OPINION AND ORDER

The Commission, coming now to consider the above-entitled application filed pursuant to Section 4909.18 Revised Code, and the Staff Report of Investigation issued pursuant to Section 4909.19 Revised Code; having appointed its attorney examiner Joseph P. Cowin, pursuant to Section 4901.18 Revised Code to conduct a public hearing and to certify the record directly to the Commission; having reviewed the testimony and exhibits introduced in evidence at the public hearing commencing June 20, 1983, and concluding July 21, 1983; and being otherwise fully advised in the premises, hereby issues its Opinion and Order.

HISTORY OF THE PROCEEDINGS:

The Ohio Edison Company (Ohio Edison, the applicant, or the company) is an Ohio corporation engaged in the business of supplying electric service to some 840,000 customers within the state of Ohio. The company's service ter-

ritory, which covers approximately 7500 square miles, encompasses all **[*3]** or part of 35 Ohio counties and ranges generally from the Pennsylvania border on the east, through north-central Ohio and through the west-central portion of the state. The company's wholly-owned subsidiary, Pennsylvania Power Company, provides electric service to about 122,000 customers in an area of approximately 1,500 square miles in western Pennsylvania. This case involves service to approximately 99% of the applicant's total customers.

Ohio Edison is a public utility and an electric light company within the definitions of Sections 4905.02 and 4905.03(A)(4) Revised Code. As such, the company is subject to the jurisdiction of this Commission pursuant to Sections 4905.04, 4905.05, and 4905.06 Revised Code. Its present rates for electric service were established by order of this Commission in Ohio Edison Company, Case No. 81-1171-EL-AIR (March 31, 1982).

On August 9, 1982, Ohio Edison served and filed a notice of its intent to submit a permanent rate application affecting service to essentially all its customers. This notice was docketed as Case No. 82-1025-EL-AIR. In its filing, the applicant requested that the test period be the twelve month period ending July 31, 1983 **[*4]** and that the date certain be set as October 31, 1982. In addition, the company requested a waiver from certain of the Standard Filing Requirements. By Entry of August 25, 1982 the Commission approved the requested date certain and test period.

The application to increase rates was filed with the Commission on November 26, 1982 together with the Standard Filing Requirements. By Entry of January 26, 1983, the Commission accepted the application for filing as of the November 26, 1982 date, granted the requested waivers of the Standard Filing Requirements, and approved the proposed newspaper notice submitted by Ohio Edison for publication. Updated information for the test year was filed on January 26, 1983.

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. A written report of the results of the Staff's investigation was issued May 5, 1983, and was served as provided by law. Objections to the Staff Report were filed by Ohio Edison and the following intervenors: the Office of Consumers' Counsel (OCC or Consumers' Counsel); the Eastgate Development and Transportation **[*5]** Agency (EDATA), a voluntary organization of local government political subdivisions in Ashtabula, Columbiana, Mahoning and Trumbull Counties; the Industrial Energy Consumers (IEC), an ad hoc group of large industrial consumers of Ohio Edison; the United States Steel Corporation (U.S. Steel); and the Luntz Corporation (Luntz). Luntz also served notice of a service complaint pursuant to Section 4909.153 Revised Code. The City of Akron and the Ohio Cable Television Association, although filing no objections, were also granted leave to intervene in the proceeding. The Board of Trumbull County Commissioners was also granted intervention in this proceeding, both on its own and as a member of EDATA. Its interests were represented through EDATA and counsel for EDATA was delegated as trial attorney.

Pursuant to the Commission's Entry of May 5, 1983, the hearing of this matter commenced June 20, 1983 at the offices of the Commission, 375 South High Street, Columbus, Ohio, before attorney examiner Joseph P. Cowin. In accordance with the requirement of Section 4903.083 Revised Code, the final sessions of the hearing were held July 18, 1983 in the Arts and Science Building, Room 132, Youngstown **[*6]** State University, Spring and Fifth Streets, Youngstown, Ohio, and July 21, 1983 in the Akron City Council Chambers, Room 301, Municipal Building, 166 South High Street, Akron, Ohio, to afford members of the public affected by the application the opportunity to present statements concerning the proposed increase. The recorded transcript of the proceeding and the exhibits admitted into evidence have now been certified to the Commission for its consideration.

COMMISSION REVIEW AND DISCUSSION:

This case comes before the Commission upon the application of Ohio Edison Company, pursuant to Section 4909.18 Revised Code, for authority to increase its rates and charges for electric service to jurisdictional customers. Applicant alleges that its existing rates are insufficient to provide it reasonable compensation for the service it renders, and seeks Commission approval of rate schedules which would yield some $203,322,000 in additional gross annual revenue based on the Staff's analysis of test year operations which did not include an adjustment for revenue curtailment (S.R. Schedule 1). Based upon the company's elasticity study, the proposed rates would yield some $165,010,000 additional **[*7]** gross annual revenues net of curtailment (Co. Ex. 3, Schedule C-1). It now falls to the Commission to determine if the existing rates are inadequate and, in the event of such a finding, to establish rates which will afford the company a reasonable earnings opportunity.

The Commission's consideration of this case has been simplified by virtue of a series of stipulations jointly offered by the applicant, the intervenors, and the Staff which contain proposed findings relative to many of the matters origi-

nally placed in issue by filed objections to the Staff Report (Jt. Exs. 1-5). The parties agree that if the specified findings are adopted by the Commission many of the filed objections may be regarded as satisfied or withdrawn. The joint stipulations cover rate of return and tariff issues.

Rule 4901-1-30 of the Ohio Administrative Code provides for stipulations of this type. The Commission has often observed that such stipulations, although not binding upon the Commission, are entitled to careful consideration, particularly when sponsored by parties representing such a wide range of interests and when endorsed by the Staff (See, e.g., Cincinnati Gas & Electric Company, **[*8]** Case No. 76-302-EL-AIR [May 4, 1977]). In the instant case, the parties' cooperation in developing proposed resolutions reduced the hearing time which would otherwise have been required, and the Commission believes that they should be commended for their efforts in this regard.

ALLOCATIONS

The jurisdictional rate area of this application covers all classes of customers over a 35 county area. Excluded from this proceeding are sales to customers whose rates are not subject to the jurisdiction of this Commission, specifically wholesale sales for resale and wheeling service for Buckeye Power, Inc. (S.R., p. 4). Therefore, it is necessary that certain allocations be made so that only accounts, property and expenses associated with rendering service to jurisdictional customers be included in this proceeding.

The method of allocation used by the applicant for rate base purposes is the average of twelve monthly peaks as was used in the prior case. The Staff has previously expressed its preference for the twelve monthly peak method. This method is premised on the assumption that the capacity requirement of the system is determined by these twelve peaks loads and therefore demand **[*9]** related costs should be apportioned in accordance with each customer's coincident demand at the time of these twelve peaks. The Staff recommended that the applicant's rate base allocation factors be used for purposes of this proceeding (Staff Ex. 1, p. 4).

The jurisdictional operating revenues were readily identifiable and could be directly assigned; however, operating expenses had to be allocated. The Staff, after verification and review, utilized the applicant's operating expense allocation methods (Staff Ex. 1, p. 4).

OCC initially objected to the Staff's acceptance of the company's allocation factors for rate base and operating income because these factors failed to consider a five year agreement entered into on May 2, 1983 between Ohio Edison and Potomac Electric Power Company (PEPCO) whereby Ohio Edison agreed to sell to PEPCO through the Alleghany Power System a 150-MW block of energy on a firm basis and an additional sale on a firm basis, the specifics of which were not known at the time the objections were filed. During the hearing, however, OCC withdrew testimony on the subject and on brief withdrew the objection. Staff witness Fox testified that no adjustment should **[*10]** be made because of these agreements as the effects of these sales are speculative at this point in time (Staff Ex. 1, pp. 10-12). We find, therefore, that the company's allocation process is appropriate and the Commission will utilize these jurisdictional allocation factors for ratemaking purposes.

RATE BASE

The applicant, the Staff, and Consumers' Counsel each offered testimony in support of its respective rate base proposal in these proceedings. The following table compares the three initial estimates of the value of Ohio Edison's property used and useful in rendering service to customers affected by these matters as of the date certain, October 31, 1982. Subsequent adjustments and relevant objections will be discussed on an item by item basis below.

	Jurisdictional Rate Base		
	Applicant n1	Staff n2	OCC n3
Plant in Service	$2,714,916,612	$2,659,526,715	$2,668,251,849
Depreciation Reserve	772,345,789	749,270,678	758,282,727
Net Plant in Service	1,942,570,823	1,910,256,037	1,909,969,122
CWIP	406,108,968	n4 386,990,754	5,680,462
Working Capital n5	87,974,015	162,479,000	99,016,004
Deferred Taxes			

	Jurisdictional Rate Base Applicant n1	Staff n2	OCC n3
and Other Deductions		137,781,265	123,784,106
Jurisdictional Rate Base **[*11]**	$2,436,653,806	$2,321,944,526	$1,890,881,482

n1 Co. Ex. 3, Sch. B-1

n2 Staff Report, Sch. 7

n3 OCC Ex. 3, Sch. 2

n4 Reflects maximum CWIP which the Commission may include; however, the Staff recommended against a CWIP allowance for Perry which is the major component in this calculation.

n5 The company objects to the deduction of Deferred Taxes and Other Items from rate base generally instead of from working capital. This is, however, an issue of principle and the company did not object to the results in this case.

Plant in Service

Mad River and West Lorain

The Staff excluded from rate base all of the generating facilities at Mad River and West Lorain on the grounds that these facilities were not used and useful in providing service to the customers of Ohio Edison. Also at issue are land Account No. 310, which represents the $35,129 investment in the land of the Mad River site, and land Account No. 340, which represents the $179,334 invested at the West Lorain generating site. The company objects.

The Mad River generating facility consists of two coal fired units and two oil fired combustion turbine units. The coal fired units were constructed many years ago and are now fully depreciated. They were put on **[*12]** cold reserve on December 31, 1981 (Co. Ex. 8-J, p. 2). Cold reserve means that the generating capacity is not maintained at operating temperature but is maintained in a general operable status and can be restarted and operated with some advance notice. The coal fired generation at Mad River could be producing power within a "six week" time frame if the company needed the generation (Co. Ex. 8-J, p. 9). If they were required, however, they would not meet environmental protection requirements for burning coal, although they could be changed from coal to oil or gas with minor modification of the boiler. The combustion turbines were not placed on cold reserve although some question arose as to the actual availability of the two units.

The West Lorain facilities consist of three generating units located at West Lorain, Ohio. Two of the units are oil-fired combustion turbine units and the third is a "combined cycle" unit that utilizes waste heat from the other units so as to minimize the cost of fuel in producing steam. These are peaking units and are fairly new, having gone into service in 1973 and 1975. Because of the high cost of oil, however, these units were placed on cold **[*13]** reserve on January 15, 1983. The two combustion turbine units could be brought back from cold reserve within one week and the combined cycle unit within two weeks if needed (Co. Ex. 8-J, p. 8, Tr. III, p. 66). There was no generation at West Lorain in the month of October, the month of the date certain, although there was generation in August and September.

The Commission has traditionally used a rate base determined on the mid-point of the test period in determining rates for a given company. In theory, the additions and retirements that occur during the test period would average out and to some extent, this method would reach the same result as using an average rate base.

In making this determination the Commission in directed by Section 4909.15 Revised Code which states in pertinent part:

Section 4909.15 Fixation of reasonable rate.

(A) The public utilities commission when fixing and determining just and reasonable rates, fares, and tolls, rentals, and charges shall determine:

(1) The valuation as of the date certain of the property of the public utility used and useful in rendering the public utility service for which rates are to be fixed and determined. The valuation **[*14]** so determined shall be the total value as set forth in division (J) of section 4909.05 of the Revised Code, and a reasonable allowance for materials and supplies and cash working capital, as determined by the public utilities commission.

Section 4909.05 Revised Code states in part as follows:

Section 4909.05 Report of valuation of property.

(C) The original cost of each parcel of land owned in fee and in use at the date certain determined by the commission; and also a statement of the conditions of acquisition, whether by direct purchase, by donation, by exercise of the power of eminent domain, or otherwise:

(E) The original cost of all other kinds and classes of property used and useful in the rendition of service to the public. Such original costs of property, other than land owned in fee, shall be the cost, as determined to be reasonable by the commission, to the person that first dedicated the property to the public use and shall be set forth in property accounts and subaccounts as prescribed by the commission.

(J) The valuation of the property of the company shall be the sum of the amounts contained in the report pursuant to divisions (C), (D), (E), (F), and (G) of this **[*15]** section, less the sum of the amounts contained in the report pursuant to divisions (H) and (I) of this section.

The issues confronting the Commission with respect to the Mad River and West Lorain facilities are at what point in time and to what extent the property must be used and useful in order to be included in rate base. Before we discuss the specifics of each issue it would be helpful to review the case law as set forth by the Supreme Court on this matter.

In Consumers' Counsel v. Pub. Util. Comm., 58 Ohio St. 2d 449 (1979) the Supreme Court was confronted with a situation which required the interpretation of Section 4909.15(A)(1) Revised Code. This decision involved Toledo Edison Company, Case No. 76-1174-EL-AIR (June 9, 1978), wherein the Commission determined that Davis-Besse Unit No. 1 was used and useful in providing utility service to the customers of Toledo Edison. Toledo Edison filed its application for rate relief on September 1, 1977, the same date established by the Commission as the date certain. The Davis-Besse unit was not synchronized with Toledo Edison's transmission system on the date certain but was undergoing testing operations. On September **[*16]** 4, 1977, however, the unit generated net power on an hourly basis, and on september 20, 1977 began, for the first time, to deliver net production to the transmission systems on a daily basis. On November 21, 1977 Toledo Edison declared 25 percent of the unit to be in "commercial operation" for purposes of the production of electric service to its customers. Simultaneous with the declaration of "commercial availability" for the unit, 25 percent of Toledo Edison's investment in the unit was transferred from the company's Construction Work In Progress Account (CWIP) to its Plant in Service Account and depreciation was begun.

In resolving the issue of used and useful, the Court placed a great deal of emphasis on the precise operational status at date certain of the property involved. The Court stated at p. 455:

While the initial synchronization of a nuclear generating unit to its transmission system presents some indication that a generating facility is useful for purposes of supplying service to ratepayers, as the commission found, we conclude that, under the facts and circumstances at bar, the manifest weight of the evidence demonstrates that, at the date certain, the unit in question **[*17]** was undergoing start up testing, which was not completed until November 12, 1977. Until that time, it was unknown whether the unit's systems would function in an integrated manner and continue to do so in the proximate future.

Furthermore, the uncontroverted facts demonstrate that prior to September 1, 1977, the date certain, the unit in question provided no beneficial service to the ratepayers of the utility. The record shows that even though the unit was synchronized with Toledo Edison's transmission system, and Mode 1 start up was achieved on August 30, 1977, positive net electric generation on a daily basis did not result until September 20, 1977, several weeks after the passage of the date certain. Although, as the commission noted, the unit produced electricity on August 28, 1977, as part of the Mode 2 testing process, the evidence in the record is to the effect that the output of the unit was less than the amount consumed from Toledo Edison's transmission system in order to operate the unit. Therefore, the unit was not "useful" in rendering utility service to the ratepayers at that time. (Emphasis added.)

We must note that in addition to the above quoted passage, **[*18]** the Court, in a footnote, commenting on the testimony of one Philip E. Miller, indicated that Toledo Edison's accounting treatment was highly probative of the actu-

al status os the unit. The Court indicated that the accounting records of the company, as of date certain, are an indication of the treatment to be afforded a specific piece of property. The language of the Opinion clearly states that the used and useful status of the property should be determined as of date certain. Indeed, the Court found that this worked no injustice on a utility, because it is the utility which selects the most advantageous time to file a rate case. The Court stated at p. 457:

In so holding, we find no hardship imposed upon a utility which seeks to comply with the used and useful requirement as of the date certain. The test period, and to some extend the date certain, are determined essentially by the date at which the utility files it application for a rate increase. Any uncertainty which the utility harbors as to the used and useful status of its property, and therefore its includability in the rate base, can be minimized by the careful selection of the date at which the utility chooses to **[*19]** file its application for the rate increase. (Emphasis added).

Based upon this language, we are of the opinion that it would be inappropriate to adjust for additions or retirements that occur after date certain.

In Cleveland v. Pub. Util. Comm., 63 Ohio St. 2d 62 (1980) the court addressed the issue of whether a generating plant can be removed from a company's rate base because it is producing far below its capacity. Setting forth guidelines the Court referred to the decision of the Pennsylvania Public Utility Commission dealing with Three Mile Island in Penn. Pub. Util. Comm. v. Metro Edison Company, 29 P.U.R. 4th 502 (1979). The Ohio Court quoted from the Pennsylvania decision regarding the factors to be considered in determining the usefulness of utility plant:

". . . The length of time which utility plant may be out of service and not be removed from rate base depends upon the nature of the plant, the degree to which the outage can be expected to occur during normal operation of the plant, and the certainty with which resumption of service can be predicted. An example of an outage which will not require a rate base adjustment would be the outage of a generating plant **[*20]** for several weeks for unscheduled maintenance. A generating plant by its nature cannot be operating continuously without periodic maintenance. Outages of several days to several months duration, whether scheduled or forced, are typical of the normal operation of such plant; and the resumption of service is reasonably certain." (at 64.)

The Court found that the Commission had properly included Davis Besse in plant in service. The Court cautioned the application of its decision, however, as follows:

However, in affirming this finding, we do not wish to leave the impression that even a minute quantity of electricity production will qualify a generating plant for inclusion in the rate base. As appellee itself noted in its instant order, "[i]t is conceivable . . . that a generating plant could be out of service for such an extended period of time that the commission might properly conclude that it was no longer used and useful, and should therefore be excluded from the utility's rate base." (at 65.)

The Court confirmed its decision in Consumers' Counsel v. Pub. Util. Comm., supra, that the facts of each case must be analyzed to determine appropriate treatment to be given **[*21]** a particular piece of property. We must, therefore, look at the particular facts with respect to each operating unit at issue to determine if it is properly included in rate base.

The two coal fired units at Mad River were placed on cold reserve as of December 31, 1982. The Staff excluded these units on the basis that they were no longer used and useful in providing electric service to the company's customers. In doing source staff relied primarily on the fact that the units had been placed on cold reserve and equated this transfer to the retirement of the specific units (S.R., p. 12, Staff Initial Brief, p. 12 et seq.). Assuming that the transfer were the equivalent of a retirement, which the company strongly disputes, the language contained in Consumers' Counsel indicates that this would not be a controlling factor unless the transfer occurred before the date certain. The date certain is the appropriate point in time at which to value the property and no adjustment should be made for property going into service or being removed from service after that date. The language in Consumers' Counsel indicates that the status of the property on the date certain on the company's **[*22]** books is highly probative of the issue. Based upon the record we find that the transfer to cold storage as of December 31, 1982 is not a controlling factor. The property, however, must still satisfy the requirements set forth in Cleveland v. Pub. Util. Comm., supra.

The Staff also objects to the inclusion of the Mad River coal fired units on the basis that the property is surplus generation and that it is uneconomical to operate (Staff Ex. 1, pp. 18-20). Mr. Fox testified that it was his opinion that these units would not be needed in the future as evidenced by the transfer of the units to cold reserve and by Ohio Edison's capacity reserve margins, which were determined to be 26.3 percent in 1982 and 23.6 percent in 1983, both of which were above the 20 percent standard utilized by the Staff for ratemaking purposes in determining excess capacity.

The Staff's determination of reserve margins did not include the units at issue here because the Staff had recommended their exclusion from rate base (S.R., Schedule 8.2). The Staff made no determination of excess capacity with these units included. It should be noted that the Staff normally uses the 20 percent test only as a preliminary **[*23]** step in a series of tests to determine if a given utility has excess capacity [See, e.g., Dayton Power and Light Company, Case No. 82-517-EL-AIR (April 27, 1983)]. Given the record in this case we cannot characterize these units as excess capacity. To make this determination without a precise calculation and without utilizing the entire series of tests would be arbitrary.

Although the record indicates that these units are among the less efficient generation of the company, the units still provide an economic benefit to the company in that economy power was purchased against this capacity during the test period (Co. Ex. 8-J, p. 7). More importantly, however, the record indicates that on date certain the Mad River coal fired units, although fully depreciated, were listed as plant in service on the company's books. In addition, witness Garfield testified that the units generated 9,248 MWH in August, 1982; 3,402 MWH in September, 1982; 5,688 MWH in October, 1982; 6,908 MWH in November, 1982 and 4,408 MWH in December, 1982 (Co. Ex. 8-J, pp. 4-5). We find that, based upon the record, the coal fired units at Mad River were used and useful as of date certain and should be **[*24]** included in plant in service.

The two oil fired combustion turbines (CTA and CTB) at Mad River are peaking units the company would use to meet peak load requirements in the Springfield area. Mr. Garfield testified that the Springfield area is distance from the other power plants of Ohio Edison and yet it constitutes a major load center for the system (Co. Ex. 8-J, pp. 10-11). The Springfield area is also served by an interconnection with the Columbus and Southern Ohio Electric Company, an interconnection with the Dayton Power and Light Company and a 138 KV transmission line of Ohio Edison. Mr. Garfield testified that under a unique set of circumstances in which all three of these lines were incapacitated, the only power source for the area on short notice would be the peaking units. Staff witness Fox disagreed strongly with this analysis and testified that the possibility of such an occurrence would be extremely remote. In addition he expressed some doubt about the availability of the units if needed (Staff Ex. 1, pp. 14-15). The CTA unit was shut down for repairs on April 15, 1980 and is not expected to be back on line until June, 1984 (Tr. IV, p. 76). The CTB unit has not **[*25]** been operated since September of 1982 although it is available for generation (Staff Ex. 1, p. 14). At the time of the Staff's inspection on February 18, 1983, the CTB unit was in operable condition and capable of generating power with a few minutes notice (Tr. IX, pp. 3-4).

The Staff and OCC argue that these two units should not be included in rate base in this case in that the CTA unit has been in a state of disrepair since April of 1980 and the CTB unit is capacity that is currently not needed. We must agree that since CTA has been out of service since April of 1980 and is not expected to return to service until June of 1984 it cannot be considered used and useful under the guidelines set forth in Cleveland v. Pub. Util. Comm., supra. CTB presents a different situation, however. The unit was in an operable state as of the date certain and capable of generating capacity at any moment. The main argument for excluding it from rate base centers on the fact that the unit was not called upon to serve the customers of the area on a daily basis. We must note that the unit is a peaking unit that is not designed nor intended for base load utilization. In addition, as noted **[*26]** previously, the Staff made no determination of excess capacity in this case. We also note that the unit is available for generation if needed. Based upon the record we find that the CTB unit was used and useful as of date certain and should be included in rate base. The CTA unit should be excluded.

Three peaking units at West Lorain were listed on the company's books as plant in service on the date certain and were transferred to cold reserve as of January 15, 1983. There is no dispute that these units were operational on date certain and capable of generating power. The issue to be resolved is whether they can be considered used and useful in light of their transfer to cold reserve some two and a half months after date certain. The Staff and OCC argue that the units represent expensive excess capacity. We are again confronted, however, with no specific determination that there is excess capacity for this company currently, or expected in the near future. The company argues that these units were used and useful and contends that this determination cannot be measured in terms of generation alone. The company was able to make economy purchases against this generation in October, **[*27]** November and December of 1982 at time when the units would have been called on to generate (Co. Ex. 8-J, p. 7). Consistent with our finding regarding the coal fired generation at Mad River, the guidelines established by the Supreme Court, and the record as a whole, we find that these units were used and useful as of date certain and are properly included in plant in service.

The Staff also excluded the land associated with the Mad River and West Lorain units. Based upon the inclusion of the Mad River units we find that the land associated with those units should also be included. A slightly different issue arises with respect to West Lorain. The Staff recommends that if the Commission were to include the generating

units at West Lorain, 80 percent of the land at the generating site should be excluded. Mr. Fox testified that it was his opinion that the 166.7 acres located at West Lorain is excessive and that a substantial part is intended for future use by the company. He recommended that 80 percent of the original cost of $179,333, or $143,467, be excluded. Mr. Fox's analysis was based upon comparing the land included at the West Lorain facilities to land included at other **[*28]** generating facilities, specifically Edgewater, Mad River, and East Palestine (Staff Ex. 1, pp. 26-27).

Company witness Daniels testified on rebuttal as to the used and useful nature of the acreage in question (Tr. XIII, pp. 80-129, Co. Ex. 24). He testified that the facilities on the site are distributed over the entire property and that all of the 166.7 acres are necessary for the efficient operation of the generating stations. The company provided a map to show the layout of the area and to demonstrate the necessity of including all of the land at issue. Based upon the record as a whole, however, we find that not all 166.7 acres should be included in rate base and accept the Staff's alternative recommendation to exclude 80 percent.

Land Accounts

The Staff excluded from plant in service the amount of $1,780 from Account No. 360 which represents 30 percent of a distribution substation site located in the City of Lorain and $7,045 from Account No. 389 which represents portions of the Poland Line Shop and the Ashland Line Shop (S.R., p. 12). Staff witness Fox agreed that these exclusions were already made by the company and that plant in service should not be adjusted twice. **[*29]** Plant in service should, therefore, be adjusted accordingly.

The Staff also recommended that the company be ordered to reflect the rate case treatment afforded a piece of property on its books and records. Staff witness Fox testified that the company's books reflect as plant in service pieces of property that the Commission has previously determined not to be used and useful for ratemaking purposes (Staff Ex. 1, pp. 30-31). The company maintains a list of exclusions upheld by the Commission in past cases and excludes these separately in the rate case application. The company contends that it maintains its records in accordance with the Uniform System of Accounts as prescribed by the Federal Energy Regulatory Commission (FERC) and that it need not make any adjustments on its books for the exclusions resulting from the Commission treatment of a given piece of land for rate case purposes. Some debate has arisen as to whether or not the Commission has the authority to direct or has in fact directed the company to adjust its books and records for these items.

Section 4905.13 Revised Code authorizes this Commission to establish a system of accounts to be kept by the public utilities **[*30]** of Ohio and to prescribe the manner in which these accounts shall be kept. In Chapter 4901:1-9 Ohio Administrative Code we have adopted the Uniform System of Accounts for public utilities established by the FERC pursuant to the Federal Power Act, for use in Ohio. It is important to note that as far as regulation in Ohio is concerned, the system of accounts established by the FERC is only applicable to the extent that it has been adopted by this Commission. We find we have the power to modify the Uniform System of Accounts prescribed by the FERC, if we so choose, as it applies to utilities operating within the state of Ohio.

The Uniform System of Accounts was prepared by FERC for hearings before FERC under ratemaking rules that are substantially different than those for rate cases in Ohio. As noted previously, for ratemaking in Ohio we are constrained by Section 4909.05(C) Revised Code, to the valuation of property as of a date certain no later than the date the application is accepted for filing and a test year which cannot end more than nine months after the date certain. The FERC does not follow such a practice but sets rates based upon cost of service information provided **[*31]** for one of two test periods, one historic and one future. The test period to be used is the future test period if the information is available. The rate base used is determined based upon a thirteen month average for each period. 18 CFR Part 35.13. Given the different approaches to ratemaking it is quite possible for different plant accounts to be given different treatments under the two jurisdictions. In actuality the company maintains different ledger sheets for both the PUCO and the FERC. We find that it would work no hardship upon the company to make the transfers requested by Mr. Fox and that it might help to eliminate errors in future cases. The company is, therefore, directed to make the appropriate transfers on its books.

The final issue with respec to land accounts is the recommendation by Mr. Fox that the company be required to complete a 100 percent on site inventory of all of company's land (Staff Ex. 1, pp. 30-31). The Staff is of the opinion that such an inspection would insure that the company's books reflect only those parcels of land that are used and useful in providing utility service to its customers. The company's primary objection to this proposal is **[*32]** the magnitude of such an undertaking. Mr. Daniels testified that such a project would require a nine-month period if sufficient resources were available for such a project. He emphasized that there would be over 500 parcels involved in such an inspection and that professional individuals from the accounting, real estate, engineering, and planning departments

would have to be involved at considerable expense to the company (Tr. XII, p. 89). No specific dollar figures were provided, however, as to what the total cost might be.

We are of the opinion that there is definite merit to the Staff's proposal and that such an audit could provide useful information as to the current status of the company's property. We hesitate, however, to order the company to undertake such an inventory without a clearer definition of the exact manner in which it is to be conducted, the scope of the investigation, and an estimate of the costs that would be incurred by the company. We direct that the Staff provide the company with specific details as to what it proposes as an investigation and that the company prepare a plan for implementing the Staff's proposal and file it as part of the Standard Filing **[*33]** Requirements in its next rate case.

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 the Applicant's used and useful property. The Staff, as part of its investigation, tested the theoretical depreciation reserve level based on the accrual rates mentioned above. The Staff's theoretical reserve study based on October 31, 1982, date certain balances determined the theoretical reserve ratio to be 33.05 percent as compared to an actual booked 29.16 percent reserve ratio. The Staff found these ratios to be in agreement, well within the limits of estimation. The Staff, therefore, based its calculation of the jurisdictional depreciation reserve on the applicant's total company booked reserve (S.R., p. 13).

In Case No. 82-559-EL-AAM, heard in conjunction with the company's last rate case, Case No. 81-1171-EL-AIR, the company's depreciation accrual rates were increased and depreciation expense at the new rates was annualized to reflect the change. The effective date of the change in accrual rates was November 5, 1982, part way through the test year **[*34]** in this case, so the Staff annualized depreciation expense at the new rates in this case. OCC objected, however, that the Staff did not also adjust the depreciation reserve on the date certain to reflect the new accrual rates and Staff witness Fox agreed this should be done (Staff Ex. 1, pp. 22-23).

The company objects, arguing that such a retroactive adjustment to the reserve is inappropriate. The company points to our language in Dayton Power and Light Company, Case No. 82-517-EL-AIR (April 27, 1983) as an indication of proper treatment to be given depreciation reserve:

The investors of DP&L are entitled to a return on the investment they have made in the company that is used and useful in providing utility service to its customers. The purpose of depreciation expense is to provide a systematic recovery to the investors of this investment. Deduction of the accumulated depreciation reserve from rate base is an accepted principle in developing a rate base, since the reserve represents capital presumably already collected from the utility's customers through depreciation expense charges reflected in current rates and, as a result, the investor is no longer entitled to **[*35]** a return on this investment. Thus, the investor is entitled to recovery of his investment and a return on that portion not recovered. (Emphasis added.) (at 7.)

The Staff annualizes depreciation expense to reflect the latest known depreciation rates consistent with its practice of annualizing all expenses where a permanent increase has occurred during the test year. The Staff adjusts depreciation reserve to match depreciation expense for the test period. As pointed out by the company, however, this results in an adjustment to depreciation reserve that results in a portion of the investment in the company going unrecovered. The issue revolves around the fact that plant in service is fixed as of date certain. We must note that we make no changes in plant in service to reflect occurrences after the date certain. We find, therefore, consistent with our discussion in Dayton Power and Light Co., supra, that no adjustment should be made to the reserve to reflect the change in depreciation rates.

Construction Work In Progress (CWIP)

Section 4909.15(A)(1), Revised Code provides that the Commission, in its discretion, may include in its rate base determination a reasonable **[*36]** allowance for construction work in progress (CWIP). The statute limits eligibility to projects which are 75 percent complete at the date certain, and there is a further prohibition against authorization of such an allowance to the extent it would exceed 20 percent of the total valuation not including this item (Section 4909.15(E), Revised Code).

For purposes of this case, Ohio Edison proposed a jurisdictional allowance of $540,845,109 for five CWIP projects (Co. Ex. 3, Sch. B-4). The Staff inspected each of these projects and originally concluded that four of the five projects totalling $510,921,747 on a jurisdictional basis were 75 percent complete and could be considered for inclusion in rate base. At the time of the hearing, however, the Staff recommended against the inclusion of $996,203 in CWIP for the

Akron-Ravenna 69 KV line project #1151 and the $505,291,256 in CWIP for the Perry Nuclear Power Plant Project 1012-2110.

The company claimed $996,203 as CWIP in rate base for this Akron-Ravenna 69 KV line Project #1151 which began in May, 1978. It was estimated to be 85 percent physically complete by Mr. Crutchfield and 91 percent of the expenditures have been made. The **[*37]** Staff agreed the project is "obviously more than 75 percent complete by physical inspection and by dollars expended" (Staff Ex. 1, p. 33), but the Staff excluded it because it failed the elapsed time test. The reason for the delay in the project is that part of the final right-of-way has not yet been acquired and has been held up in the Portage County Courts for an indefinite period. The project can be completed in a six week period once the final right-of-way has been obtained (Tr. III, p. 38). Although we do not dispute the fact that the project is 75 percent complete, we must note that there is no indication as to when the project may actually be completed. We find, therefore, that the project should not be included in CWIP.

In Toledo Edison Company, Case No. 82-1025-EL-AIR, we were confronted with an almost identical set of facts with respect to the Perry project as we are in this case, the only difference being that the date certain in this case is one month later. All of the witnesses in this case agreed that there was "progress" made in completing the project during the month of October, the month between the dates certain in the two cases. We find, therefore that **[*38]** the project is 75 percent complete and eligible for CWIP consideration.

Having determined that the Perry project is eligible for inclusion in the construction work in progress allowance, the Commission turns to the question of whether we should, in an exercise of the discretion conferred by the statute, recognize some portion of the investment for ratemaking purposes. As indicated at the outset of this discussion, applicant's jurisdictional date certain investment in Perry was $505,291,256. Due to the 20 percent limitation and the inclusion of the minor projects referred to above, the total possible allowance for Perry in this case is $383,029,000. Applicant requests inclusion to the maximum extent permitted by law, while the Staff and Consumers' Counsel argue that there should be no rate recognition for Perry as the project will not be providing service during the period the rates fixed in this proceeding will be in effect.

