

UNITED STATES OF AMERICA
NUCLEAR REGULATORY COMMISSION

ATOMIC SAFETY AND LICENSING BOARD
Before Administrative Judges
Louis J. Carter, Chairman
Frederick J. Shon
Dr. Oscar H. Paris

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OFFICE OF THE CLERK
NUCLEAR REGULATORY COMMISSION
WASHINGTON, D.C. 20545

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In the Matter of : Docket Nos.
: 50-247 SP
CONSOLIDATED EDISON COMPANY OF : 50-286 SP
NEW YORK, INC. (Indian Point, Unit No. 2) :
: July 2, 1982
POWER AUTHORITY OF THE STATE OF NEW YORK :
(Indian Point, Unit No. 3) :
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CONSOLIDATED EDISON'S RESPONSES TO GNYCE'S
FIRST SET OF INTERROGATORIES ON QUESTION 6

ATTORNEY FILING THIS DOCUMENT:

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Interrogatory 1

Please provide the current planned maintenance schedule as far as it has been determined, including specification of fuel reloading periods.

Response

The anticipated duration and scope of work for major plant outages for the next two years is:

September 1982

Maintenance Refueling Outage

- o Estimated duration approximately 12 weeks
- o Scope of work:
 - Refueling
 - Required NRC modifications
 - Routine plant maintenance and inspection

June 1983

General Maintenance Outage

- o Estimated duration approximately 1 month
- o Scope of Work:
 - Maintenance for plant betterment
 - Required NRC modifications
 - Routine plant maintenance and inspection.

Fall 1984

Maintenance Refueling Outage

- o Estimated duration approximately 14 weeks
- o Scope of Work:
 - 10 year in-service inspection as per Technical Specifications
 - Refueling
 - Required NRC modifications
 - Routine plant maintenance and inspection.

Interrogatory 1 (Cont'd)

Subsequent maintenance outages will be scheduled based on the need for plant maintenance and on fuel burn-up. A precise schedule of maintenance outages beyond 1984 is not presently available.

Interrogatory 2

Descriptions of and estimates of the cost of extraordinary repairs or capital improvements to be made in the future for any reason, including meeting new NRC safety standards.

Response

Con Edison's projected capital expenditures for Indian Point Unit No. 2 over the period from 1983 through 1986 are as follows:

<u>Year</u>	<u>Projected Expenditures (Millions of Dollars)</u>
1983	32.92
1984	46.05
1985	23.37
1986	28.75

Major projects include condensor retubing, NUREG-0737 modifications, the cooling tower settlement modifications and numerous other improvement projects.

At this time, Con Edison can foresee no extraordinary repairs to be made in the future other than those discussed in interrogatory 11. If extraordinary repairs are necessary, engineering designs and cost estimates will be generated when they are required, at the prevailing rates.

Interrogatory 3

Expected normal O&M expenses for each year of remaining unit lifetime.

Response

Apart from extraordinary repairs and capital improvements discussed in response to Question 2, a generic projection of normal O&M expenses can be derived from New York Power Pool (NYPP) 1981 Economic Parameter criteria data which indicates that in 1990 a nuclear unit could be expected to incur \$38.60/Kw/year in normal O&M expenses including an increment of \$7/Kw/year for TMI type adjustments. Discounting this value to 1983 at 8% per year yields a cost of \$22.52/Kw. Indian Point's winter capacity of 1,829 Mw $(965 + 864) \times 22.52/\text{Kw} = \41.2 million. This value is based on NYPP's criteria of maximum capacity factor of 69%. In 1977 Indian Point Unit 2 had a capacity factor of 68.8% and an O&M expense of \$10.7 million. Escalating that figure to 1983 and ratioing for Indian Point 3 capacity yields a value of \$36 million. The production cost simulations to be used in this proceeding will assume a 1983 Indian Point generic O&M cost of \$40 million which will be escalated at 8% per year for the lives of the units.

Interrogatory 4

Expected fuel costs per kwh for each year of the remaining life; explain how these costs are determined once the present fuel contracts run out and describe these contracts and how they determine the cost of fuel.

Response

The estimated fuel costs per kwh for each year of the remaining life are:

<u>Year</u>	<u>Estimated Fuel Cost (mills/kwh)</u>
1983	7.5
1984	7.5
1985	7.5
1986	8.1
1987	8.4
1988	9.0
1989	9.7
1990	10.3
1991	11.1
1992	11.8
1993	12.7
1994	13.6
1995	14.5
1996	15.5
1997	16.6
1998	17.8
1999	19.0
2000	20.3
2001	21.8
2002	23.3
2003	24.9
2004	26.7
2005	28.5
2006	30.5

Interrogatory 4 (Cont'd)

Once the current contracts expire, the fuel costs for the remaining life are estimated assuming an annual rate of escalation of 7% per year.

The Company has several current contracts for the supply of natural uranium as U_3O_8 , two contracts for the supply of conversion services, one contract for the supply of enrichment services and two for the supply of fabrication services. Payments to the suppliers are made in accordance with the terms and conditions of each contract. These payments are then assigned to the fuel region about to be fabricated or in the process of being fabricated. All payments for each fuel region plus accumulated Allowance for Funds Used During Construction represent the total cost of each fuel region. When divided by the energy output of a region, the total cost of each region yields the unit cost (mills/kwh) of this region. For any year, the unit costs of each relevant region are combined to provide the unit cost applicable in that year.

Interrogatory 5

The cost of decommissioning the unit via dismantlement a) after the end of the next fuel reloading cycle (again be careful to use current dollars for the annual cost streams involved and give inflation assumption), b) in 1985, and c) at the end of the expected lifetime. Describe the technologies used in detail.

Response

a&b) As we have not performed any decommissioning cost studies for dismantlement of Unit 2 in 1985 or after the end of next fuel reloading cycle, cost estimates of dismantling the unit for these specific periods are not available.

c.) A site specific decommissioning cost study for dismantlement of Unit 2 in the year 2006 has been prepared. The study estimates the dismantlement cost to be 90 million in 1980 dollars.

The tooling and methodology assumed in this cost estimate were based on the DOE Decommissioning Handbook (DOE/EV/101 23-1).

The dismantling techniques included in the above stated study are as follows:

REACTOR VESSEL AND INTERNALS SEGMENTATION

Segmentation of the reactor vessel and internals will be performed by arc saw. The arc saw is a circular, toothless saw blade that cuts any conducting metal by maintenance of a high current electric arc between the blade and material being

Interrogatory 5 (Cont'd)

cut. The arc saw is be mounted on an articulated manipulator mast installed within the reactor vessel.

STEAM GENERATOR REMOVAL

The steam generators will be decontaminated to reduce occupational exposures. All piping and connections to the steam generators will be severed by plasma torch. They would be sealed and removed for shipment off-site by barge.

PRIMARY PIPE CUTTING

Cutting of primary piping will be performed by tracked cutters or manual plasma torch.

CONTAINMENT DISMANTLEMENT

Controlled blasting is the most effective demolition technique for the concrete structures that make up the containment building.

Interrogatory 6

Explain in detail how decommissioning costs would be included in rates if the unit were retired at the end of the next fuel reloading cycle or at the end of its expected lifetime.

Response

Decommissioning costs are currently included in rates based on retirement at the end of the unit's expected lifetime (see answer to question 15). Since Con Edison's projected decommissioning costs for the unit are included in rates based on the unit's expected lifetime and pursuant to Public Service Commission's direction in Case 27353, it would be pure conjecture to attempt to determine how decommissioning costs would be recovered if the unit were prematurely retired.

Interrogatory 7

What is the expected lifetime of the unit currently and what factors will determine this?

Response

The existing operating license for Indian Point Unit No. 2 expires in the year 2006. Con Edison currently anticipates that the actual plant lifetime could go beyond 2006.

Interrogatory 8

What is the expected cost of temporary and permanent waste disposal of all fuel burned through the end of the next fuel reloading cycle? Indicate the extent to which these costs are currently included in O&M, and describe in detail the temporary and permanent waste disposal procedures assumed to be used.

Response

Fuel discharged is maintained in storage on-site pending permanent disposal. The costs of this temporary storage are included in O&M expenses, except for capital costs which are capitalized. Data on the O&M expenses directly attributable to this storage are not available. The expected costs for permanent disposal of all fuel burned through the end of the next fuel reloading cycle based on a study completed in August, 1978 are:

<u>Region No.</u>	<u>No. of Assemblies</u>
1	65
2	64
3	64
4	72
5	60
6	68

It is expected that all spent fuel will be stored at the plant site until a permanent disposal facility is put into service. At that time it is expected one region will be put into permanent disposal each year beginning with Region 1. The expected costs for permanent disposal are included as part of the cost of nuclear fuel.

Interrogatory 9

What is the expected cost of temporary and permanent waste disposal of all fuel burned through the end of the planned unit lifetime? Provide other information as in (8) above for this case.

Response

Data are not available beyond that presented in response to Interrogatory 8.

Interrogatory 10

How is the equivalent full forced outage rate for the unit expected to change over the remaining lifetime of the unit? Show deterioration with age if any is expected. How does this translate into the annual unit availability over the remaining lifetime?

Response

Since there are no nuclear units approaching the end of their lifetime, there is no data available to predict equivalent full forced outage rates or impacts of deterioration for the remaining lifetime of Indian Point 2.

Interrogatory 11

To what extent is it expected that the condenser tubes and steam generators will have to be sealed off due to denting, corrosion, and other causes over the remaining unit lifetime? Will this cause the unit to be derated and to what extent for each future year? Will the steam generators and/or condenser have to be replaced, and if so, when and at what cost?

Response

It is expected that small numbers of tubes in the condenser and the steam generators will have to be plugged from time to time as is customary power plant practice. Based on the condenser performance record to date we believe that retubing will not be required before 1986 and probably not until some years later. Retubing would be accomplished before there is any need for derating. (Cost in range of \$40 million)

Nuclear generating units similar in design to Indian Point No. 2 have experienced corrosion problems of varying severity in their steam generators. Inspections of the Indian Point 2 steam generators have revealed tube denting and some deformation of tube support plates. These conditions appear to be progressive. The Company is presently unable to determine the remaining service life of the steam generators. It anticipates that such life may be shorter than the unit's life, but based on the corrosion mitigation measures presently being implemented or under study, and assuming that no further problems are discovered

Interrogatory 11 (Cont'd)

with the steam generators, the Company estimates that steam generator replacement will not be required before 1986, and probably not until some years later. Replacement of the steam generators is presently estimated (in current dollars) to cost in the range of \$130 million (exclusive of replacement power costs) and require an outage of up to a year. However, procurement of replacement parts could require a longer outage if steam generator replacement is required sooner than estimated. It is currently expected that replacement would take place before derating.

Even with the aforesaid cost the Company anticipates that the Indian Point 2 unit will continue to be its most economical unit.

Interrogatory 12

Is Indian Point No. 2 still capable of running at its MDC rating of 864 MW for long periods of time? Is Indian Point No. 3 still capable of running at 965 MW for long periods of time?

Response

Indian Point No. 2, is, we believe, capable of operating at its MDC rating for long periods of time.

Interrogatory 13

If the unit were permanently shutdown at the end of the next fuel loading cycle, what extraordinary costs and what O&M expenses would be incurred? Which of these costs would also be incurred at shutdown at the end of the plant lifetime, and in what amounts?

