

Annual Report

**Northern Michigan
Electric Cooperative, Inc.
Boyne City, Michigan
1980**

Northern Michigan Electric Cooperative, Inc.

Boyne City, Michigan

TABLE OF CONTENTS

Board of Directors	2
Chairman's Message	4
General Manager's Report	5
N.M.E.C. Computer	7
Average Cost for Coal and Oil	8
Number of Customers Served, Electric Sales to Cooperatives	8
Electric Revenues, Cost of Electric Service, Wages	9
Fuel Costs, Purchased Power, Taxes, Plant Additions	9
J. H. Campbell Facility	10
Our Domestic Fuel Supply	12
Facts About Fermi	13
Financial Report	14
Comparative Summary of Electrical Operations 1971 - 1980	15
Balance Sheet - Assets	20
Balance Sheet - Liabilities	21
Statement of Operations	22
Statement of Patronage Capital	23
Statement of Changes in Financial Position	24
Notes to Consolidated Financial Statements	26
Staff and Attorney	29

1980

Board of Directors

CHERRYLAND RURAL ELECTRIC COOPERATIVE ASSOCIATION



HAROLD BELDO
TREASURER



WAYNE NORDBECK
VICE CHAIRMAN



BARRIE LIGHTFOOT
DIRECTOR

PRESQUE ISLE ELECTRIC COOPERATIVE INCORPORATED



MELVIN BASEL
SECRETARY



MELVIN MAXWELL
DIRECTOR



F. EDGAR RENDER
DIRECTOR

TOP O' MICHIGAN RURAL ELECTRIC COMPANY



HOWARD CARSON
DIRECTOR



TRUMAN CUMMINGS
CHAIRMAN



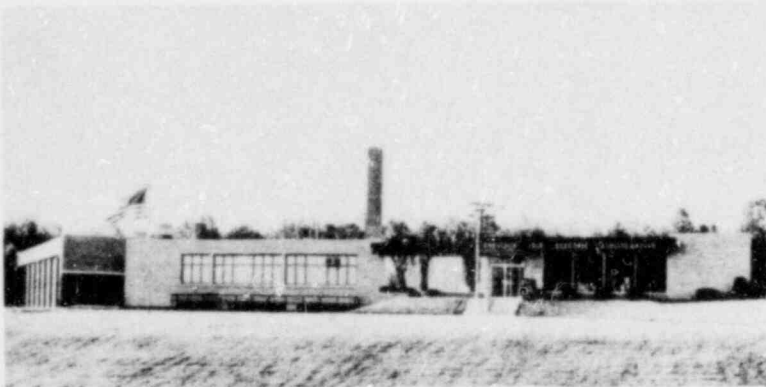
ARTHUR B. HALL
DIRECTOR

Member Cooperatives



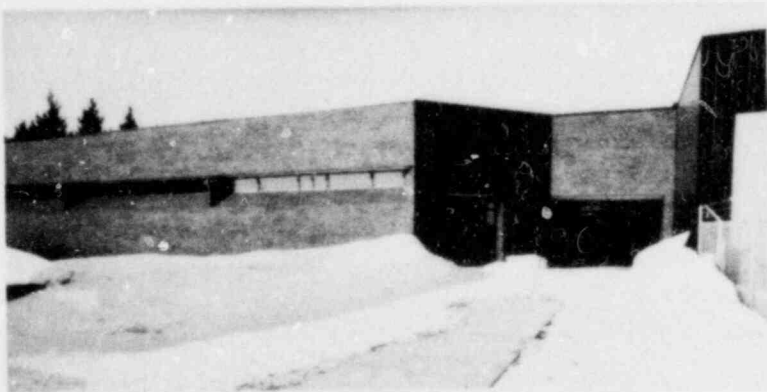
PHILIP COLE, MANAGER

Number of customers served	16,944
Miles of line	1,796



MICHAEL O'MEARA, MANAGER

Number of customers served	23,490
Miles of line	3,568



THOMAS HANNA, MANAGER

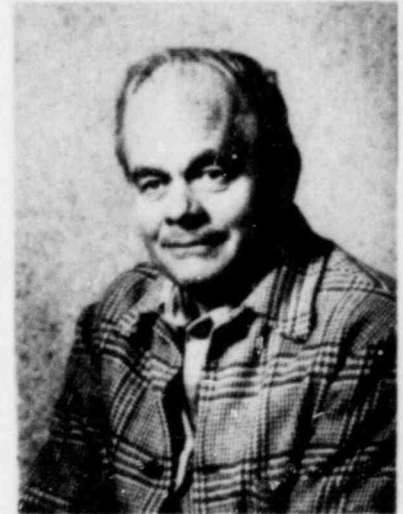
Number of customers served	34,074
Miles of line	4,658

Chairman's Message

I began serving on the Northern Board in 1973, so now have completed eight years of service. I'm sure you all remember the crisis of that year, the oil embargo and resulting higher prices. Our growth forced us into construction programs at a time when prices of materials, right-of-way and all other facets of the program were increasing at a rapid rate. Northern, like everyone else was forced to increase rates in order to meet continuing obligations, but in spite of all of this, the electricity sold to our Members is still one of the best bargains available.

The year 1980 was a culmination of a decade of problems. We encountered higher fuel costs, higher freight rates, higher money costs, rigid environmental requirements and an inflationary economy. In spite of these obstacles, we completed those tasks that enabled us to provide the power needed by our member systems.

In the very nature of your power supplier lies the answer to the Rural Electric program. This is where the bulk of the rural electric money is spent today. Supplying the most economical energy available to our member systems is our main concern at Northern, however, we as directors, should not forget our responsibility of service to our consumer members. This is what makes rural electrics unique and that is why we must continually encourage all members to take part in the various rural electric cooperative activities. In recent years many new members who know nothing about our program have been moving into our service areas.



Encourage them to become better members by becoming better educated and more acquainted with your cooperatives program. This is where our strength lies, so promote membership participation where you can.

We have seen some evidence of conservation over the last year that leads us to believe that our electrical load growth in the future may not be as great as it was in the past. This does not, however, subtract from the value or importance of the committed energy developments that Northern has underway. In this period of double-digit inflation, these projects should be completed at a cost lower than new projects started today.

As we look forward we do so anticipating many problems. With the help of our statewide association, REA staff, NRECA, and CFC, we will meet these challenges.

As Chairman of the Board, I want to thank my fellow directors, the management, and all employees of Northern for their contribution that made the achievements of 1980 possible.

Truman Cummings, Jr.
Chairman

General Manager's Report

Recently updated Power Requirement Studies represent the backbone of G&T planning. Because Northern's approved PRS is outdated and too optimistic, the Rural Electrification Administration informed us they would have difficulty approving the Campbell III Project. After arduous negotiations, NMEC/WEC agreed to submit feasibility studies which utilized a compound growth rate of three (3%) percent. The use of this extremely conservative rate did result in feasibility being established for Campbell III resulting in REA approval. This illustrates that even after the most careful analysis, a valuable project can be lost forever if an approved current Power Requirement Study is not available for use in the planning process. Northern's Board and Management would strongly urge the distribution systems, as a matter of policy, to annually prepare Power Requirement Studies. Outside the benefits accruing to the distribution cooperatives own use, such a policy would immeasurably assist Northern in its long range planning.

Northern concluded its current negotiations with Consumers Power Company by purchasing ten (10) megawatts of the Campbell III coal fired generating unit. During 1981, Northern will take two (2) MW and sell eight (8) MW back to Consumers Power. We will recapture one (1) MW per year and sell the remainder until 1989 when Northern will take its full share. Ten (10) MW of transmission capacity in the Consumers Power system has been purchased under the equalized transmission concept. Transmission participation enables Northern to avoid wheeling charges and will result in lower transmission expense.

The Fermi II deficiency loan in the amount of \$101,337,756 was authorized by the Michigan Public Service Commission on November 25, 1980. Northern's application for authorization was filed January 2, 1980. The time delay in receiving authorization was occasioned by interventions from the Public Interest Research Group in Michigan (PIRGIM) and the Attorney General. Conservatively, we estimate the cost of these interventions to exceed \$3,400,000 as of December 31, 1980. Unfortunately, the cost will continue to accelerate because of legal expenses associated with our defense in that the aforementioned parties appealed to the courts the favorable Commission decision. Detroit Edison and NMEC/WEC have commenced negotiations on several important matters concerning Fermi II which this report must mention. Cooperatives have requested a slippage in the sell back



arrangement to commence with the date of commercial operation and we have also requested that Detroit Edison sell, on an equalized basis, a portion of their transmission system. Detroit Edison has requested cooperatives to advance \$50,000,000 as advance payments on the Fermi II project. The parties have agreed in principle to the various proposals. Verbal permission to proceed was received from REA at a meeting of all parties. Legal and engineering are attempting at this time to iron out differences.

Cooperative's efforts to construct a 10 megawatt lead-acid battery plant have been effectively thwarted by the Attorney General's intervention in the related financing hearings. Feasibility for this project was heavily dependent on the availability of five (5%) percent financing from the REA Insured Loan Program in the amount of \$2,000,000 and, of course, the use of Fermi II energy for charging purposes. Future availability of five (5%) financing for generation and transmission purposes will be determined by agreement between Congress and this Administration. Management is unable because of this cloud to determine at this time if its ultimate recommendation would have been to proceed with SBEED. The financing hearings are continuing with the hope this source of financing will again be definitely available.

During the year, in conjunction with Packaging Corporation of America, preliminary studies were prepared that indicated the envisioned co-generation project was feasible. The main parameters of

this project were to construct a 30 MW wood-fired generating plant and sell waste heat in the form of process steam to PCA with PCA furnishing all of the wood required for fuel. Despite the attractive results, PCA has determined it does not wish to pursue the matter further at this time.

During the remainder of this century, only two significant generating plants are scheduled for construction in Michigan. The City of Lansing proposes to build a 150 MW to 250 MW plant at its Erickson location and Detroit Edison is proceeding with construction of its Belle River Units 1 and 2 which are 676 megawatts each. Northern has expressed its interest in participation in these units to the named utilities. We have been informed our decision must be made regarding the Lansing Plant by September, 1981. It is impossible for Northern to have the necessary information compiled by that date. Consequently, we have asked Lansing to consider offering a unit power option to Northern together with a request for a slippage in the September, 1981 date to February, 1982. Detroit Edison has agreed to use the Fermi contract as a building block for participation in Belle River even though Northern finds

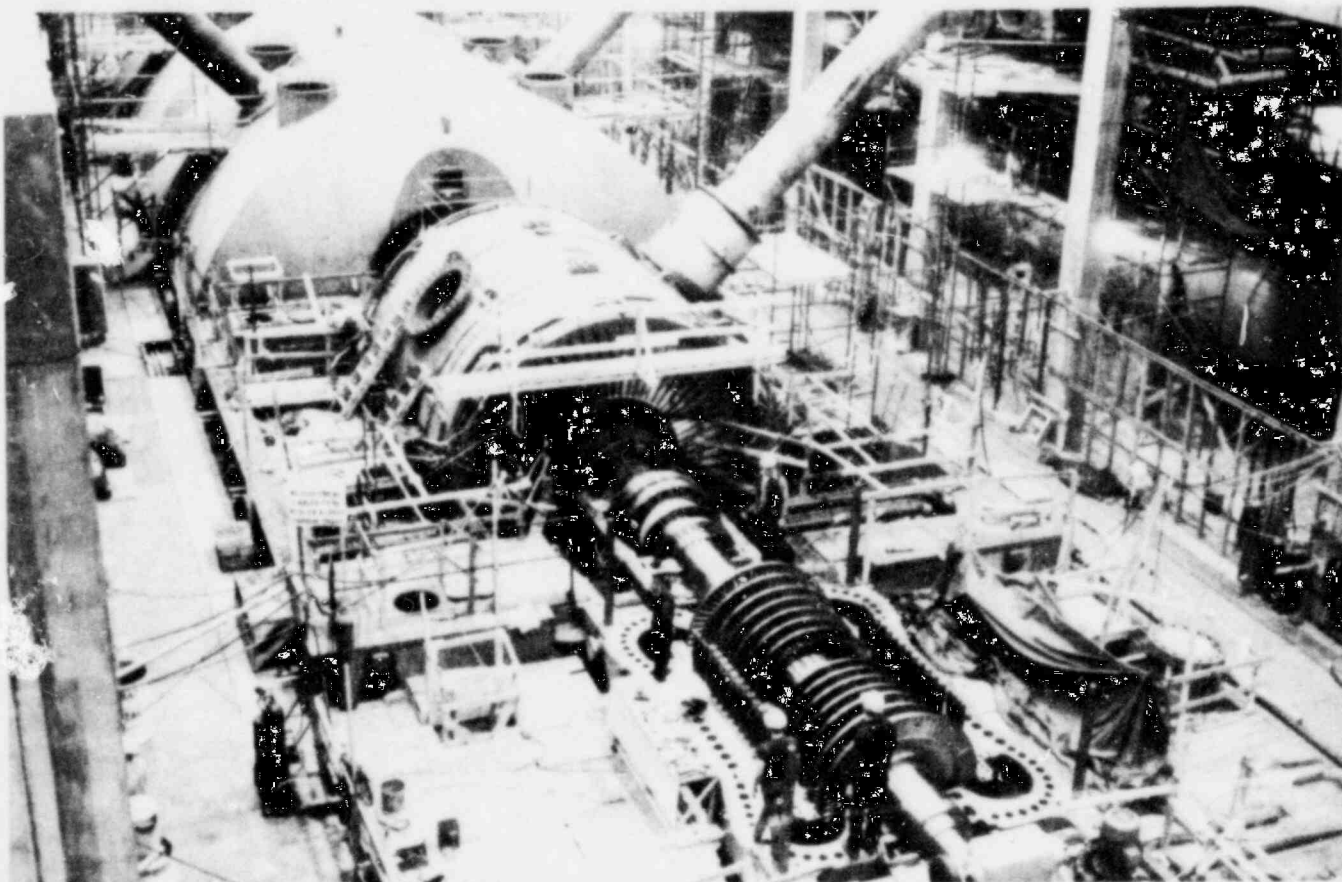
it impossible to do more than speculate as to purchase quantities at this time. Timely completion of a Power Requirement Study will allow Northern to actively pursue these alternatives.

The rate increase requested in late 1980 became effective April 1, 1981. For the first time, the Commission approved a Northern rate request intact. This unusual occurrence will preclude the necessity of Northern filing for rate relief in 1981.