The Commission agrees that the fact that Perry Unit No. 1 will not be in service until 1985 is a relevant consideration; however, given this applicant's overall financial condition, we believe that there must be some rate recognition for the project. As **[*39]** pointed out by Mr. Owoc, Ohio Edison's interest coverage is very low and its current bond rating by Standard and Poors is BBB-, the lowest possible investment grade (Co. Ex. 8-A, pp. 5-6). Over the next five years, the company estimates that it will need to borrow approximately $1 billion to fund construction projects, pollution control facilities and other projects. Mr. Owoc estimated that if the company's bond rating was Aa instead of BBB- this could save the ratepayers of the company in excess of $300 million in interest charges over this period. Mr. Owoc emphasized that there would be other benefits to the company in addition to the savings in interest. Mr. Curley also testified concerning the company's current financial condition. He emphasized that the company's AFUDC accounts for 99 percent of the company's earnings and that its cash flow coverage of its common stock dividend in only one time (Co. Ex. 8-I). In an attempt to recognize all competing factors, we find that Perry should be included at 25 percent of its jurisdictional date certain cost. We note that the income such a measure will generate approximates the annual interest costs produced by applying the weighted **[*40]** cost of debt to the date certain Perry investment as bounded by the 20 percent cap. This is the same general method used in the recent Toledo Edison case. In other words, inclusion of 25 percent of the investment in Perry is roughly equivalent to providing applicant with income to meet the annual long-term debt interest obligation associated with the maximum construction work in progress allowance for Perry permitted under the statutes. Combining 25 percent of applicant's jurisdictional date certain cost of the Perry project, or $126,322,814, with the cost of the minor projects included as discussed above, produces a construction work in progress allowance of $131,953,000. The Commission finds this to be a reasonable allowance in light of the circumstances of this case.

Working Capital

The applicant, the Staff and OCC have each proposed an allowance for working capital based upon the formula approach to be included in rate base in accordance with the provisions of Section 4909.15(A)(1) Revised Code. Applicant requested an allowance $173,826,156 before credits (Co. Ex. 3, Schedule B-5), the Staff recommended an allowance of $162,479,000 (S.R., Schedule 11) and OCC recommended **[*41]** an allowance of $99,016,009 (OCC Ex. 3, Schedule 5). In addition, EDATA has made a specific proposal with respect to the materials and supplies component that would substantially reduce the allowance proposed by the other participants. Issues have been raised with respect

to each component of the formula method and we will discuss the position of the various parties on an item by item basis.

Cash Component

The cash component of working capital consists of one-eighth of adjusted operating and maintenance expenses, excluding fuel and purchased power, plus an allowance for the lag in the recovery of fuel expenses (S.R., p. 15). Initially the applicant objected to the Staff's exclusion of the demand and energy charges for purchased power which are not recoverable through the electric fuel component rate and the carrying charges on the portion of nuclear fuel expense that is paid out prior to being expensed. On brief the company made it clear that it no longer considered these adjustments at issue and accepted the Staff's treatment (Co. Reply Brief, p. 15). The issue that remains, however, is the appropriate treatment to be utilized in determining a fuel lag component.

Prior to **[*42]** the implementation of Chapter 4901:1-11 Ohio Administrative Code (O.A.C.), the Commission recognized a fuel expense lag, but through the cost of service rather than through working capital. Since under Chapter 4901:1-11 O.A.C. fuel expenses and revenues are synchronized, the Commission has adopted a method to expressly recognize the lag in working capital. The Staff and the company are in apparent agreement as to the appropriate adjustment as expressed by company witness Wilson (Co. Ex. 23). OCC, however, has expressed several objections to this method. On brief, however, OCC limited its discussion to two areas.

Based upon its prior experience the applicant originally used 7.00 days for the number of "Billing lag" days for Data Processing Center (DPC) accounts. Billing Lag refers to the number of days between the time the applicant reads the meter and the time the bill is mailed to the customer. DPC accounts are accounts that are cycle billed to the customer and generally consist of all residential accounts and small secondary and power accounts (Tr. VI, pp. 145-146).

OCC contends that a 7.00 day lag is excessive and recommends that the Commission adopt a 5.00 day lag. In **[*43]** support of its position, OCC points to the Management Review performed by Cresap, McCormick and Paget (Co. Ex. 4) wherein the consulting firm found that the time lag of seven days between the meter reading and mailing of the customers' bills was excessive (Co. Ex. 4, pp. VII-17 through VII-18). The consultants made the recommendation that the bills should be mailed the date after the meter is read, which would result in only a two day lag. OCC points out that the company, in a letter dated October 29, 1982 directed to the Commission in response to the audit recommendations, has indicated that it intends to implement a 5.00 day lag in mailing customers' bills beginning in December of 1982. The letter from the company also indicates that it plans to further reduce the lag through the use of a new Customer Information System (CIS) that will be phased in beginning in August of 1983 (OCC Ex. 16, p. 15).

On rebuttal, company witness Wilson testified that he had sought updated information for 1983 in making a recommendation to the Commission. He testified that for 1983 the company's experience had actually been 5.78 days between the reading of the meter and the mailing of the bill **[*44]** (Tr. XII, p. 53). Mr. Wilson used this figure in revising his fuel lag component of working capital. The record does not reveal, however, precisely how the 5.78 days was calculated nor what time period this represents. It is unclear, therefore, whether the use of this figure is appropriate for our purposes. More importantly, however, we must remember that the auditors in the Management Review found that a two day lag would be appropriate for the company. We would not expect the company to be able to implement such a shift overnight; however, we would certainly be hard pressed to ignore such a recommendation. The company itself set the goal of a five day lag for December 1982. We find that the five day lag is appropriate for the purposes of this case and that the fuel lag component of working capital should be adjusted accordingly.

The second area objected to by OCC is the computation of the "Lead from Payment After Receipt". This refers to the lead days between receipt of the fuel and the payment to the vendor. Initially the company used the month of April 1982 in calculating an average lead (Tr. VI, p. 96). Each invoice for the month of April was analyzed to determine **[*45]** the lead days between the receipt of the fuel and payment to the vendor. The number of lead days per receipt was then multiplied by the dollar amount of the invoice to calculate the weighed fuel payments for the month. This figure was divided by the total fuel payments for April to determine a weighed average lead from payment (OCC Ex. 13).

OCC questioned Mr. Wilson regarding this calculation. The specific concern expressed by OCC was the selection of April 1982 as a basis for the analysis rather than another month or an average of a number of months. To address this issue Mr. Wilson offered an alternative calculation. He began with the number of days in a year, 365, and divided by 12 to get the average days in a month, 30.4. Then assuming there would be equal deliveries of coal over the month,

he divided this figure by 2 to get an average lead of 15.2. Since coal payments are made on the 20th day of the following month, he added the 15.2 to 20 to get an average total lead of 35.2 days (Tr. XII, p. 54).

On brief OCC seems to accept this general method, although raising some question about the assumption of equal payments over the month. As acknowledged by OCC there is nothing **[*46]** in the record to confirm or dispute this assumption and, under the circumstances, we are of the opinion that it is reasonable. OCC claims, however, that the method set forth by Mr. Wilson is in need of some "fine tuning." OCC points out that invariably in a given year the 20th of a month will fall occasionally on a Saturday or Sunday. As a result, when such an event occurs the company will get a few more days lead. OCC recommends that the 20 day lead used by Mr. Wilson should actually be a 20.42 day lead, derived by multiplying 20 times 12, adding five days to account for days when the 20th falls on a weekend, and dividing by 12. Mr. Wilson rejected the necessity of such an adjustment testifying that the use of the 20th as a payment day was an average and that occasionally a coal supplier will pick the check up on the Friday before a weekend in order to avoid waiting the extra days in order to receive payment (Tr. XII, p. 57). Upon review of the record we find the 20 day lead used by Mr. Wilson to be a reasonable estimate of what transpires in payment of suppliers by the company. This is, after all, an approximation of what is necessary to provide the company an appropriate **[*47]** working capital allowance and to ascribe to the calculation a precision that does not exist ignores the purpose of the calculation itself. We will adopt, therefore, the fuel expense lag proposal of the company, modified to incorporate OCC's proposal for a 5 day lag on DPC accounts.

Materials and Supplies

The Staff's materials and supplies component is based on the test year thirteen month average balances of materials and supplies held for normal operations and repair purposes. Approximately 11 percent held for new construction is excluded (S.R., p. 15). Initially the company objected to the Staff using "backward-looking" averages for the materials and supplies component and recommended the use of test year end balances (Co. Obj. #4). On brief, however, the company notes that since the difference between the Staff's thirteen month average balance recommendation and the recommendation of the company is "comparatively small", the company believes that the Staff's original proposal will provide a reasonable amount of materials and supplies for ratemaking purposes. The company recommends the adoption of the Staff's recommended level of approximately $34 million. OCC supports the **[*48]** alternative recommendation set forth by the Staff of a one percent of rate base allowance, or approximately $26 million. EDATA would utilize the recommendation of Mr. Jones which reduces the inventory level to approximately $20 million. The company objects to the recommendation of OCC to adjust the inventory level for sales of materials and supplies, the alternative Staff recommendation to use a percentage of rate base as the appropriate amount, and the recommendations of EDATA witness Jones to substantially reduce the materials and supplies component. The company asserts that it maintained the material and supply inventory level used by the Staff in the Staff Report during the test year and that this level represents a reasonable allowance for materials and supplies in working capital. The key to this discussion is the word reasonable. We must agree with EDATA and OCC that the mere fact the company maintains a given level of inventory in and of itself does not make that a reasonable level. In this case a great deal of information has been presented on what constitutes a reasonable level for Ohio Edison.

It is by no means a simple task to make a determination of what constitutes **[*49]** a reasonable level of inventory for a company with over two and a half billion dollars in plant. Nowhere is this is more evident than in the analysis set forth by EDATA witness Alan Jones. Mr. Jones utilized conventional inventory analysis techniques in making a determination that the material and supply levels at Ohio Edison were grossly inflated; he recommended that the Commission reduce the allowable component in working capital by some 57.9 percent from the initial recommendation of the company and Staff, except for the balances at Beaver Valley and Bruce Mansfield, which he concludes to be reasonable (EDATA Exs. 2a, p. 4). The 57.9 percent adjustment represents an accumulation of various specific adjustments made by a variety of techniques (EDATA Ex. 2, pp. 22-23). Although he recommends a summation of these components Mr. Jones recognizes that their effect is not additive and that a strong interdependence exists between them. This is easily demonstrated by adding together all of the various recommendations made by Mr. Jones which would result in a reduction in excess of 100 percent. Mr. Jones, therefore, recommends that the largest of his percentage adjustments should **[*50]** be utilized. Clearly the two most significant points in the testimony are the inventory turnover rate discussion and the Economic Order Quantity (EOQ)/Reorder Point (ROP) analysis. We are of the opinion that either of these adjustments standing alone could determine a proper inventory level and that additional adjustments, such as the adjustment due to obsolete items, could in fact already be accounted for in the EOQ analysis. This does not mean that they do not provide useful information but simply that adding the adjustments together results in a double counting.

Perhaps the most useful and more easily understood analysis performed by Mr. Jones is the inventory turnover discussion. A similar analysis was performed by Staff witness Fox. Inventory turnover refers to the rapidity with which the inventory of a given company is used in any given period, usually on an annual basis. For the purposes of his analysis, Mr. Jones used the average number of months supply of inventory on hand to represent the rate at which Ohio Edison's inventory was being used. In determining a standard for comparison purposes, Mr. Jones testified that he had no knowledge of such a standard for Transmission **[*51]** and Distribution Operations (T&D); however, for power plant maintenance he relied on the recommendations of other consultants and used a 12 month supply standard (EDATA Ex. 2, p. 8). It should be noted that Staff witness Fox disagreed with Mr. Jones' 12 month standard on production plant, indicating that these accounts represent the more costly spare parts for a company, and recommended that a 24 month maximum standard be applied in Ohio (Staff Ex. 1, p. 8). Mr. Fox recommended a six month supply for T&D and an overall inventory level of 12 months. Using the 12 months ending April 1983 as a base, Mr. Jones calculated what the inventory should be using a 12 month standard for power plant maintenance and assuming T&D levels and statutory levels remained constant at current company levels. These figures indicated a 29.9 month power plant inventory balance for the company as of that date. Based upon this analysis, he determined that the overall level of materials and supplies should be reduced by some 47 percent to reach what he would recommend as an appropriate level (EDATA Ex. 2, pp. 12-14). It is important to note that this analysis did not include figures for either Bruce Mansfield **[*52]** or Beaver Valley. Mr. Fox made a similar analysis using data that included these two facilities and developed results that were markedly different. Mr. Fox's analysis resulted in a 14.228 month supply of inventory for the company as a whole rather than the 29.9 month supply developed by Mr. Jones excluding Beaver Valley and Bruce Mansfield (Staff Ex. 1, pp. 7-8, EDATA Ex. 1). The difference between the two calculations results from the treatment afforded Bruce Mansfield which by far has the largest dollar amount of inventory issues per month. The supply of inventory on hand at Bruce Mansfield is 5.8 months, well below the standard set forth by either witness. Recognizing this set of circumstances, witness Jones recommended that inventory levels only be adjusted for all plants except Bruce Mansfield and Beaver Valley, even though his calculations showed a 28.1 month supply at Beaver Valley, stating that the net effect of these two facilities was very close to his 12 month inventory standard. Hidden in this calculation is the dominant impact that Bruce Mansfield has on the inventory requirements of the company. Taking the figures contained in Mr. Fox's workpapers presented as **[*53]** EDATA Ex. 1, we can calculate an average monthly issue for Bruce Mansfield for July through December of 1982 of approximately $1,350,000. Applying Mr. Jones' 12 month standard to this average inventory results in a material working capital requirement of approximately $16,200,000 for this plant alone. Under Mr. Jones' recommendation this leaves slightly less than $4 million for all of the other Ohio Edison facilities. The error in this analysis is that Mr. Jones only includes a six month inventory supply for Bruce Mansfield. As pointed out by the company on brief, when compared to the total average issues per month figure contained in the testimony of Mr. Fox, the final recommendation of Mr. Jones results in approximately a six month inventory supply for the company taken as a whole (Staff Ex. 1, p. 8, EDATA Ex. 2, p. 5).

To verify or to supplement his findings with this inventory turnover analysis Mr. Jones performs an analysis using EOQ and ROP formulas. These techniques are generally accepted inventory control models that can be quite useful in certain circumstances. The first step in any inventory model is to develop a functional relationship between the variables of interest, **[*54]** in this case purchasing costs and inventory carrying costs, and the measure of effectiveness of dealing with these variables. The greater the amount of units purchased per year, the lower the per unit purchasing costs; however, offsetting these savings are the costs of holding and maintaining higher inventory levels. The second step in the process is to develop ordering policies to minimize the total overall costs (EDATA Ex. 2, p. 10). To undertake this analysis an initial sample of approximately 1,000 items was taken from the generating facilities of Ohio Edison, excluding Beaver Valley, Bruce Mansfield, Mad River and Norwalk, which were unavailable (EDATA Ex. 2, p. 17). Suing the EOQ and ROP methods Mr. Jones determined what he considered to be appropriate inventory levels for these the separate plant locations (EDATA ex. 2, Schedule IMC 13). For example, the sample for the W. H. Sammis Plant indicated that of the items sampled the total actual inventory balances were $17,236, whereas, Mr. Jones' calculated inventory level using his models was $6,402, leading Mr. Jones to conclude that inventory levels at this site should be reduced by some 63 percent.

The company argues that **[*55]** there are numerous flaws in this analysis. First the company points out in developing factors to be applied to the inventory levels the samples used would have included items held for construction which have already been eliminated by the Staff. The company argues that this would distort the findings and lead to meaningless calculations. In response, EDATA argues on brief that if anything these circumstances would lead to results more favorable to the company since construction items would presumably turn over faster than maintenance items. We simply cannot tell from the record exactly how such a set of circumstances might affect the final outcome of

the study. In fact, from the analysis presented we have no way of knowing to what extent construction items might have been included in the sampling process. This does not mean that we either agree or disagree with the argument set forth by either side, but simply that we cannot make a judgment, nor do we believe either party could, based upon the information available. We must admit, however, that we share some of the company's concern about the use of a sampling technique to draw conclusions about the inventory methods utilized **[*56]** by the company. The use of a sample can only be beneficial in making an analysis if it can be said that the sample is somehow representative of the population from which it is drawn. Presumably each of the some 68,000 items held in inventory by the company is unique from the point of lead time, reorder point and economic order quantity. To draw a sample from these items and to draw reference about the general population may be possible on one or two of the parameters mentioned, but it is highly unlikely that the sample could be representative of the general population on all of the parameters. Realizing this, witness Jones used averages for some of the parameters such as ordering costs and carrying costs (EDATA Ex. 2, pp. 16-17). Given his limitations on time and information, such assumptions were a necessity. It is difficult if not impossible to predict what impact these assumptions would have on the outcome of the study. Suffice it to say that we hesitate to adopt such recommendations given the uncertainty surrounding the magnitude of their impact.

Aside from the concerns we have expressed on the EOQ/ROP analysis we must note that the final calculation would be subject to **[*57]** many of the same concerns we have expressed regarding the turnover analysis. In the final analysis the material and supply level recommended by Mr. Jones represents a six month supply based on a comparison of his results with those of Mr. Fox. Using the twelve month guideline expressed by both Mr. Jones and Mr. Fox we find we cannot accept this level as reasonable. At the same time we find considerable merit in some of the criticism expressed by Mr. Jones and in others set forth in the Management Report of Cresap, McCormick and Paget. In light of these concerns Mr. Fox recommended as an alternative using one percent of plant in service as an appropriate inventory level.

At first blush this proposal appears to represent a viable alternative to the complexities involved in determining inventory levels for utilities in Ohio. We are extremely hesitant, however, to take any steps to establish such a guideline. By doing so we would be inviting every other utility in the state to raise its inventory level to the same point. More importantly, however, selecting an arbitrary limit such as this ignores the different needs of the various utilities and the differences that exist in **[*58]** accounting practices among utilities. Not all of the utilities within this state adhere to the same practice when it comes to determining what level of purchases are booked to material and supply accounts and what are booked to plant accounts. To establish a one percent standard without taking such factors into consideration unduly penalizes some companies and gives an undeserved benefit to others. We are of the opinion that materials and supplies should not be based upon such an arbitrary standard and we reject the one percent recommendation.

Based upon the above discussion we find that the thirteen month average balance recommendation proposed by the Staff should be adopted as the starting point in determining an appropriate materials and supply component for working capital. Various other recommendations have been presented that still must be discussed before a final number can be adopted. Before we begin with these items, however, we want to make it clear that we are concerned over the inventory control practices of the company as evidenced by this record. We note there is a great deal of fluctuation in inventory levels between the various plant locations ranging from the **[*59]** 5.8 month supply at Bruce Mansfield to a 40.99 month at Edgewater (EDATA Ex. 2, Schedule IMC-7). Although we have adopted the overall inventory levels as reasonable we are concerned that resources may be standing idle at one location while another location may be operating at an unduly low level. In its October 29, 1982, response to the Management Report the applicant indicated that it did not consider all of the recommendations of that report in this area to be appropriate and that it planned to conduct an internal study to more fully comprehend the implications and benefits of these proposals. The company plans to have this study complete in 1983 although it was not available for this hearing. The company is directed to make the study available to the Staff as part of the Standard Filing Requirements for its next rate case. We will pursue this issue further in applicant's next rate case and the company will bear the burden of justifying its inventory levels.

OCC recommends that an adjustment be made to account for the sales of materials and supplies that occur on an ongoing basis. OCC witness Miller testified that it was his recommendation:

. . . that the Commission **[*60]** recognize the fact that some of the materials and supplies held in inventory are ultimately sold and not used by the company. If this fact is not recognized, the company will earn both a return on these amounts as well as the ultimate sale revenues (OCC Ex. 1, p. 20).

Mr. Miller then went on to testify that the thirteen month average balance method does not adequately account for the sales of materials and supplies. The company responds that the use of "net" balances eliminates Mr. Miller's con-

cerns. OCC contends, however, that an adjustment is needed to reflect the level of inventory that must be maintained in order to have this inventory available for sale. For example, if the applicant maintained a $100 inventory for four months and then sold $50 at the end of the four month period, the inventory maintained for each of those four months would be overstated by $50, which represents the unused inventory on hand in each of those months which was ultimately sold. OCC's calculation would eliminate this inventory entirely, resulting in an average inventory of $50. Under the company's method of using the net balances for each month the result would be an average of $87.50 (100+100+100+50/4). **[*61]** The underlying assumption in OCC's argument is that the company determines that it has excess inventory and then proceeds to let it sit around for four months before making any attempt to sell it. More precisely, if we were to adopt OCC's position we would be saying that the company had $523,887 of excess inventory at the beginning of the test year, held that amount for twelve months and then sold it all on the last day of the test year. We do not dispute the fact that the company might receive some "float" in the inventory that it ultimately sells, but we do not believe that OCC's proposed reduction adequately determines what that amount might be.

Witness Jones also made a similar recommendation with respect to obsolete inventory. Based upon his sampling technique, discussed previously he determined that an adjustment should be made to materials and supplies in the amount of $1,105,065 (EDATA Ex. 1, p. 16). This analysis represents stock having no activity since April of 1981, adjusted for the number of items that had only one unit in stock that might be justified for use in emergency situations. We note that the Management Report made a similar finding in discussing the **[*62]** inventory levels for the applicant. The report indicates that approximately 10 percent of total division inventory (in dollars terms) has been inactive since October 1980; yet only $7,726 of the approximately $600,000 items have been written on as obsolete or excess (Co. Ex. 4, p. IX-25). Needless to say we must view such evidence as an indication that the company's inventory levels are indeed in need of review. However, unlike the adjustments Mr. Jones previously discussed, his recommendation on this point comes from a report issued by the company indicating an actual count of some 8,697 items which make up the $1,473,432 and not a sample (EDATA Ex. 2, Schedule IMC-10). We find, therefore, that the materials and supplies component should be reduced by his recommendation, specifically $1,105,065.

Fuel Inventory

The Staff's fossil fuel inventory allowance is based on a 60 day supply of coal priced at date certain price levels and a thirteen month average balance of light-off and peaking oil (S.R., p. 15). The main issue in the fuel inventory component calculation deals with the proper amount of coal inventory. As a preliminary matter, however, we must resolve the dispute concerning **[*63]** the treatment to be afforded the oil inventory in light of our decision with respect to the Mad River and West Lorain generating facilities. The Staff excluded the oil inventories at both of these locations (Staff Ex. 1, p. 26). Consistent with our plant in service treatment on these issues, we find that one half of the oil reserves at Mad River should be included in the working capital calculation and that all of the reserves at West Lorain should be included.

The dispute concerning the coal inventory concerns both the number of tons to be included in calculation and the price per ton to be applied. The Staff computes an average burn figure for the company for all locations and multiplies this by what it considers to be reasonable days supply of coal, in this case 60 days (Staff Ex. 1, p. 25). The obvious purpose of this method is to eliminate what the Staff deems to be excess coal inventory. The company objects and contends that the appropriate calculation would be to use the average number of tons outstanding during the test year which results in approximately a 71 day supply under the Staff's method (Co. Ex. 8-D, p. 6). The difference in actual tonnage is 1,311,210 for **[*64]** the Staff and 1,568,961 for the company, or approximately 257,841 tons of coal and $10.5 million in working capital.

We find the company's discussion on this point on brief extremely helpful in determining what is involved on this issue. The company points out that the daily average burn rate for Ohio Edison has been decreasing over the past few cases. In Case No. 80-141-EL-AIR the average daily burn for the company was 25,742 tons/day. In Case No. 81-1171-EL-AIR this had dropped to 23,978 tons/day and in this case it is 21,852 tons/day (Co. Initial Brief, p. 49). These figures illustrate the rationale behind the Staff's method. Instead of simply determining an average inventory level, the Staff attempts to reflect in its calculation the current operating needs of the company. In terms of total tonnage levels, the company points out that if its daily burn were higher, the Staff's method of calculating fuel inventory would produce a larger result. This is precisely what the Staff attempts to achieve, on the theory that if the company is using coal faster, a larger total "buffer" would be required. We find the Staff's method is a reasonable method to determine a fuel inventory **[*65]** working capital requirement.

The second company objection to the fuel inventory component deals with the proper price to be applied to inventory levels. The Staff recommends a date certain average price in determining the appropriate price per ton calculated by taking the average prices per location for the two months centered on the date certain and weighting these prices by the test year consumption at each location as reflected in the company's three and nine filings (Tr. IX, pp. 87-91). This results in a cost of $40.868 per ton of coal. The company objects to the use of this figure on several grounds. First, the company points out that this is not the method used in the company's previous rate case where the Staff weighted the components by the most recent 12 month data on consumption by location rather than the three and nine figures. In this case using this method would result in a slightly higher figure of $41.15 based upon the twelve months ending January 1983. We are of the opinion that the Staff's estimate using the company's three and nine figures represents a reasonable estimate of date certain costs of coal. Nothing in the record would convince us that the use **[*66]** of the 12 month period ending in January would lead to more accurate results for the test year.

The second objection raised by the company to the price per ton is that end of test year prices rather than date certain prices should be used (Co. Ex. 6-D, p. 39). In this case, the weighted end of test year price used by the company is $46.858 per ton compared to the Staff's date certain price of $40.868 or a difference of approximately $6 per ton. The company argues that by using a price that is nine months "stale" the Staff understates that value of fuel inventories maintained by the company. This precise issue was raised in the applicant's last case, however, where we pointed out that working capital is a rate base item and the use of the average date certain price is appropriate. We will, therefore, adopt the Staff's recommended price per ton of coal of $40.868.

The final issue to be resolved is whether the 60 day supply is reasonable in light of existing circumstances. Unfortunately although much time was spent in this area, the record reveals little specific information on whether a 60 day supply as opposed to a 65 day supply or 70 day supply would be more appropriate. The **[*67]** company's main argument on this point is that it has a 70 day coal supply which it considers reasonable. In the company's last case we determined that a 58-65 day supply was reasonable and selected 60 days as appropriate. Nothing has been presented in this case to cause us to conclude that this figure is unreasonable or that circumstances have changed to warrant a higher number. We therefore adopt 60 days as the appropriate days supply. Applying that figure to the days burn figure of 21,852 results in a coal inventory level of 1,311,120 tons.

Deferred Quarto Coal

The Staff and the company propose the use of a thirteen month test year average balance in determining a reasonable allowance for working capital (S.R., Schedule 11). This is consistent with Commission findings in Case No. 80-141-EL-AIR and 81-1171-EL-AIR. OCC contends that this figure is not representative of the collection period rates in that the deferred Quarto balance has been steadily decreasing throughout the test period. First we must note that OCC rejects this same type of argument when proposed by the applicant in support of end of test year pricing. Secondly, the deferred balance may no longer be decreasing. **[*68]** Based upon the record we find that the Staff's recommendation is reasonable and should be adopted.

Deferred Nuclear Fuel

The company originally proposed a jurisdictional deferred nuclear fuel allowance net of taxes of $10,771,278 (Co. Ex. 3, Schedule B-5.1). The Staff and OCC used a thirteen month average resulting in estimates of $7,850,397 for the Staff and $8,474,424 for OCC (Staff Update Schedule 11, OCC Ex. 3A, Schedule 11). OCC's estimate is based on actual data while the Staff uses two months estimated data in its calculation. On brief OCC argues that, although higher, its estimate is more theoretically sound but offers no objection to the use of the Staff's method (OCC Initial Brief, p. 36). We find the Staff's proposal is supported by the record and should be adopted.

Tax Offset

As an offset to working capital, the Staff deducts customer deposits and one-fourth of operating taxes excluding F.I.C.A. tax and the excise tax surcharge expense, and state and federal deferred taxes (S.R., p. 15). Initially the company objected to the reclassification of OCC and PUCO maintenance assessments as taxes, however, it did not pursue this objection.

The final issue in this area **[*69]** concerns the inclusion of the gross receipts tax in the tax offset. This issue has been presented to the Commission numerous times by this company as well as others. We see no reason to deviate from our past decisions. The company's objection is overruled.

Selective Adjustments to the Working Capital Formula

The theory or justification of a working capital allowance is that a utility, like any other business, must have an additional investment in inventories of fuel and materials and supplies, and a certain amount of cash in order to operate. This working capital is as much of an investment as capital expended for plant, since without it the utility could not operate. Working capital provides funds for the utility to pay for expenses incurred prior to billing and collecting revenues for services rendered. The key issue with respect to the inclusion of an allowance for working capital in the rate base is the determination of the proper amount that should be considered as a rate base component.

There are three alternative methods for determining the amount of working capital that should be considered as a rate base component:

a) A formula approach, adopted by the Commission **[*70]** in previous cases, equates cash working capital requirements with the formula described previously in this order for electric companies.

b) A lag study which quantifies the dollar effect of the time difference between the date costs are incurred and paid and the date services are billed and collected. This means that both the lag in expenses and the lag in revenues are considered, and the net lag is calculated. This should be determined for each transaction where capital is used and/or obtained, and finally, the sum of the sources of working capital is subtracted from the sum of the uses to determine the net working capital requirements. This contemplates a lengthy detailed study.

c) A balance sheet analysis which identifies the investors' capital employed in the utility business other than that employed in utility plant and non-utility plant and other investments. It also identifies the creditors and other non-investor sources of capital. The difference between the capital employed and the capital obtained from these sources represents the net working capital requirements.

Of these three methods this Commission has utilized almost exclusively the formula approach and in doing **[*71]** so has often voiced its reasons for not making selective adjustments to the formula. The use of the formula is an attempt to approximate the working capital needs of the company without expending the time and energy demand in using either of the other two techniques which would define with precision those requirements. Any attempt to make selective adjustments to the formula, without reviewing the formula as a whole, detracts from, rather than adds to, the reasonableness of the ultimate results.

The company initially proposed that working capital be adjusted to account for certain charges for purchased power and for fuel expense. As noted previously the company chose not to pursue these issues on brief, recognizing that such an adjustment has previously been rejected by this Commission in the utilization of the formula approach.

OCC, on the other hand, persists in attempting to make selective adjustments to the working capital formula. The first issue presented by OCC concerns the Westinghouse settlement offset. A number of years ago the company reached a settlement with the Westinghouse Corporation concerning uranium supply contract. The company has been amortizing the proceeds **[*72]** of the settlement and the interest accrued on the settlement funds back to its customers through the EFC mechanism over the burn period of the fuel used to replace that which would have been supplied under the contract which was the subject of litigation (OCC Ex. 1, pp. 41-42). OCC suggests that the deferred balance be subtracted from rate base and that the company continue to pass this amount back to the ratepayers. To do so, however, would defeat the reasons why the practice was begun.

In Ohio Edison Company, Case No. 78-622-EL-FAC (October 18, 1978) the Commission first dealt with the issue of the treatment to be given the Westinghouse settlement. At that time the Commission was given the choice of deducting the settlement from rate base as a non-investor supplied source of funds, or returning the settlement to the consumer in the form of lower fuel charges. The Commission decided to pass the settlement back to the consumer through the EFC (then FAC) clause and to compensate the consumer for the time value of money by imputing an interest component on the balance at the AFUDC rate and passing this interest component through the EFC clause also. In doing so we noted as **[*73]** follows at pp. 6-7:

. . . In regards to the accrued interest calculation, Mr. Larkin's [OCC's witness] opinion was basically that no interest expense should be recorded but that the value of the settlement should be deducted from rate base in a rate case as a source of customer supplied capital (Tr. VII, p. 196). In this manner the benefits would be reflected in the base rates currently, rather than through the FCAC during a future period. Mr. Larkin, however, did concede that the Commission could flow the benefits either through the fuel clause or through the base rates (Tr. VII, pp. 198-199).

It is the opinion of the Commission that both methods would benefit the ratepayers. The basic difference between the two methods is that a rate base deduction will benefit current ratepayers. However, it is future ratepayers who must

bear the burden of higher cost nuclear fuel due to the contract breach. The current ratepayers have not yet felt any out of pocket loss, and will be reimbursed for the use of the funds received currently through the interest expense. In order to flow the benefits to the customers as the higher fuel costs are incurred in the future, the Commission prefers **[*74]** the use of the FCAC to match benefits with ratepayers more appropriately.

OCC's main point of contention seems to be that the company currently imputes interest at 10.9 percent, in effect paying the consumer this amount on the balance outstanding, and earning a higher rate of return by having this balance in materials and supplies in rate base (OCC Initial Brief, p. 48). OCC quotes the number 13.02 percent, the authorized rate of return in the company's last rate case, as the amount the company earns on this balance. We have been unable to find, however, a case where the company has earned such a return. In the company's last case, Case No. 81-1171-EL-AIR, the Commission found that the company actually earned 10.77 percent and in the case before that, Case No. 80-1139-EL-AIR, 9.20 percent. Upon review of the record we find we must reject OCC's position on this point.

The final area of contention is the injuries and damages reserve. As pointed out by witness Miller, this reserve, Account No. 262, is described in the FERC Uniform Systems of Accounts as follows:

This account shall be credited with amounts charged to Account 925, Injuries and Damages, or other appropriate accounts, **[*75]** to meet probable liability, not covered by insurance, for deaths or injuries to employees and others, and for damages to property neither owned nor held under lease by the utility.

(OCC Ex. 1, pp. 37-38.)

OCC contends that these funds are customer supplied, constant with reasonable certainty, and available for investment. Upon review of the record, however, we cannot find where any one of these three criteria have been shown. First, these amounts have fluctuated widely since 1979. For 1979-1980 the fluctuation was up 100 percent, for 1980-1981 the fluctuation was down over 20 percent, and for 1981-1982 the fluctuation was up almost 50 perdent (OCC Ex. 1, p. 39). Based on the record in this case we fail to see how this could be classified as constant. Nor does the record reveal that these are customer-supplied funds which are available for investment. The testimony offered in this case does not establish such parameters. Upon review of the record we find that OCC's objection on this part should be overruled.

The following schedule presents in summary form the Commission's determination of the allowance for working capital in this case. These figures take into account revisions **[*76]** necessary to reflect the disposition of other issues which affect the allowance.

Jurisdictional Working Capital Allowance
(000's Omitted)

1/8 of Adjusted Operating and Maintenance Expense, excluding Fuel and Purchased Power	$ 44,205
Fuel Expense Lag	5,860
Total Cash Component	50,065
Plus: Materials and Supplies	32,950
Fuel Inventory	59,650
Deferred Nuclear Fuel (Net of Tax)	7,850
Deferred Quarto (Net of Tax)	27,105
Less: Customer Deposits	2,354
1/4 of Operating Taxes, excluding F.I.C.A. and Deferred Taxes	39,511

Jurisdictional Working Capital Allowance	$135,755

Other Rate Base Items

The Staff reduced the rate base by the jurisdictional portions of the date certain balance of customer advances for construction, 1981 and 1982 ACRS tax benefits sold, the accumulated unrestricted investment tax credit (exclusive of ITC on qualified property additions placed in service after December 31, 1980), deferred taxes resulting from accelerated amortization and liberalized depreciation, one-half of the deferred income taxes associated with taxes and pension capitalized, nuclear fuel disposal costs, one-half of deferred taxes on T.B.T. interest income and lease **[*77]** expense, and accumulated deferred taxes, as of date certain, for nuclear and quarto fuel. Deferred property taxes were also deducted. The Staff also reduced rate base by the balance outstanding associated with the accrued liability for the Clinch River Liquid Metal Fast Breeder Reactor project as shown on Schedule 12 (S.R. pp. 15-16). The adjustment for deferred nuclear fuel disposal costs was incorporated in the Staff's updated figures.