Response

If Indian Point Unit No. 2 were permanently shutdown at the end of the next fuel loading cycle, extraordinary costs and O&M expenses would depend on specific directives in the order to shutdown and the Company's corresponding actions. If the unit were to be decommissioned immediately after shutdown, O&M costs would be included in decommissioning. If decommissioning were not started immediately after shutdown, some O&M expenses would be incurred until commencement of the dismantling process. If during dismantling, a permanent spent fuel disposal facility were not available, incremental temporary Away From Reactor (AFR) spent fuel storage costs would be incurred. Con Edison estimates that, based on a January 1, 1983 shutdown, incremental cost of disposal at an AFR would be \$45.4 million (1/1/82 dollars) for temporary storage of spent fuel from Indian Point Units 1 and 2. If the plant were to be shutdown at the end of its lifetime, all of the above expenses would be incurred. However these expenses (except for the cost to ship spent fuel) would be included in the cost of decommissioning.

Interrogatory 14

How are nuclear fuel costs actually included in rates? Are the costs of nuclear fuel capitalized? What is the depreciation period, etc.?

Response

Nuclear fuel costs, along with the Company's other electric generation fuel costs, are included in base rates with the difference between base rates and actual costs billed or credited to customers through the fuel adjustment clause. Nuclear fuel costs are capitalized by region and generally each region is amortized over 3 cycles, on a units of production basis, over a period of approximately 5 years.

Interrogatory 15

How are decommissioning costs currently being collected from ratepayers and how much is collected? How much is the decommissioning fund projected to be worth by unit shutdown?

Response

As of May 31, 1982, \$16,046,786 has been collected from customers through base rates utilizing the depreciation accrual method in providing for Indian Point 2 decommissioning. Based upon the Public Service Commission's Opinion in Case 27353, issued April 6, 1979, Indian Point 2's current annual allowance for decommissioning is \$3.14 million and by unit shutdown, the decommissioning reserve for Indian Point 2 will be approximately \$135 million.

Interrogatory 16

Since the start of commercial operation, list the date and causes of each plant shutdown.

Response

This information is included in the Company's monthly operating reports which are filed with the Nuclear Regulatory Commission. Copies of these reports may be examined in the White Plains Public Library Public Document Room.

Interrogatory 17

Itemize all other costs associated with your nuclear effort including engineering, purchasing, personnel and other staffs, legal, research and development, regulatory, emergency planning, and any other costs which could be foregone if you were a non-nuclear utility.

Response

This information is not available. Providing the information would require performing a detailed analysis.

Interrogatory 18

Estimate the insurance premium it would be necessary for you to remit appropriate to the liability involved in operating your Indian Point reactor were it not limited by the Price-Anderson Act.

Response

Con Edison does not have an estimate of the insurance premium under the hypothetical proposed.

Interrogatory 19

List major components, e.g., fan cooler units, steam generators and steam turbine blades, which will need to be replaced during the expected operating life of your plant.

Response

Major components replacements which could be anticipated during the remaining plant life are steam generators (see interrogatory 11), condenser tubes (see interrogatory 11), and reactor coolant pumps.

Interrogatory 20

In that some of the equipment in (19) above may be replaced prior to the passage of one-third of the plant's life, state when such equipment will need replacement again, and if no such replacement is anticipated, justify that finding.

Response

None of the items from mentioned in interrogatory 19, more is expected to be replaced in the first 1/3 of (licensed) plant lifetime. The replacements will incorporate improved design and materials which, when coupled with the operating experience gained, should ensure a long life for the equipment. Therefore, it is not anticipated that this replacement equipment will again require replacement.

Interrogatory 21

State how the storage and/or disposal of spent fuel and low-level waste from plant operation will be carried out throughout the life of the plant.

Response

With regard to the storage and/or disposal of spent fuel, see response to Interrogatory 8.

With regard to the disposal of low-level waste from the plant, it is expected this material will continue to be disposed of by land burial at commercially available burial sites.

Interrogatory 22

How much money has been collected to date as a provision for spent fuel disposal cost? Is this money to be used for permanent disposal costs, costs of interim storage outside of the reactor storage pool, costs associated with current onsite storage pool, or some combination of these? Please specify.

Response

As of May 31, 1982, \$48,530,308 has been collected for spent fuel disposal costs for Indian Point 2. This amount will be used for permanent disposal costs.

Interrogatory 23

What price does the Company currently pay for nuclear fuel? Please supply this price in \$/Kgu and \$/Kwh, and show the calculations used to compute each.

Please specify whether charges for miscellaneous items (such as fuel disposal) are included in the prices, and show explicitly the assumptions implicit in the costs (capacity factor, fuel exposure, thermal efficiency, etc.).

Response

Based on the current cycle (Cycle 5) of operation the Company's cost of nuclear fuel is \$524.73/Kgu (\$0.006248/Kwh). This cost is composed of the following components:

<u>Component</u>	(a) <u>\$/Kgu</u>	(b) <u>\$/Kwh</u>
Fabrication	94.93	0.001130
Enriched Uranium	316.65	0.003771
Permanent Disposal	113.15	0.001347

The above numbers correspond to the moneys to be amortized in Cycle 5 to arrive at the nuclear fuel cost, as explained in response to Interrogatory 4.

(a) Based on the core loading of 87.42 Metric Tons of Uranium.

(b) Based on the estimated plant heat rate of 11,700 Btu/Kwh.

For the current cycle the following assumptions apply:

Plant capacity factor (between refuelings)	=	80%
Fuel exposure (Cycle 5 core average)	=	12,000 Mega- watt Days per Metric Ton of Uranium
Plant thermal efficiency	=	29.17%

Interrogatory 23 (Cont'd)

Currently expected Region Average Exposure when fully discharged:

Region 4:	33,200	Megawatt	Days	per	Metric	Ton	of	Uranium
Region 5:	30,700	"	"	"	"	"	"	"
Region 6:	31,100	"	"	"	"	"	"	"
Region 7:	32,100	"	"	"	"	"	"	"

Interrogatory 24

Is decontamination of the reactor likely to be required one or more times during the expected lifetime of the plant? If decontamination is expected, please supply schedule and cost estimates.

Response

At the present time, there does not appear to be any need to decontaminate the reactor.

Interrogatory 25

Please supply estimates of the costs, past and planned, of expanding the capacity of the spent fuel storage pool. Please indicate specifically what activities are currently underway or planned for the future.

Response

In 1976 the Indian Point Unit No. 2 spent fuel pool was modified to increase storage capacity from 264 to 482 assemblies. The cost was about \$2 million. Currently, the Indian Point Unit No. 2 spent fuel pool is being modified to increase storage from 482 to 980 assemblies. The total cost is estimated to be about \$8.25 million. No additional plans are being considered at the present time.

Interrogatory 26

Please provide a copy of the Company's annual report to FERC (Form 1) for the year ended 1981.

Response

This form may be inspected upon request at Con Edison's offices at 4 Irving Place, New York, New York.

Interrogatory 27

In the above form the section entitled "Steam Electric Generating Plant Statistics" (large plants), please describe in detail the development of the entry on line 21 for fuel used at your Indian Point unit. In particular, please indicate if the reported expense includes any allowance for plant decommissioning costs, spent fuel disposal, or return on investment in fuel assemblies. In addition, please indicate all sources of difference between this number and the expense charged to FERC account 518, nuclear fuel expense.

Response

Line 21:

Amortization of Nuclear Fuel	
Assemblies and Components	\$ 3,464,378.17
Uranium Burn-up	11,555,338.22
Storage and Shipping	4,129,211.76
Oil for conventional	
portion of plant	<u>1,241,189.44</u>
	<u>\$ 20,390,117.59</u>

FERC Account 518:	43,532,528	
Less Line 21:	<u>20,390,118</u>	
	\$23,142,410	= Net recoverable
		fuel credit de-
		ferred for 12
		months ended
		12/31/81

Interrogatory 28

Please describe the manner in which charges for spent fuel expenses are reflected in annual required revenues. In addition, please indicate for available future years the expected contribution from ratepayers for spent fuel expenditures, as well as charges made against this reserve account.

Response

Spent fuel disposal costs are considered part of nuclear fuel costs. As such, they are taken into account as required revenue with all electric fuel expenses in the setting of base rates and for the fuel adjustment clause. The only difference is that since spent fuel disposal costs are being collected in advance of actual payment, they become an offset to rate base. Per our latest electric rate case filing, expected contributions from ratepayers for Indian Point No. 2 spent fuel disposal costs are: \$5.4 million for 1982; and \$8.74 million for 1983. We do not anticipate any charges against the reserve until a permanent site for spent fuel disposal becomes available.

Interrogatory 29

At what cost is Indian Point No.2 in the rate base? Of the total, what portion is direct construction cost and what portion represents AFDC?

Response

In New York Public Service Commission Case 27744, Indian Point No. 2 was included in rate base at an average net book value of \$252 million. The portion that represents direct construction cost and the portion that represents AFDC is not available.

Interrogatory 30

Were the tax savings associated with debt AFDC flowed through or normalized? If the latter, please provide the amortization schedule by which savings will be passed through to ratepayers.

Response

Tax savings associated with debt AFDC are flowed through to ratepayers.

Interrogatory 31

Please describe the procedures and service lives by which book depreciation, tax depreciation and depreciation for calculating book taxes are developed. In addition to a full description please provide depreciation schedules for each item.

Response

Book Depreciation - Based upon New York Public Service Commission Opinion No. 79-8, issued April 6, 1979, the Company calculates the depreciation expense for Indian Point No. 2 on a 27 year remaining life amortization basis. The monthly depreciation rate is the reciprocal of the remaining life in months. The depreciation expense is calculated on each month's opening unrecovered cost by primary plant account. An example of this calculation for April 1982 is attached.

Tax Depreciation - For the Pre-1981 Indian Point No. 2 Assets the Company elected the Class Life Asset Depreciation Range System (ADR) pursuant to Regulations Section 1.167(a)-11. The ADR System is based on broad industry classes of assets where the classes and class lives are determined under Revenue Procedure 77-10 for years ending after March 20, 1977, and under Revenue Procedure 72-10 for years ending before March 21, 1977. The ADR Regulations refer to the "asset depreciation period" rather than the "useful life" in explaining how to compute ADR depreciation. This is because such depreciation period can be shorter than

Interrogatory 31 (Cont'd)

the actual useful life. However, the depreciation period is treated as the useful life for all income tax purposes, including the computation of depreciation. The method used in computing depreciation is the Sum of the Years - Digits Method. Under this method, the years of useful life are numbered and these numbers are totaled. The result is the sum of the years-digit. The deduction under this method is figured by multiplying the basis by a fraction. The fraction has the remaining useful life at the beginning of the year as its numerator and the sum of the years-digits as its denominator. For tax purposes under this system the Indian Point #2 assets would be classified as follows:

<u>Asset Guideline Class</u>	<u>Vintage Year</u>	<u>Description</u>	<u>Asset Dept. Period</u>
49.12	1974	Electric Utility Nuclear Production Plant	16 Years

Attached are the depreciation schedules for the Nuclear Production Plant for vintage years 1973 (I.P. 2 went into service) through vintage year 1979. These schedules for depreciation have been audited and approved by the Internal Revenue Service. Caution should be used when looking at these schedules since Indian Point 1 additions to plant may be included in the basis of any given vintage year.