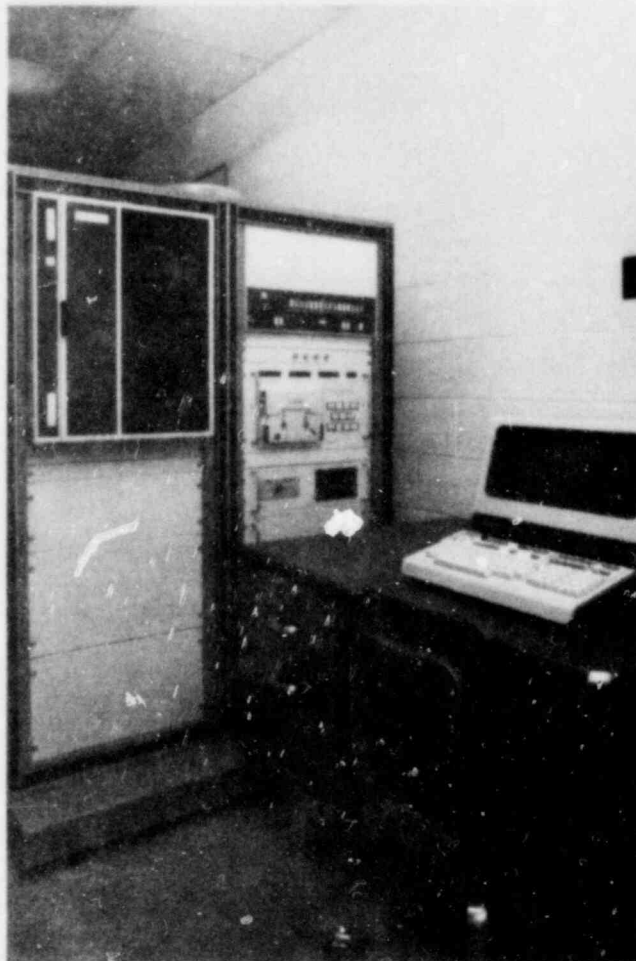
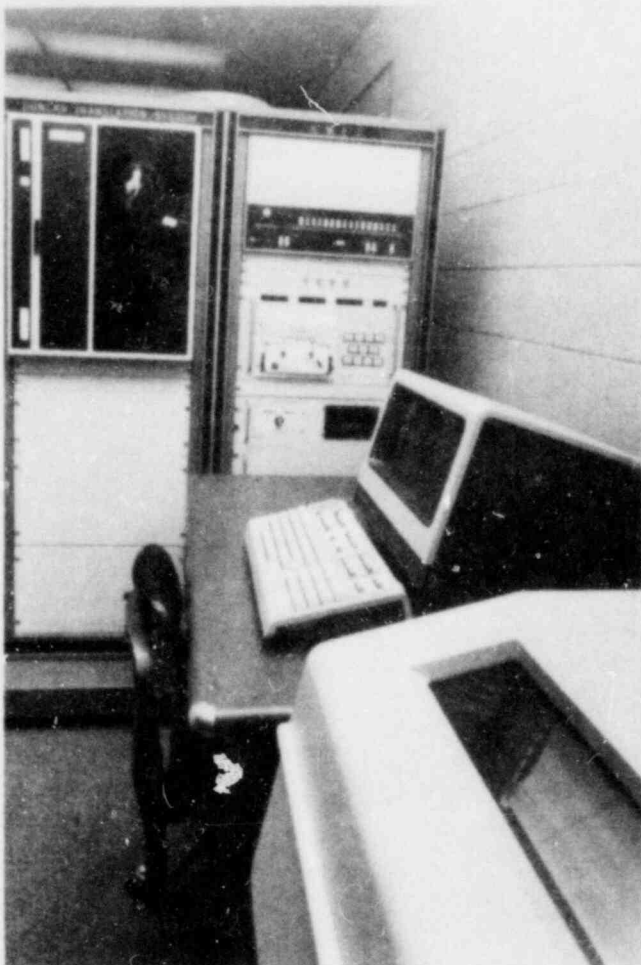
The examination of a proposed merger between Northern and Wolverine by a Committee composed of distribution cooperative directors is continuing. Monthly meetings have resolved numerous problems. The committee will be issuing its recommendations in this regard during 1981.

The continuing frustrations by unreasonable law and regulation are burdensome to us all. The Northern staff wishes to express its appreciation to the Directors and Distribution Managers for their assistance and support during these very trying times. Working together is the cooperative key to success.

Clyde L. Johnson

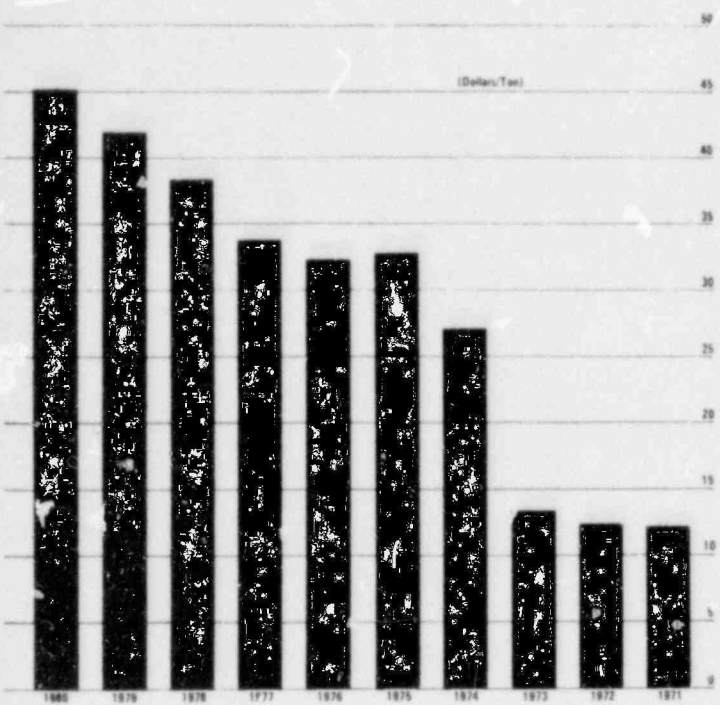


Turbine Building 3rd Floor. General View Looking South
FERMI II NUCLEAR PLANT dated: 1980

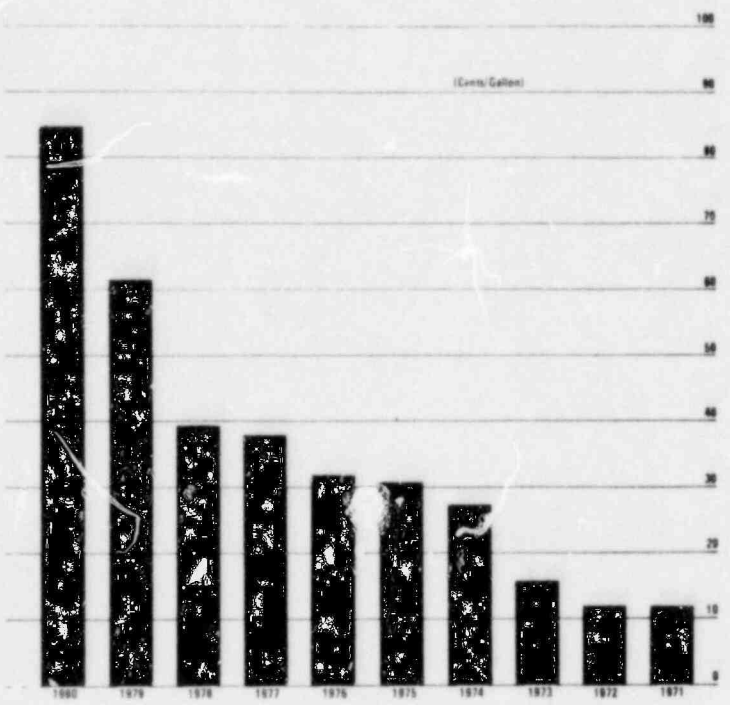


During 1980, the above Hewlett-Packard computer with associated equipment was installed to enable processing magnetic tape metering data from distribution substations.

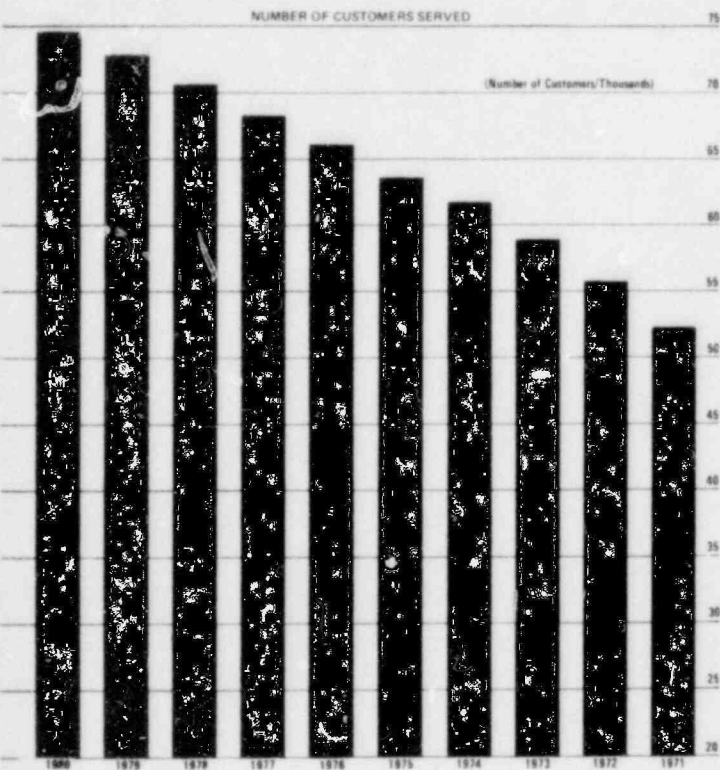
AVERAGE COST PER TON OF COAL



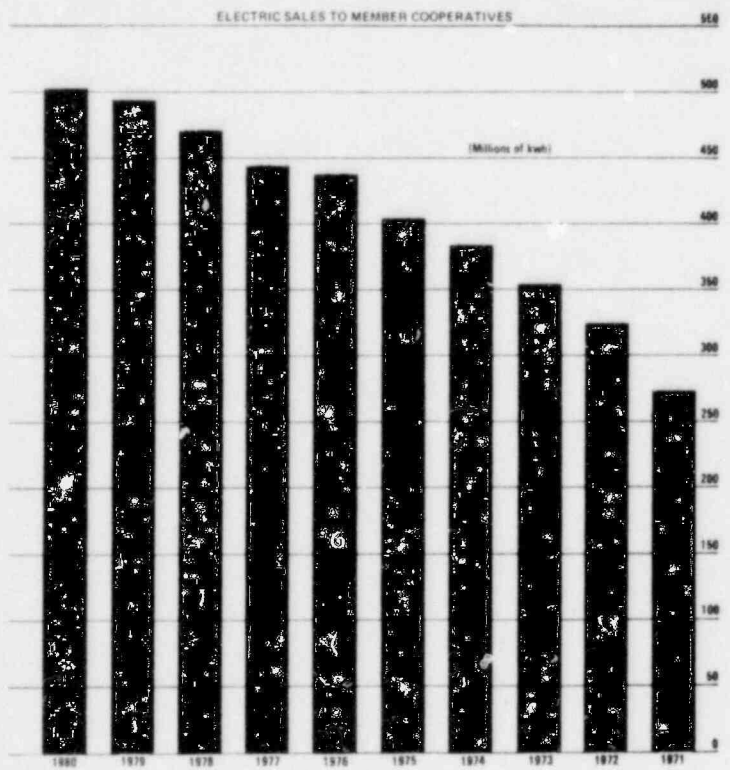
AVERAGE COST OF OIL PER GALLON



NUMBER OF CUSTOMERS SERVED



ELECTRIC SALES TO MEMBER COOPERATIVES



Electric Revenues

Revenues from the sale of electric energy in 1980 totaled \$21,468,596, up 11.9% over 1979. Part of the increase can be attributed to increases in fuel and purchased power costs, and sale of Campbell capacity and energy to Consumers Power Company, however member cooperative kilowatt hour sales increased 1.5% over 1979. During 1980 member cooperatives purchased \$20,432,735 in electric energy which represented 8.5% dollar increase in their purchases over the previous year.

During the past ten years, the number of kilowatt hours sold to member cooperatives has almost doubled. In 1971 our sales to members amounted to 273 million kilowatt hours while in 1980 they reached 503 million kilowatt hours, an increase of 84%.

The trend of rising fuel and purchased power costs continued in 1980. Application of the fuel and purchased power adjustment charge caused the average price per kilowatt hour to members to reach 40.7 mills, an increase of 7% over the 1979 cost.

Cost of Electric Service

The average cost of electric service was 38.2 mills per KWH in 1979. In 1980, this cost was 40.7 mills per KWH, representing a 6.5% increase for 1980.

The total cost of electric service in 1980 was \$21,583,688, an increase over 1979 of 11.5% in cost, compared to an increase of only 1.5% in the total number of kilowatt hours sold. 73% of 1980 electric costs was for fuel and purchased power, 13% for wages, materials, supplies and 14% for depreciation, taxes, interest and maintenance.

Wages

Gross wages earned in 1980 were \$1,361,475, an increase of \$118,646 over 1979 gross wages amounting to \$1,242,829. \$1,196,262 of 1980 wages were charged as operating and maintenance costs, \$155,368 capitalized and \$9,845 were charged to other accounts.

Fuel Costs

Coal purchased in 1980 for the Advance Steam Plant totaled 132,264 tons with a total cost of \$5,973,912. The average unit cost increased from \$1.69 to \$1.78 per million BTU or 5% during the year. The price per gallon paid for fuel oil was 86.00¢ at the beginning of the year and had increased to 101.10¢ per gallon by the year's end.

Purchased Power

The cost of purchased power decreased \$530,728 in 1980 with the price of such power averaging 34.5 mills per kilowatt hours. This is an increase of 3.4 mills per kilowatt over 1979 costs. Most of this increase was due to higher fuel adjustment charges and base rate increases by the investor owned utilities.

The primary sources of our purchased power was from the City of Lansing and Detroit Edison Company. Jointly, they supplied 48% of the cooperative's total energy requirements.

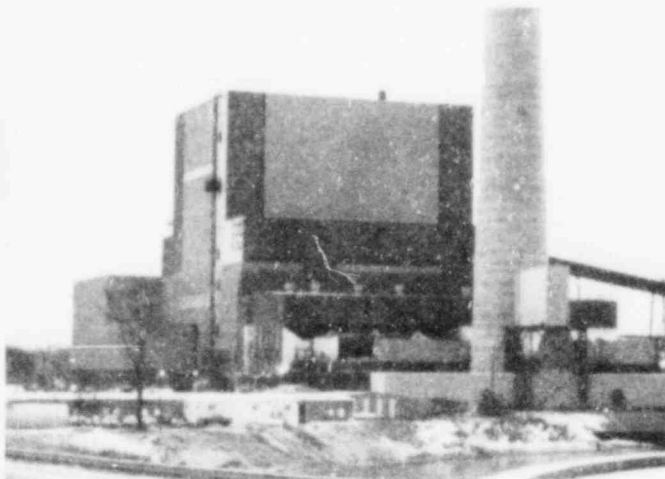
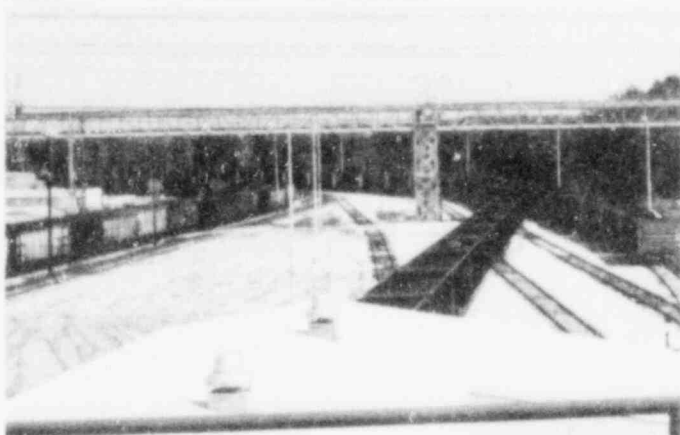
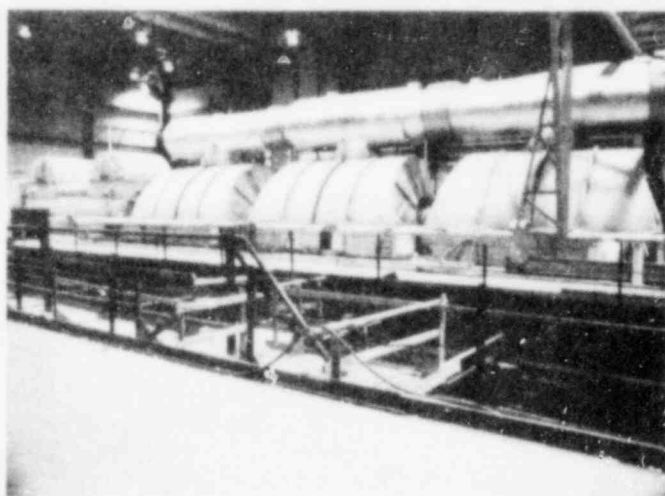
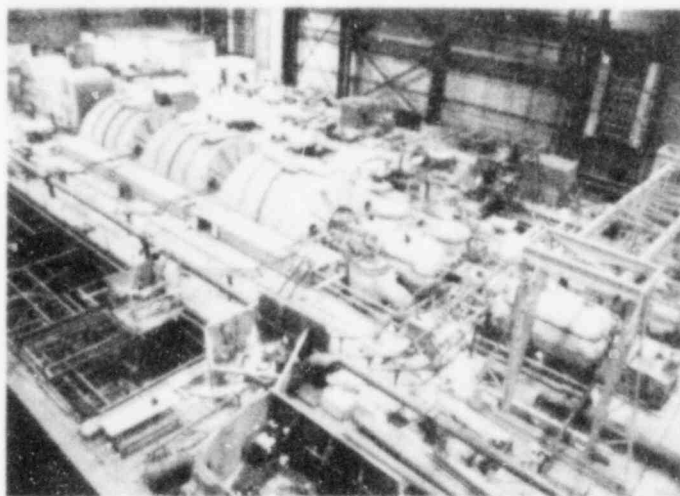
Taxes

Tax expense in 1980 totaled \$603,399, an increase of 7% over 1979. \$523,491 was for property taxes and \$79,908 for employment taxes. These taxes totaled 3% of the total cost of electric service for 1980.