The applicant objected to the deduction of other rate base items from rate base rather than from working capital, however, it decided not to pursue this issue admitting that it was a matter of principle rather than substance. We will therefore not address this issue.

The applicant also objected to the deduction from rate base of original balances for ACRS tax benefits sold which do not reflect subsequent amortization to the date certain; the failure to exclude from the rate base deduction for deferred taxes-accelerated depreciation, the balances deferred taxes flowed through to the ratepayers prior to 1977 and the failure of the Staff to use date certain balances for deferred income tax items. Staff witness Montgomery testified that he agreed **[*78]** with the company on these points and with the calculations performed by the company to take these factors into consideration (Staff Ex. 2, pp. 12-13). We will therefore adopt the company's recommendation on these issues.

The company also objected to the allocation factors used to derive the jurisdictional deferred nuclear fuel and deferred Quarto fuel balances on Schedule 12. Witness Montgomery agreed with the company's proposal and the correct factors are set forth in his testimony at p. 12. We will adopt these factors.

The company continues to object to the deduction from rate base of any deferred income taxes associated with property tax expense, except deferred taxes normalized. For the purposes of this case, however, it accepts the modified reduction by the Staff as set forth in Staff witness Montgomery's testimony (Staff Ex. 2, pp. 14-16). We will adopt the Staff's recommendation.

Rate Base Summary

In light of the foregoing discussion, the Commission finds the jurisdictional rate base, as of the date certain of October 31, 1981, to be as set forth on the following table, which has been adjusted for rounding purposes.

Jurisdictional Rate Base Summary
(000's Omitted)

Plant in Service	$2,712,110
Less: Depreciation Reserve	771,297
Net Plant in Service	$1,940,813
Plus: Construction Work in Progress	131,953
Working Capital	135,755
Less: Other Items	97,362
Jurisdictional Rate Base	$2,111,159

[*79]

OPERATING INCOME

Revenues

Revenue Levels

The only issue with respect to the determination of proper test year revenues was which forfeited discount ratio was appropriate. The Staff used the test year ratio proposed by the company of .006140 (Staff Ex. 3, p. 7). OCC objects to

this figure and recommends the use of the 1982 calendar year ratio of .006485. OCC's argument in support of its portion is that the forfeited discount ratio has generally been increasing over the past several years. The following figures represent the ratios since 1978 as set forth in OCC Ex. 18:

.005172 for 1978

.005325 for 1979

.006297 for 1980

.005947 for 1981

.006485 for 1982

The Staff responds that OCC has failed to demonstrate why the 1982 ratio is more appropriate and that unless the test period levels are unreliable or nonrepresentative of normal operations they should be used (Staff Initial Brief, p. 39). Upon review of the record and the figures set forth above, we find the Staff's ratio is representative of normal operations and should be adopted.

Revenue Curtailment

The applicant is requesting a net income curtailment adjustment of $11,595,211, consisting of a revenue **[*80]** curtailment of $38,322,422 and an avoided cost curtailment of $26,727,231 (Co. Ex. 3, Schedule C-1). To determine this proposal, the company developed price elasticity estimates for the residential, commercial, and industrial classes and proposed an adjustment for each class (Co. Exs. 6-G and 8-G). The price elasticity of demand for electricity is defined as the ratio of the percent change in kilowatt hours demanded that results from a one percent change in price, all other influences on demand being assumed unchanged (Co. Ex. 6-G, p. 2). To develop the specific elasticity estimates for each class of customers, the company used a model which consists of a two equation simultaneous system of equations. The first equation in each model contains price as the dependent variable while the second has demand as the dependent variable. The company developed a data set for each model for specific independent variables and estimated, by the use of a regression technique known as three-stage least squares, the specific coefficients for each class of customers. Three-stage regression is a regression procedure developed specifically for estimation in models which consist of simultaneous **[*81]** equations (Co. Ex. 6-G). This is the same technique used by the company in its last rate case, Case No. 81-1171-EL-AIR, although the elasticity adjustments being proposed are based on an additional year's data.

The Staff has recommended against the adoption of the company's proposal for two distinct reasons. First, the Staff contends that the models are in error because price is treated as a dependent endogenous variable in the first equation, in that the model uses demand to determine price, and as an independent exogenous variable in the second equation, in that price is used to determine demand. Staff witness Farrar testified that it is fundamental that price must be treated as an independent variable to develop a meaningful elasticity coefficient (Staff Ex. 4, p. 20). Secondly, the Staff submits that the use of average price rather than marginal price in the company's models as a variable overestimates the dollar amount of curtailment. The economic concept of price elasticity, as noted above, describes the percentage change in consumption that takes place at the margin due to a percentage change in price. Staff witness Farrar testified that it is inappropriate to use average **[*82]** price because when the consumer reduces consumption by a given amount, it is the marginal price that the consumer is saving and not the average price.

Company witness Byrd testified that there are many models that have been developed to estimate the curtailment effect of electricity usage. These models differ in the specific equations used to represent the demand curve, the price measure, the data input for the variables, and the estimation techniques applied. Mr. Byrd noted various surveys that have compared different techniques and the results that have been obtained by those techniques. He pointed out that there have been studies by recognized authorities that have used average price as opposed to marginal price, and price as an endogenous variable as opposed to an exogenous variable. He further noted that these studies have reached results similar to those which have been obtained by other estimation techniques that did not have the specific characteristics that the Staff found deficient (Co. Ex. 8-G). Mr. Byrd noted that the reason the company does not use marginal price in its recommended models is that it is, in his opinion, impossible to calculate a true marginal price **[*83]** from rate schedules with demand charges such as Ohio Edison's. Given a rate schedule with a demand charge it can be shown that two customers with the same level of consumption could have different marginal prices depending on the relation between their billing demand and consumption level (Co. Ex. 7-G, p. 7).

As we have noted in other cases, we recognize the underlying principle of revenue curtailment, i.e., that an increase in price will normally result in decreased sales, holding other factors constant. Any economics text book will define demand as a function of price. The important point in implementing such a model in a rate case, however, is that the model must provide a reasonable estimate of the curtailment for the company. In support of the reasonableness of his recommendations, Mr. Byrd reports the finding of a survey conducted by EPRI which reported ranges for elasticity estimates for the various classes of customers. The ranges Mr. Byrd derived from the study are compared to the company's estimates as follows:

	EPRI Survey Range	Company Estimates
Residential	-0.03 to -0.54	-0.145
Commercial	-0.17 to -1.18	-0.292
Industrial	-0.04 to -0.20	-0.119

[*84]

(Co. Ex. 8-G, p. 5)

Mr. Byrd contends that the fact that the company's estimates fall within the range of the EPRI study tends to confirm the reasonableness of the company's results. We must note, however, that the magnitude of the spread of these ranges affords little in the way of support. In addition, such a comparison does not establish the reasonableness of the company's estimates for the specific needs of Ohio Edison.

Mr. Byrd also discussed an article by Lester Taylor entitled "The Demand for Electricity: A survey" which contained a discussion of the theoretical aspects of the use of average versus marginal price. In addition he discussed a survey of studies conducted in this area entitled "Price Elasticity of Demand for Energy - Evaluating the Estimates" propared by Resources for the Future, Inc. and sponsored by EPRI. Based upon these surveys Mr. Byrd testified that the use of an average price in elasticity studies is generally recognized as an appropriate method. We note, however, that although several of the studies in the EPRI survey used average price, Mr. Byrd indicated that the studies that used marginal price fall at the low end of the overall range of estimates, **[*85]** implying that the use of marginal price resulted in lower curtailment estimates than average price (Co. Ex. 8-G, p. 4). This fact was also brought out on cross examination by the Staff where Mr. Byrd acknowledged that using the marginal price in his calculations would, most likely, lead to a lower curtailment effect, although he emphasized that the magnitude of the variance would depend to a large extent on the way marginal price was calculated (Tr. VI, pp. 8-14). Also, we must note that while Mr. Byrd used the survey conducted by Resources for the Future, Inc. to the support the position that using price as a dependent variable to predict demand is an acceptable practice, it appears that this is the exception rather than the norm (Tr. VI, pp. 16-18).

Based upon the above discussion we find that we must reach the same result in this case as we did in the company's last case. As we noted in that case:

[w]e are not convinced by the applicant that the calculation and use of marginal price in a model is a practical impossibility and that the use of an equation where price is treated as a variable dependent upon demand is proper. The Commission will reject the proposed curtailment **[*86]** or elasticity adjustment.

The company's objection is overruled.

Expenses

Labor

As a preliminary matter the company proposed that the wage increase to the nonrepresented groups which was granted during the test year should be recognized in the labor expense annualization. The Staff agrees and no party has objected. Consistent with past decisions we find this adjustment is appropriate and is adopted (Staff Ex. 3, p. 8).

The remaining issue in dispute with respect to labor expense is whether the company's test year labor figure should be adjusted to reflect a lower level of employees evidenced by actual company figures through May of 1983. OCC witness Haskins testified that it was his opinion that the test year level of employees was overstated on average by 173 employees per month and proposed an adjustment of $3,556,371 on a jurisdictional basis based on actual employee levels. Mr. Haskin's methodology took the actual number of employees per month for the twelve month period ending May 31, 1983 and compared it to the average number of employees per month included in the applicant's three and nine figures to arrive at his 173 average variance per month. The average **[*87]** variance for the seven months for which

information was available was 241, as reflected on OCC Ex. 3a, Schedule 8.5a. The Staff made a similar calculation; however, Staff witness Barrington testified that the adjustment should only be applied to the nine months forecasted portion of the test year as the first three months were actual figures (Staff Ex. 3, p. 9, Updated Staff Schedules). The company disputes the need for any adjustment.

Company witness Hall, testifying on rebuttal, set forth a breakdown as to the specifics of the variance between the test year three and nine filing and the actual employee levels. The major element of the variance was due to the transfer of the Mad River and West Lorain generating units to cold standby, which reduced staffing requirements by 96 employees. This reduced level, however, has already been reflected in the adjustment to remove all of the expenses associated with these plants from test year operations (Tr. XII, pp. 6-7, Co. Ex. 21). Mr. Hall testified that another major component in the variance was due to the fact that from 51 to 57 disabled employees, who are budgeted, are not reflected in the actual employee figures. These employees **[*88]** remain on the company payroll until their positions are finally terminated (Tr. XII, p. 46). It should be noted that the number of employees in this classification during the test year was relatively stable and represents a normal operating level for the company. The remaining variance was broken down into three categories: delayed hirings, austerity freeze, and unexplained variance. Delayed hirings refers to employees that the company plans to hire as soon as qualified individuals are found. This figure averaged 39 per month during the test year. Austerity freeze refers to employees that the company has delayed replacing in order to reduce expenses in light of revenue collections running below expectations (Tr. XII, p. 9). This category averaged 45 per month for the test period. The final category, unexplained variance, refers to employees for which, given the limited time to prepare his rebuttal testimony, Mr. Hall found no explanation readily available (Tr. XII, p. 10). This figure averaged 35 per month for the time period in question (Co. Ex. 21). Based on Mr. Hall's analysis the company argues that there is no reason to adjust the three and nine employee figure in that **[*89]** it is representative of the period that rates will be in effect. The company argues that no evidence has been presented to demonstrate why the actual figure is more representative than the estimated figure.

Test year operating income should be reflective of the results of normal operations for the company. The impact of unusual or nonrecurring events should be excluded from the determination of expenses if they are not reflective of what the company is reasonably expected to experience. In making this determination the Commission may adopt the company's projected figures, if appropriate, or may use actual figures, if more representative, or may develop figures based on an independent analysis. The key to resolving the issue of which figures should be utilized does not depend on whether the figures are actual or estimated but rather, based upon the record as a whole, whether the figures are the best indication of normal operations of the company.

In this case Mr. Hall explained most of the variance between actual employee levels and the company's three and nine test year figures. The 35 employees unaccounted for represents less than 1/2 of 1 percent of the total budgeted figure. **[*90]** Mr. Hall testified that although in the limited time he had available he was unable to account for the variance, he believed the company could do so given additional time (Tr. XXI, p. 10). OCC and the Staff point to past Commission cases, specifically Dayton Power and Light Company, Case No. 82-517-EL-AIR, supra, and Ohio Bell Telephone Company, Case No. 81-1433-TP-AIR (December 22, 1982), for precedent for using actual figures over company estimated figures. The distinction, however, is that in those cases the Commission made a definite finding that the estimated figures were not representative of normal expected company operations. Based upon the record in this case we find that the estimated employee levels used by the company are representative of normal expected operations. Nothing has been presented to demonstrate that the actual figures would be more representative. We find, therefore, that no adjustment should be made to the number of employees used in the labor calculation.

Nuclear Fuel Disposal Costs

The applicant and the Staff have included an amount in operating expenses to account for costs which will eventually be incurred in connection with **[*91]** the disposal of spent nuclear fuel. Disagreement has arisen regarding precisely which elements should be incorporated in calculating these costs. We note that a great deal of uncertainty surrounds the specifics of such activities; however, it is readily apparent that significant costs will be incurred. Both the method proposed by the applicant and the method proposed by the Staff attempt to collect through current rates the portion of these future costs which are attributable to the amount of fuel consumed during the test period.

The Staff allowed "away from reactor" (AFR) and permanent storage costs on all of Ohio Edison's share of spent nuclear fuel burned during the test year, but found that transportation costs associated with the movement of the fuel to these sites were not known with certainty and, therefore, should not be allowed (Staff Ex. 3, p. 3). The Staff based this decision on the fact that the locations for the AFR sites and the permanent storage sites have not yet been determined

and that it was mere speculation as to where they would finally be situated. The company contends that although the sites have not yet been determined some minimal allowance should be **[*92]** provided. The Department of Energy now has sites under consideration in six states for permanent storage, namely; Utah, Washington, Nevada, Mississippi, Louisiana and Texas (Co. Ex. 6-E, p. 25). No information was presented on proposed sites for AFR storage. The company estimated transportation costs for spent fuel using a shipment of 2,330 miles based upon the location of the most likely site for permanent storage at the Hanford reservation in Washington State. (Id.) We note that in the company's most recent rate case, Case No. 81-1171-EL-AIR, at page 20, we rejected a similar company proposal for transportation costs based upon a 1500 mile distance. Although we do not dispute the fact that such costs will be incurred at some time in the future, we find that it would be mere speculation at this point as to what those costs will be. This finding is consistent with our decision in numerous Commission cases. See, e.g., Cleveland Electric Illuminating Co., Case No. 81-146-EL-AIR (March 17, 1982).

The company also objected to the failure of the Staff to escalate disposal costs to 1983 levels. The Staff Report used an escalation factor based on the fourth quarter **[*93]** of 1982, which represented the latest available data at that time. Staff witness Barrington testified during the hearing that the Staff was of the opinion that the use of an escalation factor based upon the first quarter of 1983, which is now available, would be appropriate in calculating AFR storage costs. Staff witness Montgomery testified that the National Waste Policy Act of 1982 provided an even more current estimation of cost figures for permanent storage. The act specifics a cost of 1.0 mil per KWH on electricity generated by a nuclear power reactor. Witness Montgomery testified that this figure should be used in lieu of the original Staff recommendation for the permanent disposal cost portion of the calculation (Staff Ex. 2, p. 28).

Neither the company nor OCC object to the use of the 1983 escalating factor for the AFR costs or the use of the 1 mil figure for permanent storage costs. The company argues on brief, however, that the 1 mil should also be adjusted by the escalating factor for the first quarter of 1983. We do not believe that it would be appropriate to adjust the 1 mil per KWH figure. As pointed out by OCC on brief, it did not become effective until after **[*94]** the first quarter of 1983. We find, therefore, that the 1983 escalating factor should be used for AFR storage costs and the 1 mil per KWH, unadjusted for the 1983 escalating factor, for permanent storage costs.

The final issue in this area concerns whether the AFR costs should be applied to all of the nuclear fuel coming out of the on site storage facilities. As pointed out by OCC, there are seven batches of nuclear fuel in the present fuel cycle, only four of which will have AFR costs associated with them (Tr. V, pp. 127-128, 155). The Staff's calculation included AFR costs for all seven batches. We find that the Staff's calculation should be adjusted to remove the AFR costs associated with the three batches which will not incur these costs. Based upon the above discussion, we adopt the Staff's calculation as set forth in its revised schedules, adjusted for the removal of the AFR costs for the three batches that will not incur such costs.

Advertising

As in many previous Commission cases, a great deal of dispute has arisen with respect to which expenses should properly be included in test year operations for advertising. The Staff eliminated all of the advertising contained **[*95]** in FERC Account 909, Informational and Instructional Advertising Expenses, except programs entitled "R-values" and "Its Been Done," as promotional or institutional advertising. The Staff also excluded all of the advertising in FERC Account 930.1, General Advertising except for three TV and six radio commercials on the same basis (S.R., p. 8, Schedule 3.16). OCC is in agreement with the Staff's recommendation on these ads; however, the company objects.

The company contends that the ads excluded from Account 909 are intended to inform its customers of the efficiencies in the use of weather-stripping and of the electric heat pump and add-on heat pump, and the benefits of overall planning of energy consumption in home construction. Company witness Hall testified that these ads provided a valuable service to the customers of Ohio Edison. In addition, Mr. Hall testified that these ads were similar to ads the Commission has allowed in other rate cases. The company proposes that these ads, totalling $347,065, are proper expenses to be included in this case. The ads are set forth in Company Exhibit 9. The company makes similar contentions with respect to some of the ads excluded **[*96]** from Account 930.1. These ads, copies of which are set forth in Company Exhibit 10, total $18,628 in cost.

In Cleveland v. Pub. Util. Comm., 63 Ohio St. 2d 62 (1980), the Supreme Court classified advertising into four categories as a basis of including or excluding such expenses. These categories are: (1) institutional, which is designed to enhance or preserve the corporate image of the utility or to present it in a favorable light; (2) promotional, which is designed to obtain new utility customers, to increase usage by present customers, or to encourage one form of energy in preference to another; (3) informational, which is designed to inform consumers of rates, charges and conditions of ser-

vice, of benefits and savings available, and of safety precautions, emergency procedures, and other similar matters; and (4) conservation, which is designed to inform the customer of the means by which he can conserve energy and reduce usage. Cleveland, supra, pp. 70-71. The Court observed that while informational and conservation advertising may properly be considered a cost of rendering utility service because of the obvious benefits such advertising confers **[*97]** upon consumers, promotional and institutional advertisements do not possess this same quality. Cleveland, supra, pp. 70-71. The Court held that unless an applicant utility can demonstrate a direct, primary benefit to customers from its institutional and promotional advertising, the expenses associated with these advertisements are to be disallowed. Cleveland, supra, p. 73.

This is not the first time the Commission has been confronted with viewing specific advertisements to attempt to place them in the categories as mentioned above. In the Order on Rehearing in Cleveland Electric Illuminating Company, Case No. 79-537-EL-AIR (January 21, 1981), we set forth some quidelines in attempting to distinguish the characteristics of the specific ads in question, where we stated at p. 6:

All advertising imparts information. The characteristics which distinguishes informational advert ising from promotional or institutional advertising as the terms are defined by the Court in Cleveland, supra, is that the acceptable informational advertisement contains a message which the customer may act on in connection with his usage or prospective usage of the service **[*98]** provided. The critical question is whether the consumer can respond, to his benefit, to the message conveyed. Ads which merely tout the value or quality of the service, or the efforts required by the company to provide the service, although they may be of interest to some customers, do not satisfy this criterion. Moreover, the potential customer response must bear a direct relationship to an aspect of the actual provision of service. This required nexus is not present when the intent of the advertisement is to influence customer opinion, even if the company believes that customer support for a particular company position will ultimately result in lower rates than might otherwise be anticipated.

As the record in this case demonstrates, differences of opinion can arise with respect to specific ads as to what the dominant message of a particular ad might be. Suffice it to say we will exercise our best judgment in interpreting the ads at issue.

The ads at issue from Account 909 set forth a message concerning the prudence of considering the energy consumption in home construction, the benefits associated with the heat pump and add-on-heat pump, and overall energy conservation (Co. **[*99]** Ex. 9). OCC argues that the dominant message contained in the ads is promotional, to sway customers or potential cumtomers in their choice of an energy source. Company witness Hall testified that this could be one message derived from these ads but that another message is to provide information to the customer on energy conservation. Mr. Hall stated that the heat pump ads are intended to inform customers of the efficiencies of these systems resulting in a direct benefit to the consumer. He noted, for example, that a customer may not realize that such units function as air conditioning systems as well as heating systems (Co. Ex. 8-E, p. 11). In addition, upon cross examination, Mr. Hall noted that the ads convey to a new home purchaser valuable information on energy conservation in home construction that would be helpful in assuring that the home was constructed in an energy efficient manner (Tr. V, p. 113). Mr. Hall also testified that similar ads have been allowed by the Commission in the applicant's most recent rate proceeding, Case No. 81-1171-EL-AIR, and that of the Cleveland Electric Illuminating Company, Case No. 81-1378-EL-AIR. We find, based upon the record as a whole, **[*100]** the dominant message of these ads is informational and conservational and that their costs should be included in operating expenses.

The company's argument with respect to the ads disallowed from Account 930.1 is slightly different. The main point set forth by Mr. Hall is that the Staff allowed ads in this case that were very similar to those disallowed. In Company Ex. 10 the company set forth copy of two ads that were allowed, as well as four ads that were disallowed. Upon review of company Exhibit 10 we find that we must agree with the company that the dominant message of the two ads that were allowed is very similar to the four ads that were disallowed. We find, however, that the dominant message of all of the ads in company Exhibit 10 is promotional and institutional and that expenses associated with all of these ads should be removed from allowable expenses.

The next area of dispute involves expenses associated with the cost of labor of Ohio Edison's employees in preparing advertisements. The amount at issue is $116,016 which was booked to Account 909. Company witness Hall indicated that a portion of these expenses represent work on advertising that has been disallowed **[*101]** by the Staff (Tr. V, pp. 113-114). OCC contends that this entire amount should be excluded from the rate proceeding in that it cannot be determined what portion of these dollars are attributable to advertising which has been approved by the Commission or which has been excluded from test year operations. Staff witness Barrington testified that the Staff's initial position

in preparing this case was that these expenses were to be excluded, although he recommended that they be included in his testimony at hearing (Staff Ex. 3, p. 11, Tr. X, p. 49). The company did not offer any testimony is support of these expenses. Upon review of the record we find that this amount should be excluded.

The final issue regarding advertising involves more nostalgia the dollars. The company includes in its advertising expense in FERC Account 909 its cost for the use of the "Reddy Kilowatt" copyright. Reddy Kilowatt is an organization that provides public relations services to the utility industry, a part of which is the Reddy Kilowatt Logo which has been used by numerous electric utilities for many years to stand for reliable electric service (Tr. V, pp. 105-106). Reddy Kilowatt is a small cartoon **[*102]** character. For use of this logo the company pays a fee of $15,276 annually (Id., p. 107). Although we hesitate to find an endearing character such as Reddy Kilowatt provides no benefit to the customers of Ohio Edison, we are certain that this is not the type of expense the Supreme Court had in mind when it established the guidelines set forth above. We find, therefore that this amount should be excluded from advertising expense.

Depreciation Expense

The first issue with respect to determining the proper level of depreciation expense is the treatment to be afforded the Air Quality Control System projects (AQCS) at the W.H. Sammis plant. These units went into service during the test year but subsequent to the date certain. The Staff initially made no provision for depreciation associated with these units in test year expense levels and the company objected. Staff witness Fox testified during the hearing, however, that he was of the opinion that the additional jurisdictional depreciation expense associated with these units should be recognized for the purposes of this case and recommended an amount of $3,120,187 which represents the annualized calculation of 3.39 percent **[*103]** accrual rate to the $92,040,922 jurisdictional plant addition (Staff Ex. 1, p. 35).

OCC argues that the adjustment would not be appropriate. OCC witness Haskins testified that since these units did not go into service until after the date certain the recognition of depreciation expense would result in a mismatch between operating income and rate base (OCC Ex. 2, pp. 21-22). We disagree. The purpose of such an adjustment is to make test year operating expenses representative of the level of expense the company will experience when these rates are in effect. The Staff in numerous cases has made such adjustments to normalize the effects of an event which has occurred during the test year (See, e.g., Beaver Valley No. 1 Production Expense, Ohio Edison Company, Case No. 78-1567-EL-AIR, supra). The impact that major plant additions will have on expense levels are the type of occurrence that must be recognized if the rates we set are to be reflective of normal operations. We, therefore, will adopt the proposal made by the Staff.

The next issue concerns the treatment to be afforded depreciation on the generating units at Mad River and West Lorain which have been placed **[*104]** on cold reserve subsequent to date certain. The company contends that depreciation on these units is appropriate if the Commission were to include them in rate base. OCC and the Staff argue that such depreciation should not be included considering their cold standby status regardless of their rate base treatment. Although we have included these units in rate base, as discussed previously, the record reveals that it is not likely that these units will operate during the period these rates will be in effect. The key fact that resulted in their inclusion in rate base was their operational status as of date certain, which changed before the end of the test year. We find that since these units are not likely to generate power during the period these rates will be in effect it is improper to include the associated depreciation expense in test year operations. This treatment is consistent with including depreciation on the AQCS units. We, therefore, adopt the Staff's exclusion.

Finally, the Staff annualized the depreciation expense to reflect the adoption by the Commission of updated accrual rates in the company's last rate case, Case No. 81-1171-EL-AIR. We find that this treatment **[*105]** is appropriate and should be adopted.

Mad River and West Lorain Operations and Maintenance Expenses

As noted previously, we have included the facilities at Mad River (except for the oil fired CTA unit) and West Lorain in rate base. This determination was predicated upon their status as of date certain, the controlling factor being that they in fact were ir service on that date. This decision, however, does not control what treatment should be afforded operations and maintenance expenses.

The record in this case reveals that it is unlikely that any of the units at Mad River or West Lorain will generate power during the period these rates will be in effect. Indeed, the company concedes that all expenses associated with these units should be eliminated except for $43,692 for test year generation and $198,000 for miscellaneous other power expense (Co. Ex. 8-E, pp. 13-15). We do not dispute the necessity of replacing test year generation from some other

source. Therefore, we find the $43,692 figure should be included in operations expenses. We do not reach the same result for the miscellaneous other power expense. These expenses go to keep the units at West Lorain maintained **[*106]** and operable. Considering the fact that these units are not expected to generate power during the upcoming period, we find that these expenses are not appropriate and should be excluded.

Property Taxes

The applicant objected to the property tax rate that was used and the decrease in property taxes associated with the exclusion of certain property from rate base. Company witness J. Sitarz testified that the wrong composite rate was used in determining jurisdictional assessed valuation (Co. Ex. 8-F, p. 3). Staff witness Barrington agreed (Staff Ex. 3, p. 6). We will adopt the proposal component rate recommended by Mr. Sitarz.

Mr. Sitarz also testified that if there are any increases in rate base resulting from the West Lorain and Mad River units that property taxes should also be adjusted. We disagree. Consistent with our findings with respect to operations and maintenance expenses we are of the opinion that these expenses should also be excluded.

Residential Conservation Service Rpogram (RCSP)

The purpose of RCSP is to encourage the installation of energy conservation measures, including renewable resource measures, in existing houses, by residential customers of **[*107]** large gas and electric utilities as well as home heating suppliers. Generally, the RCS Program requires the affected utilities, as well as those public utilities who are participating on a voluntary basis, to provide various energy surveys and audits to eligible customers requesting such services. The program also requires the utilities to make arrangements for the financing and installation of conservation measures.

Two issues have arisen with respect to RCSP. First, the company argues that it should be allowed to recover the full amount of the $102,000 estimated mailing expense that the company will incur in its bi-annual mailing required by the program. The Staff allowed only one half of this expense since the mailing occurs only once in two years, reasoning that the mailing expense should be amortized over a two year period. The company points out, however, that in Ohio Edison Company, Case No. 80-141-EL-AIR (February 11, 1981) the Commission authorized the full mailing expense, reasoning that if the full expense were not allowed, the company would be precluded from recovering the second half in its next rate case because it would be a past loss. We will allow the full **[*108]** expense.

The remaining issue concerns OCC's objection that the Commission should conduct a performance evaluation on the applicants conduct regarding the RCSP. As pointed out by the Staff witness Barrington, however, this is a federally mandated program, the control of which is maintained at the federal level. We will overrule OCC's objection on this point.

Federal and State Income Tax Expense

The applicant objected to numerous areas in the calculation of federal income tax. Staff witness Montgomery testified that he agreed with almost all of the applicant's proposals in this area and a discussion of these issues is set forth in his testimony (Staff Ex. 2, pp. 16-19). None of the parties have objected to these adjustments. We find that they are supported by the record and should be adopted. We note that, consistent with our treatment afforded the depreciation expense on Mad River and West Lorain, the depreciation expense associated with these units should be removed from the calculation of income taxes.

Rate Case Expense

OCC initially objected to the inclusion of any rate case expense; however, it did not pursue its objection on brief. The company's actual expense **[*109]** was $41,071.08. The company should be commended for its efforts to reduce this expense. The Commission notes with pleasure the comparatively modest amount presented by the company as rate case expense, especially when compared to other cases recently before us. We find that this figure is reasonable and should be amortized over a one year period.

Miscellaneous

The applicant objected to the failure of the Staff Report to provide for recovery of line losses associated with past deferred Quarto costs which are now being amortized. Company Wilson testified that the Commission recognized such a provision in the company's previous rate case, Case No. 81-1171-EL-AIR. His proposed adjustment is shown in

his pre-filed testimony (Co. Ex. 8-H, p. 2). Staff witness Montgomery agreed with this proposal (Staff Ex. 2, p. 16). No party has objected. We find the proposal is well made and should be adopted.

The company also objected to the Staff's calculation of gross receipts tax. Staff witness Barrignton agreed with one element of the objection, the use of the company's proposed non-taxable receipts ratio (Staff Ex. 3, p. 7). We find that the non-taxable ratio proposed by the company **[*110]** should be used.

The company initially objected to the exclusion of expenses associated with the Clinch River Liquid Metal Fast Breeder Reactor. On brief, however, the company acknowledged the uncertainty surrounding the project and did not pursue its position (Company Reply Brief, p. 30). We find these costs should be excluded.

OCC initially objected to the use of the test year uncollectible ratio, but did not pursue this point on brief. Staff witness Barrington testified that the ratio was reasonable when compared to the ratio over the past three years (Staff Ex. 3, pp. 11-12). We will approve the test year ratio.

OCC objected to the levels for PUCO and OCC maintenance assessments. Staff witness Barrington testified that the Staff disagrees with OCC's belief that the prior years credits will continue on any consistent basis. We have found in numerous cases that the use of the actual assessment is appropriate (See, e.g., Dayton Power and Light Company, Case No. 82-517-EL-AIR, supra). We will adopt the Staff's proposal.

OCC objected to the inclusion in test year expenses of an amount for the Allis-Chalmers Coal Gasification Project. As we noted in the applicants' **[*111]** last rate case at pp. 22-23:

The purpose of this project is to build and operate a commercial unit that will process coal to produce kilngas (Tr. IV, 65). Although it would not be practical to retrofit existing company units so that kilngas could be burned and the company does not presently have under construction any plants that will use kilngas, the applicant's interest in this research project is to find an alternative to coal so as to take advantage of its available supply of high-sulfur coal to fuel future generating plants at an economical cost (Tr. IV, 65-67). The Commission believes this project, as a part of research and development, is reasonable and should be reflected in test year operating expenses. OCC's objection should be overruled.

OCC's objection is again overruled.

OCC objected to the inclusion in test year expenses of an amount for applicants' East Palestine Office. The company agrees with OCC's recommendation except for the exclusion of $3600 for the lease payment. We find that OCC's proposal is well made and that the expenses associated with these offices, including the $3600 lease payment, should be excluded.

The Staff in the Staff Report included the **[*112]** Ohio Department of Energy Utility Fee both in O&M expense and in Taxes Other Than Income Taxes (OCC Ex. 2, p. 20). Staff witness Barrington acknowledged the error (Staff Ex. 3, p. 14). Staff witness Barrington also testified that the Ohio Departement Fee should be $128,977 (Staff Ex. 3, p. 14) rather than the $149,557 appearing on Sch. 3.24f of the Staff Report. OCC agrees with the Staff. We will adopt the Staff's revised position.

Operating Income Summary

Consistent with the foregoing discussion, the Commission finds the company's jurisdictional adjusted revenues and expenses for the test year ending July 31, 1983, to be as follows:

	(000's Omitted)
Operating Revenues	$1,222,791
Operating Expenses	
Operation and Maintenance	719,990
Depreciation	91,659
AFUDC Amortization	42
Taxes Other than Income Tax	110,550
Federal Income Taxes	91,452
Total Operating Expenses	$1,013,693

Net Operating Income $ 209,098

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 $209,098,000 based **[*113]** on adjusted test year operations. Applying this dollar return to the jurisdictional rate base results in a rate of return of 9.90 percent under present rates. This rate of return is below that recommended as reasonable by 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.

Under the rates proposed by the company, additional gross revenues of $203,332,000 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 $103,814,000 resulting in income available for fixed charges of $312,912,000. Applying this dollar return to the jurisdictional rate base results in a rate of return of 14.82 percent. Although it is apparent that the present rates are inadequate, the increase requested by the applicant results in a rate of return **[*114]** which is higher than that recommended by the Staff. The Commission must therefore examine the rate of return proposal submitted in this proceeding in order to determine a fair rate of return for purposes of establishing just and reasonable rates.

RATE OF RETURN

The parties and the Staff recommend that the Commission authorize an overall rate of return of 12.37 percent for the purpose of this proceeding. Implicit in this rate of return recommendation is a 15.78 percent return on common equity and a 5.39 percent factor to be used by the Commission in calculating the federal and state income tax interest deduction (Joint Ex. No. 5). Based upon the adoption of this recommendation the parties proposed to withdraw their objections in this area. Also, as part of this recommendation and stipulation the parties and the Staff agree that the treatment afforded the gains from the company's bond/stock swap and bond reacquisition authorized in the company's prior rate case, Case No. 81-1171-EL-AIR, should not be altered.