**Electric Plant in Service — Nuclear Production — Computation of
Depreciation Expense for the Month of April 1982**

Co. Acct. No.	Account	Balance at <u>3-31-82</u>		Net (Col 1-2)	Accrual (Col 3x1/269)
		Book Cost	Accum. Prov. for Depn.		
1					
2	9452 Land and Land Rights	34675972	-	— Non - Depreciable —	
3					
4	9456 Structures & Improvements	335959387	329349362	806610025	33932907
5					
6	9460 Reactor Plant Equipment	651878026	431186257	520691769	53704816
7					
8	9462 Turbogenerator Units	490203459	059983771	330219688	13253355
9					
10	9465 Accessory Electric Equip.	071302806	604324484	666978320	2307883
11					
12	9468 Misc. Power Plant Equip.	723442171	210456306	513185865	1775730
13					
14	Total	4007661819	635300180		104974691
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Revenue Procedure 72-10

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SECTION 1. PURPOSE

The purpose of this Revenue Procedure is to restate under the rules authorized by section 167(m) of the Code, the asset guideline classes, asset depreciation periods and asset depreciation ranges referred to in section 1.167(a)-11(b)(4) of the Income Tax Regulations for the Class Life Asset Depreciation Range System (ADR) that taxpayers may elect for certain assets first placed in service by the taxpayer after December 31, 1970. In addition, this Revenue Procedure restates under the rules authorized by section 263(f) of the Code the asset guideline class repair allowance percentages referred to in section 1.167(a)-11(d)(2) of the regulations that may be used by electing taxpayers in determining, under sections 162, 212, and 263 of the Internal Revenue Code of 1954, the treatment of expenditures paid or incurred in connection with the repair, maintenance, rehabilitation or improvement of certain property described in section 1.167(a)-11(d)(2)(iii) of the regulations. Taxpayers may elect, in accordance with the provisions of section 1.167(a)-11 of the regulations to apply the established asset depreciation periods and asset depreciation ranges to "eligible property" as defined in section 1.167(a)-11(b)(2) of the regulations, and to apply the established asset guideline class repair allowance percentages to "repair allowance property" as defined in section 1.167(a)-11(d)(2)(iii) of the regulations. Taxpayers may also elect to apply the asset guideline periods in accordance with section 1.167(a)-12 of the regulations to certain property placed in service before January 1, 1971.

SEC. 2. RULES OF APPLICATION.

2.01 In the case of a building or other structure which is section 1250 property (as defined in section 1250(c) of the Code), in accordance with section 1.167(a)-11(d)(2)(iii) of the regulations each item of such property shall for purposes of applying the asset guideline repair allowance be treated as in a separate asset guideline class. Thus, for example, if the taxpayer has two buildings which would, but for the preceding sentence, be in the same asset guideline class, the repair allowance for each building will be determined by applying section 1.167(a)-11(d)(2)(iii) separately to the unadjusted basis of each building.

2.02 Property which is used predominantly outside the United States may be eligible property if the requirements of section 1.167(a)-11(b)(2) of the regulations are met. In the case of property first placed in service and used predominantly outside the United States during the taxable year of election, an asset guideline period, but no asset depreciation range is in effect. Accordingly, such property shall not be treated as included in the same asset guideline class as property used predominantly inside the United States, for purposes of determining the asset depreciation period under section 1.167(a)-11(b)(4) of the regulations. Thus, for this purpose each asset guideline class described in this Revenue Procedure has an exact counterpart which consists of property otherwise includable within the class, but used predominantly outside the United States during the taxable year of election. Generally, for this purpose property is used predominantly outside the United States if such property is physically located outside the United States during more than 50 percent of days of the taxable year of election, beginning with the date the property is first placed in service. However, there are ten exceptions to this general rule and these are contained in section 48(a)(2) of the Internal Revenue Code of 1954. The asset depreciation period for property, which is determined in the taxable year of election, will not be changed because of a change in predominant use after the close of such taxable year. Although treated as in a separate class for purposes of determining the asset depreciation period, property predominantly used outside the United States shall be included in the same asset guideline class as property predominantly used inside the United States for purposes of applying the asset guideline class repair allowance under section 1.167(a)-11(d)(2) of the regulations.

SEC. 3. ASSET GUIDELINE CLASSES AND PERIODS, ASSET DEPRECIATION RANGES, AND ANNUAL ASSET GUIDELINE REPAIR ALLOWANCE PERCENTAGES.

The asset guideline classes, asset guideline periods, asset depreciation ranges, and asset guideline repair allowance percentages have been established as set forth below.

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Asset Guide- line Class	Description of Assets Included	Asset Deprecia- tion Range (in years)			Annual Asset Guide- line Repair Allow- ance Percentage
		Lower limit	Asset Guideline Period	Upper limit	
49.0	Electric, gas and sanitary services:				
49.11	Electric utility hydraulic production plant: Includes assets used in the hydraulic power pro- duction of electricity for sale, related land improve- ments, dams, flumes, canals, and waterways.....	40	50	60	1.5
49.12	Electric utility nuclear production plant: Includes assets used in the nuclear power produc- tion of electricity for sale and related land im- provements	16	20	24	3.0
49.121	Nuclear fuel assemblies: Includes initial core and replacement core nuclear fuel assemblies (i.e. the composite of fabricated nuclear fuel and container) when used in a boiling water, pressurized water, or high temperature gas reactor used in the production of electricity. Does not include nuclear fuel assemblies used in breeder reactors	4.0	5.0	6.0	..
49.13	Electric utility steam production plant: Includes assets used in the steam power production of electricity for sale, combustion turbines operated in a combined cycle with a conventional steam unit, and related land improvements.....	22.5	28	33.5	5.0
49.14	Electric utility transmission and distribution plant: Includes assets used in the transmission and dis- tribution of electricity for sale and related land improvements	24	30	36	4.5
49.15	Electric utility combustion turbine production plant: Includes assets used in the production of elec- tricity for sale by the use of such prime movers as jet engines, combustion turbines, diesel engines, gasoline engines and other internal combustion engines, their associated power turbines and/or generators, and related land improvements. Does not include combustion turbines operated in a combined cycle with a conventional steam unit....	16	20	24	4.0
49.2	Gas utilities: Includes assets used in the production, transmis- sion, and distribution of natural and manufactured gas for sale, including related land improvements and identified as:				
49.21	Distribution facilities: Including gas water heaters and gas conver- sion equipment installed by utility on cus- tomers' premises on a rental basis	28	35	42	2.0
49.22	Gas making facilities:				
49.221	Manufactured gas production plant: Includes assets used in the manufacture of gas having chemical and/or physical properties which do not permit complete interchangeability with domestic natural gas	24	30	36	2.0

Revenue Procedure 77-10

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SECTION 1. PURPOSE.

.01 The purpose of this Revenue Procedure is to restate, pursuant to sections 167(m) and 263(f) of the Internal Revenue Code of 1954, with certain substantive modifications as noted below, the asset guideline classes, asset guideline depreciation periods and ranges, and annual asset guideline repair allowance percentages for the Class Life Asset Depreciation Range (CLADR) System.

.02 This Revenue Procedure supersedes Rev. Proc. 72-10, 1972-1 C. B. 721, and the supplements and revisions of the asset guideline classes, periods, and repair allowance percentages published since the publication of Rev. Proc. 72-10. These Revenue Procedures are as follows:

73-2, 1973-1 C. B. 747
73-3, 1973-1 C. B. 749
73-23, 1973-2 C. B. 474
73-24, 1973-2 C. B. 475
73-25, 1973-2 C. B. 477

73-26, 1973-2 C. B. 479
73-27, 1973-2 C. B. 480
73-28, 1973-2 C. B. 482
73-30, 1973-2 C. B. 484
74-27, 1974-2 C. B. 480
74-28, 1974-2 C. B. 481
74-29, 1974-2 C. B. 482
74-30, 1974-2 C. B. 483
74-31, 1974-2 C. B. 487
74-32, 1974-2 C. B. 487
74-37, 1974-2 C. B. 491
74-50, 1974-2 C. B. 506
76-16, 1976-1 C. B. 556
76-17, 1976-1 C. B. 557
76-18, 1976-1 C. B. 559
76-27, 1976-2 C. B. 644
76-37, 1976-2 C. B. 659
77-2, 1977-1 C. B. 53
77-3, 1977-1 C. B. 535
77-8, 1977-1 C. B. 541

.03 In addition, certain changes are made in the numbering system of asset guideline classes to facilitate the understanding and use of the CLADR system.

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Asset guideline class	Description of assets included	Asset depreciation range (in years)			Annual asset guideline repair allowance percentage
		Lower limit	Asset guideline period	Upper limit	
	cables, matching transformers, multiple set connector equipment, and converters.....	8	10	12	5
48.43	CATV-Program Origination: Includes assets such as cameras, film chains, video tape recorders, lighting, and remote location equipment excluding vehicles. Does not include buildings and their structural components.....	7	9	11	9
48.44	CATV-Service and Test: Includes assets such as oscilloscopes, field strength meters, spectrum analyzers, and cable testing equipment, but does not include vehicles.....	7	8.5	10	2.5
48.45	CATV-Microwave Systems: Includes assets such as towers, antennas, transmitting and receiving equipment, and broad band microwave assets if used in the provision of cable television services. Does not include assets used in the provision of common carrier services.....	7.5	9.5	11.5	2
	Electric, Gas, Water and Steam, Utility Services: Includes assets used in the production, transmission and distribution of electricity, gas, steam, or water for sale, including related land improvements.				
49.11	Electric Utility Hydraulic Production Plant: Includes assets used in the hydraulic power production of electricity for sale, including related land improvements, such as dams, flumes, canals, and waterways..	40	50	60	1.5
49.12	Electric Utility Nuclear Production Plant: Includes assets used in the nuclear power production of electricity for sale and related land improvements. Does not include nuclear fuel assemblies.....	16	20	24	3
49.121	Electric Utility Nuclear Fuel Assemblies: Includes initial core and replacement core nuclear fuel assemblies (i.e. the composite of fabricated nuclear fuel and container) when used in a boiling water, pressurized water, or high temperature gas reactor used in the production of electricity. Does not include nuclear fuel assemblies used in breeder reactors.....	4	5	6	
49.13	Electric Utility Steam Production Plant: Includes assets used in the steam power production of electricity for sale, combustion turbines operated in a combined cycle with a conventional steam unit and related land improvements. Also includes package boilers, electric generators and related assets such as electricity and steam distribution systems as used by a waste reduction and resource recovery plant if the steam or electricity is normally for sale to others.....	22.5	28	33.5	5.0

GUIDELINE CLASS 12 000
 VINTAGE YEAR 1973
 ASSET DEPR. PERIOD 16.00

----- REPORTING YEARS -----

UTILITY PLANT COST BASIS:

	1973	1974	1975	1976
OPENING BALANCE JAN. 1		5,423,615.42	5,392,320.10	5,398,250.57
PRIOR YEARS ADJUSTMENT		22,912.91-	5,930.47	
OPENING BAL. JAN. 1 - INCL. PRIOR YRS. ADJ.		5,400,702.51	5,398,250.57	5,398,250.57
ADDITIONS	5,423,615.42			
ORDINARY RETIREMENTS		8,382.41		
EXTRAORDINARY RETIREMENTS				
TOTAL RETIREMENTS		8,382.41		
TRANSFERS AND ADJUSTMENTS				
AVERAGE BALANCE	2,711,807.71	5,396,511.31	5,398,250.57	5,398,250.57
ACCUMULATED TRANSFERS AND ADJUSTMENTS				
REPAIR ALLOWANCE AVERAGE BALANCE	2,711,807.71	5,396,511.31	5,398,250.57	5,398,250.57

DEPRECIATION FACTORS:

	16.00	15.50	14.50	13.50
REMAINING DEPRECIABLE PERIODS				
DECIMAL EQUIVALENT	.050824	.113971	.106618	.099265

DEPRECIABLE BASIS JANUARY 1:

	1973	1974	1975	1976
UNADJUSTED BASIS JAN. 1		5,400,702.51	5,406,632.98	5,406,632.98
RESERVE BALANCE JAN. 1		319,038.75	934,562.22	1,511,006.62
GROSS SALVAGE				
ACCUMULATED DEPR. - EXTRAORDINARY RETIREMENTS				
ESTIMATED SALVAGE				
SALVAGE ADJUSTMENT				
UNRECOVERED COST JAN. 1		5,081,663.76	4,472,070.76	3,895,626.36

ANNUAL DEPRECIATION DEDUCTION:

	1973	1974	1975	1976
DEPRECIATION - UNADJUSTED BASIS JAN. 1		615,523.47	576,444.40	536,689.42
DEPRECIATION - ADDITIONS	319,038.75			
DEPRECIATION - EXTRAORDINARY RETIREMENTS				
DEPRECIATION - OTHER				
TOTAL ANNUAL DEPRECIATION DEDUCTION	319,038.75	615,523.47	576,444.40	536,689.42

GUIDELINE CLASS 12 000
 VINTAGE YEAR 1973
 ASSET DEPR. PERIOD 16.00

----- REPORTING YEARS -----

UTILITY PLANT COST BASIS:

	1977	1978	1979	1980
OPENING BALANCE JAN. 1	5,398,250.57	5,388,155.29	5,388,155.29	5,388,155.29
PRIOR YEARS ADJUSTMENT				
OPENING BAL. JAN. 1 - INCL. PRIOR YRS. ADJ.	5,398,250.57	5,388,155.29	5,388,155.29	
ADDITIONS				
ORDINARY RETIREMENTS	10,095.28			
EXTRAORDINARY RETIREMENTS				
TOTAL RETIREMENTS	10,095.28			
TRANSFERS AND ADJUSTMENTS				
AVERAGE BALANCE	5,393,202.93	5,388,155.29	5,388,155.29	
ACCUMULATED TRANSFERS AND ADJUSTMENTS				
REPAIR ALLOWANCE AVERAGE BALANCE	5,393,202.93	5,388,155.29	5,388,155.29	

DEPRECIATION FACTORS:

	12.50	11.50	10.50	9.50
REMAINING DEPRECIABLE PERIODS				
DECIMAL EQUIVALENT	.091912	.084559	.077206	.069853

DEPRECIABLE BASIS JANUARY 1:

	1977	1978	1979	1980
UNADJUSTED BASIS JAN. 1	5,406,632.98	5,406,632.98	5,406,632.98	5,406,632.98
RESERVE BALANCE JAN. 1	2,047,696.04	2,544,630.49	3,001,809.97	3,419,234.48
GROSS SALVAGE				
ACCUMULATED DEPR. - EXTRAORDINARY RETIREMENTS				
ESTIMATED SALVAGE				
SALVAGE ADJUSTMENT				
UNRECOVERED COST JAN. 1	3,358,936.94	2,862,002.49	2,404,823.01	1,987,398.50

ANNUAL DEPRECIATION DEDUCTION:

	1977	1978	1979	1980
DEPRECIATION - UNADJUSTED BASIS JAN. 1	496,934.45	457,179.48	417,424.51	377,669.53
DEPRECIATION - ADDITIONS				
DEPRECIATION - EXTRAORDINARY RETIREMENTS				
DEPRECIATION - OTHER				
TOTAL ANNUAL DEPRECIATION DEDUCTION	496,934.45	457,179.48	417,424.51	

GUIDELINE CLASS 12 000
 VINTAGE YEAR 1974
 ASSET DEPR. PERIOD 16.00

----- REPORTING YEARS -----

UTILITY PLANT COST BASIS:

	1974	1975	1976	1977
OPENING BALANCE JAN. 1		1,994,079.14	2,168,781.95	2,168,781.95
PRIOR YEARS ADJUSTMENT		156,625.76		2,352.91
OPENING BAL. JAN. 1 - INCL. PRIOR YRS. ADJ.		2,150,904.90	2,168,781.95	2,166,429.04
ADDITIONS	1,994,079.14			
ORDINARY RETIREMENTS				
EXTRAORDINARY RETIREMENTS				
TOTAL RETIREMENTS				
TRANSFERS AND ADJUSTMENTS		17,877.05		
AVERAGE BALANCE	997,039.57	2,159,843.43	2,168,781.95	2,166,429.04
ACCUMULATED TRANSFERS AND ADJUSTMENTS		17,877.05	17,877.05	17,877.05
REPAIR ALLOWANCE AVERAGE BALANCE	997,039.57	2,150,904.91	2,159,843.43	2,157,490.52

DEPRECIATION FACTORS:

	1974	1975	1976	1977
REMAINING DEPRECIABLE PERIODS	16.00	13.50	14.50	23.50
DECLINE EQUIVALENT	.080824	.113971	.106616	.099265

DEPRECIABLE BASIS JANUARY 1:

	1974	1975	1976	1977
UNADJUSTED BASIS JAN. 1		2,150,904.90	2,150,904.90	2,148,551.99
RESERVE BALANCE JAN. 1		117,299.71	362,440.49	591,765.67
GROSS SALVAGE				
ACCUMULATED DEPR. - EXTRAORDINARY RETIREMENTS				
ESTIMATED SALVAGE				
SALVAGE ADJUSTMENT				
UNRECOVERED COST JAN. 1		2,033,605.19	1,788,464.41	1,556,786.32

ANNUAL DEPRECIATION DEDUCTIONS:

	1974	1975	1976	1977
DEPRECIATION - UNADJUSTED BASIS JAN. 1		245,140.78	229,325.18	213,276.01
DEPRECIATION - ADDITIONS	117,299.71			
DEPRECIATION - EXTRAORDINARY RETIREMENTS				
DEPRECIATION - OTHER				
TOTAL ANNUAL DEPRECIATION DEDUCTION	117,299.71	245,140.78	229,325.18	213,276.01

GUIDELINE CLASS 12 000
 VINTAGE YEAR 1974
 ASSET DEPR. PERIOD 16.00

----- REPORTING YEARS -----

UTILITY PLANT COST BASIS:

	1978	1979	1980
OPENING BALANCE JAN. 1	2,166,429.04	2,164,829.08	2,164,471.19
PRIOR YEARS ADJUSTMENT		357.89	
OPENING BAL. JAN. 1 - INCL. PRIOR YRS. ADJ.	2,166,429.04	2,164,471.19	
ADDITIONS			
ORDINARY RETIREMENTS	1,599.96		
EXTRAORDINARY RETIREMENTS			
TOTAL RETIREMENTS	1,599.96		
TRANSFERS AND ADJUSTMENTS			
AVERAGE BALANCE	2,165,629.06	2,164,471.19	
ACCUMULATED TRANSFERS AND ADJUSTMENTS	17,877.05	17,877.05	17,877.05
REPAIR ALLOWANCE AVERAGE BALANCE	2,156,690.54	2,155,532.67	

DEPRECIATION FACTORS:

	1978	1979	1980
REMAINING DEPRECIABLE PERIODS	12.50	11.50	10.50
DECIMAL EQUIVALENT	.091912	.084559	.077206

DEPRECIABLE BASIS JANUARY 1:

	1978	1979	1980
UNADJUSTED BASIS JAN. 1	2,148,551.99	2,148,194.10	2,148,194.10
RESERVE BALANCE JAN. 1	805,041.68	1,002,519.39	1,184,168.53
GROSS SALVAGE			
ACCUMULATED DEPR. - EXTRAORDINARY RETIREMENTS			
ESTIMATED SALVAGE			
SALVAGE ADJUSTMENT			
UNRECOVERED COST JAN. 1	1,343,510.31	1,145,674.71	964,025.57

ANNUAL DEPRECIATION DEDUCTION:

	1978	1979	1980
DEPRECIATION - UNADJUSTED JAN. 1	197,477.71	181,649.14	165,853.47
DEPRECIATION - ADDITIONS			
DEPRECIATION - EXTRAORDINARY RETIREMENTS			
DEPRECIATION - OTHER			
TOTAL ANNUAL DEPRECIATION DEDUCTION	197,477.71	181,649.14	

GUIDELINE CLASS 10 000
 VINTAGE YEAR 1975
 ASSET DEPR. PERIOD 16.00

----- REPORTING YEARS -----

UTILITY PLANT COST BASIS:

	1975	1976	1977	1978
OPENING BALANCE JAN. 1		205,166.69	203,783.68	203,783.68
PRIOR YEARS ADJUSTMENT		1,383.01-		9,555.24-
OPENING BAL. JAN. 1 - INCL. PRIOR YRS. ADJ.		203,783.68	203,783.68	194,228.44
ADDITIONS	205,166.69			
ORDINARY RETIREMENTS				
EXTRAORDINARY RETIREMENTS				
TOTAL RETIREMENTS				
TRANSFERS AND ADJUSTMENTS				
AVERAGE BALANCE	102,583.35	203,783.68	203,783.68	194,228.44
ACCUMULATED TRANSFERS AND ADJUSTMENTS				
REPAIR ALLOWANCE AVERAGE BALANCE	102,583.35	203,783.68	203,783.68	194,228.44

DEPRECIATION FACTORS:

	16.00	15.50	14.50	13.50
REMAINING DEPRECIABLE PERIODS				
DEFINIAL EQUIVALENT	.058824	.113971	.106619	.099265

DEPRECIABLE BASIS JANUARY 1:

	1975	1976	1977	1978
UNADJUSTED BASIS JAN. 1		203,783.68	203,783.68	194,228.44
RESERVE BALANCE JAN. 1		12,068.73	35,294.16	57,021.17
GROSS SALVAGE				
ACCUMULATED DEPR. - EXTRAORDINARY RETIREMENTS				
ESTIMATED SALVAGE				
SALVAGE ADJUSTMENT				
UNRECOVERED COST JAN. 1		191,714.95	168,489.52	137,207.27

ANNUAL DEPRECIATION DEDUCTION:

	1975	1976	1977	1978
DEPRECIATION - UNADJUSTED BASIS JAN. 1		23,225.43	21,727.01	19,280.09
DEPRECIATION - ADDITIONS	12,068.73			
DEPRECIATION - EXTRAORDINARY RETIREMENTS				
DEPRECIATION - OTHER				
TOTAL ANNUAL DEPRECIATION DEDUCTION	12,068.73	23,225.43	21,727.01	19,280.09