Plant Additions

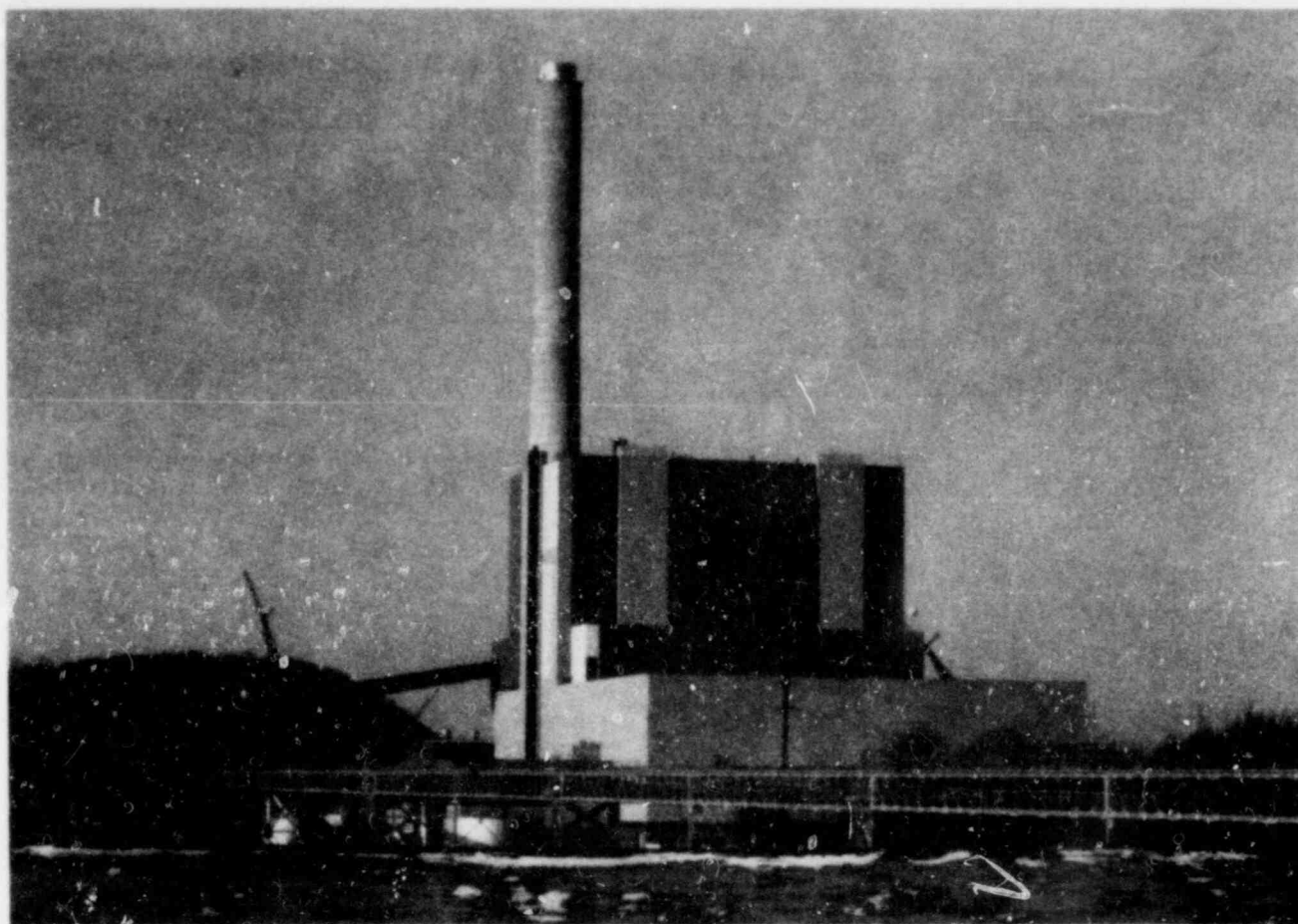
Total utility plant additions in 1980, including the Fermi II project amounted to \$39,123,991 a 26% increase in total utility plant.

During the year, two new substations were completed and seventeen miles of 69,000 volt line was completed.



J.H. CAMPBELL UNIT NO. 3, COAL FIRED FACILITY FACT SHEET

Plant Built By:	Consumers Power Company
Major Contractors:	
Design and Construction:	Townsend and Bottum, Inc., Ann Arbor, Michigan
Design Engy, Procurement and Expediting Services:	Commonwealth Associates, Inc., Jackson, Michigan
Steam Generator:	Foster Wheeler Energy Cooperation, Livingston, NJ
Turbine Generator:	General Electric Company, Schenectady, NY
Plant Location:	On Lake Michigan in Port Sheldon Township, 11 miles south of Grand Haven, 35 miles west of Grand Rapids
Northern Michigan Electric Cooperative Ownership:	1.26% of plant or approximately 10MWE
Construction Started:	February, 1974
Completion Date:	September 16, 1980
Generator Electric Output:	770 MWE
Type of Fuel:	Low sulfur coal, not to exceed one percent sulfur by content
Source of Fuel:	Coal mines in Eastern Kentucky
Boiler Thermal Output:	6,000,000 #/hr. steam
Other Uses of Site:	Units 1 and 2 of Campbell Plant in operation, generating 265,000 and 385,000 kilowatts of electricity, respectively
Source of Water Used for Coolant:	Lake Michigan



J. H. Campbell Unit No. 3

CHRONOLOGY

January, 1976 — Main plant excavation started
 August, 1976 — Base slab pour started (boiler and turbine building)
 November, 1976 — Chimney foundation started
 February, 1977 — Structural steel erection started
 March, 1977 — Erection of chimney shell started
 June, 1977 — Turbine pedestal completed
 September, 1977 — Chimney shell completed
 December, 1977 — Generator stator set in place — Boiler erector mobilized
 April, 1978 — Offshore portion of circulating water system started
 June, 1978 — Turbine — Generator installation started
 January, 1979 — Plant heating system (auxiliary boiler) placed in service
 September, 1979 — Boiler hydrostatic test completed
 October, 1979 — First coal delivery
 January, 1980 — First boiler fire with oil
 June, 1980 — Unit synchronized

MAJOR EQUIPMENT

Steam Generator — Foster Wheeler — 6,000,000 lb/hr. 1005°F., 2620 PSIG
 Turbine Generator — General Electric — 770,000 KW
 Building — Roof elevation from ground 268 feet 400 ft. x 400 ft. square at ground level

Our Domestic Fuel Supply

Government and industry agree that in the near future, only two domestic resources can be expanded to help meet our rising demand for energy: coal and uranium.

Coal is our most abundant natural fuel, potentially, it could provide much of our energy for several hundred years. Environmental and other restrictions on its mining, transportation, and combustion, however, severely limit its increased use especially at power plants. Coal has many other valuable applications, as a liquified fuel for transportation, as a raw material for plastics, chemicals and medicines.

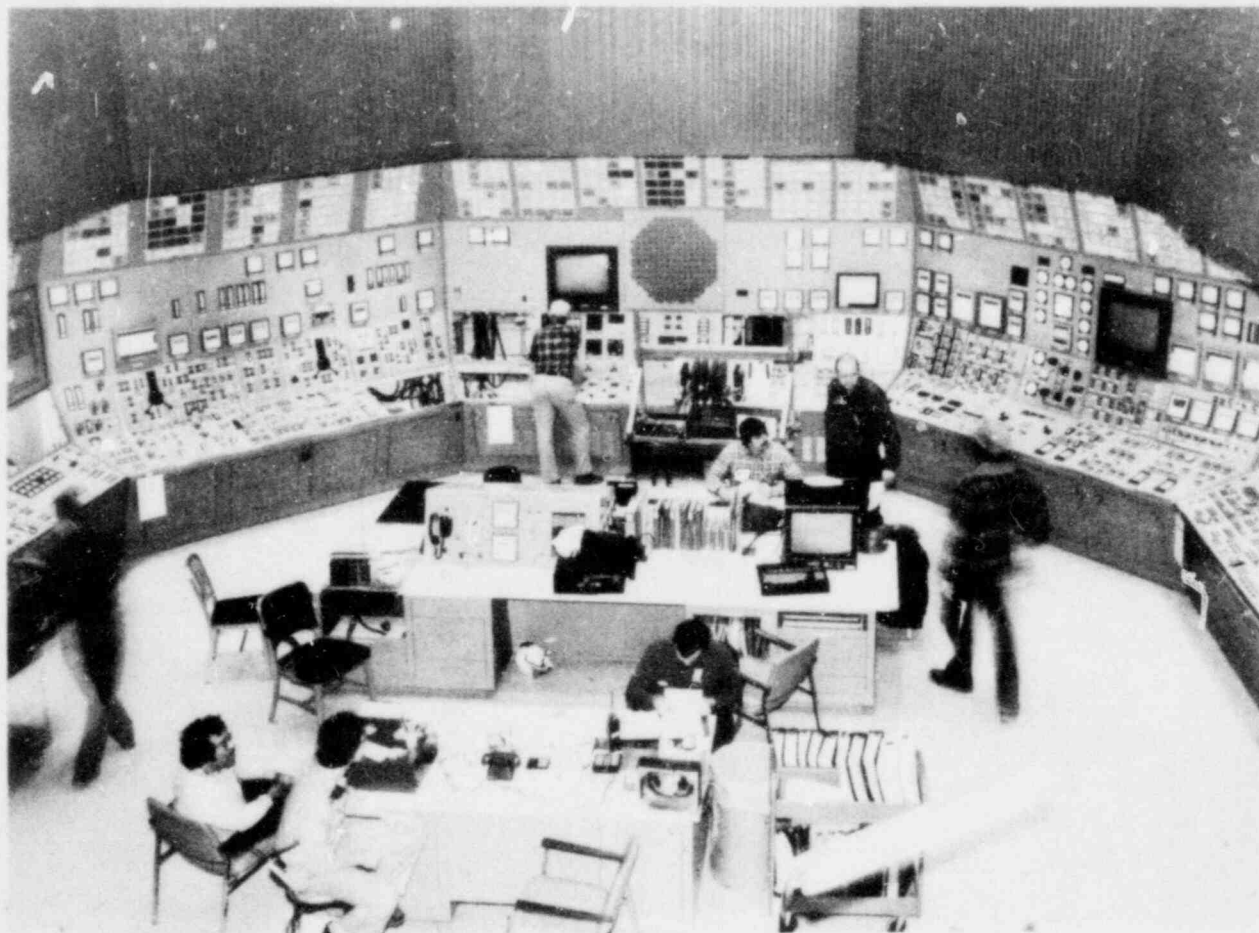
Oil and gas production will remain relatively constant, but cannot grow to fill increasing require-

ments. Importing greater amounts of petroleum products poses a serious threat to our nation's economy and security.

Hydro power furnishes less than five percent of our total energy now and most suitable waterways have been dammed. Supplemental sources such as solar, geothermal, tidal and wind power can contribute relatively little to increasing needs.

Uranium used in today's light water reactor generating station will last for decades. Breeder reactors which create more fuel than they consume while producing energy could extend this resource for centuries.

To bridge the gap between dwindling supplies of our traditional fossil fuels and the essentially unlimited fuels of the future, we must rely increasingly on electricity generated from uranium at nuclear energy plants.



Control Room - FERMI II NUCLEAR PLANT

Facts About Fermi

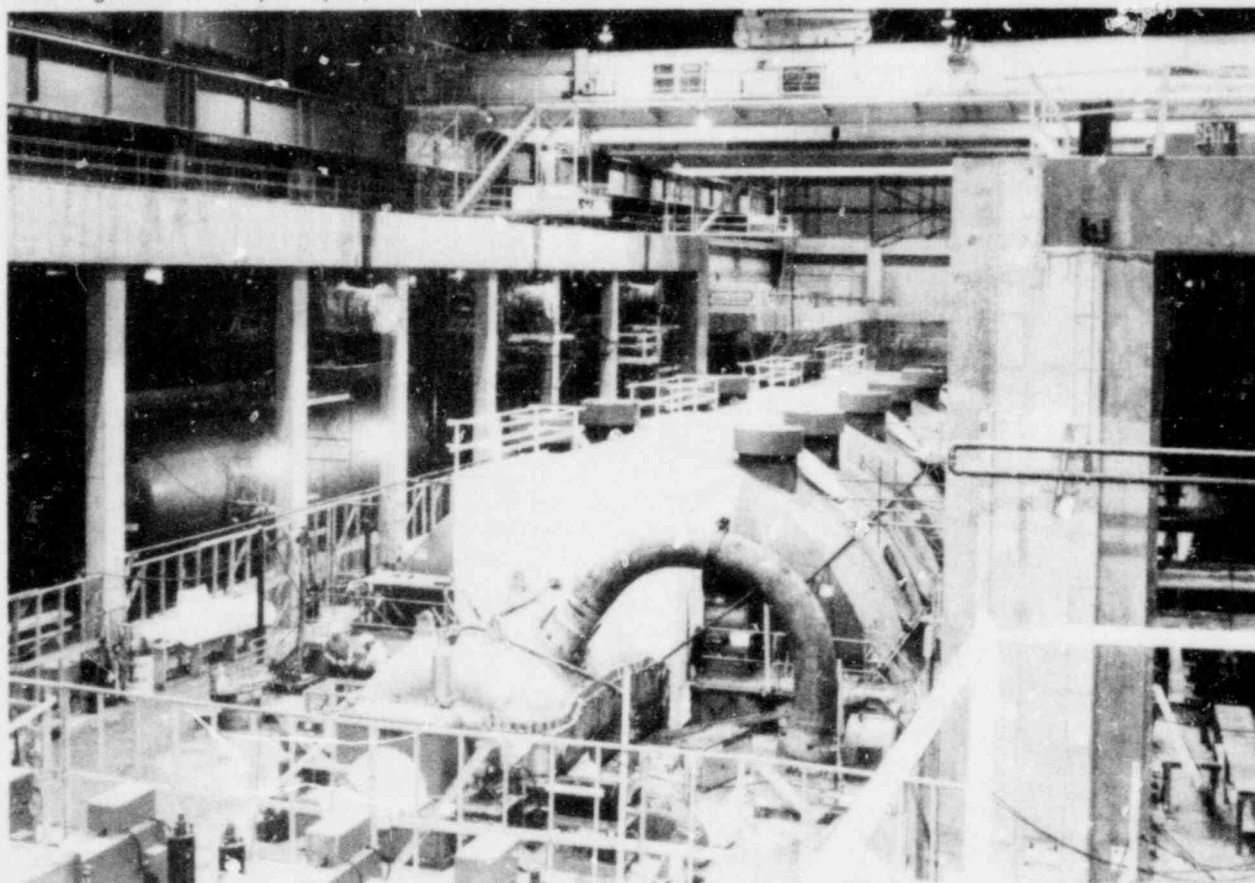
In February, 1977, a 20percent ownership interest in Fermi II was sold by Detroit Edison to Northern Michigan Electric Cooperative (11.22%) and Wolverine Electric Cooperative (8.78%). The three companies will share the plants output consistent with their respective interests.