In making a rate of return determination the Commission has placed greater reliability on the use of the Staff's DEF methodology than on other techniques of estimation. **[*115]** As we have noted on numerous occasions the DCF method is a market measure of estimating the return requirements of the investors of a given utility and as such takes a myriad of factors and occurrences into consideration. We find that the recommendation of 12.37 percent, as an overall rate of return, is fair and reasonable based upon the Staff's DCF methodology. We further find that this overall rate has been determined with reference to the actual embedded cost of debt to the company and that implicit in the overall rate is a 15.78 percent return on equity. In addition, based upon the stipulation, we will not change the treatment afforded the bond/stock swap and bond reacquisition as determined in the company's last rate case. The Commission notes, however, that this finding does not signify that we agree with the treatment afforded the debt/equity swap issue. We are adopting the proposals of the parties for the purposes of this case only, as it was the result of a stipulation and recommendation entered into by all of the participants in this proceeding. The 5.39 percent factor should be used in computing federal and state income tax interest deduction

As part of the stipulation, **[*116]** the parties, except OCC, and the Staff further stipulate and recommend that the Commission recognize that an explicit annual adjustment to the company's cost of capital would have been required to reflect the impact of the termination of the four CAPCO generating units in 1980 had a methodology other than the Staff's DCF methodology being used in the cost of capital analysis. In Ohio Edison Company, Case No. 80-141-EL-AIR, supra, we authorized an amortization of Ohio Edison's share of these terminated units. This issue was subsequently addressed by the Supreme Court in another case involving the Cleveland Electric Illuminating Company (CEI). In Consumers' Counsel v. Pub. Util. Comm., 67 Ohio St. 2d 153 (1981) the Supreme Court made a determination that these costs could not be passed through to CEI's ratepayers. In Cleveland Electric Illuminating Company, Case No. 81-146-EL-AIR, supra, we specifically recognized the increased risk to utility investore that resulted from the Supreme Court's decision by adjusting the return on equity accordingly. The basis of that decision stemmed from the fact that the Supreme Court's decision was issued during the base period **[*117]** that the Staff used in computing the yield component of its DCF methodology. The Staff has consistently utilized a twelve month period in developing an average stock price to use in computing an appropriate yield. Since the twelve month period used by the Staff included

data both before and after the Supreme Court's decision, we found that it did not recognize the total effect of the increase in investor perceived risk that resulted from the Court's ruling. Thus it was appropriate to recognize an adjustment to the return on equity to reflect the full impact of the increase risk perceived by the investors of CEI.

As we have noted, the DCF model employed by the Staff is a market based approach that takes into consideration a variety of factors. In addition, the Staff's DCF methodology is company specific in that it is based upon the specific capital requirements of the utility before the Commission at a particular point in time. The DCF methodology used by the Staff in the instant case was based upon information for the twelve months ending June of 1983, well after the Supreme Court's decision discussed above. The July 1981 Supreme Court decision, as well as the subsequent book **[*118]** amortization of the costs associated with the terminated units, was thus known by and recognized in the market activity of Ohio Edison's stock during the period the Staff used to compute a yield component. Thus while no explicit adjustment is recognized in the Staff's DCF method, the recommendation presented implicitly includes an allowance for the increased investor perceived risk that resulted from the Supreme Court's decision, in that the return requirement demanded by Ohio Edison's investors is higher than it otherwise would have been. We therefore find that the continued book amortization of the cost associated with the terminated units in the amount of $8,487,946 per year is appropriate.

AUTHORIZED INCREASE

A rate of return of 12.37 percent applied to the jurisdictional rate base of $2,111,159,000 approved for purposes of this proceeding results in an allowable return of $261,150,000. 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 the allowance for federal income tax of $45,396,000, in the allowance **[*119]** for other taxes of $4,049,000, and in the uncollectibles of allowable expenses to $454,000. Adding the approved return to these allowable expenses results in a finding that the applicant is entitled to place rates in effect which will generate $1,324,742,000 in gross annual operating revenues. This represents an increase of $101,951,000 over the rates which are presently in effect.

POWERPLANT PRODUCTIVITY

Ohio Edison has been reporting the immediate past performance of its generating units on a quarterly basis. The Staff has monitored these reports and has concluded that the applicant has achieved an increase in both operating efficiency and equivalent availability in the period 1979-1981 (S.R. pp. 31-34). In 1982 both the operating efficiency and equivalent availabilities declined from the 1981 levels, primarily due to the availability of the Sammis Unit No. 6. The Staff remains encouraged by these results and recommends that the applicant continue its actions that have resulted in improved power plant performance. The Commission is hopeful that the applicant will continue to strive to improve its operating efficiencies. Ohio Edison should continue to submit these quarterly **[*120]** reports to the Staff.

RATES AND TARIFFS

There were a number of objections filled in this proceeding which were directed to the area of rate design and revenue distribution. All of these objections were withdrawn, however, subject to the acceptance by the Commission of Joint Exhibits 1, 2, 3 and 4. In addition to withdrawing its objections, Luntz Corporation also requested that its service complaint be dismissed if the stipulations and recommendations are adopted by the Commission. While stipulations and recommendations are not binding upon the Commission, such stipulations are entitled to very careful consideration, particularly when they represent unanimous agreement among interested parties as to a reasonable disposition of the matters previously in controversy. See Cincinnati Gas & Electric Company, Case No. 76-302-EL-AIR (May 4, 1977).

Revenue Distribution

Joint Ex. 1 provides that if the applicant receives full rate relief the distribution of the increases for the various classes should be as shown on the updated E-4 Schedules of the company's Standard Filing Requirements, except that the revenue distribution for the General-Service Small Class (Rate Class **[*121]** 50) should be reduced by the equivalent of $2.9 million and the revenue distribution for the General Service-Medium Class (Rate Class 52) should be increased by the equivalent of $2.9 million. The parties further recommend that if the company receives less than full rate relief, the reduction should be reflected only in the rates for residential and general service classes and that the reduction should be reflected by proportionally reducing the proposed increases in the base rates for each of those classes as adjusted above. The Commission has authorized a revenue increase less than what the company proposed. After reviewing the testimony in the exhibit, the Commission finds the stipulation to be reasonable and supported by the evidence. The stipulation is adopted.

Residential Rate Design (Rate 10)

Joint Exhibit 4 provides that if Ohio Edison were to receive full rate relief, the signatory parties and the Staff would stipulate to the following rate structure for Rate 10:

Customer Charge per month	$1.75
First 600 KWH per KWH	8.339
Balance to 125 hours use per KWH	7.786
Load Management:	
Over 125 hours use (125 KWH per KW of billing demand) per KWH	1.578

[*122]

It also provides that in the event the Commission should grant the applicant less revenue than requested, the customer charge should remain at $1.75 per month and that any such reduction should be reflected by proportionally reducing the proposed increases in the base rates for each of the blocks, respectively. The parties and the Staff also recommended that the miscellaneous charges contained on Proposed Tariff Sheet No. 6, Exhibit B-1 in Case No. 83-426-EL-ATA, should be approved by the Commission except that the language in the Meter Test Charge section shall be revised as follows: "When the company tests a meter at the request of the customer a charge of $25.00 shall be paid by the customer after the first testing is performed (Standard Rules and Regulations, Section X, Paragraph C)." The stipulation also provides that the company's rules and regulations shall be revised accordingly.

In addition to the Meter Test Charge provision, Proposed Sheet No. 6 also contains the following:

Disconnection Call Charge:

When service is about to be discontinued pursuant to the foregoing rules and regulations governing disconnection for nonpayment of past due bills and the customer makes **[*123]** a payment to the collector, a charge of $5.00 will be assessed for the trip (Standard Rules and Regulations, Section XII, Paragraph B).

Reconnection Charge:

When service has been disconnected pursuant to Standard Rules and Regulations, Section XII, Paragraph C, the following charges shall apply for reconnection of service.

Reconnection Charge:	
Normal Business Hours	$10.00
After Normal Business Hours	$20.00

Dishonored Check Charge:

A charge of $5.00 shall be made for the additional cost incurred by the company for processing checks that are returned by the bank (Standard Rules and Regulations, Section VII, Paragraph F).

As noted above the adoption of these provisions was also stipulated by the parties and the Staff.

The Commission also finds that the stipulations and recommendations set forth in Joint Ex. 4 are reasonable and should be adopted. We note that this includes the adoption of the Disconnection Call Charge, the Reconnection Call Charge, and the Dishonored Check Charge, as well as Meter Test Charge. Since the Commission has authorized a revenue level less than that proposed by the company, the applicant is directed to file tariffs proportionally reducing **[*124]** the proposed increases in the base rates for each of the blocks.

General Service Classes (50, 52 and 53)

In addition to the stipulation regarding revenue distribution there were also stipulations regarding specific rate design (Joint Exs. 2 and 3). Joint Exhibit 2 provided that the reduction in rates to the General Service Class that results from less than full rate relief should be reflected in the General Service Rates by a proportional reduction of the company's proposed increases in all rate elements except the tail block energy charges which should not be reduced below the following charges:

a) 0.80 per KWH in Rates 50 and 52 (Secondary Service); and,

b) 0.69 per KWH in Rate 53 (Primary Service)

The parties and the Staff recognized in the stipulation that such reductions may vary marginally from rate element to rate element in order that the rates so determined will generate the revenue requirement granted by the Commission. We find the provisions should be adopted.

The General Service customers also entered into another stipulation to modify certain provisions of the General Service Tariffs. These provisions are set forth in Joint Ex. 3 and the Attachments thereto. **[*125]** Company witness Wilson testified that after Joint Ex. 3 was signed it was brought to his attention that one of the language changes that was incorporated into the language of the General Service-Large (Rate 53) Tariff could cause an improper interpretation of what was intended under the tariff (Tr. XII, pp. 50-51). Mr. Wilson indicated that the language agreed to by the parties should be modified and the corrected language was set forth on Company Ex. 22. We find that the provisions of the stipulation are reasonable and should be adopted. As noted by the parties, we do not adopt the specific rates set forth on the Attachments I and II, as they represent rate levels based on full rate relief. The specific rates are covered by the stipulations previously discussed. Attachment III, revised rates 50 and 52 bill distributions, shall be used in the calculation of final revenues granted by the Commission in this case.

Effective Date

Section 4909.42, Revised Code provides that if the Commission has not acted upon a rate application within 275 days after the application is filed, the applicant utility may, upon the filing of an undertaking in an amount determined by the Commission, **[*126]** place its proposed rates in effect, subject to the condition that any amounts collected in excess of those finally determined by the Commission shall be refunded to the company's customars. The Commission makes every effort to issue its rate orders within the 275 day period, in order to avoid the customer confusion which might result if the refund provision were invoked. Unfortunately, due to the length of the hearings and the number of complex issues in this case, it was not possible for the Commission to issue an Opinion and Order within the 275 day period. However, Ohio Edison has not attempted to place its proposed rates in effect, and the Commission believes that basic principles of fairness dictate that the applicant should not be penalized for its forbearance. The Commission, therefore, finds that the appropriate course in this proceeding is to provide that the new tariffs shall take effect on the date they are accepted for filing by the Commission. The customary notice requirements will, of course, be retained, and such notice should be mailed to the affected customers upon approval of its form by the Commission.

FINDINGS OF FACT:

From the evidence of record in **[*127]** this proceeding, the Commission now makes the following findings:

1) The value of all of applicant'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, Revised Code as of the date certain of October 31, 1983, is not less than $2,111,159,000.

2) For the twelve month period ending July 31, 1983, the test period in this proceeding, the revenues, expenses, and income available for fixed charges realized by applicant under its present rate schedules were $1,222,791,000, $1,013,693,000, and $209,098,000 respectively.

3) This net annual compensation of $209,098,000 represents a rate of return of 9.90 percent on the jurisdictional rate base of $2,111,159,000.

4) A rate of return of 9.90 percent is insufficient to provide applicant reasonable compensation for the service rendered customers affected by the application.

5) A rate of return of 12.37 percent is fair and reasonable under the circumstances presented by this case and is sufficient to provide applicant just compensation and return on the value of its property used and useful in furnishing electric service to its **[*128]** jurisdictional customers.

6) A rate of return of 12.37 percent applied to the rate base of $2,111,159,000 will result in income available for fixed charges in the amount of $261,150,000.

7) The allowable annual expenses of the company for purposes of this proceeding are $1,063,592,000.

8) The allowable gross annual revenue to which the applicant is entitled for purposes of this proceeding is the sum of the amounts stated in Findings 6 and 7, or $1,324,742,000.

9) The company's present tariffs governing service to customers should be withdrawn and cancelled and the applicant 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 Revised Code; further, the applicant has complied with the requirements of those statutes.

2) A staff investigation was conducted and a report duly filed and mailed, and public hearings have been held herein, the written notice of which complied with the requirements of Section 4909.19 Revised Code.

3) The existing rates and **[*129]** charges as set forth in the tariffs governing electric service to customers affected by this application are insufficient to provide the applicant with adequate net annual compensation and return on its property used and useful in the rendition of electric service.

4) A rate of return of 12.37 percent 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 governing service to customers affected by this application 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 the Ohio Edison Company for authority to increase its rates and charges for electric service 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 governing service to customers affected by this application and to file new tariffs consistent with the discussion and findings **[*130]** 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. The new rates included therein shall be applicable to all service rendered on or after the effective date. 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 service complaint noticed by Luntz Corporation be and hereby is dismissed. 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 **[*131]** parties of record.

THE PUBLIC UTILITIES COMMISSION OF OHIO

Legal Topics:

For related research and practice materials, see the following legal topics:
Energy & Utilities LawAdministrative ProceedingsJudicial ReviewGeneral OverviewEnergy & Utilities LawElectric Power IndustryState RegulationGeneral OverviewEnergy & Utilities LawUtility CompaniesRatesRatemaking FactorsRate Base

EXHIBIT 2

In the Matter of the Application of The Dayton Power and Light Company for authority to modify and increase its rates for electric service to all jurisdictional consumers

82-517-EL-AIR

PUBLIC UTILITIES COMMISSION OF OHIO

1983 Ohio PUC LEXIS 70; 53 P.U.R.4th 217

April 27, 1983

APPEARANCES:

Messrs. Smith & Schnake, LPA, by Messrs. Charles J. Faruki, Paul L. Hortstman and D. Jeffrey Ireland, 2000 Courthouse Plaza, N.E., P.O. Box 1817, Dayton, Ohio, 45401, and Mr. Stephen F. Koziar, Jr., Counsel and Secretary, The Dayton Power and Light Company, Courthouse Plaza, S.W., Dayton, Ohio, 45401, on behalf of the Applicant, The Dayton Power and Light Company.

Mr. Anthony J. Celebrezze, Jr., Attorney General of Ohio, by Ms. Marsha Rockey Schermer and M. Steven H. Feldman, 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. Janine L. Migden and Mr. Richard P. Rosenberry, Associate Consumers' Counsel, 137 East State Street, Columbus, Ohio, 43215, on behalf of the residential consumers of The Dayton Power and Light Company.

Mr. Lee C. Falke, Montgomery County Prosecuting Attorney, Dayton, Ohio, and Messrs. Henry W. Eckhart and Herbert C. Hunt, Jr., 50 West Broad Street, Columbus, Ohio 43215, on behalf of the Board of County Commissioners of **[*2]** Montgomery County, Ohio, intervenor, and Messrs. Eckhart and Hunt on behalf of Miami County and other units of local governments, intervenors (hereinafter Montgomery County, et al.).

Mr. Robert B. Clayton, Office of the Staff Judge Advocate, 2750th Air Base Wing, Wright-Patterson Air Force Base, Ohio 45433, on behalf of Executive Agencies of the United States Government, intervenor.

Messrs. Vorys, Sater, Seymour and Pease, by Mr. Sheldon A. Taft, 52 East Gay Street, Columbus, Ohio 43215, on behalf of Miami Valley Regional Transit Authority, intervenor.

Bell & Randazzo Co., LPA, by Messrs. Samuel C. Randazzo and Langdon D. Bell, 21 East State Street, Columbus, Ohio, on behalf of Industrial Electric Consumers, General Motors Corp., Duriron, Inc., Southwestern Portland Cement, Corning Glass Works, P.H. Glatfelder Co., Mead Corporation and Mid-Valley Pipeline Company, intervenors.

Mr. Nolan Yogi, 5555 Wierville Road, New Knoxville, Ohio, 45871, on behalf of The Way International, intervenor.

PANEL: [*1]

Michael Del Bane, Chairman; William H. Brooks; Alan R. Schriber; Ashley C. Brown

OPINION: OPINION AND ORDER

The Commission, coming now to consider the above-entitled application filed pursuant to Section 4909.18 Revised Code, and the Staff Report of Investigation issued **[*3]** pursuant to Section 4909.19 Revised Code; having appointed its attorney examiner, Joseph P. Cowin, pursuant to Section 4901.18 Revised Code to conduct a public hearing and to

certify the record directly to the Commission; having reviewed the testimony and exhibits introduced in evidence at the public hearing commencing March 2, 1983, and concluding April 18, 1983; and being otherwise fully advised in the premises, hereby issues its Opinion and Order.

HISTORY OF THE PROCEEDINGS:

The Dayton Power and Light Company (DP&L, applicant or company), the applicant herein, is an Ohio corporation authorized to engage in the business of supplying electric service to consumers within this state. Applicant is a public utility and an electric light company 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 renders electric service to an estimated 421,000 retail customers located in a 24 county area in the west-central portion of this state which covers approximately 6,000 square miles. In addition to its retail and wholesale **[*4]** electric operations, applicant is also engaged in the business of providing natural gas and steam service. The company's present rates for electric service were established by order of this Commission in Dayton Power and Light Company, Case No. 81-1256-EL-AIR (December 22, 1982).

On April 2, 1982, The Dayton Power and Light Company served and filed a notice of its intent to submit a permanent rate increase application pursuant to Section 4909.18 Revised Code, as required by Section 4909.43(B) Revised Code and Rule 4901-7-01 Ohio Administrative Code (OAC). The proposed application was to affect rates to all jurisdictional customers.As a part of this prefiling notification, the company requested that June 30, 1982, be fixed as the date certain for the valuation of property and that the twelve months ending March 31, 1983, be established as the test period for the analysis of accounts. By motion filed May 12, 1982, applicant requested waivers of certain of the Commission's Standard Filing Requirements.

By Entry of April 21, 1982, the Commission approved the proposed date certain, but reserved ruling on the requested test period, directing that the company also file its analysis **[*5]** of accounts based on the traditional twelve-month period with the date certain midpoint, January 1, 1982 to December 31, 1982, as well as on the test year proposed by applicant. By Entry of June 9, 1982, the Commission granted, in part, the waiver request.

The instant application was submitted on July 2, 1982, and was accepted for filing as of that date by Commission Entry of August 18, 1982. The form of the legal notice proposed by the company was also approved.

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 Staff investigation was filed January 21, 1983, and was served as provided by law. Objections to the Staff Report were timely filed by the applicant and the following intervenors: the Office of Consumers' Counsel, Montgomery County, et al., Executive Agencies, the Miami Valley Regional Transit Authority, Industrial Electric Consumers, The Way International and The Ohio Cable Television Association. *

* Although Ohio Cable Television Association intervened in this proceeding, they did not enter an appearance during the hearing.

[*6]

By Entry of February 2, 1982, the Commission set this matter for public hearing. On April 8, 1983, the hearing was held at the Dayton Municipal Building in Dayton, Ohio, to afford members of the public an opportunity to present statements concerning the proposed rate increase. The taking of expert testimony began on March 2, 1983, at the offices of the Commission, 375 South High Street, Columbus, Ohio, before attorney examiner Joseph P. Cowin. The recorded transcript of the proceeding and the exhibits admitted in evidence during the twenty days of hearing have now been certified to the Commission by the examiner for its consideration.

COMMISSION REVIEW AND DISCUSSION:

This case comes before the Commission upon the application of the Dayton Power and Light Company, pursuant to Section 4909.18 Revised Code, for authority to increase its rates and charges for electric service to jurisdictional customers. Applicant alleges that its existing rates are insufficient to afford it reasonable compensation for the service it renders, and seeks Commission approval of permanent rates which would yield approximately $155,000,000 in additional gross annual revenues based on the Staff's **[*7]** analysis of operations during either test year.This requested relief represents an increase of approximately 24 percent.

ALLOCATIONS

It is necessary to apply certain allocation factors to the applicant's rate base valuation and to its operating income accounts in order to ensure that the rates ultimately authorized reflect the cost of providing jurisdictional electric service. The need for such allocation factors in the present case arises both because the applicant is a combination utility and because a portion of the applicant's electric sales are not affected by this application. The Staff reviewed the applicant's methodology and documentation supporting its allocation factors and concluded that said allocation factors are generally proper and reasonable for purposes of the present proceeding. Although the applicant failed to allocate a portion of its transmission plant for wheeling services provided to the Buckeye Power Company, the Staff included $990,322 of revenue received for this service in Period II operating income, which more than offsets the revenue requirements associated with including the additional transmission plant in rate base. With respect to operating **[*8]** expenses, the Staff allocated certain taxes on the basis of plant-in-service ratios rather than the factors proposed by the applicant in its Standard Filing Requirements. No parties raised any objections to the Staff's procedures as to allocations. Therefore, the Commission adopts the Staff's approach regarding this matter.

RATE BASE

The following table compares the initial jurisdictional rate base valuations as of the date certain which were proposed by the applicant, the Staff and the Office of Consumers' Counsel in the present case. Issues relating thereto will be discussed hereinafter.

Jurisdictional Rate Base Proposals
(000's omitted)

	Applicant n1	Staff n2	OCC n3
Plant in Service	$1,510,509	$1,413,320	$1,412,373
Depreciation Reserve	325,649	284,524	289,982
Net Plant in Service	$1,175,860	$1,128,796	$1,122,391
CWIP	243,691	n4 232,529	0
Working Capital	79,300	68,479	57,363
Less: Deferred Taxes and Other Deductions	36,704	34,629	35,403
Jurisdictional Rate Base	$1,462,147	$1,395,175	$1,144,351

n1 App. Ex. 27, Sch. B-1 (Updated)

n2 S.R., Sch. 7

n3 OCC Ex. 2, Schedule 2

n4 Reflects maximum CWIP which the Commission may include; however, the Staff recommended against a CWIP allowance in this case

[*9]

Plant in Service

Killen Spare Turbine Generator Equipment and Main Boiler Feed Pump Equipment

The applicant has included in plant in service the turbine generator equipment and main boiler feed pump equipment that was originally purchased for Killen Unit No. 1, the second unit at the Killen Station, which has been abandoned by the company. At the time Killen No. 1 was abandoned, the spare turbine generator at issue had already been

ordered from the General Electric Company and the generator was approximately two-thirds complete. In addition, with the cancellation of Killen Unit No. 1, DP&L made the decision to increase its ownership in the Killen Station from 49% to 67%, increasing its capacity share from 294 megawatts to 402 megawatts (App. Ex. 21, pp. 3-4).

The Staff excluded these items from rate base, stating that they are not in service, are not the type of equipment normally inventoried in materials and supplies, and are only potentially useful because the times are identical to equipment installed and in service at Killen Unit No. 2 (S.R., p. 14). The company objected. Company witness Smith testified at length that this equipment should be included in rate base **[*10]** because it is used and useful and necessary to maintain an adequate and reasonable level of spare parts at Killen Station. The company's position is that to insure the reliability of the station and to produce substantial cost savings to the customers of DP&L, the spare turbine and feed pump equipment should be included (App. Ex., pp. 2-21).

The company makes numerous arguments in support of its position. It argues that the Killen Unit No. 2 is unique in the industry in that it is a 600 megawatt coal-fired cyclic unit (Tr. VIII, p. 21). Witness Smith testified that a cyclic unit has the ability to match steam temperatures and metal temperatures enabling the unit to go through rapid start ups and shut downs (Tr. X, p. 41-42). A base load unit does not have the characteristics or the controls necessary to allow this type of operation. As a result longer start up periods are required for the steam temperatures and metal temperatures to match. Once a base coal unit is shut down it may take up to 16 to 24 hours to bring the unit back to full load, whereas, a cyclic unit may reach full load within four hours. This enables the company to take this unit off line in the nighttime and **[*11]** bring it back on in the morning, resulting in cost savings to DP&L's customers (Id.). The company argues that this type of operation results in increased wear and tear on the unit, necessitating additional spare parts and, in this case, justifying the used and useful aspect of the spare generator.

Staff witness Fox disagreed, however, with Mr. Smith's analysis. He testified that he did not view Killen Unit No. 2 as a cyclic unit and that it was designed primarily as a base load unit (Tr. X, p. 160). Mr. Fox was aware that some modifications were performed on the unit, but it was his opinion that, for all practical purposes, it was designed as a base load unit. Mr. Fox also indicated that, in his opinion, the risk of a major component failure at a cyclic unit was only slightly greater than in a base load unit (Id., p. 162). The Staff argues that the turbine generator does not represent a normal inventory of spare parts and that the cost involved is far in excess of the level of spare parts needed to maintain adequate reliable service to the customers of DP&L (Staff Ex. 2, p. 8). Mr. Fox indicated that in the absence of the spare turbine generator and feed pump the company **[*12]** might be required to expend approximately $1 million to provide a reasonable level of spare parts for the Killen unit; however, he conducted no specific analysis based upon the facts of this case to recommend what precise level would be appropriate (Tr. X, p. 171). It was the opinion that certain parts in the spare turbine, but not all of the parts proposed by the company for inclusion in this case, would be included in a normal inventory.

Mr. Smith also testified that a significant savings in revenues would result from the availability of the spare turbine generator. He estimated that over the life of the unit a total of $71.4 million would be saved by the consumers of DP&L as a result of the purchase of these items (App. Ex. 21, p. 14). Mr. Smith valued this savings in 1982 dollars. Some flaws are apparent, however, in Mr. Smith's analysis. For example, the analysis, although valued in terms of 1982 dollars, apparently does not take into consideration the time value of money. A dollar today is certainly more valuable than a dollar saved by the company 25 years into the future. In addition, the fact that the company will earn a return on this $17 million for years into the **[*13]** future would certainly impact on the total savings figure proposed by Mr. Smith. Finally, we are of the opinion that this analysis does not really address the issue we are attempting to resolve: does the company's proposal constitute a reasonable inventory of spare parts for the Killen unit?

The same basic arguments were made with respect to the company's proposal to include the main boiler feed pump in rate base as were set forth above with respect to the spare turbine. The Staff's position on this item is also the same. Although the company argues on brief that the Staff misunderstood the nature of the unit involved and the necessity for the spare generator, a review of the record reveals that Mr. Fox did understand the arguments set forth by Mr. Smith but simply disagreed with him. We do not believe it is appropriate to include units in plant in service solely on the assertion that they may someday be used or that a particular unit may be valuable in a given rare or unusual situation. See, e.g., Columbus and Southern Ohio Electric Company, Case No. 81-1058-EL-AIR (November 5, 1982). We must reject the company's proposal to include these items in rate base.

As **[*14]** an alternative, the company proposes that a partial list of items that make up the turbine generator be included (App. Ex. 21, Schedule S6S-1). The portion of this list allocated to DP&L is approximately $13,476,452, or three-fourths of the Killen Unit No. 1 turbine generator (App. Ex. 21, p. 20). As stated above, Staff witness Fox indi-

cated that a prudent level of spare parts might approximate $1 million; however, the Staff did not recommend that any level be included in rate base (Tr. X, pp. 171-172). Upon review of the record we do not believe that the company's alternative is significantly, superior to its original proposal. We do not accept the proposal that three-fourths of the these parts would be necessary to maintain a reasonable level of spare parts. We, therefore, find that based upon this record, the company failed to meet its burden of proof on this issue and no allowance should be included in rate base for Killen spare parts.

Wind Turbine Generators

DP&L has purchased, installed and is currently operating three wind turbine generators in its service territory. These wind turbine generators are located at Aullwood Audubon Center, Sinclair Community College, and **[*15]** the Ohio Hi-Point Joint Vocational School in Bellefontaine, Ohio (S.R., p. 14). The company contends that these generators are used and useful in supplying utility service and represent a reasonable and prudent investment necessary to enable it to fulfill its obligations under the Public Utility Regulatory Policy Act. The Sinclair unit was not connected to the applicant's system at the time the Staff made its field inspection; however, company witness Smith testified that all three units were producing electricity at the time of the hearing (Tr. VIII, p. 38).

The issue to be resolved is whether or not this property was used and useful at the date certain. Although this is not the company's normal method of generation, the units would be used and useful if they were generating electricity on date certain. The Staff Report indicates that one of the units was not generating at the time the Staff made its inspection although it does not indicate a date of the inspection. Upon review of the record we cannot find proof that this unit was in fact in service on date certain. Further, although we have a total amount of $77,000 for all three units we cannot determine from the record **[*16]** as it now stands the dollars associated with the unit that was not in service. We must find, therefore, that this item should not be included in rate base as we cannot ascertain what was used and useful at date certain. The Commission looks with favor upon this type of activity; however, the company failed to sustain its burden of proof.

Reserve For Depreciation

Section 4909.05(H) Revised Code requires that the Commission determine the proper and adequate reserve for depreciation to be deducted from the cost of the applicant's plant in service included in this proceeding. The Staff, as part of its investigation, tested the applicant's booked depreciation reserve level against the theoretical level determined using the most recently approved accrual rates. The Staff's theoretical reserve study based upon June 30, 1982 date certain plant balances determined the theoretical reserve to be 25.42% as compared to the applicant's actual booked reserve ratio of 23.11% (S.R., p. 17). The Staff found this to be appropriate and used the company's total reserve as a starting point in the calculation of the proper reserve level.

The Staff adjusted depreciation reserve to account for **[*17]** Tait deactivation and to reflect one day's depreciation on Killen No. 2 which went into service on date certain (S.R., Schedule I-9). The company objected to the Staff's failure to adjust depreciation reserve for the Killen coal handling and oil storage equipment excluded from rate base in Case No. 81-1256-EL-AIR. Staff witness Fox agreed with the company and recommended that the depreciation reserve be adjusted accordingly (Staff Ex. 2, p. 10). Mr. Fox also testified that if the Commission were to exclude the Killen spare turbine and boiler, an additional adjustment would have to be made. Given our decision on this issue we find that both adjustments are appropriate. Depreciation expense should also be adjusted to reflect these changes.

Consumers' Counsel objects to the Staff's treatment of depreciation for Killen Unit No. 2. As noted above, the Staff only included one day's depreciation in its calculation of depreciation reserve. The Staff annualized this depreciation for the purposes of determining depreciation expense (S.R., Schedules I-9 and I-9.1). OCC claims that this treatment is incorrect and that the Commission should synchronize the depreciation expense treatment **[*18]** with the treatment given depreciation reserve. OCC contends that the Staff's treatment results in an increase in the company's rates for the additional pro forma depreciation expense without giving ratepayers the benefit of this additional depreciation expense by including it in depreciation reserve. We must note that the proposal offered by the company and the Staff is consistent with our decision in Dayton Power and Light Company, Case No. 81-21-EL-AIR, supra. In that case we were faced with the exact same fact pattern with the East Bend unit.

The investors of DP&L are entitled to a return on the investment they have made in the company that is used and useful in providing utility service to its customers. The purpose of depreciation expense is to provide a systematic recovery to the investors of this investment. Deduction of the accumulated depreciation reserve from rate base is an accepted principle in developing a rate base, since the reserve represents capital presumably already collected from the

utility's customers through depreciation expense charges reflected in current rates and, as a result, the investor is no longer entitled to a return on this investment. **[*19]** Thus, the investor is entitled to recovery of his investment and a return on that portion not recovered.

In this case OCC submits that we should annualize the depreciation associated with Killen Unit No. 2 and deduct this from rate base. The customers of DP&L, however, have not been paying any depreciation charges in prior periods to represent a return of this capital to the investor since this is the first case in which Killen has been included in rate base and the first time that we are determining a depreciation expense level for Killen. We are of the opinion that OCC's recommendation would deprive DP&L's investors of the opportunity to fully recover their investment in the plant of the company. At the same time, however, we must establish a depreciation expense level to reflect what charges the company is likely to incur during the period these rates are in effect. As a result we must include depreciation associated with Killen Unit No. 2 in operating income to allow the investors a systematic method to recover their investment. Based upon the above discussion we find that OCC's proposal must be denied.

Generating Capacity

The Commission is required by Section 4905.70 **[*20]** Revised Code to investigate any excess generating capacity. As part of its investigation the Staff examined the applicant's generating capability to determine if capacity exists which exceeds that reasonably required to meet its peak load and to afford an adequate reserve margin, and found that no adjustment for excess capacity was warranted (S.R., p. 16). Montgomery County objected.

Staff witness Fox testified at length at hearing concerning the Staff's calculations with respect to excess capacity (See various sections of Tr. X, pp. 93, et seq.). Mr. Fox testified that the Staff uses a total of four different tests in determining the existence of excess capacity for a utility company (Tr. X, p. 152). The first test is a 20-percent test to see if the company has a 20 percent reserve margin. If the company exceeds the 20 percent reserve margin, the Staff views this as an indication that the company might have excess capacity, and then proceeds to apply the "capability less the largest units" test. For this test the Staff uses a 15 percent reserve margin and applies this to the generating capacity of the company, assuming that the company's largest generating unit was not in **[*21]** service (Id.). In this case the company met the 15 percent margin and the Staff concluded that the company did not have excess capacity.

On brief Montgomery County argues that the Staff's test was in error. During the hearing Montgomery County offered no witness on the subject and produced little evidence to justify its position. The argument contained in its brief centers on a recalculation of the Staff's 20 percent reserve margin test. The brief does not reveal, however, the source of the numbers used as a basis for this calculation. We cannot disagree with the mathematical calculation presented, in that it appears the arithmetic is correct; however, we cannot accept a calculation without knowing the source of the numbers used in the calculation. In addition, Montgomery County does not perform the other tests used by Mr. Fox and by this Commission in other cases to resolve the issue. We find that Montgomery County has failed to meet its burden of proof on this point in this case as it has in the company's last four rate cases. Dayton Power and Light Company, Case No. 81-1256-EL-AIR, supra; Dayton Power and Light Company, Case No. 81-21-EL-AIR, supra; **[*22]** Dayton Power and Light Company, Case No. 80-687-EL-AIR, (July 15, 1981), and Dayton Power and Light Company, Case No. 79-510-EL-AIR (July 31, 1980). We overrule Montgomery County's objection on this point.

Construction Work In Progress:

Section 4909.15(A)(1) Revised Code provides that the Commission may, in its discretion, include a reasonable allowance for construction work in progress in its rate base determination. The statute provides that only projects which are at least 75 percent complete may be considered in establishing the allowance and limits the total allowance which may be authorized to no more than 20 percent of the remainder of the rate base. In this proceeding, applicant has requested that the Commission include in the construction work in progress allowance its date certain investment of $373,098,000 in the Zimmer Nuclear Power Station to the maximum extent permitted by law (App. Ex. 22, Sched. B-4). The 20 percent cap, when applied to the rate base as determined herein, would limit the allowance for Zimmer Unit No. 1, the Zimmer substation, and the nuclear fuel core, the three projects referred to collectively as the Zimmer project, to $232,478,000. **[*23]** The addition of this amount of construction work in progress to rate base would increase the revenue requirement by approximately $46 million.