GUIDELINE CLASS 12 000
 VINTAGE YEAR 1975
 ASSET DEPR. PERIOD 16.00

----- REPORTING YEARS -----

UTILITY PLANT COST BASIS:

	1979	1980
OPENING BALANCE JAN. 1	194,228.44	194,228.44
PRIOR YEARS ADJUSTMENT		
OPENING BAL. JAN. 1 - INCL. PRIOR YRS. ADJ.	194,228.44	
ADDITIONS		
ORDINARY RETIREMENTS		
EXTRAORDINARY RETIREMENTS		
TOTAL RETIREMENTS		
TRANSFERS AND ADJUSTMENTS		
AVERAGE BALANCE	194,228.44	
ACCUMULATED TRANSFERS AND ADJUSTMENTS		
REPAIR ALLOWANCE AVERAGE BALANCE	194,228.44	

DEPRECIATION FACTORS:

	12.50	11.50
REMAINING DEPRECIABLE PERIODS		
DECIMAL EQUIVALENT	.091912	.084559

DEPRECIABLE BASIS JANUARY 1:

	1979	1980
UNADJUSTED BASIS JAN. 1	194,228.44	194,228.44
RESERVE BALANCE JAN. 1	76,301.26	94,153.18
GROSS SALVAGE		
ACCUMULATED DEPR. - EXTRAORDINARY RETIREMENTS		
ESTIMATED SALVAGE		
SALVAGE ADJUSTMENT		
UNRECOVERED COST JAN. 1	117,927.18	100,075.26

ANNUAL DEPRECIATION DEDUCTION:

	1979	1980
DEPRECIATION - UNADJUSTED BASIS JAN. 1	17,851.92	16,423.76
DEPRECIATION - ADDITIONS		
DEPRECIATION - EXTRAORDINARY RETIREMENTS		
DEPRECIATION - OTHER		
TOTAL ANNUAL DEPRECIATION DEDUCTION	17,851.92	

GUIDELINE CLASS 12 000
 VINTAGE YEAR 1976
 ASSET DEPR. PERIOD 16.00

----- REPORTING YEARS -----

UTILITY PLANT COST BASIS:

	1976	1977	1978	1979
OPENING BALANCE JAN. 1		93,493.30	93,493.30	93,493.30
PRIOR YEARS ADJUSTMENT				
OPENING BAL. JAN. 1 - INCL. PRIOR YRS. ADJ.		93,493.30	93,493.30	93,493.30
ADDITIONS	93,493.30			
ORDINARY RETIREMENTS				
EXTRAORDINARY RETIREMENTS				
TOTAL RETIREMENTS				
TRANSFERS AND ADJUSTMENTS				
AVERAGE BALANCE	46,746.65	93,493.30	93,493.30	93,493.30
ACCUMULATED TRANSFERS AND ADJUSTMENTS				
REPAIR ALLOWANCE AVERAGE BALANCE	46,746.65	93,493.30	93,493.30	93,493.30

DEPRECIATION FACTORS:

	1976	1977	1978	1979
REMAINING DEPRECIABLE PERIODS	16.00	15.50	14.50	13.50
DECIMAL EQUIVALENT	.058824	.113971	.106618	.099265

DEPRECIABLE BASIS JANUARY 1:

	1976	1977	1978	1979
UNADJUSTED BASIS JAN. 1		93,493.30	93,493.30	93,493.30
RESERVE BALANCE JAN. 1		5,499.65	16,155.17	26,123.24
LESS SALVAGE				
ACCUMULATED DEPR. - EXTRAORDINARY RETIREMENTS				
ESTIMATED SALVAGE				
SALVAGE ADJUSTMENT				
UNRECOVERED COST JAN. 1		67,993.65	77,338.13	67,370.06

ANNUAL DEPRECIATION DEDUCTION:

	1976	1977	1978	1979
DEPRECIATION - UNADJUSTED BASIS JAN. 1		10,655.52	9,968.07	9,280.61
DEPRECIATION - ADDITIONS	5,499.65			
DEPRECIATION - EXTRAORDINARY RETIREMENTS				
DEPRECIATION - OTHER				
TOTAL ANNUAL DEPRECIATION DEDUCTION	5,499.65	10,655.52	9,968.07	9,280.61

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GUIDELINE CLASS 12 000
VINTAGE YEAR 1976
ASSET DEPR. PERIOD 16.00

-----REPORTING YEARS-----

UTILITY PLANT COST BASIS:

1980

OPENING BALANCE JAN. 1
PRIOR YEARS ADJUSTMENT
OPENING BAL. JAN. 1 - INCL. PRIOR YRS. ADJ.
ADDITIONS
ORDINARY RETIREMENTS
EXTRAORDINARY RETIREMENTS
TOTAL RETIREMENTS
TRANSFERS AND ADJUSTMENTS
AVERAGE BALANCE
ACCUMULATED TRANSFERS AND ADJUSTMENTS
REPAIR ALLOWANCE AVERAGE BALANCE

93,493.30

DEPRECIATION FACTORS:

REMAINING DEPRECIABLE PERIODS
DECIMAL EQUIVALENT

12.50
.091912

DEPRECIABLE BASIS JANUARY 1:

UNADJUSTED BASIS JAN. 1
RESERVE BALANCE JAN. 1
GROSS SALVAGE
ACCUMULATED DEPR. - EXTRAORDINARY RETIREMENTS
ESTIMATED SALVAGE
SALVAGE ADJUSTMENT
UNRECOVERED COST JAN. 1

93,493.30
35,403.85

58,089.45

ANNUAL DEPRECIATION DEDUCTION:

DEPRECIATION - UNADJUSTED BASIS JAN. 1
DEPRECIATION - ADDITIONS
DEPRECIATION - EXTRAORDINARY RETIREMENTS
DEPRECIATION - OTHER
TOTAL ANNUAL DEPRECIATION DEDUCTION

8,593.16

GUIDELINE CLASS 12 000
 VINTAGE YEAR 1977
 ASSET DEPR. PERIOD 16.00

----- REPORTING YEARS -----

UTILITY PLANT COST BASIS:

	1977	1978	1979	1980
OPENING BALANCE JAN. 1		28,322.34	28,343.68	28,343.68
PRIOR YEARS ADJUSTMENT		21.34		
OPENING BAL. JAN. 1 - INCL. PRIOR YRS. ADJ.		28,343.68	28,343.68	
ADDITIONS	28,322.34			
ORDINARY RETIREMENTS				
EXTRAORDINARY RETIREMENTS				
TOTAL RETIREMENTS				
TRANSFERS AND ADJUSTMENTS				
AVERAGE BALANCE	14,161.17	28,343.68	28,343.68	
ACCUMULATED TRANSFERS AND ADJUSTMENTS				
REPAIR ALLOWANCE AVERAGE BALANCE	14,161.17	28,343.68	28,343.68	

DEPRECIATION FACTORS:

	16.00	15.50	14.50	13.50
REMAINING DEPRECIABLE PERIODS	16.00	15.50	14.50	13.50
DECIMAL EQUIVALENT	.058824	.113971	.106618	.099265

DEPRECIABLE BASIS JANUARY 1:

	1977	1978	1979	1980
UNADJUSTED BASIS JAN. 1		28,343.68	28,343.68	28,343.68
RESERVE BALANCE JAN. 1		1,666.03	4,896.39	7,918.34
GROSS SALVAGE				
ACCUMULATED DEPR. - EXTRAORDINARY RETIREMENTS				
ESTIMATED SALVAGE				
SALVAGE ADJUSTMENT				
UNRECOVERED COST JAN. 1		26,677.65	23,447.29	20,425.34

ANNUAL DEPRECIATION DEDUCTION:

	1977	1978	1979	1980
DEPRECIATION - UNADJUSTED BASIS JAN. 1		3,230.36	3,021.95	2,815.54
DEPRECIATION - ADDITIONS	1,666.03			
DEPRECIATION - EXTRAORDINARY RETIREMENTS				
DEPRECIATION - OTHER				
TOTAL ANNUAL DEPRECIATION DEDUCTION	1,666.03	3,230.36	3,021.95	

GUIDELINE CLASS 12 000
 VINTAGE YEAR 1978
 ASSET DEPR. PERIOD 16.00

-----REPORTING YEARS-----

UTILITY PLANT COST BASIS:

	1978	1979	1980
OPENING BALANCE JAN. 1		190,336.77	193,627.48
PRIOR YEARS ADJUSTMENT		3,320.71	
OPENING BAL. JAN. 1 - INCL. PRIOR YRS. ADJ.		193,627.48	
ADDITIONS	190,306.77		
ORDINARY RETIREMENTS			
EXTRAORDINARY RETIREMENTS			
TOTAL RETIREMENTS			
TRANSFERS AND ADJUSTMENTS			
AVERAGE BALANCE	95,153.39	193,627.48	
ACCUMULATED TRANSFERS AND ADJUSTMENTS			
REPAIR ALLOWANCE AVERAGE BALANCE	95,153.39	193,627.48	

DEPRECIATION FACTORS:

	16.00	15.50	14.50
REMAINING DEPRECIABLE PERIODS			
DECIMAL EQUIVALENT	.058824	.113971	.106618

DEPRECIABLE BASIS JANUARY 1:

UNADJUSTED BASIS JAN. 1		193,627.48	193,627.48
RESERVE BALANCE JAN. 1		11,194.61	33,262.53
GROSS SALVAGE			
ACCUMULATED DEPR. - EXTRAORDINARY RETIREMENTS			
ESTIMATED SALVAGE			
SALVAGE ADJUSTMENT			
UNRECOVERED COST JAN. 1		182,432.87	160,364.95

ANNUAL DEPRECIATION DEDUCTION:

DEPRECIATION - UNADJUSTED BASIS JAN. 1		22,067.92	20,644.17
DEPRECIATION - ADDITIONS	11,194.61		
DEPRECIATION - EXTRAORDINARY RETIREMENTS			
DEPRECIATION - OTHER			
TOTAL ANNUAL DEPRECIATION DEDUCTION	11,194.61	22,067.92	

GUIDELINE CLASS 12 000
 VINTAGE YEAR 1979
 ASSET DEPR. PERIOD 16.00

----- REPORTING YEARS -----

UTILITY PLANT COST BASIS:

	1979	1980
OPENING BALANCE JAN. 1		529,493.32
PRIOR YEARS ADJUSTMENT		
OPENING BAL. JAN. 1 - INCL. PRIOR YRS. ADJ.		
ADDITIONS	529,493.32	
ORDINARY RETIREMENTS		
EXTRAORDINARY RETIREMENTS		
TOTAL RETIREMENTS		
TRANSFERS AND ADJUSTMENTS		
AVERAGE BALANCE	264,746.66	
ACCUMULATED TRANSFERS AND ADJUSTMENTS		
REPAIR ALLOWANCE AVERAGE BALANCE	264,746.66	

DEPRECIATION FACTORS:

	16.00	15.50
REMAINING DEPRECIABLE PERIODS		
DECIMAL EQUIVALENT	.058824	.113971

DEPRECIABLE BASIS JANUARY 1:

	529,493.32
UNADJUSTED BASIS JAN. 1	
RESERVE BALANCE JAN. 1	31,146.92
GROSS SALVAGE	
ACCUMULATED DEPR. - EXTRAORDINARY RETIREMENTS	
ESTIMATED SALVAGE	
SALVAGE ADJUSTMENT	
UNRECOVERED COST JAN. 1	498,346.40

ANNUAL DEPRECIATION DEDUCTION:

	31,146.92	60,346.88
DEPRECIATION - UNADJUSTED BASIS JAN. 1		
DEPRECIATION - ADDITIONS	31,146.92	
DEPRECIATION - EXTRAORDINARY RETIREMENTS		
DEPRECIATION - OTHER		
TOTAL ANNUAL DEPRECIATION DEDUCTION	31,146.92	

GUIDELINE CLASS 11 000
 VINTAGE YEAR 1973
 ASSET DEPR. PERIOD 16.00

----- REPORTING YEARS -----

UTILITY PLANT COST BASIS:

	1973	1974	1975	1976
OPENING BALANCE JAN. 1		145,825,941.64	144,327,861.09	143,817,698.02
PRIOR YEARS ADJUSTMENT		1,499,157.00-	510,163.07-	80,299.03-
OPENING BAL. JAN. 1 - INCL. PRIOR YRS. ADJ.		144,326,784.64	143,817,698.02	143,737,398.99
ADDITIONS	145,825,941.64			
ORDINARY RETIREMENTS				273,817.80
EXTRAORDINARY RETIREMENTS				273,817.80
TOTAL RETIREMENTS				3,453.80-
TRANSFERS AND ADJUSTMENTS		1,076.45		143,598,763.19
AVERAGE BALANCE	72,912,970.82	144,327,322.87	143,817,698.02	143,598,763.19
ACCUMULATED TRANSFERS AND ADJUSTMENTS		1,076.45	1,076.45	2,377.35-
REPAIR ALLOWANCE AVERAGE BALANCE	72,912,970.82	144,326,784.65	143,817,159.80	143,599,951.87

DEPRECIATION FACTORS:

	16.00	15.50	14.50	13.50
REMAINING DEPRECIABLE PERIODS				
DECIMAL EQUIVALENT	.058824	.113971	.106618	.099265

DEPRECIABLE BASIS JANUARY 1:

UNADJUSTED BASIS JAN. 1	144,326,784.64	143,816,621.57	143,736,322.54
RESERVE BALANCE JAN. 1	8,578,065.19	25,027,133.16	40,360,573.72
GROSS SALVAGE			
ACCUMULATED DEPR. - EXTRAORDINARY RETIREMENTS			
ESTIMATED SALVAGE			
SALVAGE ADJUSTMENT			
UNRECOVERED COST JAN. 1	135,748,719.45	118,789,488.41	103,375,748.82

ANNUAL DEPRECIATION DEDUCTION:

DEPRECIATION - UNADJUSTED BASIS JAN. 1	16,449,067.97	15,333,440.56	14,267,986.06
DEPRECIATION - ADDITIONS	8,578,065.19		
DEPRECIATION - EXTRAORDINARY RETIREMENTS			
DEPRECIATION - OTHER			
TOTAL ANNUAL DEPRECIATION DEDUCTION	8,578,065.19	16,449,067.97	15,333,440.56

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FEDERAL INCOME TAX DEPRECIATION
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GUIDELINE CLASS 11 000
 VINTAGE YEAR 1973
 ASSET DEPR. PERIOD 16.00

----- REPORTING YEAR -----

UTILITY PLANT COST BASIS:

	1977	1978	1979	1980
OPENING BALANCE JAN. 1	143,460,127.39	142,368,096.46	142,117,980.40	141,998,618.69
ADDITIONS	861,770.61	188,275.94	119,361.71	
ORDINARY RETIREMENTS				
EXTRAORDINARY RETIREMENTS				
TOTAL RETIREMENTS	861,770.61	188,275.94	119,361.71	
TRANSFERS AND ADJUSTMENTS	230,260.32	61,840.12		
AVERAGE BALANCE	142,914,111.93	142,243,038.43	142,058,299.55	
ACCUMULATED TRANSFERS AND ADJUSTMENTS	232,637.67	294,477.79	294,477.79	294,477.79
REPAIR ALLOWANCE AVERAGE BALANCE	143,030,430.77	142,390,277.33	142,205,538.45	

DEPRECIATION FACTORS:

	1977	1978	1979	1980
REMAINING DEPRECIABLE PERIODS	12.50	11.50	10.50	9.50
DECIMAL EQUIVALENT	.091912	.084559	.077206	.069853

DEPRECIABLE BASIS JANUARY 1:

	1977	1978	1979	1980
UNADJUSTED BASIS JAN. 1	143,736,322.54	143,736,322.54	143,736,322.54	143,736,322.54
RESERVE BALANCE JAN. 1	54,628,559.78	67,839,652.66	79,993,852.36	91,091,158.88
GROSS SALVAGE				
ACCUMULATED DEPR. - EXTRAORDINARY RETIREMENTS				
ESTIMATED SALVAGE				
SALVAGE ADJUSTMENT				
RECOVERED COST JAN. 1	69,107,762.76	75,896,669.88	63,742,470.18	52,645,163.66

ANNUAL DEPRECIATION DEDUCTION:

	1977	1978	1979	1980
DEPRECIATION - UNADJUSTED BASIS JAN. 1	13,211,092.08	12,154,199.70	11,097,306.52	10,040,413.34
DEPRECIATION - ADDITIONS				
DEPRECIATION - EXTRAORDINARY RETIREMENTS				
DEPRECIATION - OTHER				
TOTAL ANNUAL DEPRECIATION DEDUCTION	13,211,092.08	12,154,199.70	11,097,306.52	

GUIDE LINE CLASS 11 000
VINTAGE YEAR 1974
ASSET DEPR. PERIOD 16.00

----- REPORTING YEARS -----

UTILITY PLANT COST BASIS:

	1974	1975	1976	1977
OPENING BALANCE JAN. 1		2,129,968.03	2,065,835.29	2,066,034.07
PRIOR YEARS ADJUSTMENT		2,357.17-	198.78	
OPENING BAL. JAN. 1 - INCL. PRIOR YRS. ADJ.		2,127,610.86	2,066,034.07	2,066,034.07
ADDITIONS	2,129,968.03			
ORDINARY RETIREMENTS		43,898.52		216,944.87
EXTRAORDINARY RETIREMENTS				
TOTAL RETIREMENTS		43,898.52		216,944.87
TRANSFERS AND ADJUSTMENTS		17,877.05-		
AVERAGE BALANCE	1,064,984.02	2,096,723.08	2,066,034.07	1,957,561.64
ACCUMULATED TRANSFERS AND ADJUSTMENTS		17,877.05-	17,877.05-	17,877.05-
REPAIR ALLOWANCE AVERAGE BALANCE	1,064,984.02	2,105,661.61	2,074,972.60	1,966,500.17

DEPRECIATION FACTORS:

	1974	1975	1976	1977
REMAINING DEPRECIABLE PERIODS	16.00	15.50	14.50	13.50
DECIMAL EQUIVALENT	.058824	.113971	.106618	.099265

DEPRECIABLE BASIS JANUARY 1:

	1974	1975	1976	1977
UNADJUSTED BASIS JAN. 1		2,127,610.86	2,127,809.64	2,127,809.64
RESERVE BALANCE JAN. 1		125,293.24	425,757.54	652,620.35
GROSS SALVAGE		57,978.36		
ACCUMULATED DEPR. - EXTRAORDINARY RETIREMENTS				
ESTIMATED SALVAGE				
SALVAGE ADJUSTMENT				
UNRECOVERED COST JAN. 1		2,002,317.62	1,702,052.10	1,475,189.29

ANNUAL DEPRECIATION DEDUCTION:

	1974	1975	1976	1977
DEPRECIATION - UNADJUSTED BASIS JAN. 1		242,485.94	226,862.81	211,217.02
DEPRECIATION - ADDITIONS	125,293.24			
DEPRECIATION - EXTRAORDINARY RETIREMENTS				
DEPRECIATION - OTHER				
TOTAL ANNUAL DEPRECIATION DEDUCTION	125,293.24	242,485.94	226,862.81	211,217.02

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FEDERAL INCOME TAX DEPRECIATION
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 VINTAGE YEAR 1974
 ASSET DEPR. PERIOD 16.00

----- REPORTING YEARS -----

UTILITY PLANT COST BASIS:

	1978	1979	1980
OPENING BALANCE JAN. 1	1,849,089.20	1,637,038.71	1,631,091.77
ADDITIONS	212,050.49	5,946.94	
OPENING BAL. JAN. 1 - INCL. PRIOR YRS. ADJ.	1,637,038.71	1,631,091.77	
ORDINARY RETIREMENTS			
EXTRAORDINARY RETIREMENTS			
TOTAL RETIREMENTS			
TRANSFERS AND ADJUSTMENTS			
AVERAGE BALANCE	1,637,038.71	1,631,091.77	
ACCUMULATED TRANSFERS AND ADJUSTMENTS	17,877.05	17,877.05	17,877.05
REPAIR ALLOWANCE AVERAGE BALANCE	1,645,977.24	1,640,030.30	

DEPRECIATION FACTORS:

	1978	1979	1980
REMAINING DEPRECIABLE PERIODS	12.50	11.50	10.50
DECIMAL EQUIVALENT	.091912	.084559	.077206

DEPRECIABLE BASIS JANUARY 1:

	1978	1979	1980
UNADJUSTED BASIS JAN. 1	1,915,759.15	1,909,812.21	1,909,812.21
RESERVE BALANCE JAN. 1	863,837.37	1,039,918.62	1,201,410.43
GROSS SALVAGE			
ACCUMULATED DEPR. - EXTRAORDINARY RETIREMENTS			
ESTIMATED SALVAGE			
SALVAGE ADJUSTMENT			
UNRECOVERED COST JAN. 1	1,051,921.78	869,893.59	708,401.78

ANNUAL DEPRECIATION DEDUCTIONS:

	1978	1979	1980
DEPRECIATION - UNADJUSTED BASIS JAN. 1	176,081.25	161,491.81	147,448.96
DEPRECIATION - ADDITIONS			
DEPRECIATION - EXTRAORDINARY RETIREMENTS			
DEPRECIATION - OTHER			
TOTAL ANNUAL DEPRECIATION DEDUCTION	176,081.25	161,491.81	

GUIDELINE CLASS 11 000
 VINTAGE YEAR 1975
 ASSET DEPR. PERIOD 16.00

----- REPORTING YEARS -----

UTILITY PLANT COST BASIS:

	1975	1976	1977	1978
OPENING BALANCE JAN. 1		7,827,521.03	7,692,251.26	7,891,939.19
PRIOR YEARS ADJUSTMENT		35,269.77-		6,172.57-
OPENING BAL. JAN. 1 - INCL. PRIOR YRS. ADJ.		7,892,251.26	7,692,251.26	7,885,766.62
ADDITIONS	7,911,956.75			
ORDINARY RETIREMENTS			312.07	
EXTRAORDINARY RETIREMENTS				
TOTAL RETIREMENTS			312.07	
TRANSFERS AND ADJUSTMENTS	15,564.28			
AVERAGE BALANCE	3,963,760.52	7,892,251.26	7,692,095.23	7,885,766.62
ACCUMULATED TRANSFERS AND ADJUSTMENTS	15,564.28	15,564.28	15,564.28	15,564.28
REPAIR ALLOWANCE AVERAGE BALANCE	3,955,978.38	7,884,469.12	7,884,313.09	7,877,984.48