Fermi II Key Dates

Plans for project announced: July 26, 1968.
Application for AEC (now NRC) construction permit submitted: April 29, 1969
Construction permit issued: September 26, 1972
Site preparation work started: Late 1969
Construction started: October, 1970
Reactor vessel delivered: July, 1974
Generator delivered: July, 1976
Cooperative projected completion date: July, 1983
General Information:

Electric generation capacity: 1,100,000 Kilowatts

Ownership: Detroit Edison (80%), Co-op's (20%)
Plant operated by: Detroit Edison
Architect-Engineer: Detroit Edison
Anticipated plant life: 40 years
Nuclear reactor manufacturer: General Electric Co., San Jose, California
Turbine generator manufacturer: English Electric, Ltd., Stafford, U.K.
Construction manager: Daniel Construction Co., Greenville, South Carolina
Work Force-Construction, average 825
Construction, peak 2,100
Operational Total 125
Type of fuel: Uranium Oxide enriched U-235
Total fuel weight: 164 tons
Materials: Volume of concrete 300,000 cubic yards.
Steel: 20,000 tons
Electric wire: 750 miles
Conduit: 40 miles
Method of cooling condenser water: Closed cycle with two natural draft cooling towers.



Turbine Building 3rd Floor. General View Looking South
FERMI II NUCLEAR PLANT

Financial



This Annual Report includes the Balance Sheet and Statement of Revenue and Expense of the cooperative. These statements audited by Donald R. Bredon of Traverse City, Michigan reflect that for the calendar year 1980, operations produced a (loss) in margins of (\$115,092) and non-operating margins totaled \$40,670.

\$19,773 of non-operating margins represents patronage capital issued by the National Rural Utilities Cooperative Finance Corporation ("CFC").

Northern is a participating member of the National Rural Utilities Cooperative Finance Corporation ("CFC") purchased \$125,673 in CFC capital term certificates in 1980. The current investment totals \$897,035. The cooperative's projected total investment in capital term certificates through 1984 is \$1,402,842.

During 1980, the cooperative received R.E.A. insured loan fund advances of \$1,621,000 to finance construction of approved loan projects. In addition, \$29,959,000 of R.E.A. guaranteed loans were advanced to finance the Fermi II project and \$404,000 in guaranteed loans to finance transmission projects.

Substantial progress was achieved on Fermi II nuclear generating station during the year. During 1980, Southern Engineering Company has reported to the cooperative on construction progress and cost monitoring of the Fermi II project and Campbell III project. Their reports address topics such as cost reporting systems, contracts relevant to fuel acquisition for the plants and construction progress on these projects.

Harold E. Beldo

COMPARATIVE SUMMARY OF ELECTRICAL OPERATIONS 1971 - 1980

(MILLS PER KWH)	1980	1979	1978	1977	1976	1975	1974	1973	1972	1971
Total Operating Revenue (1)	40.7	37.8	34.0	30.4	31.4	29.0	25.3	18.3	16.8	15.8
Operating Costs:										
Production Expense (2)	32.6	31.2	27.9	25.2	25.2	23.4	19.6	13.3	11.2	9.8
Transmission Expense	.9	.8	.9	.6	.7	.6	.7	.8	.6	.7
Other Adm. & General Expense	1.5	1.3	1.2	1.4	1.2	1.0	.9	.7	.7	.7
Depreciation & Amort.	2.0	1.8	1.7	1.5	1.5	1.5	1.6	1.6	1.7	1.8
Taxes	1.1	1.1	1.0	.9	.9	.9	.9	.9	.9	1.0
Interest	2.8	2.0	1.6	1.4	1.2	1.3	1.1	.9	1.0	1.1
TOTAL OPERATING COSTS	40.9	38.2	34.3	31.0	30.7	28.7	24.8	18.2	16.1	15.1
Net Operating Margin (Loss)	(.2)	(.4)	(.3)	(.6)	.7	.3	.5	.1	.7	.7
(1) Member Cooperative Sales	40.7	38.0	34.5	30.8	31.4	28.9	25.3	18.3	16.7	16.0
Wholesale and Other	41.9	33.4	25.5	24.3	26.7	30.3	27.2	16.8	18.9	8.8
(2) Generated Power-Cost of Fuel										
Steam Generation	22.3	22.3	20.4	18.2	17.8	16.6	10.0	7.0	6.8	6.3
Internal Combustion	96.8	48.7	34.3	42.1	34.9	34.8	33.4	23.4	17.1	14.4
Purchased Power Cost	34.6	31.1	29.0	24.8	24.8	23.1	27.1	18.0	14.0	16.0

COMPARATIVE SUMMARY OF ELECTRICAL OPERATIONS 1971 - 1980

ELECTRICITY GENERATED AND PURCHASED— IN THOUSANDS OF KILOWATT HOURS

	1980	1979	1978
Generated	262,512	181,539	243,347
Purchased for System	<u>290,229</u>	<u>339,295</u>	<u>267,320</u>
	<u>552,740</u>	<u>520,834</u>	<u>510,667</u>

ELECTRIC SALES — IN THOUSANDS OF KILOWATT HOURS

Member Sales	502,505	495,018	471,489
Wholesale and Other	<u>24,929</u>	<u>12,317</u>	<u>25,274</u>
	<u>527,434</u>	<u>507,335</u>	<u>496,763</u>

ELECTRICAL SALES TO MEMBER COOPERATIVES— IN THOUSANDS OF KILOWATT HOURS

Cherryland Rural Electric Cooperative, Ass'n.	128,868	125,049	117,005
Presque Isle Electric Cooperative, Inc.	132,471	134,950	133,443
Top O' Michigan Rural Electric Company	<u>241,166</u>	<u>237,011</u>	<u>221,041</u>
	<u>502,505</u>	<u>497,018</u>	<u>471,489</u>

MAXIMUM KILOWATT DEMAND AT MEMBER DELIVERY POINTS

1980	1979	1978
101,348	101,309	99,861

ANNUAL LOAD FACTOR PERCENT MEMBER COOPERATIVES

1980	1979	1978
56	56	54

LINE LOSSES PERCENT

1980	1979	1978
4.6	2.6	2.7

COMPARATIVE SUMMARY OF ELECTRICAL OPERATIONS 1971 - 1980

1977	1976	1975	1974	1973	1972	1971
253,491	281,412	310,365	288,730	290,850	294,580	267,608
<u>247,675</u>	<u>192,531</u>	<u>129,575</u>	<u>124,186</u>	<u>92,887</u>	<u>50,885</u>	<u>28,595</u>
<u>501,166</u>	<u>473,943</u>	<u>439,940</u>	<u>412,916</u>	<u>383,737</u>	<u>345,465</u>	<u>296,203</u>
444,737	438,169	404,510	383,762	354,407	324,285	272,980
<u>33,229</u>	<u>9,297</u>	<u>12,714</u>	<u>3,435</u>	<u>12,088</u>	<u>6,557</u>	<u>5,209</u>
<u>477,966</u>	<u>447,466</u>	<u>417,224</u>	<u>387,197</u>	<u>366,495</u>	<u>330,842</u>	<u>278,189</u>
106,753	103,185	93,658	88,087	84,462	75,707	63,894
129,067	129,266	123,120	120,915	116,265	111,830	98,534
<u>208,917</u>	<u>205,718</u>	<u>187,732</u>	<u>174,760</u>	<u>153,680</u>	<u>130,748</u>	<u>110,552</u>
<u>444,737</u>	<u>438,169</u>	<u>404,510</u>	<u>383,762</u>	<u>354,407</u>	<u>324,285</u>	<u>272,980</u>
100,153	91,472	86,898	82,828	75,749	70,752	63,598
51	55	53	53	53	52	49
4.6	5.6	5.2	6.2	4.5	4.2	6.1

COMPARATIVE SUMMARY OF ELECTRICAL OPERATIONS 1971 - 1980

	1980	1979	1978	1977
ELECTRIC ENERGY SALES				
Member Cooperatives	20,432,735	18,817,402	16,246,253	13,712,248
Wholesale and Other	<u>1,035,861</u>	<u>360,142</u>	<u>645,356</u>	<u>808,975</u>
TOTAL OPERATING REVENUES	21,468,596	19,177,544	16,891,609	14,521,223
OPERATING EXPENSES				
Operation Expense - Generated Power	6,679,079	4,691,040	5,628,937	5,389,864
Operation Expense - Purchased Power	10,026,172	10,556,900	7,737,500	6,144,278
Operation Expense - Transmission	318,865	317,381	244,001	212,151
Other Admin. & General Expenses	798,775	640,810	545,867	664,000
Maint. Expense - Generated Power	481,349	560,963	485,542	485,663
Maint. Expense - Transmission	154,139	89,592	174,068	82,687
Maint. Expense - General Plant	19,848	27,395	41,975	33,418
Depreciation & Amortization	1,035,561	899,238	850,928	715,040
Taxes	603,399	564,036	499,937	428,784
Interest on Long Term Debt	13,632,796	9,235,453	6,822,288	4,279,591
Less Interest charged to const.	(12,481,391)	(8,450,340)	(6,112,286)	(3,661,306)
Other Interest	<u>315,096</u>	<u>225,398</u>	<u>97,991</u>	<u>33,557</u>
TOTAL COST OF ELECTRICAL SERVICE	<u>21,583,688</u>	<u>19,357,866</u>	<u>17,016,754</u>	<u>14,807,727</u>
GAIN (LOSS) IN OPERATING MARGINS	(115,092)	(180,322)	(125,145)	(286,504)
NON OPERATING MARGINS	<u>40,670</u>	<u>130,237</u>	<u>601,148</u>	<u>165,232</u>
GAIN (LOSS) IN TOTAL MARGINS	<u>(74,422)</u>	<u>(50,085)</u>	<u>476,003</u>	<u>(121,272)</u>

1976	1975	1974	1973	1972	1971
13,776,658	11,697,592	9,691,622	6,491,195	5,431,332	4,358,507
<u>247,795</u>	<u>384,840</u>	<u>93,271</u>	<u>202,793</u>	<u>123,799</u>	<u>46,036</u>
14,024,453	12,082,432	9,784,893	6,693,988	5,555,131	4,404,543
5,910,629	6,344,738	3,963,109	2,939,425	2,757,483	2,144,558
4,768,538	2,991,890	3,369,138	1,674,092	713,540	456,085
185,646	135,636	118,067	81,058	73,175	80,022
497,785	402,046	323,148	237,114	224,424	190,261
596,799	414,952	259,175	254,754	230,243	125,215
137,075	106,131	164,438	220,568	106,017	102,589
23,649	23,674	16,006	12,922	20,164	12,969
672,121	626,986	607,732	592,960	568,506	511,410
380,570	398,910	359,930	321,252	312,628	288,719
487,944	368,757	339,933	332,001	331,364	313,830
				(1,947)	(11,197)
<u>48,440</u>	<u>162,616</u>	<u>75,776</u>	<u>15,294</u>	<u>817</u>	<u>965</u>
<u>13,709,196</u>	<u>11,976,336</u>	<u>9,596,452</u>	<u>6,681,440</u>	<u>5,336,414</u>	<u>4,215,426</u>
315,257	106,096	188,441	12,548	218,717	189,117
<u>22,147</u>	<u>11,584</u>	<u>17,263</u>	<u>6,156</u>	<u>5,410</u>	<u>1,192</u>
<u>337,404</u>	<u>117,680</u>	<u>205,704</u>	<u>18,704</u>	<u>224,127</u>	<u>190,309</u>

MICHIGAN 47 CHEBOYGAN
NORTHERN MICHIGAN ELECTRIC COOPERATIVE, INC.
BOYNE CITY, MICHIGAN

BALANCE SHEET

ASSETS

	December 31,	
	1980	1979
UTILITY PLANT:		
Electric plant in service	\$33,230,136	\$30,815,865
Construction work in progress	155,750,020	119,040,300
Electric plant acquisition adjustment	<u>89,988</u>	<u>89,988</u>
	189,070,144	149,946,153
Less accumulated depreciation and amortization	<u>11,448,352</u>	<u>10,357,830</u>
NET UTILITY PLANT	<u>177,621,792</u>	<u>139,588,323</u>
INVESTMENTS:		
Investments in associated organizations	1,775,846	1,630,400
Nonutility property, net of accumulated depreciation	<u>6,623</u>	<u>6,857</u>
TOTAL INVESTMENTS	<u>1,782,469</u>	<u>1,637,257</u>
CURRENT ASSETS:		
Cash	110,928	116,811
Cash, restricted for construction	741,889	156,222
Accounts receivable	1,966,998	1,986,022
Materials and supplies	6,097,351	5,152,431
Prepayments	<u>113,176</u>	<u>185,649</u>
TOTAL CURRENT ASSETS	<u>9,030,342</u>	<u>7,597,135</u>
DEFERRED CHARGES	<u>180,982</u>	<u>97,145</u>
	<u>\$188,615,585</u>	<u>\$148,919,860</u>

See accompanying summary of accounting policies and notes to financial statements.