As described in a number of prior Commission orders, the Zimmer project is jointly owned by The Cincinnati Gas & Electric Company (40 percent), Columbus and Southern Ohio Electric Company (28.5 percent), and this applicant (31.5 percent). The Cincinnati Gas & Electric Company is the party responsible for the construction of the property and is the Nuclear Regulatory Commission licensee. The construction of Zimmer began in 1971. At that time, the

project was expected to be placed in service in 1975 at an estimated cost of some $235 million. However, the projected in-service date has been revised at least ten times in the intervening years and the most recent total budget estimate provided by The Cincinnati Gas & Electric Company is $1.7 billion (OCC Ex. 12, p. 9). The project is not yet in service, nor can The Cincinnati Gas & Electric Company now even project when Zimmer will be placed in service due to the November 12, 1982 order of the Nuclear Regulatory Commission in Docket No. 50-358, In the Matter of Cincinnati Gas & Electric **[*24]** Company (William H. Zimmer Nuclear Power Station), which suspended all safety-related construction at the Zimmer site.

The company contends that the project is 97 percent complete based on physical inspection and is, therefore, eligible for inclusion in the construction work in progress allowance (App. Ex. 20, p. 3; App. Ex. 21, pp. 23-24). Applicant maintains that its investment in Zimmer must be accorded rate recognition to maximum extent permitted by statute in order to preserve the company's financial integrity (App. Ex. 19, pp. 13-20). The Staff agrees that the project is clearly more than 75 percent complete based on physical inspection (Staff Ex. 2, pp. 5-6; Tr. X, pp. 173-174), but, consistent with its position with respect to this subject, recommends against the inclusion in the construction work in progress allowance of any project which will not be in service during the period the rates set in the proceeding will be in effect (Staff Ex. 8, pp. 18-19). Consumers' Counsel argues that the physical inspection is not a reliable measure of percent completion in connection with Zimmer (OCC Ex. 1a, pp. 7-8), that an elapsed time test cannot properly be applied without a reliable **[*25]** estimate of an in-service date (Tr. X, p. 199), and that a dollars expended test, even if one used the outdated $1.7 billion budget estimate, would show the project to be less than 75 percent complete (OCC Ex. 1a, p. 9). In the alternative, intervenor contends that even if the project is deemed to be 75 percent complete, the Commission should still permit no allowance (OCC Ex. 1a, pp. 12-18). Executive Agencies opposes rate recognition for Zimmer for reasons similar to those advanced by the Staff. In addition, Executive Agencies opposes the inclusion of Zimmer because of questions as to what extent the extraordinary cost of this endeavor has been due to lack of prudent management (Exec. Ag. Ex. 5; pp. 4-11). Montgomery County, et al., raises a number of arguments against the inclusion of Zimmer, including the absence of any significant physical progress over the past several months (OCC-Montgomery County, et al., Jt. Ex. 11, Item Nos. 27, 28, 29), and the company's alleged failure to show either that the additional capacity Zimmer represents is necessary, or that the costs over the life of Zimmer would be no greater than those the company would have incurred in **[*26]** connection with other courses the company would have pursued had it not undertaken the Zimmer project (Montgomery County, et al., Ex. 14).

The Commission has had occasion to consider whether to include an allowance for Zimmer in construction work in progress in recent rate proceedings involving Dayton Power and Light's two partners in the Zimmer project. In both Columbus and Southern Ohio Electric Company, Case No. 81-1058-EL-AIR, Order on Rehearing (March 16, 1983) and Cincinnati Gas & Electric Company, Case No. 82-485-EL-AIR (March 30, 1983), the Commission determined that it would be inappropriate to include Zimmer, even if 75 percent complete based on physical inspection, when The Cincinnati Gas & Electric Company, the party charged with its construction, could not even provide an estimate of an in-service date in light of the November 12, 1982 NRC order. As emphasized in both these decisions, the issue is not whether construction work in progress is, in theory, an appropriate component in the ratemaking process, but whether the Commission should ask ratepayers to supply a cash return on a project of indeterminate status. Thus, although the Zimmer question **[*27]** in this case generated volumes of transcript and stacks of exhibits, the bulk of this evidence is not necessary to the decision. This Commission is well aware of Zimmer's troubled history. Indeed, it has been documented in case after case in which the Commission has been asked to include an allowance for Zimmer in the rates authorized (See, e.g., Columbus and Southern Ohio Electric Company, supra; Cincinnati Gas & Electric Company, supra; Dayton Power and Light Company, Case No. 79-510-EL-AIR [July 31, 1980]; Dayton Power and Light Company, Case No. 80-687-EL-AIR [July 15, 1981]; Dayton Power and Light Company, Case No. 81-21-EL-AIR [February 3, 1982]). The Commission has, in the past, included allowances for Zimmer in the face of repeated postponements of the in-service date, escalating budget estimates, and even the November, 1981 order of the NRC fining The Cincinnati Gas & Electric Company $200,000 for violations with respect to a number of construction criteria and for what it characterized as a "widespread breakdown" in the implementation of the licensee's quality assurance program. The Commission did so based on assurances by the applicant **[*28]** utilities that no additional postponements were foreseen, that no additional work or rework requirements would add significantly to the overall cost, and that the program to remedy the deficiencies identified by the NRC was well under way. Now, as we learned from testimony offered in the Columbus and Southern and Cincinnati Gas & Electric cases, supra, which has also been made a part of this record by stipulation of the parties, The Cincinnati Gas & Electric Company advises that they cannot even provide an estimate as to when the project might be placed in service or as to what additional costs might be incurred as a result of the most recent NRC order. Under these facts, we believe it totally unreasonable to include an allowance for Zimmer in this case.

Applicant has attempted to point out distinctions which it contends justify a different resolution of the Zimmer issue in this case than in the Columbus and Southern and Cincinnati Gas & Electric Company proceedings, supra. We do not find these arguments persuasive. First, applicant asserts that because The Cincinnati Gas & Electric Company is the NRC licensee and, as such, the party responsible for the **[*29]** Zimmer problems, it is inappropriate to penalize DP&L by denying it an allowance for its Zimmer investment, particularly in light of the steps the company has taken, such as the commencement of an arbitration proceeding, in an effort to protect its ratepayers. This is a rate case, not a witch hunt. It is not the Commission's intention to penalize anyone. However, the fact remains that although there are many doorsteps at which blame might be laid for the Zimmer problems, the doorsteps of the customers of these companies are not among them. These customers have already gone the extra mile with respect to Zimmer, and the Commission cannot ask them to contribute further without any reliable indication as to when, and at what cost, they will receive service from this unit.

Applicant also contends that the financial condition of each of the three owners of the project is different, and that it would be much more severely affected by the denial of an allowance for construction work in progress for Zimmer than either of its partners in the project (App. Ex. 19A, pp. 3-4). As indicated in our discussion of this subject in Columbus and Southern, supra, the Commission is certainly **[*30]** mindful of the impact the denial of an allowance for Zimmer construction work in progress will have on the financial condition of all three of the companies involved. The Commission is also aware of the potential for downgradings of the companies' bond ratings, and that this may well lead to higher future financing costs, costs that will ultimately be borne by consumers. However, this is the same dilemma the Commission faces in almost every rate case. What price should we ask consumers to pay presently for a potential future benefit? A balance must be struck and the Commission, given all the circumstances, does not believe that a provision for a cash return on Zimmer accomplishes that result.

Working Capital:

The Staff, the company, and OCC are in basic agreement as to the appropriate calculation of the working capital component. The Staff recommended allowance for working capital is based on the formula method that has been recommended and approved in recent cases (S.R., p. 18). The company presented the same basic proposal which, by the time the hearing had concluded, differed only with respect to the treatment to be afforded coal inventory. Although OCC had originally **[*31]** proposed the balance sheet approach to the calculation of working capital. OCC witness Miller, however, stated at hearing that OCC would recommend the use of the traditional formula for the purposes of this case (Tr. XVI, p. 101). OCC continued to disagree, however, with the period to be used to calculate the fuel inventory.

The company has proposed that its fuel inventory reflect a build up in its coal stock pile in anticipation of a possible strike by the United Mine Workers of America (UMWA) (App. Ex. 4, p. 3). This results in an increase in the jurisdictional level of working capital allowance from $36,526,000 to $40,862,000. The Staff reduced the working capital allowance in order to exclude the UMWA strike build up portion. Staff witness Fox testified that it would be inappropriate to include this item in working capital because it is difficult to predict in advance if a strike will occur or how long it will last (Tr. X, p. 193). Mr. Fox testified that the level of inventory that the company was asking for was simply not known and measurable. OCC agrees with the Staff and opposes the company's recommendation.

We must note that this is not the first time this precise **[*32]** issue has been presented to the Commission. The issue was presented to us in the company's last case with essentially the same testimony and arguments, as can be said of the company's last four cases. Inasmuch as the company has introduced nothing new on this issue in this case we find that we must again reject the company's proposal. See Dayton Power and Light Company, Case No. 81-1256-EL-AIR, supra; Dayton Power and Light Company, Case No. 81-21-EL-AIR, supra; and Dayton Power and Light Company, Case No. 79-510-EL-AIR, supra.

The Staff calculated the fuel inventory for use in this case based upon the twelve months actual data from November 1981 through October 1982 (Staff Ex. 5, p. 7). This was the most recent information available to the Staff at the time the Staff Report was prepared. Aside from the strike build up issue the company recommends the use of the six months actual data and six months projected data for Period I in this case, the twelve months ending December 31, 1982 (App. Ex. 4, Appendix D). Consumers' Counsel, on the other hand, recommends the use of Period II information if the Commission should select that test year as appropriate **[*33]** for use in this proceeding (OCC Ex. 2, Schedules 4.1a and 4.2).

The initial decision we must address is which period would be the most appropriate given the fact that we have selected Period II as the appropriate test period in this case (See discussion, infra). OCC argues that Period II is the ap-

propriate period and the Staff and the company contend it is Period I. We must remember that we are determining a working capital component pursuant to Section 4909.15(A)(1) Revised Code, which states in pertinent part:

The valuation as of the date certain of the property of the public utility used and useful in rendering the public utility service for which rates are to be fixed and determined. The valuation so determined shall be the total value as set forth in division (J) of section 4909.05 of the Revised Code, and a reasonable allowance for materials and supplies and cash working capital, as determined by the public utilities commission.

Clearly the language of the statute indicates that working capital is a rate base concept. In applying this statute, the Commission has utilized traditional test year data, centered on the date certain to determine a level that was representative **[*34]** for ratemaking purposes. Although we have not stated specifically that working capital must be determined as of date certain, we feel that the use of date certain as a reference point is appropriate wherever possible. This is precisely the approach we have taken in previous cases. In Cleveland Electric Illuminating Company, Case No. 81-146-EL-AIR (March 17, 1982), we adopted the use of the future test year. In determining the appropriate working capital component, however, we used an analysis of the traditional six and six test year to develop a cash component which was more reflective of date certain. We feel that it is again appropriate in this case where we have information available based on date certain. We must, therefore, reject OCC's recommendation.

The company contends that we should use the six months actual and six months projected information contained in Mr. Jensen's testimony. Witness Fox used the actual information available when the Staff Report was prepared for the most recent twelve months. The company and the Staff agree on an oil inventory. The analysis performed by Mr. Fox results in a fuel inventory component that closely approximates the analysis **[*35]** performed by the company. As pointed out during the hearing, a slight error in calculation reduces this difference even further (Tr. X, p. 184). We must note that the fuel inventory analysis performed by Mr. Jensen deviates from past practices on one important point. Mr. Jensen used a 70 day coal supply for Killen rather than a 60 day coal supply. In past DP&L cases we have used a 60 day coal supply for applicant's commonly owned facilities and a 70 day coal supply for its wholly-owned facilities (See, e.g., Dayton Power and Light Company, Case No. 80-687-EL-AIR, supra). We find that this distinction is proper and supported by the record in this case. Killen is a commonly owned facility. If we were to adjust Mr. Jensen's fuel inventory downward to reflect this modification, the difference between the two recommendations would be very slight. Based upon the record we find the Staff's recommendation to be appropriate.

The following schedule presents in summary form the Commission's determination of the allowance for working capital in this case. These figures take into account revisions necessary to reflect the disposition of other issues which affect the allowance. **[*36]**

Jurisdictional Working Capital Allowance
(000's Omitted)

1/8 of Adjusted Operating and Maintenance Expense, excluding Fuel and Purchased Power	$14,592
Plus: Materials and Supplies	13,904
Fuel Expense Lag	8,758
Fuel Inventory	45,312
Less: Customer Deposits	783
1/4 of Operating Taxes, excluding F.I.C.A. and Deferred Taxes	14,513
Jurisdictional Working Capital Allowance	$67,270

Other Items:

The Staff made its customary adjustment to reduce rate base by the jurisdictional portion of the date certain balance of accumulated deferred taxes associated with accelerated amortization and liberalized depreciation, and those accumulated deferred investment tax credits which may be deducted without loss of benefit (S.R., p. 19; S.R., Sched. I-12). As

discussed infra, all issues relating to deferred taxes were resolved at hearing, and the summary schedule below incorporates the proper deduction for these items.

Consistent with the Commission's decisions in Dayton Power and Light Company, Case No. 81-1256-EL-AIR (December 22, 1982), Columbus and Southern Ohio Electric Company, Case No. 81-1058-EL-AIR (November 5, 1982), and Cincinnati Gas & **[*37]** Electric Company, Case No. 81-66-EL-AIR (January 27, 1982), the Staff recommended an additional rate base deduction to reflect accrued Breeder Reactor Corporation payments which have been recognized in cost of service in prior cases but which have not actually been collected (S.R., p. 19). Although there was initially some question as to the appropriate amount of the adjustment, the parties now agree that the $717,168 figure proposed by Staff witness Smith represents the proper deduction (Staff Ex. 3, p. 6; Tr. XVI, pp. 37-38; App. Br., p. 215). Accordingly, the Commission will include this amount as part of the deduction for "Other Items" shown on the following summary schedule.

Rate Base Summary:

In light of the foregoing, the Commission finds the jurisdictional statutory rate base, as of the date certain, to be as set forth on the following table:

Jurisdictional Rate Base (000's Omitted)	
Plant In Service	$1,413,320
Less: Depreciation Reserve	284,289
Net Plant In Service	$1,129,031
Plus: CWIP	0
Working Capital	67,270
Less: Total Other Deductions	34,128
Jurisdictional Rate Base	$1,162,173

OPERATING INCOME

Test Year

The initial question **[*38]** that must be determined with respect to revenues and expenses is the selection of the appropriate test year. On April 2, 1982 the company filed with the Commission a notice of intent to submit a permanent rate increase application pursuant to Section 4909.18 Revised Code as required by Section 4909.43(B) Revised Code and Rule 4901-7-01 OAC. As part of that notice the company requested that the test year ending March 31, 1983 (Period II) be established as the proper period for the valuation of accounts in this case. By Entry of April 21, 1982, the Commission reserved ruling on the requested test period, directing the company to also file an analysis of accounts based on the traditional twelve month period with the date certain as the midpoint. The company complied and filed test year information based upon the twelve months ending December 31, 1982 (Period I) as well as the twelve months ending March 31, 1983.

Any discussion on the selection of an appropriate test year must begin with the new provisions of Section 4909.15(C) Revised Code, which reads as follows:

The test period, unless otherwise ordered by the public utilities commission, shall be the twelve-month period beginning **[*39]** six months prior to the date the application is filed and ending six months subsequent to that date. In no event shall the test period end more than nine months subsequent to the date the application is filed. The revenues and expenses of the utility shall be determined during the test period. The date certain shall be not later than the date of filing.

This statute grants to the Commission discretion in the selection of a date certain and test period for ratemaking purposes. The statute limits this discretion, however, in that the date certain cannot be later than the filing of the application and the test period cannot end more than nine months subsequent to the date the application is filed. Within these parameters the Commission may exercise its discretion to select an appropriate test period.

The company recommends the adoption of the test period ending March 31, 1983 (App. Br. I, p. 24). It should be noted that the dollar impact of the selection of one test period over the other is extremely small when compared to the applicant's revenue request in this case. At the time the Staff Report was issued the dollar impact of this issue was approximately $4,000 out of a revenue **[*40]** request of $190 million (S.R. p. 1). This fact did not go unnoticed by the other parties to this proceeding; only Montgomery County took a position on which test year should be used and opposed Period II.

The most important consideration in the selection of an appropriate test year is the determination of what data represents the most realistic appraisal of what is required to afford the applicant a reasonable earnings opportunity for the period in which the rates established by this proceeding will be in effect (Cleveland Electric Illuminating Company, Case No. 81-146-EL-AIR [March 17, 1982]). Although the differences between the two periods are slight we find that the information for the test year ending March 31, 1983 contains the most current information available on the revenues and costs that the company will experience for the time period these rates will be collected. Staff witness Smith testified that it was the Staff's opinion that Period II more closely represents costs to be incurred by the applicant when the rates at issue in this proceeding will be in effect (Staff Ex. 3, p. 3). Therefore, based upon the record in this case, we find the use of Period II to be **[*41]** reasonable and overrule Montgomery County's objections.

Revenues

Base Revenue Annualization

The Staff determined that the applicant would have realized gross annual operating revenues of $595,087,000 had the rates established in Dayton Power and Light Company, Case No. 81-21-EL-AIR (February 3, 1982) been in effect throughout the test period selected in this case (S.R., Schedule II-1). Both the applicant and OCC objected on the basis that the base revenue adjustment did not incorporate the changes in the tariffs that resulted from the applicant's most recent rate case, Dayton Power and Light Company, Case No. 81-1256-EL-AIR, supra. Staff witness Gallina agreed with the company and OCC and testified that those were the most current rates and should be utilized (Staff Ex. 5, p. 7). We find, therefore, that base revenues should be annualized to reflect the rates established in Case No. 81-1256-EL-AIR.

The Staff, OCC and the company agreed generally on the amount of sales revenue to be included in this proceeding. Montgomery County, however, recommended an adjustment to the company's sales forecast. Through its witness Mr. Rothey, Montgomery County submitted **[*42]** that the revenue requirements were overstated because the revenue forecast for Period II fails to consider depressed economic conditions or the effect of abnormal weather during the test year (Mont. Co. Ex. 1). Montgomery County argues that this Commission must normalize the company's test period operations to reflect these factors. Mr. Rothey proposed that an additional $7,600,000 in revenues be imputed to DP&L for the test year to reflect this adjustment (Mont. Co. Ex. 1, p. 14). In the alternative he proposed that the cost of equity be reduced. In making these recommendations, however, Mr. Rothey was at best tentative in offering the justification for the quantification of the adjustments he was recommending. He admitted that there were many inherent difficulties in performing his analysis because of his limited knowledge of how the company assigns its industrial sales estimates to its industrial rate schedules. We do not believe the record supports Mr. Rothey's recommendation. Montgomery County's position on this point should therefore be rejected.

Fuel Revenue Annualization

The Staff originally annualized fuel revenues using a fuel component rate of $0.01905 which **[*43]** was effective September 7, 1982 (S.R., p. 6, Schedule II - 3.2). The company, the Staff and OCC all agree that the use of the most recent fuel component of $0.02117 developed in the company's latest EFC case, Case No. 82-167-EL-EFC, is appropriate for the annualization of fuel revenues (OCC Ex. 1A, p. 32, Staff Ex. 5, p. 5; App. Ex. 4A, Appendix J). The parties also agree that the most recent fuel component is proper in annualizing the fuel expense associated with the jurisdictional sales. The parties disagree, however, with the calculation of the fuel expense associated with jurisdictional company use and system losses.

The dispute between the parties centers around the specific fuel component rate to be applied to the MWH jurisdictional losses and company use total. The company and the Staff recommend the use of an estimated end of test year fuel component rate of $0.02174 (Co. Ex. 4A, Appendix J). OCC, however, contends that the same component used to calculate jurisdictional fuel revenues and jurisdictional sales should be used to calculate system losses (OCC Ex. 1A, p. 30-32). OCC argues that consistency would demand that the same component be utilized for all three calculations. **[*44]** It must be remembered, however, that the annualization of the system loss portion of the fuel expense calcula-

tion has a different function than the other two calculations. Fuel revenues and jurisdictional sales are annualized to provide a total revenue calculation to determine such expenses as gross receipts and uncollectibles. The calculation for system losses is performed to place in base rates an annualized level for this expense consistent with the fuel cost recovery mechanism prescribed by Chapter 4901:1-11 OAC. The amount of system losses placed in base rates is used as a base point in calculating the System Loss Adjustment in the company's semi-annual fuel case. The reason the Staff and the company use an end of test year estimate for the fuel component is to place in base rates the most accurate calculation of the current system loss for the company to reduce or eliminate the need for a system loss adjustment in the upcoming fuel case. This is necessary because the base period in a fuel case does not correspond to the test year in a rate case. Thus, if the latest known information is used, the base revenues reflect the best estimate of the system loss experienced by **[*45]** the company and the adjustment that must be collected through fuel revenues is reduced. We find that there is a benefit to using extra precision in the calculation for system losses afforded by the estimated fuel component. OCC's objection on this point is therefore overruled.

Short Term Capacity Sales

In the applicant's last rate case the Commission recognized an amount of $403,662 before taxes as an adjustment to operating revenues for short-term capacity sales (Dayton Power and Light Company, Case No. 81-1256-EL-AIR, supra, at p. 13). The Staff did not make an adjustment for this item in the Staff Report and the Executive Agencies objected. Witness Dittmer, testifying on behalf of the Executive Agencies, defined short term capacity sales as follows:

Short term capacity sales are sales of generating capability for a limited duration. One utility commits a portion of its generating capability to another utility. Whether any energy is actually sold or not is usually not important. In paying the capacity charge, the purchasing company pays for the right to receive energy if needed.

Th terms and benefits of the sale may vary. The sale may be for only a few hours **[*46]** or up to several years. Capacity may be sold off of a specific unit (referred to as unit participation sale) or off the total generating system of the selling company. The revenues received will help cover the fixed generating capacity cost of the selling company.

(Executive Agencies Ex. 3, p. 12).

Mr. Dittmer testified that the offset to operating revenues is proper because these revenues are available to the company to cover fixed operating costs for which the company is already being compensated. As a result the benefits of these sales should be passed on to the ratepayers. Mr. Dittmer recommended that the Commission build into base rates the actual short term capacity sales revenues of $1,412,875 which DP&L received for the twelve months ended November, 1982 (Ex. Agencies Ex. 3, p. 14). As an alternative, Mr. Dittmer recommended the use of a four year average figure of $815,077, before tax effect, to account for any abnormalities in test year data. This corresponds to an adjustment of $421,128 after adjusting for taxes. This calculation is similar to the calculation made in the applicant's last rate case, except for an exclusion for sales to the City of Piqua. A distinction **[*47]** was made by Mr. Dittmer, however, between firm sales to the City of Piqua and non-firm sales. Mr. Dittmer testified that only firm sales should be used to reduce the recommended amount since these were the portion of the Piqua sales accounted for in the allocation process. He testified that non-firm sales were not included in the allocation process and, therefore, should not be included in the adjustment for short term capacity sales.

The company submits that no adjustment should be made for short term capacity sales. Company witness Jensen testified that recently the market for short term capacity sales has changed dramatically. During the past several years DP&L was able to make short term capacity sales to Ohio Edison and Ohio Power, which in turn resold the capacity to other utilities (App. Ex. 4B, p. 3). Mr. Jensen testified that in September and October of 1982, the market for these sales changed, resulting in a very limited market for short term capacity sales currently. In addition, Mr. Jensen testified that these sales were sporadic in nature and could not be forecast with certainty. He testified that the sales level for November 1982 through March 24, 1983 was 77% **[*48]** lower than the sales level in prior years and represented only approximately 23% of the prior year's average sales recommended by Mr. Dittmer. In addition, he recommended that only 50% of whatever adjustment was found to be appropriate actually be utilized in order to provide an incentive to the company to continue to make short-term capacity sales. The company's position, therefore, is that no adjustment be made, or, in the alternative, that an adjustment of $97,000 be utilized after tax consideration (App. Ex. 4B, p. 5).

Upon review of the record we are of the opinion that an adjustment for short term capacity sales is again warranted. We do not agree with the company's argument that an adjustment is inappropriate because such sales are difficult to predict. Nor do we agree with the company's position that an allowance of 50% should be provided to act as an incentive for the company to continue to make such sales. As pointed out by Mr. Dittmer, the company has an obligation to

provide reliable service to its customers at the lowest total cost possible (Ex. Agencies Ex. 4, pp. 12-13). Part of its efficient operation should be to attempt to make every effort to reduce costs **[*49]** where possible. Short term capacity sales should be part of such a goal.

The problem, however, in making such an adjustment is determining what level represents a reasonable approximation of what the company will experience during the period these rates will be in effect. The sales over the past four years show significant fluctuation from year to year. In addition, Mr. Jensen testified that these sales have dropped off sharply since November of 1982. A review of Staff Exhibit 10, which is a summation of these sales since 1978, reveals that such sales have in fact dropped significantly. Based upon this information we agree with the company that the sales figures for 1982 are not representative of what may be experienced by the company during the period these rates will be in effect. As pointed out by Mr. Jensen, sales since November have been approximately 23% of what they were for the same period in prior years. We therefore adopt the company's recommendation to take 23% of Mr. Dittmer's four year average as the most representative figure of what the company will experience in the upcoming months.

Uncollectibles and Forfeited Discounts Ratios

The Staff originally calculated **[*50]** the forfeited discount ratio on the basis of a three year average and used the test year uncollectible ratio (S.R., Schedules II-3.3 and II-3.11). OCC objected and indicated that it was its position that the forfeited discount ratio and the uncollectible expense ratio should be calculated in the same manner (OCC Ex. 1B, p. 20). Staff witness Gallina testified that although both ratios are applied to revenue items, it does not necessarily follow that both ratios must be calculated in the same manner (Staff Ex. 5, p. 8). Mr. Gallina stated that the information available for each ratio must be analyzed to determine if there are any trends in the data and what specific calculation would be the best indicator of what the ratio would be for the period the rates will be in effect. He testified that additional data had become available since the issuance of the Staff Report which indicated a clear trend with respect to the forfeited discount ratio. Based upon this information he recommended the use of the 1982 actual forfeited discount ratio since a steady increase was indicated (Id., p. 9).

We find that the Staff's recommendation is fully supported by the record and should be approved. **[*51]** The forfeited discount ratio is found to be 0.567% and the uncollectible ratio, 0.571%. It is important to remember that these ratios are independent and must each be calculated on the specific data available for each.

Labor Adjustment

There were various areas of dispute between the parties as to the appropriate calculation of labor expense for the purposes of this hearing. The disagreement touched on all aspects of the calculation including the appropriate number of employees, the average annual hours per employee, the average wage rate, and the appropriate allocation factors to assign these costs to electric operating expenses. Each of these components will be dealt with individually. In making these determinations it is important to remember that the purpose of the test-year analysis is not to set rates for the test year, but to develop evidence of what is required to afford an applicant utility a reasonable earnings opportunity during the period the rates will be in effect. This does not mean that actual data or projected data should be ignored, but that all of the information be considered as evidence to determine an appropriate expense level to provide the applicant **[*52]** with a reasonable earnings opportunity.

Employee Level

The Staff and OCC both recommend that the latest known number of employees be used to calculate labor expense. OCC witness Haskins originally recommended that an average number of employees for January 1982 through June 1982 reduced by 633 to account for anticipated employee reductions since June, be used as a basis to calculate labor expense (OCC Ex. 1B, p. 21). In his rebuttal testimony, however, he testified that information became available during the hearing that showed that the employee levels had been reduced more than anticipated (OCC Ex. 16, p. 6). In December 1982 the actual number of employees was 106 lower than the Period I level used by the company and the January 1983 level was 101 employees lower than the Period II level used by the company. Mr. Gallina, testifying for the Staff, also recommended that the most recent information be used. He testified that actual data clearly indicates that employee levels have declined much further than expected (Staff Ex. 5, p. 13). As a result he testified that the company's projections should no longer be considered a reasonable estimate of what the company will experience **[*53]** during the collection period.

The company proposed to use an adjusted employee level of 3,298 for Period II (App. Ex. 6, Ex. II). Mr. Anderson testified that this figure was an estimate based on the June 1982 employee level reduced by an estimated 608 employees forecast by the company to leave employment through attrition, termination and early retirement and a reduc-

tion of 25 employees due to the Tait deactivation. Mr. Anderson acknowledged, however, on cross-examination that he anticipated that employees in the near term future would stay at a level approximating the December 1982 figure of 3,225 further reduced for the employees terminated as a result of the Tait deactivation (Tr. III, pp. 78-80). He indicated that the number of employees affected by the Tait deactivation would be approximately 45. He testified that the actual number of employees for January 1983 was 3,197 and the actual number for February 1983 was 3,136 (Tr. XIX, p. 14). The figure for February is 162 employees below the figure the company proposes for Period II.

The company argues that the estimated figure of 3,298 employees should be used by the Commission to determine test year labor expense. We are **[*54]** somewhat confused by the argument they set forth in support of their position. The company contends that selective adjustments for actual information should not be made because it would restrict the prospective nature of ratemaking by using historical data. Company witness Anderson submits that we cannot adjust specific expense items without adjusting all expense items to reflect actual data (Tr. III, pp. 142-142a). This argument misses the point, however. What we are attempting to do is to select the most representative test year information available to determine what costs will be incurred by the company when these rates will be in effect. The evidence in this case clearly reveals that the company's projections are not the best available estimate of what level of employees the company will have during the upcoming period. Mr. Anderson testified that it was his opinion that the December 6, 1982 figure, adjusted for employee terminations resulting from the Tait deactivation, was a good approximation of the level to be anticipated by the company (Tr. III, p. 80). This level is substantially below the level he recommended. Based upon the record we find that the proposal of **[*55]** OCC and the Staff to use the February 1983 figure of 3,136 is warranted. This finding is consistent with findings we have made in recent cases on the same issue. See, e.g., Ohio Bell Telephone Company, Case No. 81-1433-TP-AIR (December 22, 1982).

Average Hours Per Employee

A dispute also exists with respect to the proper number to be used to represent the average hours worked by an employee in the calculation of labor expense. The company's proposal for Period II is an estimated 2,267 hours par employee (App. Ex. 6, Exhibit II). Not surprisingly OCC agrees with this proposal. The Staff, however, recommends the use of the estimated 2,282 hours per employee recommended by the company for Period I (App. Ex. 6, Exhibit I). Staff witness Gallina testified that the Staff recommends the Period I figure because it feels that this figure is more indicative of what conditions the company will operate under during the period these rates are in effect. Mr. Gallina testified that the unadjusted employee level assumed by the company for Period I was 3,988 employees and for Period II, 4,020 employees (Staff Ex. 5, p. 15). Mr. Gallina indicated that with fewer employees it was **[*56]** anticipated that the number of hours worked per employee would be higher. We do not dispute the Staff's logic; however, the adjusted labor expense proposed by the company does not bear out the Staff's suggestion. The company submitted a labor expense adjustment based on revised employee level estimates (App. Ex. 6, Exs. I and II). These adjustments show that although the company revised the expected level of employees for Period II to a point lower than Period I it did not adjust the expected average annual hours per employee figure. Thus, the company's proposal as it now stands shows a lower average annual employee hours figure and a lower employee level figure for Period II. The analysis that the Staff performed showing the variance between the total labor hour figures for the two periods no longer stands in the same proportion. Upon review of the record we will adopt the proposal made by OCC and the company to use the Period II figure of 2,267 average annual employee hours. There is no substantive evidence in the record to show that this is not the most reasonable estimate of what the company will experience during the period these rates will remain in effect.

Wage Rate **[*57]**

The company proposed the use of an end of test year estimated wage rate to determine the labor expense in this case. Company witness Anderson recommended the use of $11.39, which is the estimate for March 1983, as the appropriate figure for Period II (App. Ex. 6, p. 2 and Ex. 2). Mr. Anderson testified that a new bargaining agreement was reached with DP&L's employees in December 1982 which was retroactive to October 1982. Consequently, an end of test year rate should be used to more accurately reflect the costs that the company will experience during the period these rates will be in effect.

The Staff and OCC oppose the company's method, however, arguing that the company's estimate is not known and measurable with reasonable certainty. The Staff and OCC recommend the use of the latest known actual rate not beyond the end of the test year, March 1983, if available, and the February 1983 rate of $11.08 if the March figures is not (Tr. XIX, p. 14).

The Commission has consistently used the last known wage rate to annualize test year labor expense. Dayton Power and Light Company, Case No. 80-687-EL-ALR (July 15, 1981). Although we recognize that the February figure does not **[*58]** reflect the agreement reached in December with the employees of DP&L (although the record does not reflect why) we are of the opinion that it represents the best available estimate of what the company will experience for labor expense during the period these rates will be in effect. Although Mr. Anderson testified concerning the December 1982 agreement, the record is not clear as to precisely how and when this agreement will impact the average wage rate; certainly its impact was not apparent in the actual figure for February. We, therefore, find that the use of the February figure is appropriate.

Labor Allocation Factors

The Company and the Staff allocated labor costs to Operating and Maintenance (O & M) expenses and to electric utility operations using 83.84% and 79.06%, respectively, derived from the company's 1983 corporate model (App. Ex. 6, Ex. 1, Staff Ex. 5, pp. 3-4). OCC submits that this calculation is in error and argues that the proper allocation factors are those contained in the Standard Filing Requirements, specifically 74.88% for the O & M percentage and 77.83% for the electric utility factor for Period II (App. Ex. 27, Schedule C-10, OCC Ex. 15, pp. 2-9). The **[*59]** labor allocation ratios for O & M expense are used to account for the fact that not all labor is charged to operation and maintenance expenses. Some labor is capitalized to various construction projects to account for the time that certain employees spend on construction activities. This portion is eventually recovered by the company through depreciation expense. The electric utility factor is used to allocate out of this rate case expenses associated with non-utility work or gas utility work.

OCC contends that it would be inappropriate to base rates in this case upon 1983 ratios. In support of its position it has set forth several arguments. First it argues that the ratios would result in a double counting of a certain portion of labor expense in that the company would be earning a return on it in rate base as well as through operating expenses. Mr. Miller testified that of the dollars expended by the company in 1982 for electric utility operations, a certain portion was expensed and a certain portion was capitalized. He contends, therefore, that since the 1983 corporate model ratios are higher than the ratio for 1982 the company will recover more dollars in operating expenses **[*60]** than were expensed in 1982 while it also receives a return on the difference in rate base. He would be correct if we were setting rates so the company could collect the dollars it expensed in 1982 instead of the dollars it will be expensing in 1983. As pointed out by Staff witness Gallina:

Q. (By Ms. Migden) Would you agree that if you increased the amount that is being expensed by using a higher ratio, such as that in the 1983 corporate model, you should decrease the portion that is being capitalized in rate base?