DEPRECIATION FACTORS:

	1975	1976	1977	1978
REMAINING DEPRECIABLE PERIODS	16.00	15.50	14.50	13.50
DECIMAL EQUIVALENT	.058824	.113971	.106618	.099265

DEPRECIABLE BASIS JANUARY 1:

	1975	1976	1977	1978
UNADJUSTED BASIS JAN. 1		7,876,686.98	7,876,686.98	7,870,514.41
RESERVE BALANCE JAN. 1		465,412.94	1,363,126.83	2,202,923.44
GROSS SALVAGE				
ACCUMULATED DEPR. - EXTRAORDINARY RETIREMENTS				
ESTIMATED SALVAGE				
SALVAGE ADJUSTMENT				
UNRECOVERED COST JAN. 1		7,411,274.04	6,513,560.15	5,667,590.97

ANNUAL DEPRECIATION DEDUCTION:

	1975	1976	1977	1978
DEPRECIATION - UNADJUSTED BASIS JAN. 1		897,713.89	839,796.61	781,266.61
DEPRECIATION - ADDITIONS	465,412.94			
DEPRECIATION - EXTRAORDINARY RETIREMENTS				
DEPRECIATION - OTHER				
TOTAL ANNUAL DEPRECIATION DEDUCTION	465,412.94	897,713.89	839,796.61	781,266.61

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GUIDELINE CLASS 11 000
VINTAGE YEAR 1975
ASSET DEPR. PERIOD 16.00

----- REPORTING YEARS -----

UTILITY PLANT COST BASIS:

	1979	1980
OPENING BALANCE JAN. 1	7,885,766.62	7,765,955.07
PRIOR YEARS ADJUSTMENT	119,811.55-	
OPENING BAL. JAN. 1 - INCL. PRIOR YRS. ADJ.	7,765,955.07	
ADDITIONS		
ORDINARY RETIREMENTS		
EXTRAORDINARY RETIREMENTS		
TOTAL RETIREMENTS		
TRANSFERS AND ADJUSTMENTS		
AVERAGE BALANCE	7,765,955.07	
ACCUMULATED TRANSFERS AND ADJUSTMENTS	15,554.28	15,564.28
REPAIR ALLOWANCE AVERAGE BALANCE	7,758,172.93	

DEPRECIATION FACTORS:

	12.50	11.50
REMAINING DEPRECIABLE PERIODS		
DECIMAL EQUIVALENT	.091912	.084559

DEPRECIABLE BASIS JANUARY 1:

	1979	1980
UNADJUSTED BASIS JAN. 1	7,750,702.86	7,750,702.86
RESERVE BALANCE JAN. 1	2,984,190.05	3,696,572.65
GROSS SALVAGE		
ACCUMULATED DEPR. - EXTRAORDINARY RETIREMENTS		
ESTIMATED SALVAGE		
SALVAGE ADJUSTMENT		
UNRECOVERED COST JAN. 1	4,766,512.81	4,054,130.21

ANNUAL DEPRECIATION DEDUCTION:

	1979	1980
DEPRECIATION - UNADJUSTED BASIS JAN. 1	712,382.60	655,391.68
DEPRECIATION - ADDITIONS		
DEPRECIATION - EXTRAORDINARY RETIREMENTS		
DEPRECIATION - OTHER		
TOTAL ANNUAL DEPRECIATION DEDUCTION	712,382.60	

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 SUM OF THE YEARS DIGITS METHOD - ADR

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GUIDELINE CLASS 11 000
 VINTAGE YEAR 1976
 ASSET DEPR. PERIOD 16.00

----- REPORTING YEARS -----

UTILITY PLANT COST BASIS:

	1976	1977	1978	1979
OPENING BALANCE JAN. 1		8,940,715.98	8,936,438.04	8,929,079.65
PRIOR YEARS ADJUSTMENT		4,277.94	7,358.39	8,114.25
OPENING BAL. JAN. 1 - INCL. PRIOR YRS. ADJ.		8,936,438.04	8,929,079.65	8,920,965.40
ADDITIONS	8,940,715.98			
ORDINARY RETIREMENTS				
EXTRAORDINARY RETIREMENTS				
TOTAL RETIREMENTS				
TRANSFERS AND ADJUSTMENTS				
AVERAGE BALANCE	4,470,357.99	8,936,438.04	8,929,079.65	8,920,965.40
ACCUMULATED TRANSFERS AND ADJUSTMENTS				
REPAIR ALLOWANCE AVERAGE BALANCE	4,470,357.99	8,936,438.04	8,929,079.65	8,920,965.40

DEPRECIATION FACTORS:

	16.00	15.50	14.50	13.50
REMAINING DEPRECIABLE PERIODS				
DECIMAL EQUIVALENT	.058824	.113971	.106618	.099265

DEPRECIABLE BASIS JANUARY 1:

		8,936,438.04	8,929,079.65	8,920,965.40
UNADJUSTED BASIS JAN. 1				
RESERVE BALANCE JAN. 1		525,928.68	1,544,423.46	2,496,424.07
GROSS SALVAGE				
ACCUMULATED DEPR. - EXTRAORDINARY RETIREMENTS				
ESTIMATED SALVAGE				
SALVAGE ADJUSTMENT				
UNRECOVERED COST JAN. 1		8,410,509.36	7,384,656.19	6,424,541.33

ANNUAL DEPRECIATION DEDUCTION:

		1,018,494.78	952,000.61	885,539.63
DEPRECIATION - UNADJUSTED BASIS JAN. 1				
DEPRECIATION - ADDITIONS	525,928.68			
DEPRECIATION - EXTRAORDINARY RETIREMENTS				
DEPRECIATION - OTHER				
TOTAL ANNUAL DEPRECIATION DEDUCTION	525,928.68	1,018,494.78	952,000.61	885,539.63

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GUIDELINE CLASS 11 000
VINTAGE YEAR 1976
ASSET DEPR. PERIOD 16.00

----- REPORTING YEARS -----

UTILITY PLANT COST BASIS:

1980

OPENING BALANCE JAN. 1
PRIOR YEARS ADJUSTMENT
OPENING BAL. JAN. 1 - INCL. PRIOR YRS. ADJ.
ADDITIONS
ORDINARY RETIREMENTS
EXTRAORDINARY RETIREMENTS
TOTAL RETIREMENTS
TRANSFERS AND ADJUSTMENTS
AVERAGE BALANCE
ACCUMULATED TRANSFERS AND ADJUSTMENTS
REPAIR ALLOWANCE AVERAGE BALANCE

8,920,965.40

DEPRECIATION FACTORS:

REMAINING DEPRECIABLE PERIODS
DECIMAL EQUIVALENT

12.50
.091912

DEPRECIABLE BASIS JANUARY 1:

UNADJUSTED BASIS JAN. 1
RESERVE BALANCE JAN. 1
GROSS SALVAGE
ACCUMULATED DEPR. - EXTRAORDINARY RETIREMENTS
ESTIMATED SALVAGE
SALVAGE ADJUSTMENT
UNRECOVERED COST JAN. 1

8,920,965.40
3,381,963.70

5,539,001.70

ANNUAL DEPRECIATION DEDUCTION:

DEPRECIATION - UNADJUSTED BASIS JAN. 1
DEPRECIATION - ADDITIONS
DEPRECIATION - EXTRAORDINARY RETIREMENTS
DEPRECIATION - OTHER
TOTAL ANNUAL DEPRECIATION DEDUCTION

819,943.77

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GUIDELINE CLASS 11 000
 VINTAGE YEAR 1977
 ASSET DEPR. PERIOD 16.00

----- REPORTING YEARS -----

UTILITY PLANT COST BASIS:

	1977	1978	1979	1980
OPENING BALANCE JAN. 1		11,080,185.71	11,099,376.10	11,096,116.56
PRIOR YEARS ADJUSTMENT		19,190.39	3,259.54	
OPENING BAL. JAN. 1 - INCL. PRIOR YRS. ADJ.		11,099,376.10	11,096,116.56	
ADDITIONS	11,080,185.71			
ORDINARY RETIREMENTS				
EXTRAORDINARY RETIREMENTS				
TOTAL RETIREMENTS				
TRANSFERS AND ADJUSTMENTS				
AVERAGE BALANCE	5,540,092.86	11,099,376.10	11,096,116.56	
ACCUMULATED TRANSFERS AND ADJUSTMENTS				
REPAIR ALLOWANCE AVERAGE BALANCE	5,540,092.86	11,099,376.10	11,096,116.56	

DEPRECIATION FACTORS:

	1977	1978	1979	1980
REMAINING DEPRECIABLE PERIODS	16.00	15.50	14.50	13.50
DECIMAL EQUIVALENT	.050824	.113971	.106618	.099265

DEPRECIABLE BASIS JANUARY 1:

	1977	1978	1979	1980
UNADJUSTED BASIS JAN. 1		11,099,376.10	11,096,116.56	11,096,116.56
RESERVE BALANCE JAN. 1		651,780.84	1,916,787.83	3,099,833.59
GROSS SALVAGE				
ACCUMULATED DEPR. - EXTRAORDINARY RETIREMENTS				
ESTIMATED SALVAGE				
SALVAGE ADJUSTMENT				
UNRECOVERED COST JAN. 1		10,447,595.26	9,179,328.73	7,996,282.97

ANNUAL DEPRECIATION DEDUCTION:

	1977	1978	1979	1980
DEPRECIATION - UNADJUSTED BASIS JAN. 1		1,265,006.99	1,183,045.76	1,101,456.01
DEPRECIATION - ADDITIONS	651,780.84			
DEPRECIATION - EXTRAORDINARY RETIREMENTS				
DEPRECIATION - OTHER				
TOTAL ANNUAL DEPRECIATION DEDUCTION	651,780.84	1,265,006.99	1,183,045.76	

GUIDELINE CLASS 11 000
 VINTAGE YEAR 1978
 ASSET DEPR. PERIOD 16.00

-----REPORTING YEARS-----

UTILITY PLANT COST BASIS:

	1978	1979	1980
OPENING BALANCE JAN. 1		6,731,472.94	6,716,848.95
PRIOR YEARS ADJUSTMENT		14,623.99-	
OPENING BAL. JAN. 1 - INCL. PRIOR YRS. ADJ.		6,716,848.95	
ADDITIONS	6,731,472.94		
ORDINARY RETIREMENTS			
EXTRAORDINARY RETIREMENTS			
TOTAL RETIREMENTS			
TRANSFERS AND ADJUSTMENTS			
AVERAGE BALANCE	3,365,736.47	6,716,848.95	
ACCUMULATED TRANSFERS AND ADJUSTMENTS			
REPAIR ALLOWANCE AVERAGE BALANCE	3,365,736.47	6,716,848.95	

DEPRECIATION FACTORS:

	16.00	15.50	14.50
REMAINING DEPRECIABLE PERIODS			
DECIMAL EQUIVALENT	.058824	.113971	.106618

DEPRECIABLE BASIS JANUARY 1:

		6,716,848.95	6,716,848.95
UNADJUSTED BASIS JAN. 1			
RESERVE BALANCE JAN. 1		395,972.16	1,161,498.15
GROSS SALVAGE			
ACCUMULATED DEPR. - EXTRAORDINARY RETIREMENTS			
ESTIMATED SALVAGE			
SALVAGE ADJUSTMENT			
UNRECOVERED COST JAN. 1		6,320,876.79	5,555,350.80

ANNUAL DEPRECIATION DEDUCTION:

		765,525.99	716,137.00
DEPRECIATION - UNADJUSTED BASIS JAN. 1			
DEPRECIATION - ADDITIONS	395,972.16		
DEPRECIATION - EXTRAORDINARY RETIREMENTS			
DEPRECIATION - OTHER			
TOTAL ANNUAL DEPRECIATION DEDUCTION	395,972.16	765,525.99	

GUIDELINE CLASS 11 000
 VINTAGE YEAR 1979
 ASSET DEPR. PERIOD 16.00

-----REPORTING YEARS-----

UTILITY PLANT COST BASIS:

	1979	1980
OPENING BALANCE JAN. 1		2,061,186.33
PRIOR YEARS ADJUSTMENT		
OPENING BAL. JAN. 1 - INCL. PRIOR YRS. ADJ.		
ADDITIONS	2,061,186.33	
ORDINARY RETIREMENTS		
EXTRAORDINARY RETIREMENTS		
TOTAL RETIREMENTS		
TRANSFERS AND ADJUSTMENTS		
AVERAGE BALANCE	1,030,593.17	
ACCUMULATED TRANSFERS AND ADJUSTMENTS		
REPAIR ALLOWANCE AVERAGE BALANCE	1,030,593.17	

DEPRECIATION FACTORS:

	16.00	15.50
REMAINING DEPRECIABLE PERIODS		
DECIMAL EQUIVALENT	.058824	.113971

DEPRECIABLE BASIS JANUARY 1:

UNADJUSTED BASIS JAN. 1	2,061,186.33
RESERVE BALANCE JAN. 1	121,247.22
GROSS SALVAGE	
ACCUMULATED DEPR. - EXTRAORDINARY RETIREMENTS	
ESTIMATED SALVAGE	
SALVAGE ADJUSTMENT	
UNRECOVERED COST JAN. 1	1,939,939.11

ANNUAL DEPRECIATION DEDUCTION:

DEPRECIATION - UNADJUSTED BASIS JAN. 1	234,915.47
DEPRECIATION - ADDITIONS	121,247.22
DEPRECIATION - EXTRAORDINARY RETIREMENTS	
DEPRECIATION - OTHER	
TOTAL ANNUAL DEPRECIATION DEDUCTION	121,247.22

Interrogatory 32

Please list all capital improvements or repairs to the unit which were treated as rate base items. Please answer questions (29), (30) and (31) for every such item.

Response

This information is not available without a detailed study.

Interrogatory 33

What property taxes have been paid for Indian Point Unit 2 annually during its life?

Response

Indian Point #2 - Property Taxes

<u>Year</u>	<u>Property Tax Amount</u>
1967	-
1968	\$ 123,459.01
1969	660,024.93
1970	1,244,249.40
1971	1,796,082.19
1972	2,860,940.20
1973	3,052,750.00
1974	3,037,625.00
1975	3,154,625.00
1976	4,444,998.85
1977	3,537,250.00
1978	3,796,561.93
1979	4,251,625.00
1980	9,150,735.63*
1981	9,688,116.27*

* The license for Indian Point Unit 1 was amended in 1980 to preclude operating the unit as an operating reactor. The tax figures shown for 1980 and 1981 are for all of Con Edison-owned property at Indian Point.

Interrogatory 34

Has the Company developed estimates of future property taxes for the unit for budget forecasting or other purposes? If so, please provide these estimates.

Response

Yes.

<u>Year</u>	<u>Estimated Property* Tax Amount</u>
1982	\$ 10,300,000.00
1983	\$ 10,900,000.00

* Figures are for all Con Edison-owned property at Indian Point.

Interrogatory 35

If the unit were prematurely shut down, what effect would this have on property tax liability?

Response

If the unit were shut down temporarily it would probably have no effect on property tax liability.

There would have to be a complete removal of equipment or a partial removal such as to render the equipment permanently inoperative in order to cause a reduction in property tax liability.

Interrogatory 36

In determining required revenues, are deferred tax reserves and/or unamortized tax savings from debt AFDC and investment tax credits used to reduce the rate base or considered as part of the capital structure? If so, please describe the procedure for each item.

Response

As an Option Two Company deferred tax reserves relating to investment tax credits are not used to reduce rate base, but are considered a source of funds earning our overall rate of return. The tax credits are amortized on a pro rata basis over the life of the plant asset. See question 30 for debt AFDC portion.

Interrogatory 37

What investment tax credits were claimed for the plant and any later capital improvements or repairs?

Response

Attached is a schedule which shows the amount of Investment Credit for the Indian Point generating station for the year it was first placed in service until 1981. It should be noted that since our records collect their basic plant data by location (Indian Point) and year dollar of addition, an amount, estimated to be minor, relating to the Indian Point Unit No. 1 station is included.

CONSOLIDATED EDISON COMPANY OF NEW YORK, INC.
 Estimated Investment Tax Credit on Indian Power, No. 2

Year	10% ITC @ 10%	10% ITC @ 40%	10% ITC @ 100%	10% ITC @ 100%	10% ITC @ 100%	10% ITC @ 100%	Total ITC
1973	115	6,441,021.00	100	100	100	100	100
1974	115	5,441,021.00	100	100	100	100	100
1975	115	4,115,021.00	100	100	100	100	100
1976	115	3,441,021.00	100	100	100	100	100
1977	115	2,441,021.00	100	100	100	100	100
1978	115	1,441,021.00	100	100	100	100	100
1979	115	1,115,021.00	100	100	100	100	100
1980	115	1,115,021.00	100	100	100	100	100
1981	115	1,115,021.00	100	100	100	100	100
Total ITC	115	1,115,021.00	100	100	100	100	100

Interrogatory 38

What annual insurance costs have been associated with the unit? What are the major components of these costs? Please provide any projections of future costs.

Response

Annual costs for Units 1 and 2 are attached; it should be noted that Nuclear Mutual Limited considers both plants as one site and therefore assesses a single premium for both plants. Figures are not immediately available for Indian Point 2.

Nuclear Insurance Costs

1) Nuclear Property Insurance

<u>Carrier</u>	<u>Coverage</u>	<u>Cost 1982 - 1983</u>	<u>Estimate 1983 - 1984 (F)</u>
REL	\$0 to \$400 Million	\$ 1,903,050 (A)	\$ 2,074,324
A.I.G. and Foreign Markets	\$450 to \$500 Million	\$ 237,050 (B)	\$ 258,384
REL II	\$400 Million Excess \$500 Million Reserve Premium	\$ 728,138 (C) \$ 116,758 (D) \$ 844,896	\$ 793,670 -----

ANI/MAELU	\$100 Million Excess \$500 Million	\$ 300,000 (E)	\$ 327,000
		\$3,284,996	\$3,453,378

2) Nuclear Liability Insurance

ANI/MAERP (Pools)	\$100 Million	\$ 584,233	\$ 636,814 (G)
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3) Nuclear Extra Expense Insurance

REL I	\$179.4 Million	\$1,641,401	\$1,641,401
	<u>Total 1 & 2 & 3</u>	\$5,510,630	\$5,731,503

- (A) Actual cost of Renewal Policy as of April 1, 1982
- (B) Actual cost of Current Policy if paid for one full year.
- (C) Actual cost of REL II Policy for one full year when \$400 Million becomes available.
- (D) Reserve Premium based on full year's coverage only payable first year.
- (E) Actual cost is \$3,000 per Million - we presently have \$67 million coverage and the goal of ANI/MAELU is to get \$100 Million coverage by the end of the summer.

(F) & All 1983-84 estimates are based on prior year premiums x 9% for inflation.

(G)

Interrogatory 39

Describe briefly all state and local income and revenue taxes, including current tax rates, for which the Company is liable.

Response

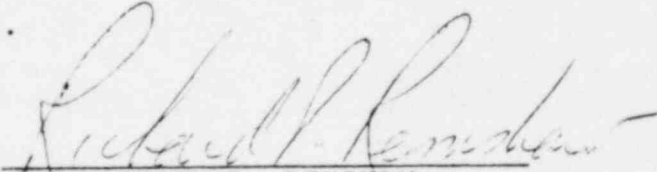
Indian Point Unit 2 is not the subject of New York state of local income or revenue taxes, rather it is the subject of property taxes. Only in the sense that this station produces a product that is sold and that the resulting revenues received are subject to revenue taxes does this station's activities have an impact on revenue taxes.

VERIFICATION

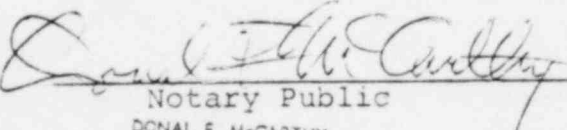
STATE OF NEW YORK)
) ss.:
COUNTY OF NEW YORK)

RICHARD P. REMSHAW, being duly sworn, deposes
and says:

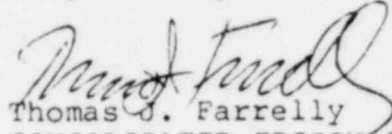
That he is the Project Manager - Indian Point
Hearings for Consolidated Edison Company of New York,
Inc., licensee of Indian Point Nuclear Generating Station,
Unit No. 2; that he is authorized to make this verification
on behalf of said corporation; and that the foregoing answers
to interrogatories were prepared under his direction and
supervision and are true and correct to the best of his
knowledge, information and belief.


RICHARD P. REMSHAW

Sworn to before me this
1st day of JULY , 1982.


Notary Public
DONAL F. MCCARTHY
NOTARY PUBLIC, State of New York
No. 30-2601325
Qualified in Nassau County
Commission Expires March 30, 1983

Respectfully submitted,



Thomas J. Farrelly
CONSOLIDATED EDISON COMPANY
OF NEW YORK, INC.

Licensee of Indian Point Unit 2
4 Irving Place
New York, New York 10003
(212) 460-4333

Dated: New York, New York
July 2, 1982

UNITED STATES OF AMERICA
NUCLEAR REGULATORY COMMISSION
ATOMIC SAFETY AND LICENSING BOARD

Before Administrative Judges:
Louis J. Carter, Chairman
Dr. Oscar H. Paris
Frederick J. Shon

-----X
CONSOLIDATED EDISON COMPANY OF : Docket Nos. 50-247-SP
NEW YORK, INC. (Indian Point, 50-286-SP
Unit No. 2) :
POWER AUTHORITY OF THE STATE OF :
NEW YORK, (Indian Point, :
Unit No. 3) :
-----X

CERTIFICATE OF SERVICE

I certify that I have served copies of Consolidated Edison's Responses to GNYCE'S First Set of Interrogatories on Question 6 on the following parties by deposit in the United States mail, postage prepaid, this 2nd day of July 1982.

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U.S. Nuclear Regulatory
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Dated: New York, New York
July 2, 1982