LIABILITIES

December 31,

	1980	1979
EQUITIES AND MARGINS:		
Memberships	\$ 600	\$ 600
Patronage capital	2,006,602	2,006,602
Other equities	<u>167,190</u>	<u>241,612</u>
TOTAL EQUITIES AND MARGINS	<u>2,174,392</u>	<u>2,248,814</u>
LONG TERM DEBT:		
Mortgage notes to:		
Rural Electrification Administration	27,395,937	26,715,231
Federal Financing Bank	145,052,000	114,689,000
Breeder Reactor Corporation	<u>26,487</u>	<u>26,487</u>
TOTAL LONG TERM DEBT	<u>172,474,424</u>	<u>141,430,718</u>
CURRENT LIABILITIES:		
Notes payable to National Rural Utilities		
Cooperative Finance Corporation	11,399,018	2,700,000
Accounts payable	1,831,413	1,813,682
Accruals:		
Taxes	520,370	490,422
Interest	60,435	69,610
Other	<u>155,533</u>	<u>166,614</u>
TOTAL CURRENT LIABILITIES	<u>13,966,769</u>	<u>5,240,328</u>
	<u><u>\$188,615,585</u></u>	<u><u>\$148,919,860</u></u>

MICHIGAN 47 CHEBOYGAN
NORTHERN MICHIGAN ELECTRIC COOPERATIVE, INC.
BOYNE CITY, MICHIGAN

STATEMENTS OF OPERATIONS

Year ended December 31,

	1980	1979
OPERATING REVENUES AND PATRONAGE CAPITAL	<u>\$21,468,596</u>	<u>\$19,177,544</u>
OPERATING EXPENSES:		
Steam power generation:		
Operation	6,419,319	4,319,457
Maintenance	385,202	395,712
Hydraulic power generation:		
Operation	66,485	62,408
Maintenance	7,281	32,485
Other power generation:		
Operation	193,275	309,176
Maintenance	88,866	132,766
Purchased power	10,026,172	10,556,900
Transmission:		
Operation	226,970	230,069
Maintenance	125,440	50,991
Distribution:		
Operation	80,158	75,514
Maintenance	28,699	3,601
Consumer accounts	11,737	1,799
Administrative and general	798,775	640,810
General plant maintenance	19,848	27,395
Depreciation and amortization	1,035,561	899,238
Taxes	603,399	564,037
Interest:		
Long-term	839,370	781,333
Intermediate loan	12,793,426	8,454,120
Interest charged to construction	(12,481,391)	(8,450,343)
Other interest	<u>315,096</u>	<u>225,398</u>
	<u>21,583,688</u>	<u>19,357,866</u>
Operating margins (deficit)	<u>(115,092)</u>	<u>(180,322)</u>
NONOPERATING MARGINS:		
Interest and dividend income	43,423	132,235
Other nonoperating loss	<u>(2,753)</u>	<u>(1,998)</u>
Nonoperating margins	<u>40,670</u>	<u>130,237</u>
NET MARGINS (DEFICIT)	<u>(\$ 74,422)</u>	<u>(\$ 50,085)</u>

See accompanying summary of accounting policies and
notes to financial statements

MICHIGAN 47 CHEBOYGAN
NORTHERN MICHIGAN ELECTRIC COOPERATIVE, INC.
BOYNE CITY, MICHIGAN

STATEMENTS OF OTHER EQUITIES

	Year ended December 31,	
	1980	1979
BALANCE, at beginning of year	\$241,612	\$291,697
ADD (DEDUCT):		
Nonoperating margins for the year	40,670	130,237
Operating deficit for the year	<u>(115,092)</u>	<u>(180,322)</u>
BALANCE, at end of year	<u>\$167,190</u>	<u>\$241,612</u>

STATEMENT OF PATRONAGE CAPITAL

	Year ended December 31	
	1980	1979
Patronage capital consisted of:		
Assignable	\$	\$
Assigned	<u>2,006,602</u>	<u>2,006,602</u>
Total	<u>2,006,602</u>	<u>2,006,602</u>

See accompanying summary of accounting policies and notes to financial statements.

MICHIGAN 47 CHEBOYGAN
NORTHERN MICHIGAN ELECTRIC COOPERATIVE, INC.
BOYNE CITY, MICHIGAN

STATEMENT OF CHANGES IN FINANCIAL POSITION

Year ended December 31,

1980

1979

FUNDS WERE PROVIDED BY:

Net margins (deficit) before provision for
depreciation and amortization of (1980-
\$1,071,305 ; 1979 - \$935,879)

Advances from REA and FFB

Material returned to stock from retirements

Decrease in deferred charges

\$ 996,883

31,984,000

10,724

32,991,607

\$ 885,794

36,460,000

79,420

125,556

37,550,770

FUNDS WERE USED FOR:

Extension and replacement of plant, net

Repayment of long-term debt to REA -
principal when due

Decrease in deferred interest

Increase in investments

Decrease in deferred credits

Plant removal costs

Increase in deferred charges

39,102,640

915,948

24,346

145,212

12,858

83,837

40,284,841

34,626,795

799,403

24,346

216,185

60,755

35,727,484

INCREASE IN WORKING CAPITAL

(\$ 7,293,234)

\$ 1,823,286

MICHIGAN 47 CHEBOYGAN
NORTHERN MICHIGAN ELECTRIC COOPERATIVE, INC.
BOYNE CITY, MICHIGAN

STATEMENT OF CHANGES IN FINANCIAL POSITION
(Continued)

	Year ended December 31,	
	1979	1980
CHANGES IN WORKING CAPITAL ITEMS:		
Increase (decrease) in current assets:		
Cash	(\$ 5,883)	\$ 48,174
Cash, restricted	585,667	(19,589)
Accounts receivable	(19,024)	369,276
Materials and supplies	944,920	970,178
Prepayments	(72,473)	(57,509)
	<u>1,433,207</u>	<u>1,310,530</u>
Decrease (increase) in current liabilities:		
Notes payable	8,699,018	(500,000)
Accounts payable	17,731	(823,943)
Accruals	<u>9,692</u>	<u>1,836,699</u>
	<u>8,726,441</u>	<u>512,756</u>
INCREASE (DECREASE) IN WORKING CAPITAL	(\$ <u>7,293,234</u>)	\$ <u>1,823,286</u>

See accompanying summary of accounting policies and
notes to financial statements.

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS DECEMBER 31, 1980 AND 1979

1. Summary of significant policies:

System of accounts

The accounting records of the Cooperative conform to the Uniform System of Accounts prescribed by the Federal Energy Regulatory Commission modified for electric borrowers of the Rural Electrification Administration.

Electric revenues and fuel costs

Electric revenues are recorded monthly as of the date meters are read and accounts are billed.

Fuel costs are charged to production expense as fuel is consumed.

Plant additions and retirements

The cost of additions to electric plant in service represents the original cost of the contracted services, direct labor and material, interest on construction loans where applicable and indirect charges for engineering, supervision and similar overhead items. Maintenance and repairs of property, replacements and renewals of items determined to be less than units of property are charged to maintenance expense. For property replaced or renewed, the original cost plus removal cost, less salvage is charged to accumulated provision for depreciation. The cost of related replacements and renewals is added to electric plant. Contributions in aid of construction are credited to the applicable plant accounts.

Depreciation

Provision has been made for depreciation on a straight line basis at annual rates as follows:

Franchises and consents	4.00%
Steam prod. plant-comp. rate	3.10%
Hydraulic production plant	2.00%
Other production plant	3.00 - 7.00%
Trans. plant-composite rate	2.75%
Distribution plant-composite rate	2.88%
Power operated equipment	10.00 - 33.00%
Other general plant	2.00 - 10.00%

Investments in associated organizations

The investments in associated organizations referred to in the financial statement were as follows:

	1980	1979
National Rural Utilities Finance Corporation		
Capital Term Certificates		
	897,035	771,362
Patronage Capital Certificates		
	873,980	854,207
Other	4,831	4,831
TOTAL	\$1,775,846	\$1,630,400

Accounts receivable

All accounts receivable are considered by management to be collectible accordingly, no provision for uncollectible accounts has been provided.

Materials and supplies

Operating materials and supplies are valued at average cost.

	December 31, 1980	1979
Intangible plant	\$ 43,445	43,445
Steam production plant	10,396,296	10,313,020
Hydraulic prod. plant	917,012	916,643
Other power prod. plant	2,655,572	2,570,957
Transmission plant	14,114,044	12,782,771
Distribution plant	4,139,782	3,425,360
General plant	<u>953,985</u>	<u>763,669</u>
Electric plant in service	33,230,136	30,815,865
Construction work in progress	155,750,020	119,040,300
Electric plant acquisition adjustment	<u>89,988</u>	<u>89,988</u>
Electric plant	\$189,070,144	\$149,946,153

Major classes of construction work in progress at the year end consisted of:

	December 31, 1980	1979
Detroit Edison-Fermi II	144,315,518	114,673,177
Consumers Power		
Campbell III	7,300,078	
Other Construction	<u>4,134,424</u>	<u>4,367,123</u>
	\$155,750,020	\$119,040,300

3. Long term debt

Mortgage notes payable to REA are represented by note instruments payable to the United States of America bearing interest at the rate of 2.5%. All assets are pledged as collateral for this debt. The notes are for 35 year periods each, and principal and interest installments are due quarterly in amounts of approximately \$475,000 each.

It is estimated that installments of \$1,900,000 payable within the next twelve months will include \$1,000,000 in principal. The notes are scheduled to be fully repaid at various times from October, 1984 to March, 2012. Unadvanced loan funds of \$9,261,974 are available to the Cooperative on loan commitments from Rural Electrification Administration.

On February 8, 1977, Northern Michigan Electric Cooperative, Inc. concluded negotiations for the purchase of 11.22 percent of the Enrico Fermi II Nuclear Energy Generating Facility, owned by Detroit Edison Company, located in Monroe County, Michigan. Long-term financing arrangements were made in 1978 with the Federal Financing Bank through the United States Department of Agriculture for \$127,873,000. Of the proceeds from the loan, \$122,905,000 are for the Enrico Fermi II and the balance being used for other plant additions. Amounts unadvanced at December 31, 1980 were \$4,593,000. The amounts are advanced from time to time as required and at varying interest rates. Amounts have been advanced from August 10, 1978 through December 31, 1980, maturing on August 10, 1980 through December 31, 1982, at interest rates of 8.260 percent to 14.348 percent. The cooperative has arranged additional long-term financing with the Federal Financing Bank for \$101,337,700 maturing at varying times and interest rates.

During 1972, the Board of Directors authorized the expenditure of \$52,973 for participation in the Liquid Metal Reactor Demonstration Program, to be paid in ten equal annual installments. There were five installments remaining at December 31, 1980.

4. Line of credit agreement

The Cooperative has established a line of credit for short term financing, with NRUCFC for \$12,000,000. At December 31, 1980 the amount owed NRUCFC under such agreement is \$3,500,000.

5. Pension plan

Pension benefits for substantially all employees are provided through participation in the Retirement and Security Program of the National Rural Electric Cooperative Association. Pension costs were approximately \$79,500 in 1979 and \$87,800 in 1980.

6. Patronage capital and other equities

Patronage capital consisted of:

	December 31, 1980	1979
Assignable		
Assigned	<u>2,006,602</u>	<u>2,006,602</u>
TOTAL	<u>2,006,602</u>	<u>2,006,602</u>

Other Equities (Deficit)

Other equities (deficit) by class consist of:

	December 31, 1980	1979
Nonoperating margins, net	173,088	247,510
Capital gains (losses), incurred prior to 1979	<u>(5,898)</u>	<u>(5,898)</u>
TOTAL	<u>\$167,190</u>	<u>\$241,612</u>

7. On August 15, 1980, the Cooperative agreed to purchase 1.26% ownership or approximately 10 megawatts in Consumers Power James H. Campbell III generating plant. After the plant began generation, the Cooperative realized electrical power sales during the year of \$629,683 or approximately 2.93% of their total power sales. The total sales to nonmembers were \$1,035,860 or approximately 4.83% of total power sales.



Breadon & Holly, P.C.

CERTIFIED PUBLIC ACCOUNTANTS

February 20, 1981

Board of Directors
Northern Michigan Electric Cooperative, Inc.
Boyne City, Michigan

We have examined the balance sheets of Northern Michigan Electric Cooperative, Inc. as of December 31, 1980 and 1979, and the related statements of operations, other equities, and changes in financial position for the years then ended. Our examination was made in accordance with generally accepted auditing standards and, accordingly, included such tests of the accounting records and such other auditing procedures as we considered necessary in the circumstances.

In our opinion, the financial statements mentioned above present fairly the financial position of Northern Michigan Electric Cooperative, Inc. at December 31, 1980 and 1979, and the results of operations and changes in its financial position for the years then ended, in conformity with generally accepted accounting principles applied on a consistent basis.

Breadon & Holly, P.C.



RAY G. TOWNE
ASSISTANT GENERAL MANAGER



JOHN R. CLARK
PRODUCTION MANAGER



RICHARD B. CHAPPELL
TRANSMISSION MANAGER



ROBERT J. HOLZSCHU
OFFICE MANAGER



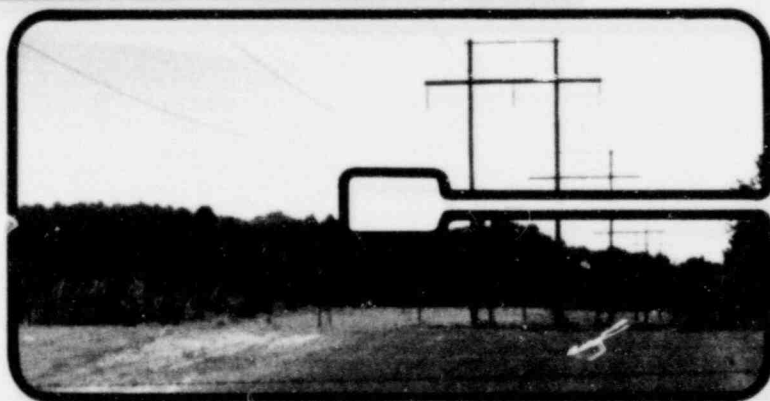
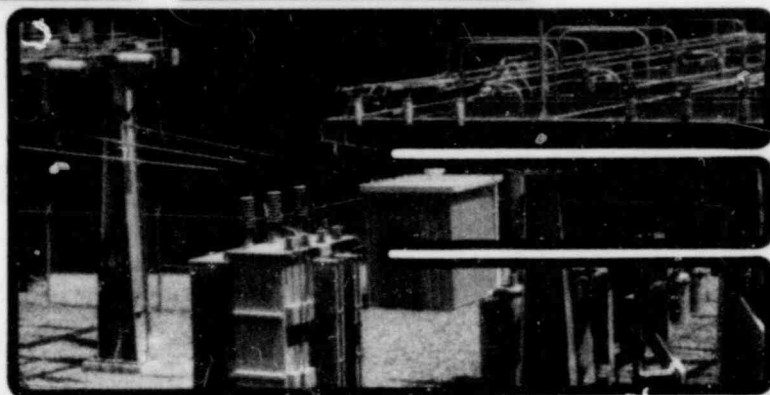
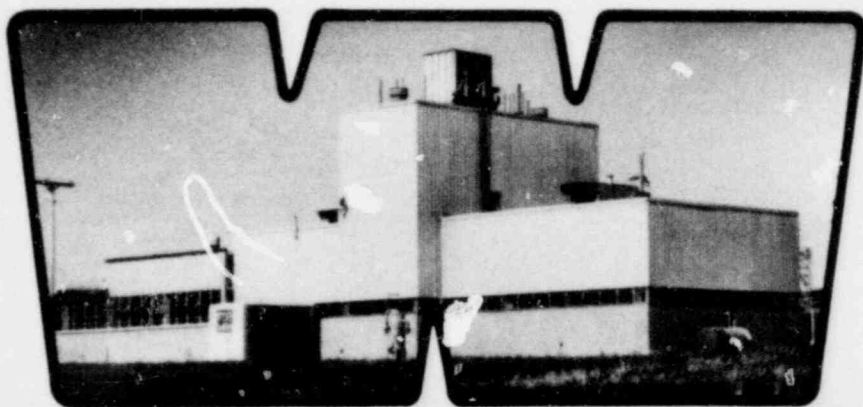
RICHARD D. LOVE
ENVIRONMENTAL ENGINEER



ROBERT C. KLEVORN
ATTORNEY

WOLVERINE ELECTRIC COOPERATIVE

BIG RAPIDS, MICHIGAN



1980 ANNUAL REPORT

8104220550
DOPE

Cover Photographs:

- Top: Wolverine's Claude Van Dyke Generating Plant, near Burnips, Michigan. This plant includes several diesel generators and a 23,000 kilowatt combined-cycle gas turbine.
- Center: Wolverine's Martiny Lake Distribution Substation, near Barryton, Michigan. This substation supplies Tri-County Electric Cooperative at 12,470 volts from a 69,000 volt transmission line, and has a capacity of 3750 kVA.
- Bottom: Wolverine's 138,000 volt transmission line between LeRoy and South Boardman. This transmission line presently operates at 69,000 volts, and interconnects Wolverine with Northern Michigan Electric Cooperative.