* * *

A. The 83.84 percent is not going to be retroactively booked on the company's books. It is merely a percentage Staff feels is reflective of the percent of wages that will be expensed in 1983 which is part of the collection period in this case.

The labor dollars actually booked in 1982 will remain at whatever percent they are, they will not as a result of anything done here be changed from capitalized to expensed or expensed to capitalized. I think that is where the confusion lies.

Using the 83.84 percent says nothing about what is actually on the company's books, what will be capitalized and what may eventually be included in rate base. (Tr. XI, p. **[*61]** 136-137.)

The issue is not what has been done in the past but what is reflective of the experience the company will have during the period these rates are in effect.

OCC also argues that to use the method proposed by the company and the Staff violates the test year concept set forth in Consumers' Counsel v. Pub. Util. Comm., 67 Ohio St. 2d 372 (1981) where the Court stated:

The language of R.C. 4909.15 is unequivocal. Rate increases are based on costs of rendering utility service during the test year period. The dates of the test year follow directly from the date the utility chooses to file for its rate increase. Id. at 374.

It is important to note that the company actually incurred all of the expenses at issue during the test period. The added revenue requirement is not a result of recognizing certain additional costs but of expensing these items rather than capitalizing them. The issue that we must decide is what treatment should be given known and measurable expenses,

not what the expenses are. Thus, the argument set forth by OCC on the issue of post-test year expense really misses the point. These are not post-test year expenses. They are known and measurable **[*62]** expenses during the test year.

Based upon the above discussion we find the proposal made by the company and Staff to use the 1983 corporate model ratios is the best indication of what we may expect the company to experience during the period these rates are in effect. We, therefore, adopt those ratios in determining labor expense. The labor allocation factors used by the company reflect the changes that have occurred during the test year such as the reduced level of employees and the placing in service of the Killen Generating Unit so as to make test period costs representative of future levels.

Employee Benefits Ratio

OCC objects to the Staff's use of the employee benefits ratios developed for Period I in Period II when the Period II ratios are lower. Staff witness Gallina testified, however, that the Staff used the Period I ratios to take into account the reduced level of employees (Staff Ex. 5, pp. 15-16, Tr. XI, pp. 138-139). He testified that the level of employees the Staff now recommends is closer to the Period I level so it would be consistent to use the Period I ratios. Upon review of the record we find the Period I ratios are most reflective of what the company will **[*63]** experience in the future and we will adopt them.

Tait Deactivation Adjustment

The applicant eliminated all test year steam power generation expenses associated with the Tait Generation Station due to its deactivation during the test year. Units 4 and 5 have been mothballed and Units 1, 2, 3, 7 and 8 have been put in wet storage (S.R., p. 8). The applicant included continuing maintenance expenses associated with Units 4 and 5. The Staff eliminated these expenditures because they were not incurred to provide utility service but to insure the future saleability of these units. OCC agrees with the Staff's treatment. The record supports this treatment and these costs should be excluded from operating expenses.

Tree Trimming and Line Clearance Expense

In Case No. 80-687-EL-AIR, applicant proposed an adjustment to its test-year line clearance expenses to permit it to implement the recommendation of Asplundh Environmental Services (AES), a consulting firm retained by the company to develop a distribution line clearance program. (Dayton Power and Light Company, Case No. 80-687-EL-AIR [July 15, 1981]). Based on then existing conditions, AES estimated that DP&L would be **[*64]** required to expend $21 million over the next three years in order to put its recommended tree trimming and line clearance program into effect. The $7 million per year cost associated with the first three-year cycle of the program represented an annual expenditure of some $3,256,000 above the test-year level of line clearance expense. Given the relationship of tree trimming and line clearance to the provision of safe, reliable service, and in order to insure that the increase in revenues allowed for the program would be applied to the program, the Commission, pursuant to the authority conferred by Section 4905.06 Revised Code, authorized the expense level of $7 million and ordered the company to implement the fourteen point program recommended by its consultant. This decision was eventually affirmed by the Supreme Court in Board of County Commissioners of Montgomery County v. Pub. Util. Comm., 1 Ohio St. 3rd 125 (1982). We approved the same adjustment in the applicant's next rate case, Case No. 81-21-EL-AIR (February 3, 1982) and increased the approved level to $7.7 million in the applicant's last rate case, Case No. 81-1256-EL-AIR (December 22, 1982) to recognize a ten percent **[*65]** increase in the annual cost of these expenses. In this case the applicant is proposing an expense allocation of $9,242,000 for Period II, an increase of approximately 17% (OCC Ex. 1A, p. 46). The Staff agrees with the applicant's proposal (S.R., p. 9).

OCC opposes the company's recommended expense level. OCC argues that no line clearance expense should be allowed or, in the alternative, that a maximum of $7 million would be appropriate. The thrust behind OCC's argument that no line clearance expense should be allowed is that there are discrepancies among the amounts paid to the various contractors involved in the operation with some contractors charging more for specific functions than others. OCC is arguing that it is unreasonable for this Commission to approve expenses where the record reveals that DP&L is paying one contractor a higher rate than it pays others for substantially the same work. It should be noted that to attempt to avoid possible prejudice to the company in dealing with the contractors the individual contracts were submitted to the Commission under protective order (Tr. V, p. 5, OCC 7A, 8A and 9A). OCC contends that the company has failed to prudently manage **[*66]** these expenses as indicated by the varying charges appearing on the face of the contracts themselves.

We must reject OCC's position. We cannot discern from the face of the contracts sufficient information to substantiate OCC's claim. The mere fact that the same charges do not appear on each contract does not indicate they were

unreasonable when made; in fact, we believe that it would indicate the opposite were true. We would be surprised to find that DP&L had seriously negotiated contracts with three separate companies and ended with the exact same terms. The fact that discrepancies appear would tend to show that the company had made an effort to obtain the best possible terms with each contractor. We, therefore, reject OCC's position on this point.

As an alternative OCC argues that the expense level for tree trimming should remain at the $7 million level originally approved in Dayton Power and Light Company, Case No. 80-687-EL-AIR, supra. OCC witness Miller testified that the company had been allowed by the Commission in the past to recover more than had been expended during the test year in each of its last three cases (OCC Ex. 1A, p. 47). The implication is that **[*67]** the company is receiving a windfall from the treatment the Commission has given this issue in prior cases. We find this is not the case, however, and that OCC's argument misses the point of our prior actions.

In Case No. 80-687-EL-AIR we directed that the company begin the implementation of the tree trimming program pursuant to Section 4905.06 Revised Code and provided specific funds to the company to accomplish that purpose. The test year in that case was the 12 months ending March 31, 1981 and the Opinion and Order issued July 15, 1981. As noted above we continued this adjustment in the company's next case, Case No. 81-21-EL-AIR, which had a test year ending September 30, 1981, approximately two and a half months after the Opinion and Order in the previous case was issued and six months after the previous test year. The Opinion and Order in 81-21-EL-AIR was issued on February 3, 1982. In Case No. 81-1256-EL-AIR we used a test year ending June 30, 1982, approximately five months after the previous Opinion and Order and eight months after the test year in the previous case. This information is summarized with the information presented by OCC to show a history of the tree trimming **[*68]** issue:

	80-687-EL-AIR	81-21-EL-AIR	81-1256-EL-AIR
Test Year Ending	3-31-81	9-30-81	7-30-82
O & O	7-15-81	2- 3-82	12-22-82
Allowable Costs	$7,000,000	$7,000,000	$7,700,000
Actual Test Year Costs	3,744,000	3,943,000	7,056,963
Adjustment	3,256,000	3,057,000	643,037

(OCC Ex. la, p. 47.)

OCC argues that the company has overrecovered tree trimming costs. It must be remembered, however, that the company was first authorized the $7 million adjustment on July 15, 1981 on a prospective basis in Case No. 80-687-EL-AIR. The test year in the following case ended only two and a half months after the company was first authorized the money to implement the program. It is not surprising, therefore, that the entire $7 million is not reflected in test year operations. It must also be remembered that the company was only collecting this money for approximately two and a half months at this period in time. We would have been greatly surprised to see the company expend the entire $3,256,000 adjustment over what they were currently spending in that two and one half months. The implication in OCC's argument is that the company has over recovered these expenses in **[*69]** each case; however, an examination of the information set forth above does not bear this contention out. As can be seen in Case No. 81-1256-EL-AIR the company did expend the allowed level of $7 million.

OCC also contends that $7 million should be the maximum allowed to the company. As pointed out in the company's last rate case, the $7 million figure was an estimate based upon costs projected some time ago. We find that it is reasonable to increase this allowance to account for changing costs. This is what we did in the applicant's last rate case, Case No. 81-1256-EL-AIR, and we find it again reasonable to do so now. We, therefore, approve the $9,242,000 amount proposed by the company.

Storm Damage

The Staff proposed to reduce test year operating expenses by $1,224,032 to account for the abnormally high level of storm damage expense included by the company in Period II expenses (S.R., Schedule II - 3.12). The company objected and offered an alternative adjustment of $771,473 for Period II (App. Ex. 6, Ex. VI). The difference between the two adjustments stems from the fact that the Staff included an adjustment for labor in its calculation, whereas the company contends **[*70]** that there need be no adjustment for labor because this is already reflected in the level of labor

granted to the company under the labor adjustment. The company argues that if we adjust for it again, we will be double counting the labor adjustment. OCC agrees with the Staff.

All of the parties agree that an adjustment is called for. The only issue we need resolve is whether or not the labor portion of the Staff's adjustment is accounted for elsewhere. Company witness Anderson testified that the Staff's adjustment for labor annualization encompasses more than just wage rates but also sets the wage level for all labor expensed by the company for the test year (App. Ex. 6A, p. 5). He testified that the labor associated with storm damage is also included in this annualization. The relevant question, however, is whether or not this annualization includes an "abnormal" level of labor associated with storm damage. We can even be more specific. Mr. Anderson testified that the number of employees employed by the company does not vary with the level of storm damage. He testified that total labor expense would vary, however, in that the number of hours worked by the employees of the **[*71]** company would be greater if the level of storm damage was greater (Tr. XIX, p. 34). We have already approved the level of hours recommended by the company for Period II in this proceeding of 2,267 per employee (See Labor Adjustment). The issue, therefore, is whether or not this number reflects a level of employee hours that would not include abnormal storm damage labor. Mr. Anderson testified that this number included a forecast number of average hours per employee for the company for the whole year including storm damage (Tr. III, p. 82). He testified that the company did not attempt to break out the portion of these hours that were related to specific items such as storm damage, although he did know how much labor was included in storm damage expense (Id.). It seems reasonable to us, however, that the two numbers should relate directly to each other as they are company proposals for the same period of time. We would assume that if the company would include a given level of storm damage expense, including labor, in a given test year as exhibited by Staff Data Request 36, that it would include in its labor adjustment the hours necessary to recover that labor. This is in **[*72]** fact what Mr. Anderson testified to, when he stated that the labor expense included everything.

Based upon the record we find that the Staff's storm damage adjustment, including labor, is warranted. We cannot determine that these costs have been taken into consideration in the company's labor adjustment. The company's objection on this point is overruled.

Rate Case Expense

The company originally included an estimated rate case expense of $531,000 (App. Ex. 22, Schedule C-9). The Staff adjusted this expense level to reflect that the company did not call a cost of service witness (S.R., p. 10). The company submitted as a late-filed exhibit its actual rate case expense of $696,469.49. On brief, however, the company only requested the Staff's proposal of $511,000 increased by $30,000 to account for the fee paid to its CWIP witness Dr. Brigham, bringing the total request to $541,000. OCC and Montgomery County oppose any rate case expense arguing that it provides no direct benefit to the customers of DP&L.

We find that the proposed expense level of $541,000 is reasonable in light of the legal notice expense contained therein. In previous cases we have rejected OCC's argument **[*73]** concerning the direct and primary benefit requirement (See, e.g., Dayton Power and Light Company, Case No. 81-21-EL-AIR, supra). Given DP&L's history of filing rate cases, a one year amortization is found to be appropriate.

As pointed out by OCC, we must note that the expense for legal publications was substantial totalling approximately $347,471.10 compared to the previous case expense of $148,492.81 (Tr. V, p. 20). We share OCC's concern regarding the cost associated with legal publication expense. The company is directed to provide detailed explanation of this level of expense in its next filing. In addition, we find that considering the magnitude of the legal expense associated with this hearing, the company shall provide in its next rate case a detailed breakdown of the costs associated with the hearing process. This breakdown shall include information as to the charges paid by the company for outside counsel as well as the charges booked for company employees.

Residential Conservation Service (RCS)

The Staff initially did not support the company's proposal of including expenses and revenues associated with RCS (Staff Ex. 5, p. 17) The Staff, however, **[*74]** requested and received additional information concerning the RCS expenses and, upon review of that information, Staff witness Gallina testified and recommended that "the test year revenues-expenses as they are included should not be adjusted" (Tr. XI, p. 178). Accordingly, we find that OCC's proposed elimination of RCS expenses is not supported by the record and its objection is overruled.

Prior Period Adjustments

Both the applicant and the Staff adjusted Period I and Period II operating expense for items applicable to prior periods. The intent is to reverse certain entries made during the test year to correct for changes made in previous accounting periods. The Staff's adjustment of $3,976 for Period II is presented in the Staff Report on Schedule II-3.17. Based upon the record in this case we find this adjustment to be reasonable.

PUCO and OCC Maintenance Assessment

Consumers' Counsel objected to the Staff's proposed allowance for the PUCO and OCC maintenance assessments on the ground that the Staff's method failed to recognize credits received in years when the agencies do not utilize their complete budgets (OCC Ex. 1A, p. 55). This objection should be overruled. **[*75]** The credits referred to are associated with a year prior to the test year and, as the Commission has previously held, are not properly offset against the test year assessment obligation (Dayton Power and Light Company, Case No. 78-92-EL-AIR [March 9, 1979]). There is no assurance that such credits will be available in subsequent years, and no method of establishing an appropriate amount for such credits even if it is accepted that some might be anticipated.

Federal and Ohio Unemployment Tax

Staff witness Gallina agrees with Mr. Aukerman that the 1983 rates of 1.1% for federal and 1.5% for Ohio unemployment taxes should be used (App. Ex. 8, p. 5; Staff Ex. 5, p. 7). OCC witness Haskins agrees with the company and Staff (OCC Ex. 16, p. 1). Use of these final rates increases jurisdictional federal and Ohio unemployment taxes by $30,553 for Period II (App. Ex. 8, p. 5).

Ohio Gross Receipts Tax and Excise Tax Surcharge Revenue

Company witness Aukerman pointed out certain errors in the Staff's calculation of Ohio gross receipts tax and excise tax surcharge revenue. Staff calculated the jurisdictional non-taxable receipts factor based on the ratio of total electric non-taxable **[*76]** revenues to total electric revenues per applicant's Schedule WPC-3.15. This factor should have been computed at the jurisdictional level (App. Ex. 8, p. 4-5).

In addition, the Staff applied its factor to operating revenues before excise tax surcharge. It would be more appropriate to have applied the factor to total operating revenues as this was the denominator used in calculating the factor used to arrive at the level of non-taxable receipts (App. Ex. 8, p. 5). Staff witness Gallina agreed with Mr. Aukerman that these errors should be corrected (Staff Ex. 5, p. 6).

The effect of these two calculations is to increase the gross receipts tax at the jurisdictional level by $41,236 for Period II (App. Ex. 8, p. 5).

Depreciation Expense

Staff witness Fox agrees with Mr. Aukerman that jurisdictional depreciation expense for account 341, Structures and Improvements, was inadvertently excluded and that depreciation expense should be increased by $31,000 for this item (Staff Ex. 2, pp. 11-12; App. Ex. 8, pp. 5-6). The remaining issues with respect to this item have been discussed under depreciation reserve in the Rate Base section of this Opinion and Order.

CWIP Expenses **[*77]**

OCC is recommending that $163,000 representing expenses for Zimmer be eliminated from the test year ending March 31, 1983 (OCC Ex. 2, Sch. 9.14). These expenses represent test generation costs for Zimmer and OCC is arguing that they should not be allowed since Zimmer is not currently on line. Staff witness Gallina testified that the applicant's corporate model, which was prepared in late 1981, assumed Zimmer would begin test generation in February 1983. This generation must be included in order for the company to fulfill its load requirements for the test year. In other words, if this test generation is eliminated, some other generation would have to replace it (Staff Ex. 5, p. 18).

The company has valued this generation at replacement cost; i.e., had Zimmer not produced any generation, this fuel cost would be incurred (at another generating plant or through purchased power) to meet the load requirements of the test year. Since a redispatch of the system with Zimmer out would result in a nearly identical expense level, the Staff felt that eliminating Zimmer expenses would merely be cosmetic and would not produce different results. We find the Staff's recommendation is reasonable **[*78]** and should be adopted.

Federal Income Tax:

The Staff's calculation of the allowance for federal income tax expense drew several objections (S.R., p. 12). Two of these are general in nature and require little discussion. The company's objection in this area is tied to its position on other operating income issues. The Commission's final determination of the allowance for federal income tax expense will, of course, take into account all other revenue and expense adjustments approved herein. Intervenor Montgomery County, et al., objected to the "normalization" of federal income tax expense in instances in which flow-through could be permitted without loss of benefit. Intervenor did not pursue this matter at hearing or on brief, and the Commission, for these reasons stated in previous decisions approving interperiod tax allocation, overrules the objection (See, e.g., Dayton Power and Light Company, Case No. 76-88-GA-AIR [July 22, 1977]).

The Staff, without objection, excluded certain deactivated units at applicant's Tait generating station from rate base (S.R., p. 15). This exclusion also impacts other elements of the ratemaking formula, including the **[*79]** three components relating to federal income tax: the accumulated deferred tax balance used as a rate base offset, current deferred tax depreciation, and tax deductible depreciation. Executive Agencies' witness Dittmer identified deficiencies in the methodology employed by the Staff in allocating the Tait-related accumulated deferred taxes and current deferred tax expense to non-jurisdictional operations and, after certain refinements supplied by applicant (App. Ex. 8A, pp. 2-3), the company, the Staff, and Executive Agencies are now in agreement that Mr. Dittmer's revised calculations provide the appropriate basis for allocating these items (Exec. Ag. Ex. 5, Sched. 1; Exec. Ag. Ex. 5, Sched. 2). A dispute remains, however, with respect to the allocation of tax deductible depreciation.

The Staff initially determined jurisdictional tax deductible depreciation by simply applying the jurisdictional allocation factor to total utility tax deductible depreciation (S.R., Sched. II-4.1). Applicant, noting that this is the procedure traditionally utilized by this Commission and by the Federal Energy Regulatory Commission, supports the Staff's original finding with respect to these items **[*80]** (App. Ex. 8A, p. 5). Executive Agencies witness Dittmer agreed that it is appropriate to use an allocation methodology to eliminate non-jurisdictional tax depreciation when the actual tax depreciation associated with the excluded property cannot be identified (Tr. XVII, pp. 20-23). However, Mr. Dittmer contends that it is possible to refine that methodology by combining the allocation procedure with direct assignment in instances where the tax depreciation associated with specific year's property additions can be reconstructed (Exec. Ag. Ex. 5, pp. 5-7). Based on data supplied by the applicant, Mr. Dittmer identified the tax depreciation for 1975 and subsequent years' Tait additions. Combining this determination with the assumption that there would be no remaining tax depreciation attributable to the excluded pre-1955 Tait property, Mr. Dittmer recommends that the tax depreciation removed in connection with this portion of the excluded Tait investment be directly assigned, while the depreciation associated with the remainder of the excluded Tait property and the balance of the non-jurisdictional investment be allocated. The overall effect of this calculation is to increase the **[*81]** jurisdictional tax deductible depreciation from the Staff's figure of $80,847,000 to $81,375,000 (Exec. Ag. Ex. 5, Sched. 3). The Staff indicates on brief that it now supports Mr. Dittmer's proposal (Staff Br., pp. 32-34).

Based upon a review of the record relative to this subject, the Commission cannot conclude that the method sponsored by Executive Agencies' witness Dittmer necessarily produces a more "accurate" determination of the appropriate amount of tax deductible depreciation. Tax depreciation records are not maintained for each item of property, and it would be almost impossible to reconstruct the actual tax depreciation for all property additions by vintage year (App. Ex. 8A, p. 5). Thus, an allocation methodology must be used to determine what portion of the total tax deductible depreciation should be regarded as jurisdictional. By selectively removing, through direct assignment, some portion or portions of the tax deductible depreciation associated with a particular investment which has been excluded from rate base, one undermines the purpose of using the allocation methodology. As applicant's witness Aukerman points out, approval of such a technique would permit **[*82]** any party to manipulate the results to its own end by reconstructing the tax depreciation in instances where direct assignment will move the jurisdictional tax deductible depreciation in the direction the party wants it to go (App. Ex. 8A, p. 6). For example, the company could have reduced the tax deductible depreciation by reconstructing the tax depreciation associated with the killen spare turbine and assigning it non-jurisdictional status while employing an allocating methodology in connection with the balance of property excluded from rate base. In light of these considerations, the Commission finds that the allocation initially proposed by the Staff produces a reasonable result and should be employed for purposes of determining jurisdictional tax deductible depreciation for use in the calculation of the allowance for federal income tax expense in this case.

Consumers' Counsel's principal objection to the Staff's scalculation of the allowance for federal income tax expense relates to the flowback of investment tax credits associated with the Killen generating station. As killen was not classified as plant in service until June of 1982, applicant and the Staff recognized only **[*83]** nine months of Killen investment tax credits as an offset to test-year federal income tax expense. Consumers' Counsel witness Miller contends that

the nine-month amortization understates the offset for ratemaking purposes and proposes that the investment tax credits associated with Killen be annualized so as to reflect a full year's flowback (OCC Ex. 14, pp. 7-8). This adjustment would increase test-year investment tax credits by some $113,000, resulting in a corresponding reduction in allowable federal income tax expense (OCC Ex. 14, p. 8).

Applicant opposes Mr. Miller's recommendation, arguing that such a measure would expose the company to a possible loss of benefit. As applicant's witness Aukerman explained, and as a review of Section 46(f) of the Internal Revenue Code reveals, no credit will be allowed if cost of service is reduced by more than a ratable portion of the allowable credit (App. Ex. 8-10). In other words, the amortization of the Killen investment tax credits must track the period over which the depreciation expense associated with the subject property is accrued on the company's regulated books of account. Thus, in the instant case, only nine months of investment **[*84]** tax credit may be offset against federal income tax expense if applicant is to remain eligible for the credits. Contrary to the argument advanced by Consumers' Counsel on brief (OCC Br., pp. 69-70), the failure to annualize the credits is not inconsistent with the Commission decision in Columbus and Southern Ohio Electric Company, Case No. 81-1058-EL-AIR (November 5, 1982). Here, the question is whether credits may be imputed to a period which predates the in-service date of the property with which they are associated, while in Columbus and Southern, supra, the Commission was simply matching the amortization period with the appropriate book life. Consistent with the foregoing discussion, Consumers' Counsel's proposed annualization must be rejected.

Consumers' Counsel witness Miller also proposed a reduction in federal income tax expense to reflect a tax credit associated with certain qualifying research and experimental expenditures (OCC Ex. 14, p. 8). However, as developed at hearing, the $27,000 credit in question actually related to 1981 research and experimental expenditures (Tr. XVI, p. 132). Because the provision of the Economic Recovery Tax Act creating the **[*85]** credits establishes the amount of the offset based on a comparison of qualifying tax-year expenditures with an historical base period expenditure level, there is no reason to assume that the credit available in an earlier year would represent a meaningful number for ratemaking purposes (Tr. XVI, pp. 132-134). Indeed, there is nothing in this record to suggest that such a credit was even available in 1982, and certainly no evidence upon which to calculate any specific tax offset for this item (Tr. XVI, p. 135).

Operating Income Summary:

Consistent with the foregoing discussion, the Commission finds applicant's jurisdictional operating income for the twelve months ending March 31, 1983, the test period in this proceeding, to be as set forth on the following schedule:

	Adjusted Operating Income (000's Omitted)
Operating Revenues	$651,561
Operating Expenses	
Operation and Maintenance	343,432
Depreciation Expense	43,637
Taxes Other Than FIT	58,419
Federal Income Tax	66,759
Total Operating Expenses	$512,247
Net Operating Income	$139,314

PROPOSED INCREASE

A comparison of jurisdictional operating revenues of $651,561,000 with the allowable jurisdictional **[*86]** expenses of $512,247,000 indicates that under its present rates applicant would have realized income available for fixed charges in the amount of $139,314,000 based on adjusted test-year operations. Applying this dollar return to the jurisdictional rate base of $1,162,173,000, results in a rate of return under present rates of 11.99 percent. This rate of return is below that recommended as reasonable by any of the expert witnesses presenting testimony on the subject and, accordingly, the Commission must conclude that the company's present permanent rates are insufficient to provide it reasonable compensation for the service rendered customers affected by the application. Rate relief is clearly required at this time.

Under the rates proposed by applicant, additional gross annual revenues of $154,152,000 would have been realized based on test-year operations as analyzed herein. On a pro forma basis, which assumes necessary expense adjustments calculated in a manner consistent with the Commission's findings, this proposed increase would have yielded an increase in jurisdictional net operating income of $79,437,000, resulting in income available for fixed charges of $218,751,000. **[*87]** Applying this dollar return to the jurisdictional rate base results in a rate of return of 18.82 percent. A rate of return of 18.82 percent is above that recommended as reasonable by the expert witnesses. Thus, further analysis is required to establish a reasonable earnings opportunity for this company.

RATE OF RETURN

Three witnesses presented cost of capital analyses to be considered by the Commission as evidence in establishing a fair rate of return for the purposes of this proceeding. Dr. Willard T. Carleton presented testimony on behalf of the company to ascertain the fair rate of return on equity to be used in calculating the company's overall rate of return (App. Exs. 15 and 16). Dr. Carleton recommended a return on equity of 17-18% (App. Ex. 16, p. 11). Mr. Allen M. Hill, Treasurer of DP&L, also testifying on behalf of the applicant, recommended a cost of equity of 17.45% - 18.60% which results in an overall cost of capital of 13% - 13.44% for the test year ending December 31, 1982 and 12.01% - 13.45% for the test year ending March 31, 1983 (App. Ex. 19, p. 12). Mr Jerry L. Wissman, testifying on behalf of the Staff of the Commission, recommended a cost of equity **[*88]** of 15.44% - 16.46% and an overall rate of return of 12.23% - 12.62% (Staff Ex. 8, p. 3).

Capital Structure and Cost of Preferred Stock and Long Term Debt

Mr. Wissman used the capital structure for December 31, 1982 in his rate of return analysis (Staff Ex. 8). Company witness Hill presented both the capital structure for December 31, 1982 and for March 31, 1983 in his rate of return testimony (App. Ex. 19, Appendices 1 and 4). The difference between the two capital structures is extremely small. The use of the most recent data in determining an appropriate capital structure has been approved by this Commission in numerous recent cases. See, e.g., Cleveland Electric Illuminating Co., Case No. 81-146-EL-AIR (March 17, 1982). The use of the most recent data best reflects the costs of capital which the company will experience during the period when the new rates will be in effect. We, therefore, adopt the capital structure for the company as of March 31, 1983. The common equity component is found to be $673,904,000 or 38.39%, the preferred stock component is found to be $215,327,000 or 12.27% with an embedded cost of 8.83% and the long term debt component is found **[*89]** to be $866,053,000 or 49.34% with an embedded cost of 10.59% (App. Ex. 19, Appendix 4).

Cost of Common Equity

In determining total allowable revenues for a utility company, the Commission, of necessity, must make a large number of individual decisions with respect to specific issues. In making most of these decisions the Commission is confronted with perhaps three or four recommendations or alternatives. However, with the selection of a fair and reasonable return on common equity, the Commission is confronted with numerous theories and models as well as vast amounts of relevant data. Of course the Commission can only select one rate of return. To accomplish this, the Commission must select the most appropriate method and the most relevant data and apply them to determine an appropriate rate of return. This does not mean that the Commission rejects other data or other techniques as unacceptable, but merely that the Commission exercises its judgment and selects that recommendation it believes to be most reasonable given the facts and circumstances presented.

All three witnesses utilized and placed most of their emphasis on the traditional discounted cash flow model (DCF) **[*90]** in determining a recommendation as to the appropriate cost of common equity for The Dayton Power and Light Company. In addition, Dr. Carleton utilized what he characterized as three derivations of the traditional DCF model, although we might disagree with his characterization. Mr. Hill also utilized a risk premium approach to estimate the cost of common equity or to verify the results obtained from the DCF model. We have in the past recognized the usefulness of other techniques or models to verify the results obtained through the use of the DCF formula. We remain of the opinion, however, that the results obtained through the application of the traditional DCF model present a truer picture of the costs associated with equity financing on a company specific basis. Review of other techniques, however, does present a useful background from which to view the reasonableness of the results obtained from the DCF model.

Methods Other than the Traditional DCF

Dr. Carleton employed what he characterized as four different DCF estimates of the cost of common equity to DP&L (App. Exs. 15 and 16). We will reserve at this point discussion of the traditional approach used by Dr. Carleton and **[*91]** concentrate on his variations of the DCF model. The first approach used by Dr. Carleton is what he called

the determination of a cost of equity as a risk adjusted rate on U.S. Government bonds (App. Ex. 15, p. 51, Appendix 7 and App. Ex. 16, p. 2). By this method Dr. Carleton estimated a risk premium structure for high and low grade electric utilities for the period 1971-1980. This estimate is arrived at using a wide range of assumptions about how investor dividend growth rate expectations are formed in the context of the DCF model in which the proportionate relationship of investor's risk premium to interest rates of all maturities is a constant. The source of this method for evaluating the cost of capital of a public utility was a paper prepared jointly by Dr. Carleton and two of his colleagues in April of 1982. Dr. Carleton testified that this model takes the form as follows:

$1 + k[t] = (1 + rp) (1 + i[t])$

Where: k[t] = cost of equity capital for future period t

rp = risk premium

i[t] = interest rate on a U.S. Government security maturing in period t

(App. Ex. 15, p. 52, Appendix 7)

Dr. Carleton testified that he applied this formula to derive a cost of equity for DP&L **[*92]** in the range of 19.44 to 20.19 percent in his direct testimony and 16.34 to 17.09 percent in his supplemental testimony (App. Ex. 15, p. 52 and App. Ex. 6, p. 3). Quite frankly his analysis leaves us completely in the dark as to how these specific figures were derived and how they relate to the applicant in this case. A review of Appendix 7 attached to his original testimony sheds little light on the underlying methodology used in computing a cost of capital. This paper is extremely technical and theoretical in nature and Dr. Carleton provides little in the way of direct testimony to explain to the Commission the underlying rationale. We find that this proposal, as offered, is of little use to us in determining a cost of equity component for the applicant.

In his second "derivation" of the DCF formula Dr. Carleton apparently is presenting a present value analysis demonstrating the rate of return required by the company to reach a market to book ratio of one in the next two years. He also presented an analysis assuming investors expected an instantaneous increase in the price of the stock to book value. Implicit in this analysis is the assumption that the sole goal of regulation **[*93]** is keeping the market price of a share of utility stock above book value. We must note that the market to book ratio of DP&L has not exceeded one since 1977 and it has been longer for Moody's 24 group (S.R., p. 30).

It is interesting to note that Dr. Carleton assumes in this analysis an expected dividend for 1983 of $2.07 and an expected dividend for 1984 of $2.19 (App. Ex. 16, p. 5). The company has recently raised its dividend for the first quarter of 1983 to $2.00 per share on an annual basis. Dr. Carleton bridges this gap by compouding the $ .50 quarterly dividend over the year to arrive at what he calls an economic equivalent dividend stream. It is also interesting to note how Dr. Carleton derived a growth component to use in this analysis (App. Ex. 16, p. 5). Dr. Carleton takes the retention ratio for 1981-82 of approximately.28 and multiplies it by a return on equity (ROE) of 16.58 percent. We do not dispute the arithmetic in this calculation but we must question the growth component in light of Dr. Carleton's own analysis of what DP&L's ROE has been in recent years. As pointed out in his own testimony, DP&L's ROE has been as follows: 9.1 percent in 1977, 9.3 percent **[*94]** in 1978, 10 percent in 1979, 10.1 percent in 1980, 13.9 percent in 1981 and 14.5 percent in 1982 (Id.). We are of the opinion that it would take no small leap of faith to expect a ROE of 16.58, precisely that rate authorized in applicant's last case, in 1983 given the fact that the company is also presenting evidence in a chameleon like manner of an upcoming financial emergency because of the anticipated treatment it will receive on Zimmer (App. Ex. 17). We simply do not accept the growth component calculation determined on one years expected ROE.

In his third derivation of the DCF model Dr. Carleton presents what appears to be the traditional risk premium approach to determining a cost of equity. In making this determination he utilizes a study performed by Roger G. Ibbotson and Rex A. Sinquefield, "Stocks, Bonds, Bills, and Inflation: Historic Returns (1926-1978)", Charlottesville, Virginia, 1979, Financial Analysis Research Foundation. This study compares the average returns on a broad spectrum of common stocks over those earned on short term government notes (App. Ex. 16, p. 9). The average spread of earned returns on common stocks over government bonds during the period **[*95]** 1926-1978 was 5.7 to 7.8 percent per year. The 1982 update of this study, covering the period 1926-1981, indicates a spread of 6.1 to 8.3 percent. It should be noted that this represents a comparison of all types of corporate stocks including mostly stocks from the unregulated sector. Dr. Carleton testified that 20-year U.S. government bond yields have recently fluctuated between 10.8 percent and 11.3 percent (App. Ex. 16, p. 10). Using this information Dr. Carleton calculated a cost of equity for DP&L of 16.9 to 19.6 percent. We find several problems with this analysis. First, the study performed by Ibbotson and

Sinquefield was intended as nothing more than a broad based market measure of risk premiums. Taking a risk premium and performing no analysis to attempt to make it company specific to DP&L does not result in a determination that we would consider as reliable. In addition, the study performed by Ibbotson and Sinquefield determined risk premiums for corporate stocks and bonds over short term treasury bills, not U.S. Government Bonds. Short term treasury bills are considered to be risk free investments. The same is not true for not long term government bonds. Although **[*96]** long term government bonds would be considered default risk free they would not be considered market risk free. As a result we are of the opinion that Dr. Carleton's analysis on this point artifically increases the cost of equity to DP&L.