TABLE OF CONTENTS

	<u>Page</u>
Board of Directors	1
Personnell	2-3
Member Cooperatives	4
President's Message	5-6
Manager's Report	7-8
Generation & Purchase Power Costs	9
Net Generation & Purchases	10
Energy Sales to Members	11
Energy Production	12
Auditors Report	13
Balance Sheet	14 a, 14 b
Statements of Revenue & Expense	15 a, 15 b
Statements of Patronage Capital and Other Equities (Deficit)	16
Statements of Changes In Financial Position	17
Notes to Financial Statements	18-22

BOARD OF DIRECTORS

WILLARD HAENKE
President Blanchard, Michigan

CLARE SHULL
Vice- President Hart, Michigan

* JOHN TYNDALL
Secretary Branch, Michigan

* DONALD HARMON
Secretary Branch, Michigan

BURTON SCOTT
Treasurer Evart, Michigan

CARL FORTELKA
Director Hoxeyville, Michigan

WILLIAM CHAPIN
Director Blanchard, Michigan

JOSEPH FAIRCHILD
Director Hesperia, Michigan

* John Tyndall resigned his position as Secretary on
September 19, 1980.

* Donald Harmon was appointed Secretary on September 19, 1980.

OFFICE PERSONNEL

MANAGER	John N. Keen
ASSISTANT MANAGER	James O. Wood
ASSISTANT TO THE MANAGER	Norman Newby
OFFICE MANAGER	Esther Brower
ACCOUNTANT	Walter Garcia
ACCOUNTANT	Roselyn Hopper
RECEPTIONIST	Beverly Adams
TRANSMISSION	Robert O. Gray
TRANSMISSION	William Zuidema
TRANSMISSION	Harley Jaques
TRANSMISSION	Dean Bishop
MAINTENANCE FOREMAN	Richard Arnold
CONSULTANTS:	
LEGAL	Daniel D. Hesslin
ENGINEERING	Daverman Associates
C. P. A'S	Cooper & Lybrand

P L A N T P E R S O N N E L

* * * * *

BURNIPS PLANT

Henry Kaumeyer, Chief Operator
Hubert Niemchick
John L. Wilson
Robert Force
Maurice McBride
Bert J. Wiersma
Glen Robinson
Kenneth Slagter
Michael Chase
Blaine St. Peter

HERSEY PLANT

Delbert Roggow, Chief Operator
Elwood Mitchell
Richard F. Brissette
Edwin K. Kersey
Gary L. Jaques
Willis Zimmerman
Kenneth Roggow
John Oehrli
Keith Tissue

PORTLAND PLANT

Eugene Snitgen

SCOTTVILLE PLANT

Terry Kuiper, Chief Operator
Gary D. Rogers
C. G. Luce
Thomas Story
Michael Terryn

VESTABURG PLANT

Richard Bigelow, Chief Operator
Jack R. Thompson
Richard Modrow
Michael Bigelow
Richard Bradley

DISPATCH OFFICE

Neil Anderson
Jerry Taber
Rex Thompson
Earl D. Jacobs
Jeffrey Arnold

RIGHT-OF-WAY-DEPARTMENT

Pete Ratcliffe
Merel Peterson
Glen Merrill

DIRECTORY OF MEMBER COOPERATIVES

* * * * *

O & A ELECTRIC
Newaygo, Michigan
Kenneth Bumstead, Manager

TRI-COUNTY ELECTRIC
Portland, Michigan
Vernor Smith, Manager

Carl Johnson
Leon Ford
Pete Boss
Burton Scott
Constance Dukes
Don Marsh
Carl Fortelka
Louis Ghent
George Telsma, Jr.

James Clarke
Wayne Swiler
Carl Morton
Keith Sackett
Peter Ondrus
Willard Haenke
William Chapin

WESTERN MICHIGAN ELECTRIC
Scottville, Michigan
Frank Anderson, Manager

OCEANA ELECTRIC
Hart, Michigan
Robert Frederiksen, Manager

Donald Harmon
Robert Hasenbank
John Tyndall
Merel Wood
Harold Hansen
Robert Thurow

Clare Shull
J. Kenneth Fairchild
Philip L. Paine
Clyde Ackley
Mary C. Hawley
Mathew Kokx
Gordon L. Lohman

P R E S I D E N T ' S M E S S A G E

It is with pleasure that I welcome you to Wolverine's Annual Meeting, and share with you, throughout this report some of the activities this past year.

The year 1980 was a year of many problems. Inflation increased our operating costs, fuel costs escalated, increased regulatory restrictions and environmental impacts of line construction all contributed to a change in the previous trends in the cost of electricity. The availability of the energy and the costs of that energy to our customers depends on the policies followed by our national government, state and local jurisdiction.

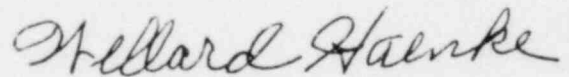
This past year we closed out our contract with Clifton Engineering Company in the amount of \$444,660.60 for the Burnips to Wayland line. We took bids for the construction of adding one circuit breaker in the 69kV switching station for the Hersey, Tustin and Hartwick line. The low bid was submitted by Newark Electronics in the amount of \$117,425.00.

We also took bids for the right-of-way clearing on the Bass Lake to Wolf Lake line as well as the transmission line construction. Nelson Tree Service was the successful bidder for the right-of-way clearing in the amount of \$55,768.00 and Clifton Engineering Company was the low bidder for the Bass Lake to Wolf Lake transmission line in the amount of \$242,881.38.

Due to the three mile incident and the N.R.C.'S new requirements, it was necessary to make a design change in Fermi II which in part delayed the start up time. It was necessary for us to increase our share of the budget in the amount of \$79,226,000.

We obtained ownership of 5 megawatts in Campbell III which went into commercial operation in September, 1980.

We greatly appreciate the splendid cooperation and assistance from the managers of our distribution members and their employees, as well as the employees of Wolverine.

A handwritten signature in cursive script, reading "Willard Haenke". The signature is written in dark ink and is positioned above the printed name.

Willard Haenke, President

MANAGER'S REPORT

This will mark the 31st Anniversary of your Cooperative. I am sure all of you are aware of the drastic changes during these thirty one years.

This past year we made some changes in several of our departments. S. Donald King retired from the cooperative in April, 1980. Robert Gray was promoted to Superintendent of Transmission and William Zuidema was promoted to substation technician. Harley Jaques was added to our line department. Due to the increased work load in the accounting department it was necessary to add another person. Roselyn Hopper was promoted from her secretarial position to assist in the accounting department and Beverly Adams was hired as our new secretary.

During the last several years we have been investigating the feasibility of alternate energy sources, one alternate being the use of "Waste Wood". This project was thoroughly investigated and as of September, 1980 we decided we should not pursue this project any further due to the resistance of fire wood users and the increasing costs of the project.

We are pursuing another alternate source of energy which is the Lead Acid Battery Storage Plant, which will be capable of being charged during off peak hours and will assist our system during the peaking hours "off peak hours are the lowest product or purchase power cost, on peak is the highest cost", therefore, this could be a great advantage to the overall cost of energy delivered to the system.

Construction and double digit inflation during the past several years has created a tremendous burden in attempting to stabilize wholesale power costs. It was necessary to apply for a general rate increase which was granted to us by the Michigan Public Service Commission effective October 1, 1980. The rate increase amounted to approximately 9%. With the increased price of fuel oil and natural gas prices, we have found it was more feasible to increase the amount of purchase power from our various sources rather than to generate it from our own existing facilities.

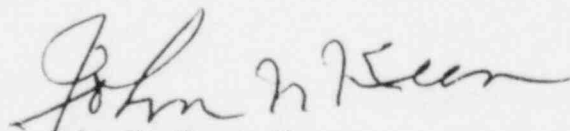
This past year we completed all the right-of-way procurement for the Hastings to Vermontville line which is approximately 22 miles long. Right-of-way for approximately twelve miles of line for the Bass Lake to Wolf Lake was completed and as of this date the Ludington to Lake County line is about 95% completed. Approximately 99% of the right-of-way procurement has been procured for the Howard City to Pierson line.

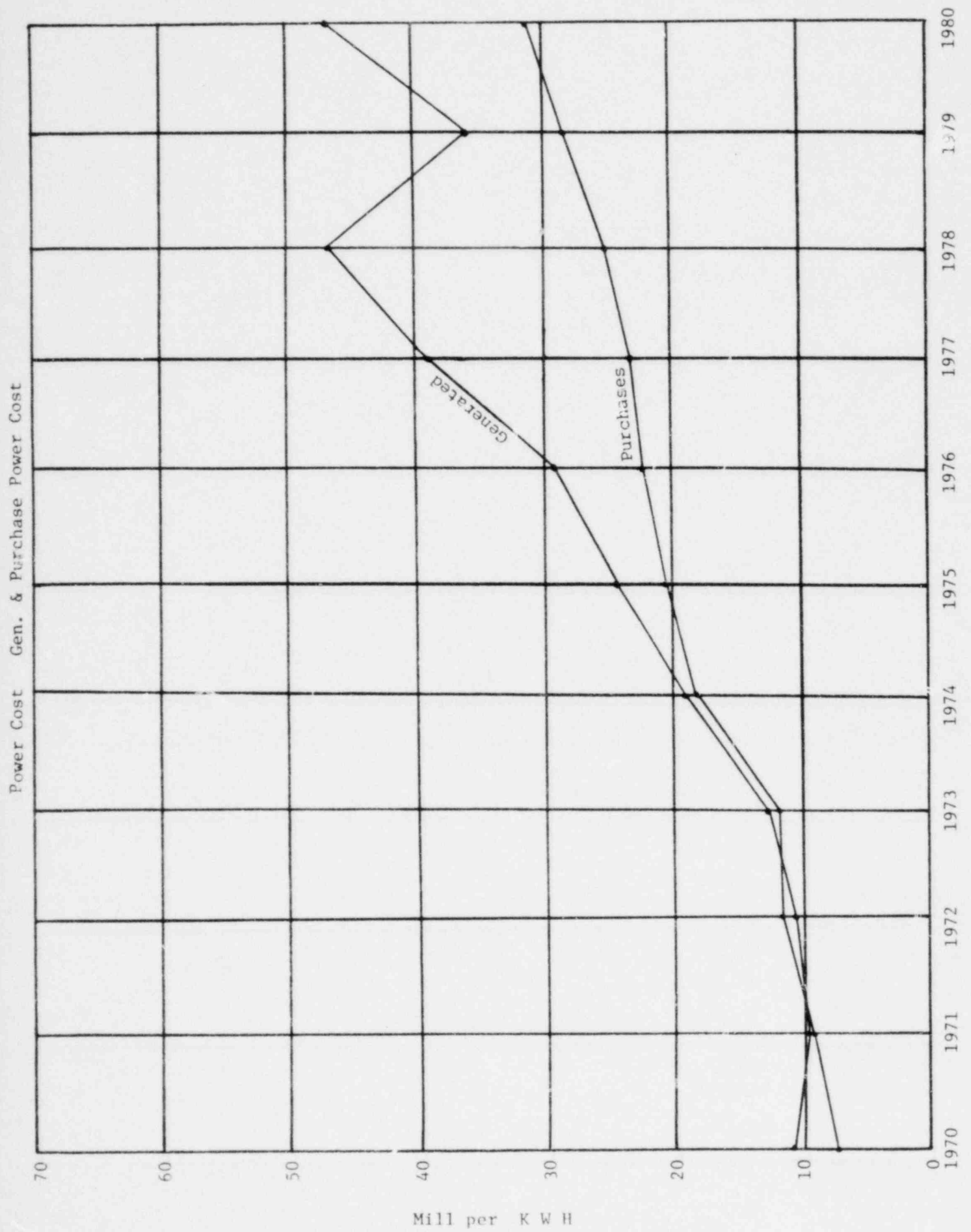
Our future plans are to convert the following substations from 44 kV to 69 kV.

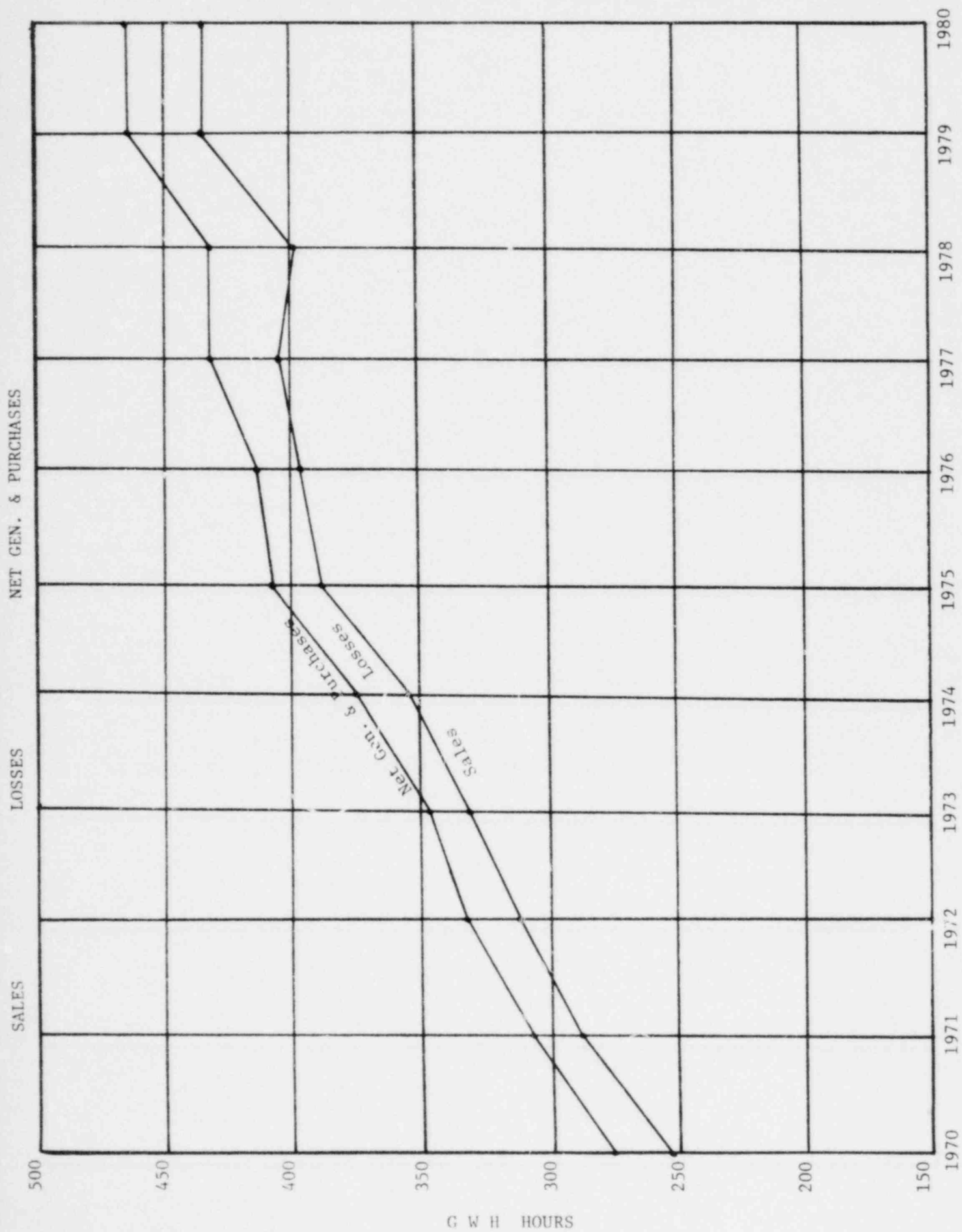
Chester	3,750	Crawford	5,000
Eaton Rapids	3,750	Grand Ledge	2,000
Hartwick	5,000	Hastings	3,750
Odessa	3,750	Otsego	2,500
Tustin	3,750	Vermontville	2,000
Wayland	3,750	Wolf Lake	2,500
White Cloud	5,000		

The Merger committee met throughout the year and while some progress has been made, there are still many details to be worked out.