Mr. Hill also used a risk premium analysis in his determination of a cost of equity for DP&L (App. Ex. 19, p. 9). Mr. Hill computed an average current yield on 101 Electrics followed by Merrill Lynch on January 15, 1983 which he found to be 10.3 percent, while the average dividend growth for the electric industry was 6.4 percent during the twelve months ended December 31, 1982 (Id.). It is not clear from his testimony, however, whether these two components were determined on the same group of stocks or whether he is comparing information derived from two different sources. Using these components he used the DCF model to determine a baseline cost of equity of 16.70 percent, which, when adjusted for issuance and flotation costs, yields a spread of 17.23 to 18.37 percent (App. Ex. 19, p. 10). He compared this figure to Moody's Average Public Utility Bond Yield for twelve months ending December 31, 1982 of 19.33 percent to determine a risk premium **[*97]** of 140 basis points. This risk premium was added to the average yield on publicly offered debt by Ohio utilities in 1982, which was 15.42 percent, to arrive at an adjusted equity spread of 17.36 to 18.50 percent. What follows is the list of public debt offerings by Ohio utilities used by Mr. Hill:

OHIO UTILITIES
PUBLIC DEBT OFFERINGS
1982

COMPANY	DATE	PRINCIPAL ($ MILLIONS)	TERM (YEARS)	YIELD (%)
Ohio Edison	2/19/82	75.0	10	17.00
DP&L	3/09/82	60.0	30	16.92
CEI	3/10/82	75.0	30	16.90
Ohio Power	3/10/82	120.0	10	16.13
C&SOE	5/12/82	65.0	12	15.38
Toledo Edison	6/11/82	60.0	10	16.18
CG&E	7/01/82	100.0	10	15.95
Toledo Edison	9/21/82	60.0	30	15.00
CEI	11/23/82	100.0	30	12.80
C&SOE	12/14/82	50.0	10	11.90
Average				15.42

(App. Ex. 19, Appendix 10.)

An examination of this data reveals that a definite trend has been established during this period of time as to the yield demanded by investors on debt obligations issued by these companies. We hesitate to place too great a reliance on the resulting equity rate derived given this obvious downward pattern.

Traditional DCF Method

This Commission has **[*98]** indicated on several occasions its preference for the DCF model over other methods of estimating the cost of common equity. Much of the discussion in this case centers on the application of the facts presented to the DCF methodology. Under the DCF model, the cost of equity equals the sum of the dividend yield and the expected rate of growth in dividends (S.R., p. 37). The model is intended to be forward looking, equating the future stream of income associated with an asset, discounted at an investor's required return, to the price of the asset at the time of purchase. Therefore, when an individual decides whether to purchase a financial asset, he will be looking for a rate of return sufficient to compensate him for his purchase price. As long as the sum of the expected discounted future receipts exceeds the purchase price, the investor will continue to hold and acquire assets. In recent Commission cases, much discussion and debate has been presented concerning the appropriate application of the DCF model. The focus of attention had been the growth component of the model, but in several cases, including this one, the yield component has received equal attention.

The general **[*99]** expression of the DCF model utilized by this Commission for rate making purposes is as follows:

K = D[i] / P[o] + g

Where: K = the required rate of return

D[o] = the dividend for the most recent four quarters

D[i] = D[o] (1 + g)

P[o] = the average price of the stock over the most recent 12 months (or four quarters)

g = the expected rate of growth in dividends

(Staff Report, Appendix A.)

Both witness Wissman and witness Hill agreed generally on their description of the basic academic DCF model. Staff witness Wissman testified that under the academic model, if P[o] were the current price, D[1] would be the expected dividend to be paid over the next period and D[o] would be the dividend that was paid in the previous period. P[o] in the academic model would be today's price, D[1] would be the expected dividend over the next four quarters, and D[o] would be the dividend paid over the last four quarters. The Staff practice in this area has been to determine P[o] as the average stock price over the past 12 months (or four quarters) in order to avoid using spot data which may be subject to extremes in short term price fluctuations or to other variances of the business cycle (Staff **[*100]** Ex. 8, p. 12). Consistent with this determination the Staff used the dividends paid by the company over the same time period, the last four quarters. This figure corresponds to D[o]. Then, consistent with the DCF model, the Staff increases D[o] by 1 + g to arrive at the D[1] to be used in calculating the yield component. Thus P[o] is the average stock price for the most recent twelve months and D[1] corresponds to the expected dividend in the formula. These figures are then used to calculate the yield component, which in this case is as follows:

D[1] / P[o] = $ .475 X 3 + $ .50 / 16.55 X 1.03 = 11.98%

(Staff Ex. 8, p. 12.)

Company witness Hill testified that he did not agree with the Staff's determination and that the Staff incorrectly applied the DCF formula by using the dividend from the most recent four quarters rather than the current annualized dividend of the company. Witness Hill used the current annualized dividend divided by the average price for the twelve months ending December 31, 1982 as follows:

D[1] / P[o] = $2.00 / $16.116 = 12.41

(App. Ex. 19, Appendix 7.)

Witness Hill stated that this is the proper application of the DCF model and recommended that this **[*101]** figure be used as the yield component.

In performing these calculations much of the discussion and argument centered upon the appropriate component to be used as D[1]. The real focus of our consideration, however, should be on the yield component taken as a whole. The DCF model assumes a continuous stream of dividends increasing at a constant rate g. In actuality, however, the increases in dividends are not continuous, but come in specific steps. For example, DP&L increased its dividend recently for the first quarter of 1983. This increase did not come on a continuous basis over any period but came in one step on a specific date. The Staff's analysis attempts to smooth out this step which occurs in order to more closely approximate the intent of the DCF model. Much of the company's argument centers around the dividend component of the calculation rather than the yield component itself. We must also note that although the Staff's method works to the detriment of the company in this case this will not always happen. We find the Staff's yield component to be appropriate.

Staff witness Wissman used the "b x r" approach to estimate growth. Averaging "b x r" for the most recent **[*102]** five year period produced 2.06% (Staff Ex. 2, p. 11). Mr. Wissman testified that over the 1977-1982 period, dividends per share have grown at a compound annual rate of 2.74% and earnings per share (EPS) have grown at a compound rate of 9.69% over the 1978-1982 period. Mr. Wissman indicated, however, that this rate is misleading since the initial EPS (i.e. 1977) is the lowest since before 1972. Mr. Wissman testified that examining the growth rate from 1976 to 1982 and 1977 to 1982 eliminates the problem. The compound growth rates in EPS from 1979 to 1982 and 1977 to 1982 are

2.43% and 4.37% respectively. For the five year period (1978-1982) b x r averaged 2.06% but was less than 1% for two of the years (1978 and 1980). He indicated that recent (1981 and 1982) values of b x r have increased; however, these increases should not be overemphasized since the applicant has had seven rate cases (two emergency) over the last three years and has experienced negligible load growth (Staff Ex. 8, p. 10-12).

The company objects to the Staff's growth calculation, claiming that the "b x r" analysis understates the actual expected growth rate for DP&L. The company contends that by using historic **[*103]** data the Staff's method contradicts the intended application of the DCF model which focuses on anticipated returns. We do not dispute the fact that the DCF model is forward looking and that expected future growth is the proper component to be utilized in the calculation. We do not feel, however, that historic growth can be ignored in determining expected growth for a company. The "g" in the DCF calculation represents the annual growth in dividends that investors expect to be experienced by a given company in the future. In evaluating the growth of a given company, investors look at many things, including the historic data available. This Commission has on numerous occasions explained the importance of relating dividend policy to earnings growth. Increases in dividends without adequate earnings to support those increases amounts to borrowing from future earnings to pay current dividends. We believe that the "b x r" calculation gives a realistic appraisal of expected growth in dividends because it does not ignore the relationship between dividend growth and earnings growth as other methods might.

Based upon the above discussion we find the Staff's recommendation to be appropriate. **[*104]** The Staff has developed a standard procedure of adjusting the baseline cost of equity to account for "flotation costs". Mr. Wissman made such an adjustment using a range of 3.2 percent to 10 percent (Staff Ex. 8, p. 14). Both company witnesses supported such an adjustment. OCC opposes this adjustment but offered no witnesses in support of its position. This Commission has addressed the question of the propriety of such an adjustment in considerable detail on a number of occasions, and we see little purpose in doing so again. We have, in past cases, adopted the Staff's recommended range, not as a summation of distinct allowances for issuance costs, market pressure, and financial flexibility, but as representative of the spread above the baseline cost of equity within which the requirements associated with these items may reasonably be anticipated to fall. The Staff presents to the Commission a range to account for these costs rather than a single point estimate because, for most practical purposes, a single estimate is undoubtedly incorrect, in the sense that it is extremely improbable that the single estimate is exactly equal to the value of these costs. What the Staff is **[*105]** recommending to the Commission is an estimated range with a corresponding factor which indicates the degree of certainty that the parameter is actually in the estimated range. We again find that this procedure is reasonable and adopt the Staff's method.

In selecting a point within this range, the Commission exercises its discretion based upon the facts of the particular case. In the absence of a showing of particular facts to influence our judgment in one direction, we have chosen to use the midpoint of the recommended range. In making this determination in this case, however, we cannot ignore the current financial condition of DP&L and the associated risks to the investors of the company. Much of the discussion in this case concerning rate of return has been directed to the importance of maintaining the financial integrity of the company, specifically with respect to its current bond rating. We are of the opinion that it is a desirable result for this Commission to take whatever steps are necessary to insure adequate service to the consumers of this state by preserving the opportunity of the utilities we regulate to earn a reasonable rate of return. We are of the opinion, therefore, **[*106]** that the high end of the Staff's recommended range is appropriate and we adopt 16.46 percent as the cost of equity in this case.

Rate of Return Summary

Applying a cost of long term debt of 10.59%, a cost of preferred stock of 8.83% and a cost of common stock of 16.46% to the capital structure approved for purposes of this proceeding yields a weighted cost of capital of 12.63%. This Commission therefore concludes that a rate of return of 12.63% is sufficient to provide the applicant reasonable compensation for the service it renders to the customers affected by this application.

Cost of Capital Summary

	Capital Structure	Cost Rate	Weighted Cost
Long Term Debt	49.34%	10.59%	5.23%
Preferred Stock	12.27%	8.83%	1.08%
Common Equity	38.39%	16.46%	6.32%
	100.00%		

Cost of Capital Summary

	Capital Structure	Cost Rate	Weighted Cost
Overall Cost of Capital			12.63%

AUTHORIZED INCREASE

A rate of return of 12.63 percent applied to the jurisdictional rate base of $1,162,173,000 approved for purposes of this proceeding results in an allowable return of $146,782,000. Certain expenses must be adjusted if the gross revenues authorized are to produce this dollar return. These adjustments, which have been calculated **[*107]** in a manner consistent with the findings herein, result in an increase in income taxes of $6,387,000, in state excise tax of $554,000, and in the allowance for uncollectibles of $83,000. The net effect of these adjustments is to increase allowable expenses to $519,171,000. 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 $666,053,000 in gross annual operating revenue. This represents an increase of $14,492,000 over the revenues which would be realized under applicant's present rate schedules.

TARIFFS

As a part of its investigation in this matter, the Staff reviewed the rate schedules and provisions governing terms and conditions of service set out in applicant's proposed tariffs (App. Ex. 22, Sched. E-1). Although there were a number of objections to the resulting staff recommendations (S.R., pp. 42-61), many of these issues have been resolved by stipulations and recommendations jointly offered by the affected parties and the staff (Jt. Ex. 1, Jt. Ex. 2, Jt. Ex. 3). These matters, as well as the remaining tariff issues, are reviewed below.

Revenue Responsibility: **[*108]**

All parties to the proceeding have entered into a stipulation by which they propose, and the Staff recommends, an allocation of the increase in revenues authorized in this proceeding to the various tariff rate classes (Jt. Ex. 2, Para. 1; Jt. Ex. 2, Stip. Ex. I). This proposed revenue distribution is not that initially recmmended by any of the experts offering testimony on this subject, but represents a compromise among parties with competing interest which those experts regard as reasonable for purposes of this case (Tr. V, p. 60; Tr. XIV, p. 109; Tr. XV, p. 116; Tr. XVIII, p. 80). Given the nature of the subject involved, the Commission finds the allocation of revenue responsibility now jointly proposed by the parties and endorsed by the Staff to be most reasonable, and directs that this revenue distribution be incorporated in the tariffs filed pursuant to this Opinion and Order.

Residential Service:

Service to applicant's residential customers is governed by the Residential Rate (App. Ex. 22, Sched. E-1, pp. 1-2), the company's regular residential schedule, or by the Optional Residential Heating Rate (App. Ex. 22, Sched. E-1, pp. 3-5), an optional schedule available to **[*109]** electric space heating customers. No major changes in the basic design of these rates have been proposed, but the parties and staff have agreed, for purposes of this case, to a reduction in the monthly customer charge from $5.00 to $4.25 on those bills indicating consumption during the billing period (Jt. Ex. 2, Para. 6). The parties and the Staff have also agreed upon a methodology to be followed in allocating the residential class revenue responsibility to the various steps of the residential schedules (Jt. Ex. 2, Para, 2-5, 7, 8). The Commission finds these provisions of the stipulation to be reasonable and will accept them for purposes of this decision.

Although the company and the Staff have agreed to the design and relative revenue assignment for the Optional Residential Heating Rate, both contend that the seasonal discount it affords space heating customers is arbitrary and that the rate should eventually be eliminated (App. Ex. 14, p. 2; S.R., p. 50). To this end, applicant's witness Reid proposes that the rate be closed to new customers effective December 31, 1983 (App. Ex. 14, pp. 3-4). The Staff apparently agrees that equitable considerations justify "grandfathering" **[*110]** existing customers, and is not opposed to the grace period suggested by Mr. Reid (Staff Ex. 9, pp. 17-18). Intervenor Montgomery County, et al., opposes the elimination of this rate, arguing that the conclusion that the seasonal discount is arbitrary is not supported by a reliable cost study and that the Commission should not close an existing rate without a more conclusive showing (Montgomery County, et al., Ex. 1, p. 13). Although the Commission certainly has no desire to perpetuate an unreasonable intra-class subsidy if one, in fact, exists, there are factors present here which persuade us that the appropriate course is to defer a decision on closing this rate to a subsequent case.

The Optional Residential Heating Rate contains a separate provision for residential heating customers who wish to have their usage measured by a load meter. The history of this rate is discussed in some detail in Dayton Power and Light Company, Case No. 78-92-EL-AIR (March 9, 1979), pages 31 and 32, which indicates that the load meter provision was implemented to satisfy the requirement of Section 4905.70 Revised Code that electric utilities offer such an option to space heating **[*111]** customers. The Staff, recognizing that adoption of its recommendation to close the rate to new customers might place applicant in violation of the statute, requested the company to develop an alternative to the load meter sections of the schedule (S.R., p. 51). However, the Staff opposed the specific alternative eventually submitted by the company (App. Ex. 13, Ex. RDR-1; S.R., p. 51; Staff Ex. 9, pp. 16-17). In lieu of that alternative, the Staff recommended that the Commission simply make the company's time-of-use rate schedule (App. Ex. 22, Sched. E-1, pp. 41-43), available on an optional basis to all residential customers (S.R., p. 51; Staff Ex. 9, p. 17). The Commission finds this suggestion unacceptable. The time-of-use rates noticed in connection with this application are applicable only in a limited geographic area in Vandalia, Ohio, as a part of the company's ongoing time-of-use rate experiment implemented pursuant to the Commission's orders in Case No. 76-823-EL-AIR/Case No. 78-92-EL-AIR. Although the special metering required for the time-of-use rates would satisfy the statutory requirement that a metering option be offered to space heating customers, to extend the **[*112]** availability of these rates at this point in time would be totally at odds with the objectives of the time-of-use implementation program. The Commission must, therefore, reject this Staff recommendation. Should the time-of-use implementation program follow the orderly expansion originally contemplated by its sponsors, the time-of-use rates will undoubtedly become mandatory across the service territory and will replace both existing residential schedules, thereby resolving the problem. However, at this juncture, with no acceptable alternative schedule before us and questions remaining as to whether an unreasonable subsidy exists, we think the better course is to allow the Optional Residential Heating Rate to remain open.

General Service:

Applicant's general service schedules include the General Service Secondary Rate (App. Ex. 22, Sched. E-1, pp. 8-13) the General Service Primary Rate (App. Ex. 22, Sched. E-1, pp. 14-16), the General Service Primary-Substation Rate (App. Ex. 22, Sched. E-1, pp. 17-20), and the General Service Transmission Rate (App. Ex. 22, Sched. E-1, pp. 21-23). All the parties, with the exception of intervenor The Way International (The Way), have entered **[*113]** into a stipulation covering the design and method for distributing the respective classes' share of the authorized increase in revenues to the various rate components of the schedules (Jt. Ex. 2, Para. 9-12). The Staff recommends approval. The Way opposes the design of the proposed General Service Primary Rate, a matter discussed below. The Commission finds the provisions of the joint stipulation and recommendation governing the balance of the general service schedules to be reasonable and will direct that these provisions be reflected in the tariffs filed pursuant to this Opinion and Order.

General Service Primary Rate:

The Way has intervened in this proceeding in opposition to the demand and energy charges of the General Service Primary Rate currently in effect for DP&L and the proposals in this case by the Staff and the applicant. The Way also opposes the continued implementation of the 75% demand ratchet currently in effect. The Way contends that these charges result in an unreasonable economic burden being placed upon low load factor customers (Way Exs. 5 and 6).

L.W. Thompson testified for The Way and proposed alternative tariffs for the General Service Primary Rate **[*114]** (Way Ex. 8). Mr. Thompson testified that the winter/summer coincident peak methodology developed by the company in determining tariffs relies upon the contribution of various customer classes to the system peak demands in selected months as the basis for assigning most production and transmission costs (Way Ex. 8, p. 13). Mr. Thompson contends that this method of assigning costs to a specific class can work an injustice where the individual characteristics of a particular member of the class differ significantly from those of the class as a whole. Specifically in this case Mr. Thompson is concerned that the low load characteristics of The Way's usage of service from DP&L assigns an inordinate amount of demand charges to The Way. He testifies that the absence of any recognition of the relationship between load factor and coincidence amounts to an assumption of uniform coincidence as a method of rate design (Id.). Mr. Thompson argues that the company's tariffs are designed based upon this assumption of uniform coincidence within the General Service Primary rate and that this method of designing rates works an undue hardship on low load users such as The Way.

The company, IEC **[*115]** and the Staff oppose the proposal made by The Way. They point out that DP&L serves approximately 142 customers under its General Service Primary Rate. The Way is one of these 142 customers and is a low-load customer with an annual load factor of 34.6 percent in 1981 and an annual load factor of 38.89 percent in 1982. They argue that a low load customer, such as The Way, imposes greater cost on a utility because its usage of

capacity-related facilities is uneven over the year and as a result the company would have to maintain a higher level of capacity year-round in order to have sufficient reserve to provide service to all of its customers at the time of the system peak. The Way's peak is during the summer months and during the summer peaking period for the company. It should be noted that The Way experiences a rather sharp summer peak as the result of a religious observance during August of each year with low usage the remainder of the year (Way Exs. 5 and 6). The company, IEC, and the Staff all argue that the redesign of the General Service Primary Rate as proposed by The Way would work a hardship on the rest of the customers in this class. They contend that the analysis **[*116]** performed by Mr. Welch on behalf of The Way is misleading in that many of the customers he studied to determine the impact of the company's proposal were not actually served under the General Service Primary Rate. In addition, they point out that Mr. Welch's analysis assumes a 100% grant of the proposed increase in this case, where the evidence would indicate substantially less than 100%. Indeed, we must note that this assumption has proved to be true.

Based upon the evidence as a whole we find we must reject The Way's proposal. We do not believe the rate it proposed would serve the needs of this class of customers better than the proposal of the Company and Staff at this time. We must note, however, that the Staff has plans to review the minimum demand provisions of this tariff once additional data is received from the company. As pointed out by witness Sarap, with the modification of the Standard Filing Requirements, such a review will be possible in future cases (Tr. XIV pp. 141-144). Thus, for purposes of this case, the Commission will accept the provision of the stipulation relating to the General Service Primary Rate.

General Service Primary-Substation Rate:

Applicant, **[*117]** the Staff, and the intervenors affected by the General Service Primary-Substation Rate (App. Ex. 22, Sched. E-1, pp. 17-20) have joined in a stipulation and recommendation which proposes a modification of the language governing the applicability of this schedule and its minimum charge provision (Jt. Ex. 3). Intervenor Industrial Electricity Consumers indicates that the stipulation satisfies its filed objections relating to this area. The stipulation is reasonable, is supported by the record (Tr. XIV, p. 109; Tr. XV, p. 116), and will be adopted.

General Service Secondary Rate:

The company proposed to change the provision governing the applicability of the General Service Secondary Rate to clarify that the rate is only available to non-residential customers and that all electric service must be at one location on the customer's premises (App. Ex. 14, pp. 6-8). The Staff agreed that the proposed changes were appropriate (Staff Ex. 9, p. 18), and the Commission will approve this modification. Applicant also proposed to delete a provision from the General Service Secondary schedule which permitted the company to fix the billing demand at a certain level if a customer's consumption **[*118]** did not exceed a specified minimum level for three consecutive billing months during the June through October period. As applicant's witness Reid explained, this language had originally been incorporated to insure that demand meters would be installed only when it would be cost effective to do so (App. Ex. 14, pp. 9-10). Demand charges are now at sufficient levels to insure the cost effectiveness of installing a demand meter. Further, if a demand meter is in place and the tariff provides for demand metering, it is certainly appropriate to use the actual demand for billing purposes. The Staff supports this proposal (Tr. XIV, pp. 91-92), and the Commission will approve the deletion of the language in question.

Interruptible Service Rider:

As a part of its application, the company has proposed to withdraw its existing Load Management Rider (App. Ex. 22, Sched. E-2, p. 17) which advises General Service Primary, General Service Primary-Substation, and General Service Transmission customers that can demonstrate a monthly interruptible load greater than 1,000 kW of the availability of a negotiated rate for interruptible service. Applicant proposed to replace this provision with **[*119]** an Interruptible Service Rider (App. Ex. 22, Sched. E-1, pp. 24-25) which sets out more specifically the terms and discounts for this type of service. The Staff found the new rider unacceptable, and recommended against approval (S.R., pp. 55-56). This matter was resolved at hearing by a stipulation and recommendation jointly offered by the applicant, the Staff, and intervenors Executive Agencies and the Industrial Electricity Consumers which sets out a proposed Interruptible Service Rate (Jt. Ex. 1). The Commission finds the new rate sheet, to be designated "First Revised Sheet No. 22-A" to be reasonable, and directs that it be incorporated in the tariffs filed pursuant to this order.

Contiguous Ratchet Provision:

The Executive Agencies has taken the position on this issue that the contiguous ratchet provision be revised so as to allow for the consideration of demands for ratchet purposes for those customers with multiple delivery points served at one or more voltage levels by DP&L on contiguous property (Exec. Ag. Ex. 2, p. 9).

On brief, however, the Executive Agencies maintains that the contiguous ratchet provision should be retained for the reasons cited by Mr. Herz, **[*120]** and concurs with Ms. Sarap that no changes to the ratchet provision should be made in this proceeding and the issue should be explored fully by all parties in the next rate case, including an examination of the issue of conjunctive metering for purposes of the ratchet where a customer's contiguous properties are serviced by meters of different service voltage levels. We find that this proposal is reasonable and find that the provision should remain unchanged. We direct the company to file information in the next proceeding to enable the Commission to fully explore this issue.

Traffic Control Signal Rate:

Applicant proposed to delete certain language from the provision of its Traffic Control Signal Rate (App. Ex. 22, Sched. E-1, pp. 30-31) governing the rate's applicability (App. Ex. 14, pp. 5-6). The language in question, which merely advises customers of the option of being served under the standard schedules, is regarded as redundant in that applicant's Rules and Regulations already provide that a customer has the option of being served under the most advantageous rate. The Staff agrees that the deletion should be approved (Tr. XIV, p. 192), and the Commission so finds. **[*121]**

Other Schedules:

The parties to the stipulation have agreed, and the Staff recommends, that the monthly customer charges of the remaining rate schedules, with the exception of the Direct Current Rate (App. Ex. 22, Sched. E-1, pp. 35-36), shall remain at current levels, with the revenue increase authorized to be recovered proportionally through the energy charges (Jt. Ex. 2, Para. 13). The parties and the Staff propose an increase in the Direct Current Rate customer charge to $30.00, with the energy charge to be adjusted to recover the balance of the schedule's revenue requirement. The increase in base revenues for the Private Outdoor Lighting Service Rate (App. Ex. 22, Sched. E-1, pp. 32-34) is to be recovered by proportional increases to the fixture, span, and pole charges of the schedule. The Commission finds this provision of the stipulation to be reasonable and will direct that the tariffs filed pursuant to this Opinion and Order reflect this proposal. As explained in the stipulation, this provision does not pertain to the Street Railway Rate.

Effective Date:

The Commission's general practice is to require that applicant utilities notify customers of any rate increase **[*122]** authorized prior to the effective date of the new tariffs, and to delay the effective date in order that this customer notification can be accomplished. However, in instances where the Commission has not acted upon a rate application within 275 days of the date of filing, and where the applicant utility has not invoked the provisions of Section 4909.42 Revised Code to attempt to place its proposed rates in effect subject to refund, the Commission establishes the effective date of the new tariffs as of the date they are approved by Entry so as not to penalize the company for its forebearance. In the instant case, applicant has not attempted to place its proposed rates in effect although the 275-day period has expired. Thus, the Commission finds that the effective date of the tariffs filed pursuant to this Order shall be the date they are approved by Commission Entry. The Customary notification requirement will, of course, be retained, said notice to be mailed to customers upon approval of its form by the Commission.

FINDINGS OF FACT:

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

1) The value of all of applicant's property **[*123]** 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, Revised Code as of the date certain of June 30, 1982, is not less than $1,162,173,000.

2) For the twelve month period ending March 31, 1983, the test period in this proceeding, the revenues, expenses, and income available for fixed charges realized by applicant under its present rate schedules were $651,561,000, $512,247,000, and $139,314,000, respectively.

3) This net annual compensation of $139,314,000 represents a rate of return of 11.99 percent on the jurisdictional rate base of $1,162,173.00.

4) A rate of return of 11.99 percent is insufficient to provide applicant reasonable compensation for the service rendered customers affected by the application.

5) A rate of return of 12.63 percent is fair and reasonable under the circumstances presented by this case and is sufficient to provide applicant just compensation and return on the value of its property used and useful in furnishing the service described in the application.

6) A rate of return of 12.63 percent applied to the jurisdictional rate base of $1,162,173,000 **[*124]** will result in income available for fixed charges in the amount of $146,782,000.

7) The allowable annual expenses of the applicant for purposes of this proceeding are $519,271,000.

8) The allowable gross annual revenue to which the applicant is entitled for purposes of this proceeding is the sum of the amounts stated in Findings 6 and 7, or $666,053,000.

9) Applicant's present tariffs should be withdrawn and cancelled and applicant 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 Revised Code; further, applicant has complied with the requirements of the aforesaid statutes.

2) A staff investigation has been conducted and a report duly filed and mailed and public hearings have been held herein, the written notice thereof having complied with the requirements of Section 4909.19 Revised Code.

3) The existing rates and charges now being charged and collected by applicant for electric service to customers affected by this application are insufficient **[*125]** to provide the applicant with adequate net annual compensation and return on its property used and useful in the rendition of electric service.

4) A rate of return of 12.63 percent is fair and reasonable under the circumstances of this case and is sufficient to provide the applicant just compensation and return on its property used and useful in the rendition of electric service to its customers.

5) Applicant 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 The Dayton Power and Light Company for authority to increase its rates and charges for electric service be granted to the extent provided in this Opinion and Order. It is, further,

ORDERED, That applicant 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 **[*126]** effective date of the new tariffs shall be the date said tariffs are approved by Commission Entry or the date the company submits its three complete printed final copies of tariffs, whichever occurs later. The rates contained in the new tariffs shall be applicable to all service rendered on and after the effective date. It is, further,

ORDERED, That the applicant 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 these methods. Applicant shall submit a proposed form of notice to the Commission when it files its tariffs for approval and the Commission will review same and, if proper, approve it by entry. It is, further,

ORDERED, That, pursuant to the recommendation of the Staff (S.R., p. 33), applicant continue to report quarterly on the immediate past performance of its generating units. It is, further,

ORDERED, That the reporting requirements relating to applicant's line clearance program as established in Case No. 80-687-EL-AIR be continued, and that the monthly reports henceforth be filed in the docket of Case No. 82-517-EL-AIR. It is, further, **[*127]**

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

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

THE PUBLIC UTILITIES COMMISSION OF OHIO

Legal Topics:

For related research and practice materials, see the following legal topics:
Energy & Utilities LawElectric Power IndustryState RegulationGeneral OverviewEnergy & Utilities LawUtility CompaniesBuying & Selling of PowerEnergy & Utilities LawUtility CompaniesRatesRatemaking FactorsRate Base

EXHIBIT 3

In the Matter of the Application of The Ohio-American Water Company to Increase Rates for water service provided to its Entire Service Area

79-1343-WW-AIR

PUBLIC UTILITIES COMMISSION OF OHIO

1981 Ohio PUC LEXIS 3

January 14, 1981

APPEARANCES:

Messrs. Bricker and Eckler, by Sally W. Bloomfield, 100 East Broad Street, Columbus, Ohio, on behalf of the applicant.

William J. Brown, Attorney General of Ohio, by Judith B. Sanders and Marsha Rockey Schermer, Assistant Attorneys General, on behalf of the Staff of the Public Utilities Commission of Ohio.

William A. Spratley, Consumers' Counsel, by Michael L. Haase and Richard P. Rosenberry, Associates Consumers' Counsel, 137 East State Street, Columbus, Ohio, on behalf of the Residential Customers of the Ohio-American Water Company.

Messrs. Bell and Clevenger, by Samuel C. Randazzo, 21 East State Street, Columbus, Ohio, on behalf of Intervenors Marion and Tiffin, Ohio, and Hopewell and Clinton Townships, Seneca County, Ohio.

PANEL: [*1]

[Illegible Paragraph]

OPINION: OPINION AND ORDER

The Commission, coming now to consider the above-entitled application filed pursuant to Section 4909.18, Revised Code; the exhibits filed with the application; the Staff Report of Investigation issued pursuant to Section 4909.19, Revised Code; the testimony and exhibits introduced into evidence at the public hearing commencing October 29, 1980 and concluding November 4, 1980; having appointed **[*2]** its Attorney Examiner William F. Brown, pursuant to Section 4909.18, Revised Code, to conduct the public hearing and to certify the record directly to the Commission; and being otherwise fully advised in the premises, hereby issues its Opinion and Order.

HISTORY OF THE PROCEEDING:

The Ohio-American Water Company (hereinafter referred to as the Applicant or the Company), the Applicant in this case, is an Ohio corporation engaged in the business of providing water service to consumers within Ohio. The present entity is the result of the merger of The Ohio Cities Water Company and Ohio American Company into the Marion Water Company. The name of The Marion Water Company was changed to Ohio-American Water Company effective January 1, 1980. The merger and reorganization was approved by this Commission in Case No. 79-821-WW-AIS, November 21, 1979. Ohio-American Water Company is a subsidiary of American Water Works Company, which is a holding company with operating subsidiaries in twenty states.

Ohio-American Water Company Consists of four divisions and they are: Ashtabula District, Lawrence County District, Marion District, and Tiffin District. With the exception of Lawrence County, **[*3]** the other three districts op-

erate their own water treatment plants. The Lawrence County District purchases all of its water from the Huntington Water Company, Huntington, West Virginia, subsidiary of the American Water Works Company.

The rates currently in effect were approved by local ordinances or by this Commission at various times from April, 1974 to November, 1976.

On December 14, 1979 the Company filed its Notice of Intent to File an Application For an Increase in Rates, with a request to establish a date certain of June 30, 1979, and a test period for the twelve months beginning January 1, 1979, and ending December 31, 1979. The Commission approved the requested date certain and test year by Entry dated January 3, 1980. Subsequently, by Entry dated April 9, 1980, the Commission accepted the Company's application as of March 14, 1980.

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. A written report of the results of the Staff's investigation was filed on August 18, 1980, and served as provided by law. Objections to the Staff Report were timely filed **[*4]** by the Company and the Intervenors.

On October 29, 1980, in accordance with the Commission's Entry of September 24, 1980, the public hearing of this matter commenced at the offices of the Commission, 375 South High Street, Columbus, Ohio. On the first day of hearing, Applicant submitted proof of publication made pursuant to Section 4909.19, Revised Code, and the Commission's prior entry, and members of the public were afforded the opportunity to make statements relative to the application. The hearing continued until November 4, 1980. At the conclusion of the hearing, the attorney examiner established a briefing schedule which called for briefs to be filed by all parties on December 2, 1980, with an optional reply brief on December 5, 1980. At the request of the Applicant, and with the agreement of the other parties, the examiner granted an extension of the briefing schedule to December 9, and December 12, 1980, respectively. The recorded transcript of the proceeding and the exhibits admitted in evidence have been certified to the Commission by the examiner for its consideration.

COMMISSION REVIEW AND DISCUSSION

This case comes before the Commission upon application of **[*5]** Ohio-American Water Company, filed under Section 4909.18, Revised Code, for authority to increase its rates and charges for water service to its jurisdictional customers. Applicant alleges that its existing rates are insufficient to afford it reasonable compensation for the service it renders, and seeks Commission approval of permanent rates which would yield approximately $1,324,904 in additional gross annual revenues, based on the company's test year operations as analyzed herein. It now falls to the Commission to examine the evidence of record in order to determine whether the existing rates are inadequate and, in the event of such a finding, to establish rates which will afford the applicant a reasonable opportunity to earn a fair rate of return.

RATE BASE

The Applicant, Staff and the OCC each offered testimony in support of its respective rate base proposal in this proceeding. The following table compares the Company and Staff estimates of property used and useful in providing service as of the date certain. The few adjustments proposed by the Staff and OCC will be discussed individually below.

JURISDICTIONAL RATE BASE

	Company n1	Staff n2
Plant in Service	$21,590,048	$21,478,567
Less: Depreciation Reserve	4,794,778	4,730,444
Net Plant in Service	16,795,270	16,748,123
Plus: Working Capital	506,166	283,471
Less: CIAC	384,855	357,296
Less: Other Items		
Rate Base	16,916,581	16,126,623

[*6]

n1 Applicant's Schedule B-1

n2 Staff Report, Schedule 7

Plant in Service

The plant in service is the surviving original cost of the plant that is used and useful in supplying water to its customers in Ashtabula, Marion, Tiffin, and Lawrence County, Ohio. The Staff excluded certain property from plant in service (Staff Report, Staff Ex. 1, pp. 10-11). Of these exclusions, the Company continues to object only to Account No. 310, 2 acres, Scioto River Intake. Additionally, the OCC objected to the inclusion of a water storage tank in the Marion District.

Scioto River Intake Property

After an on-site inspection of Scioto River Intake Property, Staff witness Coler testified that 2.0 acres, valued at $3,449, is surplus land. The parcel of land controls the Company's water rights to the Scioto River as well as supports the intake structures pumping and piping facilities. Mr. Coler further testified that the exclusion of the parcel "in no way known, deprives the Company control of the water rights, or could create any interference in the efficient operation of its present plant." (Staff Ex. 3, p. 3). Moreover, Mr. Coler stated that the area in which the land is situated **[*7]** is good farming land and there is nothing that he was aware of which precludes the Company from selling or leasing the land (Tr. IV, p. 143).

In his supplemental testimony, Company witness Edgemon stated, "this amount of property is necessary to operate and maintain the facilities and to provide for an adequate buffer area . . . Furthermore, we see no practical way to dispose of the disallowed portion of the property." (Co. Ex. 4A, p. 7).

The Commission has previously recognized that there are a number of factors which must be considered in evaluating adjustments involving the elimination of minor portions of land parcels on the theory that the total acreage at a site is above that reasonably required to support a given installation [Ohio Edison Company, Case No. 78-1567-EL-AIR, et al., (January 30, 1980)]. In the recent Cleveland Electric Illuminating Company order, the Commission found the "critical evidence in this area to be the admissions of Applicant's own witness with respect to the Company's specific plans for the future use of much of the area excluded by the Staff" [Case No. 79-537-EL-AIR at p. 7 (July 10, 1980)]. Such is the state of the record in the **[*8]** instant matter. The Company witness did not propose a future use for the land, but stated the land would be needed as a buffer or that the land was unmarketable. These two arguments have been rejected previously by the Commission, [Ohio Edison Company, Case No. 77-1249-EL-AIR, (November 17, 1978]. In view of Commission precedent and the record, we conclude that the amount associated with this exclusion should properly be assigned to Account 105 (Land Held for Future Use). Applicant's objection to the Staff adjustment should be overruled.

Marion District Water Tank

For the Marion District, the Applicant acquired an engineering depot from the U.S. Army in 1974. Included in this purchase was a water storage tank valued at $47,595 *, which is included in the rate base. During the latter stage of discovery and during cross-examination of Company witness Edgemon, the OCC concluded that the tank was not used and useful as required by Section 4909.05, Revised Code and should be excluded from the rate base. However, since the OCC had not formally filed an objection to the inclusion of the water tank in rate base, the Staff objected when this topic was raised. The examiner **[*9]** overruled the Staff objection and admitted evidence regarding the tank.

* OCC Brief p. 9 [Illegible Word]

The Ohio Supreme Court reviewed the actions of the hearing examiner and of the Commission in Office of Consumers' Counsel v. Public Utilities Commission, 56 Ohio St. 2d 220 (1978) and concluded that:

In holding that pre-filed objections by a party are intended to present the issues to which evidence should be directed, and a party intervening solely by appearance may not, as a matter of right, broaden such issues, it does not follow that the Commission must woodenly confine the hearing to such issues regardless of circumstances, and that the Commission is without discretionary authority to allow development of additional issues it considers important. The scope of the Commission inquiry properly extends to any matter put in issue by the application and related to the rate changes under consideration. 56 Ohio St. 2d, at p. 227 (Emphasis by the Court).

In view of the record and the above cited case, the Commission agrees that the examiner properly included the issue of the water tower in the proceeding.

The evidence in the record clearly establishes **[*10]** that the tank is not being used by the Company, nor, at the date certain, was it useful. Company witness Harrison, when asked whether this tank had holes in it, claimed that even

though it was currently not being used, that it could be used (Tr. II, p. 15). This testimony is a tacit admission that the tank is not used and useful and should be excluded from the rate base.

The remaining issue is the valuation of the tank. As stated above the OCC concluded that the amount in question is $47,595. However, the Applicant in its reply brief points out that this figure includes a reservoir, which had been eliminated from rate base by the Staff. Excluding the reservoir leaves a tank cost of $29,000, and $21,230 depreciation expense associated therewith. This leaves a total of $7,770 in the rate base representing the undepreciated value of the Marion depot tank (Company Reply Brief, p. 6). After reviewing the record and the briefs, the Commission concludes that $7,770 is the proper figure to be deducted from the rate base for the water tank, which is not used and useful.

Working Capital

Section 4909.15(A)(1), Revised Code provides that a reasonable allowance for working capital **[*11]** should be included in the rate base valuation. The Staff computed its proposed allowance of $283,471 for this item by use of the formula approach as traditionally accepted by the Commission (Staff Ex. 1, p. 13, and Schedule 11). Basically the Consumers' Counsel allowance for working capital differs only slightly from that of the Staff. The first difference involves the position on expenses, discussed elsewhere, and the second difference is due to the Consumers' Counsel's contention that "the inclusion of FICA taxes as an offset to the cash component of working capital" should be made (OCC Ex. 1, A. 32). The Company in its request for a working capital allowance contended through Company witness Edgemon that the Commission should modify the one-eighth of adjusted operations and maintenance expenses component of the working capital formula. The Company argues that, because some of the customers are billed on a bimonthly basis, an adjustment of one-fifth should be utilized in determining the operations and maintenance expenses for those revenues associated therewith. The Commission has had occasion to address, in detail, the issue of working capital in a number of its recent decisions. **[*12]** [see Dayton Power & Light Company, Case No. 78-92-EL-AIR, (March 9, 1979) and Columbus & Southern Ohio Electric Company, Case No. 77-545-EL-AIR, (March 31, 1978).] In its prior discussions the Commission has acknowledged that a properly conceived and developed lag study would produce the most reliable estimate of the appropriate working capital allowance, but has not encouraged that such studies be undertaken due to the expense and time involved in their preparation. However, the Company believes that the formula approach does not properly take into account the "timing difference between when expenses are incurred and payments are received" because of its bi-monthly billing procedures, it should have supported this claim with a properly conceived lead-lag study examining all timing differences. [Cleveland Electric Illuminating Company, Case No. 79-537-EL-AIR, p. 16 (July 10, 1980)]. Accordingly, the Commission will adopt the Staff's recommendation that the calculation of an allowance for working capital be made on the basis of the formula approach, incorporating a cash component of working capital composed of one-eighth of adjusted operations and maintenance expenses **[*13]** less one-fourth of adjusted operating taxes excluding FICA and deferred federal income taxes.

FICA Tax

Neither the Company nor the Staff included FICA taxes in the one-fourth tax offset to cash working capital. Consumers' Counsel contends that because the one-fourth tax offset is a composite representing a 90-day lead, a selective adjustment should not be made because the lead for particular taxes is slight. Once again the Commission will not adopt this selective adjustment to the working capital formula. The Commission in countless recent cases has held that selective adjustments to the working capital formula are unjustified unless a detailed study encompassing all factors affecting term cash needs has been undertaken. This Commission has recognized, as far back as the decision in Columbus & Southern Electric Company, Case No. 77-545-EL-AIR (March 31, 1978), that the accruals for FICA taxes are largely unavailable to the Company to reduce its cash working capital requirement, and has consistently eliminated FICA taxes from the one-fourth tax offset. And we again conclude that the FICA taxes should not be included in the tax offset.

Rate Base Summary

In light **[*14]** of the foregoing discussion of rate base items the Commission finds the statutory rate base as of the date certain to be as follows:

Plant in Service	$21,478,567
Less: Depreciation Reserve	4,730,444
Net Plant in Service	16,740,353
Plus: Working Capital	345,796

Less: Contribution in Aid of Construction	357,296
Less: Other Items	547,675
Jurisdictional Rate Base	$16,181,178

OPERATING REVENUES AND EXPENSES

Operating Revenues

Total operating revenue for the Applicant is $6,112,188 as put forth in Schedule 2 of the Staff Report. The Company filed no objections in regard to operating revenue. Although the OCC did file an objection to this figure, in its brief it recommends the adoption of the test year revenues that were determined by the Staff.

Operating Expenses

The Applicant, the Staff, and the OCC each submitted an analysis of the test year expenses. Specific expense issues used will be discussed below individually.

Labor Expense Adjustment

In view of the remote test year, the Commission must determine what would be the proper adjustment to labor expenses to reflect increases in wages. The Staff recommends that the labor adjustment reflect **[*15]** only the annualization of 1979 actual wage increases as applied to test year labor costs. Additionally the Staff proposed to exclude the cost of overtime wages in its calculations. The Company requests that the labor expense be annualized to the date of the hearing. Previously, the Commission has set forth the standard for annualizing post-test year adjustments in a series of Columbia Gas of Ohio cases. These criteria are: (1) changes are known; (2) they represent fixed legal obligations beyond the control of the company; (3) they can be calculated with certainty which can be readily reconciled with test year analysis of accounts without raising significant questions of mismatching; and (4) a relatively remote test year is employed. Although the Staff did not propose making this post-test year labor adjustment, the Commission finds that it would be reasonable to employ this adjustment in this case. As the Commission has stated in the series of Columbia cases:

That as long as a major goal of annualization is to create a representative picture of the cost which the utility will incur in the near term future, the recent verifiable, known and measurable data should be used.

[**[*16]** Columbia Gas Of Ohio Inc., Lorain, Case No. 78-1443-GA-CMR (April 30, 1980)]. Therefore, the Commission finds that it will adopt the calculation of those wage adjustments as provided by the Applicant in its Exhibit 5b.

An adjunct to labor expense is the issue of an adjustment for increases in overtime labor expense. Due to the nature of the service performed by a utility, and the fact that the service is provided 24 hours a day, a certain amount of overtime will occur each year.

The Commission has made an adjustment of this type in recent cases. In Dayton Power & Light Company, Case No. 79-372-GA-AIR (May 7, 1980), the Commission stated:

As the Company has carried its burden in demonstating that the level of test year overtime benefits both the Company and customer, is reasonable, and can reasonably be expected to approximate the level of overtime in the period in which these rates will be in effect, the Commission will adopt the proposed annualization of overtime expenses to year-end levels.

at page 11.

Such is the situation here. The Company demonstrated that during this test period, if overtime hours of existing employees had not been paid it would have been necessary **[*17]** to hire two additional distribution crews in three districts, and, furthermore, because water production facilities are maintained on a twenty-four hour basis, more personnel would be required if the current staff were not able to work on a regular rotating basis which included overtime (Tr. II, p. 121). Actual overtime expenses for the test year were $32,146 (Co. Ex. 5-E). By its evidence, the Company has

met the test of the Dayton case, supra, in establishing the levels of overtime and its benefit to both the Company and customers. The Commission will, therefore, approve the Company's proposed adjustment for overtime labor.

Unusual and Nonrepresentative Expenses

The Commission utilizes the test year period concept as a basis for setting new rates. The test year concept assumes that the test period expenses are reliable and representative of the time in which new rates will be in effect. [See also, Cleveland Electric Illuminating Company, Case No. 78-677-EL-AIR, p. 18, (May 2, 1979)]. At issue in this proceeding are four expenses which OCC contends should be classified as unusual expenses and hence not be included in the cost of service. They are: (1) Tank **[*18]** Inspection, $900; (2) Arbitration Proceedings, $7,300; (3) Settlement of a Legal Dispute, $1,200; and (4) Amortized Expense for Unusual-Winter-Related Expenditure for 1977.

In regard to the Tank Inspection, OCC witness Miller was under the impression that the $900 expense item was associated with a tank painting inspection (OCC Ex. 1, p. 17). However, it was discovered upon cross-examination that the inspection was a result of suspected structural damage to a water tank owned by the Company in the Ashtabula District (Tr. II, pp. 133-134). Company witness Harrison stated that it is not the Company's practice to review on an annual basis its water storage tanks especially to the extent of engaging in outside consultants (Tr. II, p. 134). For this item the Commission finds that this is a non-recurring or representative expense and should not be included in the cost of service.

The Staff eliminated the test year portion of the Company's amortized expenses associated with the winter of 1977 on the basis that those expenses were abnormal and non-recurring. Except in exceedingly rare circumstances, the Staff contends that the test year concept should not be corrupted by the inclusion **[*19]** of out of period cost, particularly those costs which are abnormal and non-recurring (Staff Brief, p. 6). The Company's position on this is that it is an expense which recurs regularly and should be included in operating expenses. The record in this case indicates that the severe storm occurred in 1977 that generated the expense at issue and there have not been recurring storms of such a nature every year. Thus, the Commission can only conclude that this was an unusual and non-recurring expense and should be excluded from the cost of service of the Applicant.

With regard to the arbitration expenses and the legal dispute expense, the OCC also contends that these are non-recurring expenses and should be excluded from test year expenses. The record supports that the arbitration and legal fees in question here are not unusual and are representative of the expenses incurred every year by the Applicant. The record reflects that the Company employs union workers and that these contracts come up for renegotiation after one year. The record reflects that for the test year and for 1980 arbitration proceedings involving the Company and unions have taken place. Furthermore, it is certainly **[*20]** reasonable to believe that arbitration expenses will be incurred on a fairly regular basis. Likewise the $1,200 expense connected with the settling of a legal dispute appears to be reasonable and is the type of expense that could be expected to occur every year. The Applicant established that the Ohio-American Company incurs legal expenses every year, although they are not always for the identical type of dispute (Tr. II, p. 133). In view of the record, the Commission must conclude that the arbitration and legal expenses are normal and reoccurring and are properly included in the test year expenses of the Applicant.

Depreciation Expense Adjustment

In the rate base section of this Opinion and Order, an amount for a Marion water tank was deducted from rate base after it was shown that the tank was not used and useful. In light of the evidence which had been adduced regarding this water tank, OCC asked Staff witness Barrington to determine the amount of depreciation expense associated with that water tank and provide it for the record. Mr. Barrington did so and the first expense figure for this item was $1,197. Later Mr. Barrington revised this down to $386. In view of the **[*21]** deduction from rate base, the Commission will also make a corresponding adjustment to depreciation expense in the amount of $386. This would provide an appropriate matching of both rate base and expenses.

Social and Service Club Dues

The Staff Report did not make any adjustment for social and service club dues in this case, and the Company indicated on Schedule C-6 that it did not include any social and service club dues in test year operating expenses. The Staff then, in response to an OCC objection, excluded an amount of $960 reflecting an additional $100 contribution to a charity and $860 for memberships in the Chamber of Commerce (OCC Ex. 1, p. 16); OCC Ex. 10; and Staff Ex. 5, p. 12 and Schedule 3.17). In support of the exclusions of these amounts associated with the Chamber of Commerce dues, the Staff called Mr. Said Hanna (Tr. II, p. 2). Mr. Hanna presented testimony explaining the rationale behind classifying Chamber of Commerce dues as a below-the-line-item in NARUC Account 426. Mr. Hanna explained that no expense

should be granted due to the service nature of the Chamber of Commerce dues and distinguished it from trade associations, which are a normal business **[*22]** expense (Tr. IV, pp. 11-12). [See Dayton Power and Light, Case No. 79-510-EL-AIR (July 31, 1980) p. 25] The record reflects that no evidence has been presented by the Company in support of the donations and dues. Therefore, in view of the record, the Commission will disallow the $960 associated with these expenses from test year expenses.

Tank Painting Expenses

The Company included in its test year expenses those costs associated with the painting of tanks throughout its service area. The Company and the Staff agreed that the adjustment for an allowance for those costs is appropriate. The OCC contended that due to the method of amortizing the painting cost over the years of use relative to the rate case frequency, the expenses for tank painting were being recovered twice, or that the Company had used an improper trending method.

A review of the record indicates that there is no double recovery and further that the trending methodology used by the Company is appropriate. Staff witness Hanna testified, "The purpose of including an allowance for the tank painting in the cost of service for rate making purposes is to create a normal and representative cost that is usually **[*23]** and repeatedly incurred by water companies, not necessarily every year but every number of years." (Tr. IV, p. 9). The purpose of this allowance is normalization of cost for the determination of new rates. Once the new rates are in effect, no particular revenue dollar goes to a particular dollar of expense. The Staff is not treating tank-painting expenses as the creation of a reserve for future tank painting expenses (Tr. IV, p. 10). Initially, it appeared that the Company had expended a total of $83,485 in tank painting. However, this is not a complete figure but rather one which includes only the tank painting expenses from the Ashtabula and Lawrence Counties Districts (Tr. II, pp. 67-68). Company witness Harris testified that an additional expense of $27,185 was expended in the Marion District. Thus the record reflects that the Applicant has actually spent $110,670 for tank painting expenses, while having only collected $97,479 for this expense during the test year. Therefore, the Commission must conclude, after reviewing the record, that the tank painting expense itself is a reasonable and normal business expense and, further, that there is no double recovery on the part **[*24]** of the Company.

Rate Case Expense

The Company estimated its rate case expense to be $170,000 and proposed that it be amortized over a two-year period. The Staff accepted the expense figure and also eliminated prior rate case expense of $53,000. The OCC objects to the inclusion of rate case expense in general and in particular the size of the rate case for the Applicant herein. By late-filed exhibit, the Company states its updated rate case expense is $144,715.

The Commission has consistently held that the preparation, filing, and prosecution of a rate case is a normal and necessary feature of utility operation and, as such, must be recognized in the expenses allowed, Columbus & Southern Ohio Electric Company, Case No. 77-545-EL-AIR (March 31, 1978) and East Ohio Gas Company, Case No. 79-535-GA-AIR (July 9, 1980). In keeping with that principal, the Commission will permit the inclusion of a reasonable amount for rate case expense and permit it to be amortized over two years. The late-filed Company exhibit for rate case expense lists the expense at $144,715 as opposed to the originally proposed expense of $170,000. Accordingly, the Commission finds that the reasonable **[*25]** rate case expense to be $144,715 amortized over two years.

Operating Income Summary

Upon review of the record pertinent to this subject and consistent with the foregoing discussion, the Commission finds Applicant's jurisdictional operating revenues and expenses for the test year to be as set forth in the following schedule:

Operating Revenues	$6,769,193
Operating Expenses	
Operation and Maintenance	3,659,178
Depreciation	375,182
Taxes Other than Income Tax	822,672
Federal Income Taxes	331,307
Purchased Water	118,076
Total Operating Expenses	5,306,415

Net Operating Income 1,462,778

PROPOSED INCOME

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 $1,222,939 based on adjusted test year operations. Applying this dollar return to the jurisdictional rate base results in a rate of return of 6.95 percent under present rates. This rate of return is below that recommended as reasonable by the expert witnesses testifying on this subject. The Commission, therefore, finds that the Company's present **[*26]** rates are insufficient to provide it reasonable compensation and return for the water service rendered customers affected by this application. Rate relief is required.

Under the rates proposed by the Applicant, additional gross revenues of $1,324,904 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 $682,251, resulting in income available for fixed charges of $1,806,709. Applying this dollar return to the jurisdictional rate base results in a 11.17 percent rate of return. Although it is apparent that the present rates are inadequate, the increase proposed by the Company results in a rate of return in excess of that proposed as reasonable by both witnesses sponsoring rate of return recommendations. Thus, the Commission must examine these recommendations in order to determine a fair rate of return for purposes of establishing just and reasonable rates.

RATE OF RETURN

Two witness presented testimony on the rate of return issue. Company **[*27]** witness Dr. George A. Christy recommends an 11.05 percent rate of return (Applicant's Ex. 7A, Revised Appendix 9). Staff witness Jerry L. Wissman recommends a rate of return in the range of 9.04 to 9.29 percent (Staff Ex. 6, Table 1, p. 2).

The major dispute in this rate of return area revolves around the determination of which capital structure should be employed. The Applicant proposes that the Commission utilize only the Applicant's capital structure and not that of its parent in determining the cost of capital. Dr. Christy testified that, although the Applicant is a solely owned subsidiary of the American Water Works Company, Inc., the rate of return should be set to reflect only the capital of the subsidiary since it is the assets of the subsidiary which the investors consider when making their investment decision. Dr. Christy maintains that since 60 percent of Ohio American capital consists of the debt and preferred stock which the Applicant floats itself, the Staff should not have used the consolidated capital structure. Furthermore, Dr. Christy stated that the utilization of the parent, American Water Works Company, Inc., does not operate as a market determined measure **[*28]** of the actual cost of common equity to the subsidiary Ohio-American.

The Staff proposes the use of a consolidated capital structure of the parent company, American Water Works Company, Inc., in determining a fair rate of return for the Applicant. The Consumers' Counsel concurred that this was a proper capital structure to be utilized. A primary reason for the Staff to use the parent's capital structure to determine a fair rate of return for the subsidiary-applicant is that the Applicant is a fully owned subsidiary of the parent. The Staff strongly feels that the parent's capital structure should be used and Staff witness Wissman stated as follows:

"The capital structure of any subsidiary is to a large degree subject to the discretion of the parent. The parent owns the equity of its subsidiary. Dividend payments from each subsidiary flow directly to the parent. The level of dividends required is not at the sole discretion of the subsidiary, as it would be if its equity were publicly held.

The use of consolidated capital structure is consistent with the Staff's use of market measures and the determination of the cost of capital. Economically efficient capital budgeting by **[*29]** the parent company requires that the parent devote resources to its various productive activities up to the point where the expected return on the marginal dollar invested in each activity is equal to the cost of capital of the consolidated entity. Again no distinction can be made between the parent and the subsidiary." (Staff Ex. 6, p. 5)

Further, on cross-examination of other Company witnesses, the interchangeability of the management of the various subsidiaries, the parent corporation and the service corporation, which provides services to the Applicant, was established. It is quite apparent from reviewing the record that the Applicant is not an independent entity but is very dependent upon the parent for financing and management.

The Commission believes that the use of the consolidated capital structure is appropriate in this case. Although the applicant does issue its own debt, it receives its equity financing from the parent, American Water Works, Inc., and also receives additional managerial and financial aid from the parent and service corporation. The Applicant is not an independent corporation but a 100% owned subsidiary. Aside from the legal considerations, it is **[*30]** essentially a division of the parent. Similar situations were presented in Ohio Suburban Water Company, Case No. 77-1512-WS-AIR (March 8, 1979), Ohio Water Service Company, Case Nos. 77-686-WW-AIR and 78-957-WW-CMR (March 28, 1979) and Ohio Water Service Company, 78-712-WW-AIR (July 18, 1979). In those cases, the Commission concluded that it was reasonable to believe that the debt investor is not blind to the relationship between the parent and the subsidiary. There is nothing in this record which would lead us to a different conclusion. The Commission remains convinced that the consolidated capital structure of the parent (as proposed by the Staff) is the appropriate capital structure to use in arriving at a fair and reasonable rate of return for the Applicant.

Cost of Debt and Preferred Stock

Having adopted the consolidated capital structure as recommended by the Staff, we will adopt the cost assigned to the long-term debt and preferred stock by the Staff. As the Staff's capital structure was updated to June 30, 1980, consistency requires that the cost assigned to debt and preferred stock components of the capital structure reflect the impact on the embedded **[*31]** cost resulting from all security issues as of June 30, 1980. The Commission finds the proper embedded cost of debt for use in this proceeding to be 7.45 percent and the embedded cost of preferred stock to be 5.67 percent (Staff Ex. 6, Table 1, p. 2).

Cost of Common Equity

The third component in the cost of capital approach is the cost of equity. Unlike the cost of debt and preferred stock which can be readily computed, the cost assigned to the common equity component of the capital structure can only be estimated.

Dr. Christy offered a modified DCF analysis, based on Ohio-American Water's own capital structure. In doing this analysis, Dr. Christy chose six publicly traded operating water companies located in California, Indiana, and New Jersey. He found them to have the same average legal of risk as the Ohio-American Company and then combined them with a number of averaging techniques of the various component measurements of DCF to reach his final DCF recommendation of 15.25 percent (Company Ex. 7A, p. 21).

Staff witness Wissman, utilizing the discounted cash flow (DCF) methodology, computed the cost of equity on American Water Works, Inc. Staff witness Wissman also verified **[*32]** the DCF methodology by use of the CAPM method and determined the cost of equity to be 13.95 percent.

The Commission has considered and rejected the modified DCF methodology employed by Dr. Christy. In the East Ohio Gas Company, Case No. 79-535-GA-AIR (July 9, 1980), the Commission found that:

"After chosing what he believed to be a comparable company, Mr. Rothey performed a DCF analysis using data from comparable companies. The Commission finds that this approach suffers from the same pitfalls as a comparable earnings analysis, but this approach also is a misapplication of the DCF formula, which uses market information to determine the cost of common equity of a unique and distinct company and not the average of many companies. The Commission must reject Mr. Rothey's analysis." at page 18

With the approach in the instant application being virtually the same as that of Mr. Rothey in the East Ohio Gas Company case, the Commission must reject Dr. Christy's methodology for the same reasons.

Staff witness Wissman has updated his base line cost of equity to June 30, 1980. The Staff's analysis, using the October, 1979 to September, 1980, average price of $12.15 and dividend **[*33]** of $ .96 and a 6.05 expected growth rate, results in an estimated base line cost of common equity of 13.95 percent. To the base line cost of equity, the Staff made adjustments to protect against selling cost and dilution and to allow financial flexibility in order to respond to changing market conditions. This adjustment was made by multiplying the base cost of the equity (13.95 percent) by 1.32 and 1.1 to obtain a lower and upward bound of 14.40 and 15.35 percent, respectively (Staff Ex. 6, p. 13). These adjustment values were determined by the Staff several years ago and have been relied upon by the Commission in many cases.

Upon review of the evidence, the Commission believes the recommendation of witness Wissman to be best supported. As noted in prior cases and restated by the Staff in this proceeding, the use of the DCF methodology is a sound basis for determining the cost of equity because it is:

"the only method consistent with the Staff's effort to promote economic efficiency in a regulated environment. The Staff concurs with the contention that regulatory authorities must function as a substitute for a competitive market forces and believe that achievement of economic **[*34]** efficiency is beneficial to both the utility and the consumers.

The DCF approach is consistent with economic efficiency because it equates the 'required' return of the equity investor (or cost of capital to the Company) to what can be earned on new additional investment in the competitive market place." (Staff Ex. 6, p. 9).

It is for this reason that the Staff did not rely, as did the Applicant, on the modified DCF, which is actually a comparable earnings approach. Firms to be compared can be too easily affected by arbitrary decisions, depending upon the returns being sought (Staff Ex. 6, p. 11). For these reasons, the Commission believes that the method employed by Staff witness Wissman produces the most reliable conclusion as to the return requirements of the equity investor presented on this record and, therefore, accepts his recommendation. The question then becomes which point within the range of his cost of equity recommendation should be selected. The witness's purpose in giving a range is to adjust for possible selling cost, market pressure and financial flexibility. In the recent Columbia Gas of Ohio, Inc., Case No. 79-610-GA-AIR, et. al., Mr. Wissman testified **[*35]** to the factors to which he considered justified in the use of the upward bounds of the adjustment. His views about the propriety of using these factors have not changed since testifying in that case (Tr. IV, pp. 166, 168). In making his recommendation of an adjustment he knew "of no plans for the American Water Works System to issue common equity" during the next year and one-half (Tr. IV, p. 168). In view of this testimony, the Commission concludes that the lower bound of witness Wissman's recommended range, or 14.40 percent, represents the appropriate cost of equity for use in the rate of return determination for purposes of this proceeding.

Rate of Return

Applying a cost of equity of 14.40 percent to the equity component of the capital structure approved herein, produces when combined with the findings related to long term debt and preferred stock, a weighted cost of 9.04 percent. The Commission concludes that a rate of return of 9.04 percent is sufficient to provide the Company reasonable compensation for the water service it renders customers affected by this application.

Authorized Increase

A rate of return of 9.04 percent applied to the rate base of $16,181,178 **[*36]** heretofore determined results in an allowable return of $1,462,778. 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 findings herein, result in an increase of $318,685. The net effect of these adjustments is to increase the allowable expenses to $5,306,415. Adding the authorized dollar return to these allowable expenses results in a finding that Applicant is entitled to place rates into effect which will generate $6,769,193 in gross annual operating revenues. This represents an increase of $657,005 over the revenues which would be realized under Applicant's present rate schedule.

RATES AND TARIFFS

A few issues remain for the Commission's determination. These are the deletion of a late-penalty payment, the reasonableness of the proposed reconnection charge, and a stipulation in regard to the charge for public fire protection. These issues will be discussed below.

Charge for Public Fire Protection

The Company initially proposed that an annual charge of $160 per hydrant for all hydrants be imposed (Company Ex. 9, Schedule E-1, p. 4), and the **[*37]** Staff recommended that the charge be adopted. OCC and the Cities of Marion and Tiffin objected to this proposal.

As a result of negotiations which occurred before the hearing, the parties to this case reached agreement on this issue and entered into a stipulation and recommendation (Joint Ex. 1). The stipulation would have the effect of providing for the recovery of the cost of making available public fire protection on an uniform basis throughout the Company's service area. After reviewing the stipulation and the record, the Commission finds the stipulation to be reasonable, and hereby adopts the stipulation in regard to the charge for public fire protection.

Late-Payment Penalty

Applicant proposes in this case to delete, in its uniform tariff, the provision which in certain of its districts provided for a discount for prompt payment of customers' bills (Company Ex. 9, Schedule E-4; Company Ex. 6). OCC supports the Applicant's proposal to delete the provision for a discount for prompt payment. The Staff, in its Staff Report, has recommended that the Applicant retain the discount (Staff Ex. 1, p. 24). Staff witness Carl Green testified that by retaining the discount, **[*38]** Applicant may recover some of the costs that are not included in the reconnection fee and further by having a discount would be an incentive for people not to permit themselves to have their water disconnected and find themselves paying an additional charge to be reconnected. Staff witness Green stated that the complete cost for all of this would probably be significantly more than the $12.28 specified by Applicant (Staff Ex. 2, pp. 3 and 4).

The OCC points out that it should be noted that the Staff did not propose in its testimony a discount provision a specified percentage of the customers bill. OCC argues further that this places the Applicant in a somewhat difficult position, in as much as only two of the previous four tariffs contained such clauses. Moreover there were in those tariffs two different percentages specified -- 5 percent and 10 penalties in the Marion and Lawrence County Districts, respectively.

In view of the record on this topic, the Commission finds that the Company's proposed tariffs are reasonable and that it would be only fair to delete the charges in the two remaining communities of the four that have this provision in their tariff. Furthermore, the Company **[*39]** put on witness Johnstone who testified as to the reasonableness and accuracy of its disconnection and reconnection charges (Tr. III, p. 17). Therefore, the record is such on this topic that the Commission finds that it should adopt the tariff provisions as proposed by the Applicant.

Effective Date

It has been the practice of the Commission to provide in its rate orders that tariffs filed pursuant to such orders shall be applicable to service rendered thirty days following the issuance of the entry accepting those tariffs for filing. The purpose of delaying the effective date of the tariffs has been to give notice of the authorized increase to the affected customers through mailings by the company prior to the time those rates go into effect. The Commission continues to believe that this is a reasonable practice, but finds that there are circumstances presented by this case which compel a departure from this policy.

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 **[*40]** 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. Ohio-American Water Company has not attempted to place its proposed rates into effect by filing an undertaking, even though the 275 day time period has expired in this case. The Commission believes that basic principles of fairness dictate that the Company should not be penalized for its forebearance, 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, of course, be retained, the notice to be mailed to customers upon approval of its form by the Commission.

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 Applicant's property used and useful for the rendition of water service to customers affected by this application, determined in accordance with Sections 4909.05 and 4905.15, Revised Code, **[*41]** as of the date certain of June 30, 1979, is not less than $16,181,178.

2) For the twelve-month period ended December 30, 1979, the test period in this proceeding, the revenues, expenses and income available for fixed charges realized by the Applicant under the rates now in effect were $6,112,188, $4,987,730, $1,124,458.

3) This net annual compensation of $1,124,458 represents a 6.95 percent rate of return on the rate base of $16,181,178.

4) A 6.95 percent rate of return is insufficient to provide applicant reasonable compensation for the gas service rendered customers affected by this proceeding.

5) A rate of return of 9.04 percent is fair and reasonable and is sufficient to provide applicant just compensation and return on its property used and useful in furnishing this service.

6) A rate of return of 9.04 percent applied to the rate base of $16,181,178 results in an allowable annual dollar return in the amount of $1,462,778 based on test year operations.

7) The allowable annual expenses of Applicant for purposes of this proceeding are $5,306,415.

8) The allowable gross annual revenue to which Applicant is entitled for purposes of this proceeding is the sum of the amounts **[*42]** set forth in Findings 6 and 7, or $6,769,193.

9) Applicant's present tariffs should be withdrawn and applicant should submit new tariffs consistent in all respects with the discussion and findings set forth above.

CONCLUSIONS OF LAW:

1) The applications were filed pursuant to, and this Commission has jurisdiction thereof under, the provisions of Sections 4909.17 and 4909.19, Revised Code; further, the Applicant has complied with the requirements in those sections.

2) A Staff investigation has been conducted and a report filed and mailed and a public hearing has been held herein, the written notice thereof having complied with the requirements of Section 4909.19, Revised Code, and the directives of the Commission.

3) The existing rates and charges for natural gas service currently in effect are insufficient to provide Applicant adequate net annual compensation and return on its property used and useful in furnishing service in this area covered by these applications.

4) A rate of return of 9.04 percent is fair and reasonable under the circumstances presented by this case and is sufficient to provide Applicant just compensation and return on its property used and useful in **[*43]** furnishing service to its customers.

5) Applicant should be authorized to cancel and withdraw the tariffs now governing the service and to file new tariffs consistent with the discussion and findings set forth above.

ORDER:

It is, therefore,

ORDERED, That the application of Ohio-American Water Company for authority to increase its rates and charges for water service be granted to the extent provided in this Opinion and Order. It is, further,

ORDERED, That the Applicant withdraw its present tariffs and submit new tariffs consistent with the discussion and findings set forth above for approval by the Commission. Upon receipt of three (3) complete copies of said 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 such new tariffs shall be the date said tariffs are accepted for filing. The new rates included therein shall be applicable to all service rendered on or after the effective date. It is, further,

ORDERED, That Applicant shall immediately commence notification of its customers of the increase in rates authorized herein by insert or attachment to its billings, by **[*44]** special mailing, or by a combination of those methods. Applicant shall submit a proposed form of notice to the Commission when it files its tariffs for approval. The Commission will review same and, if proper, approve it by entry. It is, further,

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

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

THE PUBLIC UTILITIES COMMISSION OF OHIO

Legal Topics:

For related research and practice materials, see the following legal topics:

Energy & Utilities LawAdministrative ProceedingsJudicial ReviewGeneral OverviewEnergy & Utilities LawUtility CompaniesBuying & Selling of PowerEnergy & Utilities LawUtility CompaniesContracts for Service

Summary: Application The Dayton Power and Light Company's Application for Rehearing electronically filed by Mr. Jeffrey S Sharkey on behalf of The Dayton Power and Light Company