In closing I would like to thank each and every one for their continued support.


John N. Keen, Manager





ENERGY SALES TO MEMBERS

TRI-COUNTY ELECTRIC COOPERATIVE

	<u>1970</u>	<u>1980</u>
Altona	8,958,600	15,901,200
Chester	7,627,500	6,315,300
Crawford	1,656,000	11,172,600
Eaton Rapids	6,091,500	7,340,300
Fowler	8,340,000	4,064,400
Hersey	4,858,800	2,922,000
Morley	2,542,500	3,273,600
Odessa	6,508,000	8,553,000
Pierson	4,065,600	6,419,600
Portland	5,663,300	6,887,500
Vestaburg	11,572,200	14,146,200
Weidman	11,854,000	13,696,000
Westphalia	8,661,600	10,335,600
*Greenbush		6,087,600
*Martiny		6,883,200
*Plains Road		4,669,200
*Vermontville		3,465,600
*Stevenson		7,032,600
*Grand Ledge		6,172,200
*Lebanon		3,443,400
	<u>88,399,600</u>	<u>148,781,100</u>

WESTERN MICHIGAN ELECTRIC COOPERATIVE

	<u>1970</u>	<u>1980</u>
Bass Lake	3,758,400	8,760,600
Eden	3,424,800	6,505,200
Fountain	2,317,400	7,601,400
Scottville	5,454,900	6,894,900
Star Lake	3,825,000	6,510,200
Victory	6,156,000	8,897,400
	<u>25,936,500</u>	<u>45,169,700</u>

* New substations since 1970

O & A ELECTRIC COOPERATIVE

	<u>1970</u>	<u>1980</u>
Allendale	3,439,800	7,441,200
Baldwin	6,955,200	12,391,200
Brohman	4,597,200	8,785,800
Burnips	3,642,000	7,128,000
Casnovia	6,138,000	13,615,400
Hartwick	9,574,200	17,309,200
Hersey	7,697,500	7,787,500
Lincoln	7,019,500	7,878,600
Morley	4,404,000	9,226,800
Pierson	3,735,800	6,689,400
Tustin	3,210,000	5,663,100
Wayland	11,397,600	6,402,400
White Cloud	6,511,500	13,156,500
*Hastings		7,293,600
*Otsego		3,932,000
*Paris		4,927,200
*Middleville		3,614,400
	<u>74,322,300</u>	<u>143,242,300</u>

GCEANA ELECTRIC COOPERATIVE

	<u>1970</u>	<u>1980</u>
Hart	7,836,000	7,247,200
Rodgers	6,780,600	9,812,600
Shelby	6,420,600	8,517,600
Silver Lake	6,235,200	10,512,000
Walkerville	8,469,600	10,742,400
*Hesperia		6,084,000
*Weare		3,983,400
	<u>35,742,000</u>	<u>56,899,200</u>

Total KWH sold to members in 1980	394,092,300
Total KWH sold to members in 1970	<u>224,400,400</u>
Difference	169,691,900

ENERGY PRODUCTION

<u>GENERATED</u>	<u>MWH</u>
Burnips	159,515.5
Hersey	10,663.3
Portland	368.6
Vestaburg	9,670.3
Scottville	6,101.8
Campbell III	<u>6,928.0</u>
	193,247.5

INTERCHANGE WITH NON-MEMBERS

<u>DELIVERED TO</u>	<u>MWH</u>	<u>RECEIVED FROM</u>	<u>MWH</u>
Miller Dairy Farms	7.3	Miller Dairy Farms	1,111.8
City of Hart	10,449.6	City of Hart	2.4
Lowell Light & Power	9,721.4	Lowell Light & Power	329.4
Northern Michigan	5,794.5	Northern Michigan	2,555.9
City of Zeeland	1,774.2	City of Zeeland	4,656.4
City of Grand Haven	5,183.1	City of Grand Haven	3,089.0
City of Traverse	1,035.1	City of Traverse	473.5
Conalco	<u>3,147.0</u>	Consumers Power Co.	10,109.9
	37,112.2	Detroit Edison Co.	88,519.5
		City of Lansing	138,771.7
		Conalco	<u>1,214.0</u>
			280,833.5

ENERGY SALES MWH TO MEMBERS

Tri-County Electric Cooperative	148,781.1
O & A Electric Cooperative	143,242.3
Oceana Electric Cooperative	56,899.2
Western Michigan Electric Cooperative	<u>45,169.7</u>
	394,092.3
Consumers Power Company	<u>5,813.5</u>
	35.8

COOPERS & LYBRAND

CERTIFIED PUBLIC ACCOUNTANTS

A MEMBER FIRM OF

COOPERS & LYBRAND (INTERNATIONAL)

Board of Directors
Wolverine Electric Cooperative,
Incorporated
Big Rapids, Michigan

We have examined the balance sheets of Wolverine Electric Cooperative, Incorporated as of December 31, 1980 and 1979, and the related statements of revenue and expense, patronage capital and other equities (deficit), and changes in financial position for the years then ended. Our examinations were made in accordance with generally accepted auditing standards and, accordingly, included such tests of the accounting records and such other auditing procedures as we considered necessary in the circumstances.

As shown in the financial statements, the Cooperative incurred a net margins deficit of \$707,860 during the year ended December 31, 1980, and as of that date, the Cooperative's current liabilities exceeded its current assets by \$6,428,552 and its total liabilities exceeded its total assets by \$1,529,006. These factors, and the imminent maturity of debt as described in Notes D and E to the financial statements, indicate that the Cooperative may be unable to continue in existence. The financial statements do not include any adjustments relating to the recoverability and classification of recorded asset amounts or the amounts and classification of liabilities that might be necessary should the Cooperative be unable to continue in existence.

In our opinion, subject to the effects on the 1980 financial statements of such adjustments, if any, as might have been required had the outcome of the uncertainty about the recoverability and classification of recorded asset amounts and the amounts and classification of liabilities referred to in the preceding paragraph been known, the financial statements referred to above present fairly the financial position of Wolverine Electric Cooperative, Incorporated as of December 31, 1980 and 1979, and the results of its operations and the changes in its financial position for the years then ended, in conformity with generally accepted accounting principles applied on a consistent basis.

Coopers & Lybrand

Niles, Michigan
February 13, 1981

MICHIGAN 46, NEWAYGO
WOLVERINE ELECTRIC COOPERATIVE, INCORPORATED
BALANCE SHEETS, as of December 31, 1980 and 1979

ASSETS AND DEFERRED DEBITS	<u>1980</u>	<u>1979</u>
Utility plant, at cost (notes A, B, D and H):		
Electric plant in service	\$ 31,253,281	\$ 31,042,463
Construction work in progress (Note G)	119,202,428	91,261,357
Electric plant acquisition adjustments	<u>378,741</u>	<u>378,741</u>
	150,834,450	122,682,601
Less, Accumulated provision for depreciation and amortization (Notes A and C)	<u>12,620,157</u>	<u>12,118,029</u>
Utility plant (net)	<u>138,214,293</u>	<u>110,564,572</u>
Other property and investments, at cost:		
Investments in associated organizations (Note F)	1,527,463	1,395,301
Other investments, at cost, which approximates market value	205,427	165,256
Notes receivable	<u>35,690</u>	<u>13,690</u>
	<u>1,768,580</u>	<u>1,574,247</u>
Current assets:		
Cash, general	151,341	780,935
Cash, REA construction fund	283,428	178,533
Accounts and interest receivable	3,277,160	2,715,389
Materials and supplies (Note A)	2,072,407	1,559,913
Prepayments	<u>153,491</u>	<u>110,462</u>
	<u>5,937,827</u>	<u>5,345,232</u>
Deferred debits (Note A)	<u>688,060</u>	<u>-</u>
Total assets and deferred debits	<u>\$146,608,760</u>	<u>\$117,484,051</u>

The accompanying notes are a part of the financial statements.

EQUITIES, LIABILITIES AND DEFERRED CREDITS	<u>1980</u>	<u>1979</u>
Equities:		
Memberships	\$ 400	\$ 400
Patronage capital	503,768	503,768
Other equities (deficit)	<u>(2,033,174)</u>	<u>(1,325,314)</u>
	<u>(1,529,006)</u>	<u>(821,146)</u>
Long-term debt:		
REA mortgage notes (Note D)	21,780,293	21,343,717
Federal Financing Bank notes (Note E)	<u>113,788,000</u>	<u>90,270,000</u>
	<u>135,568,293</u>	<u>111,613,717</u>
Current liabilities:		
Note payable, CFC, 14-1/4%, unsecured	8,309,430	2,168,065
Accounts payable	3,098,658	3,576,183
Taxes and wages payable	593,909	462,307
Accrued vacation and sick leave	311,994	275,744
Accrued interest	<u>52,388</u>	<u>49,977</u>
	<u>12,366,379</u>	<u>6,532,276</u>
Deferred credits	<u>203,094</u>	<u>159,204</u>
Total equities, liabilities and deferred credits	<u>\$146,608,760</u>	<u>\$117,484,051</u>

STATEMENTS OF REVENUE AND EXPENSE
for the years ended December 31, 1980 and 1979

	1980	
	<u>Amount</u>	<u>Percent of Revenue</u>
Operating revenues	<u>\$18,054,571</u>	<u>100.0</u>
Operating expenses:		
Other power generation:		
Operation	7,064,634	39.1
Maintenance	232,134	1.3
Other power supply:		
Purchased power	7,567,700	41.9
Transmission expense:		
Operation	212,072	1.2
Maintenance	106,444	.6
Distribution expense:		
Operation	44,129	.2
Maintenance	32,498	.2
Administrative and general:		
Operation	682,974	3.8
Maintenance	3,249	-
Depreciation and amortization (Note C)	903,292	5.0
Taxes	627,412	3.5
Interest on long-term debt	667,184	3.7
Other interest charges	<u>680,224</u>	<u>3.8</u>
Total operating expenses and interest	<u>18,823,946</u>	<u>104.3</u>
Operating margins (deficit)	<u>(769,375)</u>	<u>(4.3)</u>
Non-operating margins:		
Interest revenues	30,565	.2
Settlement of litigation (Note I)	<u>-</u>	<u>-</u>
Non-operating margins	<u>30,565</u>	<u>.2</u>
Capital credits, CFC	<u>30,950</u>	<u>.2</u>
Net margins (deficit)	<u><u>\$ (707,860)</u></u>	<u><u>(3.9)</u></u>

The accompanying notes are a part of the financial statements.

1979		
<u>Amount</u>	<u>Percent of Revenue</u>	<u>Increase (Decrease)</u>
<u>\$15,153,973</u>	<u>100.0</u>	<u>\$2,900,598</u>
6,712,266	44.3	352,368
197,718	1.3	34,416
5,161,110	34.1	2,406,590
175,638	1.2	36,434
83,596	.6	22,848
47,501	.3	(3,372)
20,957	.1	11,541
625,900	4.1	57,074
3,141	-	108
826,454	5.5	76,838
502,610	3.3	124,802
612,694	4.0	54,490
<u>328,735</u>	<u>2.2</u>	<u>351,489</u>
<u>15,298,320</u>	<u>101.0</u>	<u>3,525,626</u>
<u>(144,347)</u>	<u>(1.0)</u>	<u>(625,028)</u>
36,121	.2	(5,556)
<u>217,327</u>	<u>1.4</u>	<u>(217,327)</u>
<u>253,448</u>	<u>1.6</u>	<u>(222,883)</u>
<u>91,682</u>	<u>.7</u>	<u>(60,732)</u>
<u>\$ 200,783</u>	<u>1.3</u>	<u>\$ (908,643)</u>

STATEMENTS OF PATRONAGE CAPITAL AND OTHER EQUITIES (DEFICIT)

for the years ended December 31, 1980 and 1979

(Note J)

PATRONAGE CAPITAL

	<u>1980</u>	<u>1979</u>
Balance, beginning and end of year	<u>\$ 503,768</u>	<u>\$ 503,768</u>
Patronage capital summary:		
Assignable	<u>\$ 503,768</u>	<u>\$ 503,768</u>

OTHER EQUITIES (DEFICIT)

	<u>1980</u>	<u>1979</u>
Operating margins:		
Balance, beginning of year	\$(1,325,314)	\$(1,526,097)
Operating margins (deficit) for the year	(769,375)	(144,347)
Non-operating margins for the year	30,565	253,448
Capital credits, CFC	<u>30,950</u>	<u>91,682</u>
Balance, end of year	<u>\$(2,033,174)</u>	<u>\$(1,325,314)</u>

The accompanying notes are a part of the financial statements.

STATEMENTS OF CHANGES IN FINANCIAL POSITION
for the years ended December 31, 1980 and 1979

Source and Application of Working Capital

	<u>1980</u>	<u>1979</u>
Funds were provided by:		
From operations:		
Net margins (deficit)	\$ (707,860)	\$ 200,783
Add (deduct), Items not requiring working capital:		
Depreciation and amortization (Note C)	948,823	835,753
Deferred compensation	43,890	31,580
Increase in CFC patronage capital credits	<u>(30,950)</u>	<u>(91,682)</u>
Total from operations	253,903	976,434
Advances from Federal Financing Bank	23,518,000	25,533,000
Advances from REA	1,292,000	1,172,000
Decrease in restricted funds	<u>-</u>	<u>1,000</u>
Total source	<u>25,063,903</u>	<u>27,682,434</u>
Funds were used for:		
Extension and replacement of plant	28,564,144	26,730,860
Principal payments on long-term debt when due	834,917	820,804
Increase in other investments	40,171	35,304
Decrease in deferred interest	20,507	20,507
Increase in deferred debits	722,460	-
Increase in notes receivable	22,000	-
Purchase of CFC capital term certificates and other investments	<u>101,212</u>	<u>98,923</u>
Total use	<u>30,305,411</u>	<u>27,706,398</u>
Net decrease in working capital	(5,241,508)	(23,964)
Working capital (deficit), beginning of year	<u>(1,187,044)</u>	<u>(1,163,080)</u>
Working capital (deficit), end of year	<u><u>\$(6,428,552)</u></u>	<u><u>\$(1,187,044)</u></u>

Changes in Composition of Working Capital

	<u>1980</u>	<u>1979</u>
	Increase	(Decrease)
Current assets:		
Cash, general	\$ (629,594)	\$ (456,541)
Cash, REA construction fund	104,895	(133,945)
Accounts receivable	561,771	443,311
Materials and supplies	512,494	251,454
Prepayments	<u>43,029</u>	<u>52,864</u>
Increase in current assets	592,595	157,143
Current liabilities:		
Note payable, CFC	6,141,365	(485,507)
Accounts payable	(477,525)	585,979
Taxes and wages payable	131,602	51,760
Accrued vacation and sick leave	36,250	25,089
Accrued interest	<u>2,411</u>	<u>3,786</u>
Increase in current liabilities	5,834,103	181,107
Decrease in working capital	<u><u>\$(5,241,508)</u></u>	<u><u>(23,964)</u></u>

The accompanying notes are a part of the financial statements.

NOTES TO FINANCIAL STATEMENTS
for the years ended December 31, 1980 and 1979

Note A: ACCOUNTING POLICIES.

The following is a summary of the accounting policies adopted by the Cooperative which have a significant effect on the financial statements. The policies conform to generally accepted accounting principles and have been consistently applied.

Depreciation and Amortization of Utility Plant -
Provision for depreciation and amortization is computed using the straight-line method.

Inventory Valuation - Materials and supplies are stated at average unit cost, which is not in excess of market.

Construction Period Interest - The cost of construction work in progress includes the actual cost of funds borrowed to finance the construction of the Fermi #2 Nuclear Power Plant and the Campbell #3 Fossil Fuel Power Plant. The Cooperative incurred total interest costs of \$11,243,420 and \$7,606,885, of which \$9,896,012 and \$6,665,456 was capitalized during the years ended December 31, 1980 and 1979, respectively, for the two plants as follows:

	<u>1980</u>	<u>1979</u>
Fermi #2 Nuclear Power Plant	\$9,875,921	\$6,665,456
Campbell #3 Fossil Fuel Power Plant	<u>20,091</u>	<u>-</u>
	<u>\$9,896,012</u>	<u>\$6,665,456</u>

Federal Income Taxes - The Cooperative is exempt from federal income taxes under Section 501(c)(12) of the Internal Revenue Code. Therefore, no provision for federal income tax has been made.

Deferred Debits - The deferred debits represent contributions in aid of construction for a gasline built to supply the Hersey generation plant and preliminary research costs incurred on a wood chip burning generation plant. Management has concluded that they will not construct the generation plant. The contribution in aid of construction is being amortized over 36 months and the research costs over 46 months. The following is a summary of deferred debits at December 31, 1980, and amortized costs for the year then ended:

	<u>Deferred Debits</u>	<u>Amortization</u>
Contribution in aid of construction	\$245,044	\$14,400
Research costs	<u>443,416</u>	<u>20,000</u>
Totals	<u>\$688,060</u>	<u>\$34,400</u>

NOTES TO FINANCIAL STATEMENTS, Continued
for the years ended December 31, 1980 and 1979

Note B: UTILITY PLANT.

The electric plant in service consists of the following:

	<u>1980</u>	<u>1979</u>
Intangible plant	\$ 18,455	\$ 18,455
Production plant	12,279,066	12,435,611
Transmission plant	15,259,371	14,887,985
Distribution plant	3,251,130	3,222,746
General plant	<u>445,259</u>	<u>477,666</u>
	<u>\$31,253,281</u>	<u>\$31,042,463</u>

Note C: DEPRECIATION AND AMORTIZATION.

Depreciation and amortization were charged as follows:

	<u>1980</u>	<u>1979</u>
Charged to operations as an expense	\$903,292	\$826,454
Charged to clearing accounts	<u>45,531</u>	<u>9,299</u>
Total depreciation and amortization	<u>\$948,823</u>	<u>\$835,753</u>

Note D: LONG-TERM DEBT - REA MORTGAGE NOTES.

Long-term debt consists of 35-year Rural Electrification Administration notes bearing interest at 2% and 5% per annum. The notes are payable in equal installments plus current interest to the year 2013. The current repayment requirements approximate an \$840,000 payment on principal and deferred interest and \$640,000 for current interest. Advance payments of \$12,180 are available to meet these requirements. Utility plant in the amount of \$30,789,567 is pledged as collateral on the long-term debt.

NOTES TO FINANCIAL STATEMENTS, Continued
for the years ended December 31, 1980 and 1979

Note E: LONG-TERM DEBT - FEDERAL FINANCING BANK NOTE.

The Federal Financing Bank note is guaranteed by the Rural Electrification Administration and bears interest at a rate to be determined by the bank at the date of each advance. The rate of interest will be redetermined by the bank at each change of maturity date.

At the time of each advance, the Cooperative must designate an initial maturity date for that advance of not less than two nor more than seven years. Extensions of the initial maturity date are available, however, not to be less than two years in length. The total maturity period, including extensions of any advance, cannot exceed a maximum of seven years. The Cooperative may convert these obligations to 34-year maturities at any time after the end of the calendar year in which the advance was made and up to seven years after the advance. After the maximum seven year maturity, the advances must be repaid or converted to 34-year obligations.

Advances as of December 31, 1980 consist of the following:

<u>Initial Maturity Dates</u>	<u>Interest Rates</u>	<u>Amount</u>
1981	9.023% to 11.781%	\$ 25,533,000
1982	8.005% to 15.090%	<u>88,255,000</u>
Total		<u><u>\$113,788,000</u></u>

NOTES TO FINANCIAL STATEMENTS, Continued
for the years ended December 31, 1980 and 1979

Note F: INVESTMENTS IN ASSOCIATED ORGANIZATIONS.

The investments in associated organizations consist of the following:

	<u>1980</u>	<u>1979</u>
National Rural Utilities Cooperative Financing Corporation:		
Capital term certificates (CFC)	\$ 789,774	\$ 688,567
Patronage capital credits	734,816	703,866
Other investments	<u>2,873</u>	<u>2,868</u>
	<u>\$1,527,463</u>	<u>\$1,395,301</u>

The Cooperative has subscribed to Cooperative Financing Corporation (CFC) capital term certificates for which a payment of \$116,000 is due in 1981. Subscriptions to CFC capital term certificates are required to obtain long-term financing from CFC in the future. Cost of certificates approximate market value.

Note G: CONTRACTUAL OBLIGATION.

On February 8, 1977 the Cooperative entered into an agreement with the Detroit Edison Company to participate in 8.78% of the construction costs and operations of Enrico Fermi Nuclear Unit No. 2. The Cooperative's share of the construction costs to date are approximately \$113,875,000. The Cooperative's share of the remaining costs to complete construction are estimated at \$75,000,000 by Cooperative management. The unit is tentatively scheduled to be operational in 1984.

The Cooperative has a binding agreement with Detroit Edison Company in which Detroit Edison is obligated to purchase the excess energy generated related to the Cooperative's portion of Fermi No. 2. The Cooperative feels these revenues will be sufficient to offset the effect of the additional interest and depreciation costs recognized.

NOTES TO FINANCIAL STATEMENTS, Concluded
for the years ended December 31, 1980 and 1979

Note H: JOINT VENTURE IN CAMPBELL #3 POWER PLANT.

On August 15, 1980, the Cooperative entered into a joint venture with Consumers Power Company for the ownership and operation of the Campbell #3 Fossil Fuel Power Plant. The Cooperative has invested approximately \$3,660,000 in the plant which represents 0.63% ownership. The investment is included in Construction work in progress at December 31, 1980, and will be transferred to Electric plant in service upon approval and funding by the Rural Electrification Administration. Each participant provides its own financing for the project. The Cooperative's share of direct expenses are included in the statement of revenue and expense at December 31, 1980.

Note I: SETTLEMENT OF LITIGATION.

The Cooperative received its share of a suit taken to the Justice Department and the Nuclear Regulatory Commission, and settled out of court with Consumers Power Company in relation to the Cooperative's desire to purchase a portion of the Midland Nuclear Power Plants No.'s 1 and 2. The total revenue recognized during the year ended December 31, 1979, was determined as follows:

Cooperative's share of settlement	\$248,507
Less, Legal and engineering costs incurred relating to the case during the year ended December 31, 1979	<u>31,180</u>
Net revenue from settlement	<u>\$217,327</u>

Note J: RESTATEMENT OF EQUITIES.

Patronage Capital and Other Equities as disclosed in the equities section of the balance sheet at December 31, 1979, have been restated to conform with the Cooperative's by-laws and Rural Electrification Administration requirements.

**Detroit
Edison**

1980 Annual Report



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Directors and Officers

Board of Directors

Wendell W. Anderson, Jr.	Chairman of the Board and Chief Executive Officer, Bundy Corporation (Manufacturer of steel tubing, flexible hose and plastic components)
Malcolm Carron, S.J.	Chancellor, University of Detroit
Charles T. Fisher III	President, National Bank of Detroit
David M. Gates	Professor of Botany and Director of Biological Station, University of Michigan
Edward J. Giblin	Chairman and Chief Executive Officer, Ex-Cell-O Corporation (Manufacturer of diversified industrial products)
Ernest L. Grove, Jr.	Vice Chairman of the Board and Chief Financial Officer, The Detroit Edison Company
David B. Harper	President, Gateway National Bank
Charles M. Heidel	Executive Vice President—Operations, The Detroit Edison Company
George M. Holley, Jr.	Retired Industrialist
Patricia Shontz Longe	Economist; Professor of Business Administration, University of Michigan
Walter J. McCarthy, Jr.	President and Chief Operating Officer, The Detroit Edison Company
William G. Meese	Chairman of the Board and Chief Executive Officer, The Detroit Edison Company
Frank Merriman	Dairy Farmer
Dean E. Richardson	Chairman of the Board and Chief Executive Officer, Manufacturers National Bank of Detroit
Alan E. Schwartz	Senior Partner, Honigman Miller Schwartz and Cohn (Attorneys at law)

Committees of the Board of Directors

Executive	Finance	Audit	Compensation
William G. Meese, <i>Chairman</i>	Dean E. Richardson, <i>Chairman</i>	Charles T. Fisher III, <i>Chairman</i>	Edward J. Giblin, <i>Chairman</i>
Walter J. McCarthy, Jr.	David B. Harper	Edward J. Giblin	Alan E. Schwartz
Charles T. Fisher III	Malcolm Carron, S.J.	Malcolm Carron, S.J.	Wendell W. Anderson, Jr.
Edward J. Giblin	Charles T. Fisher III	George M. Holley, Jr.	Frank Merriman
Ernest L. Grove, Jr.	Ernest L. Grove, Jr.	Patricia Shontz Longe	Dean E. Richardson
George M. Holley, Jr.	Patricia Shontz Longe		
Patricia Shontz Longe	Walter J. McCarthy, Jr.		
Dean E. Richardson	William G. Meese		
Alan E. Schwartz	Alan E. Schwartz		
Nominating and Organization	Energy Resources	Retirement Fund Review	
Alan E. Schwartz, <i>Chairman</i>	George M. Holley Jr., <i>Chairman</i>	Patricia Shontz Longe, <i>Chairman</i>	
Edward J. Giblin	Frank Merriman	Wendell W. Anderson, Jr.	
Frank Merriman	Wendell W. Anderson, Jr.	Edward J. Giblin	
Dean E. Richardson	David M. Gates	Ernest L. Grove, Jr.	
	Charles M. Heidel	David B. Harper	
	Walter J. McCarthy, Jr.		

Officers

William G. Meese	Chairman of the Board and Chief Executive Officer
Walter J. McCarthy, Jr.	President and Chief Operating Officer
Ernest L. Grove, Jr.	Vice Chairman of the Board and Chief Financial Officer
Charles M. Heidel	Executive Vice President—Operations
Robert W. Lundgren	Executive Vice President—Administration
Leon S. Cohan	Senior Vice President and General Counsel
Wayne H. Jens	Vice President—Nuclear Operations
John W. Johnson, Jr.	Vice President—Finance
M. Jane Kay	Vice President—Employee Relations
Frank M. Kehoe	Vice President and Secretary
Claybourne Mitchell, Jr.	Vice President—Planning and Research
Burkhard H. Schneider	Vice President—Divisions
Harry Tauber	Vice President—Engineering and Construction
Robert O. Wagner	Vice President—Rates and Financial Evaluation
O. David Whiddon	Vice President—Operations
John C. Kennedy	Treasurer
William A. Basse	Controller
Arnold J. Benes	General Auditor



Above: During 1980 over 90% of our electric generation was produced by coal, the most economical and abundant of our fossil fuels.

Financial Highlights

	1980	1979	Percent Increase (Decrease)	Cover
Operating Revenues	\$1,812,514,000	\$1,698,511,000	6.7	Downtown Detroit at night provides an impressive display of the electricity required by our modern society. Detroit Edison is committed to meeting the needs of its customers in the years ahead.
Earnings for Common Stock	\$137,529,000	\$132,572,000	3.7	
Earnings per Common Share	\$1.75	\$1.90	(7.9)	Contents
Common Shares Outstanding (Average)	78,780,863	69,848,484	12.8	2 Message to Shareholders
Dividends Paid per Share	\$1.60	\$1.58	1.3	4 Revenues, Earnings and Expenses
Gross Utility Plant	\$6,213,495,000	\$5,660,023,000	9.8	6 Financing and Shareholder Data
Capitalization	\$4,568,645,000	\$3,980,707,000	14.8	8 Rate Activities
Sales of Electricity (kWh-Thousands)	34,235,000	36,891,000	(7.2)	10 Capital Expenditure Program
System Capability at Time of Peak (kW)	8,531,000	8,877,000	(3.9)	12 Research and Conservation Programs
System Peak Demand (kW)	6,703,000	6,829,000	(1.8)	14 Organization and Corporate Affairs
Electric Customers at Year End	1,764,000	1,763,000	0.1	16 Major Legal Developments
				17 Financial Statements
				34 Management's Discussion of Operations
				36 Historical Statistics
				41 Service Area and Map

To Our Fellow Shareholders

February 23, 1981



Chairman Meese President McCarthy
Vice Chairman Grove

The year 1980 was an eventful period of significant accomplishment in the face of serious challenges to management's ability to cope with a combination of adverse economic problems.

The recession, which began in mid-1979 in our service area, reached near depression levels in terms of its impact on automotive manufacturers, their suppliers, the Detroit community and the Company. The resulting substantially lower kilowatt-hour sales, down 7.2% from 1979, when combined with continuing double-digit inflation and record high interest rates, represented a serious problem for the Company.

In spite of the severe impact of these economic difficulties, the Company was nevertheless able to achieve the following results in 1980:

- A record level of revenues of more than \$1.8 billion.
- Total operation and maintenance expenses held to \$1.2 billion, up only 5.5% from 1979 despite inflation of about 13%.
- A record level of earnings for common stock of \$137.5 million, although earnings per share of \$1.75 were down 7.9% from the \$1.90 earned in 1979 because of an increase of 12.8% in the average number of common shares outstanding.
- A record level of capital expenditures of \$644.5 million required for new power plants and other facilities to meet our customers' future electric power needs.
- A record level of \$630.4 million of new capital raised to help finance the capital expenditure program.
- Completion of the unique \$800 million Belle River Project Financing arrangement with banks to help assure the orderly construction and completion on schedule of the Company's Belle River Power Plant.
- Power plant performance maintained at superior levels to help minimize fuel expense and customers' bills.
- Restoration of service promptly and efficiently after the most severe summer wind and rain storm in the Company's history.
- Michigan Public Service Commission approval of substantial rate increases in partial recognition of inflationary increases in the Company's costs of operation.

We are pleased that we were able to achieve these results under these adverse circumstances and restore earnings to an upward trend during the last half of 1980. While we shall continue our aggressive efforts to seek rate increases required to provide a reasonable return on your investment in the Company's common stock, the following other steps have been taken which we believe will also contribute to improved future operations and earnings:

- In an effort to improve and diversify the industrial base of our service area, we have intensified our activities, in cooperation with state and local agencies, to attract new industry to Southeastern Michigan. A plastics production plant, food processing facilities and a gasohol plant are among those seriously considering locating in our service area.
- Stringent cost control measures have continued, with a virtual freeze on hiring new employees and deferral or cancellation of construction projects whenever possible. The major project termination was the Greenwood Nos. 2 and 3 nuclear units,

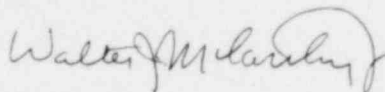
discussed later in this report. The elimination of this \$4 billion commitment from our capital expenditure program allows us to concentrate our efforts and resources on the completion of the Fermi No. 2 nuclear unit and the two coal-fired Belle River units.

- Our research and development program is directed to discovering new ways to conserve energy and to use it wisely and to finding new ways in which electricity can become the accepted form of energy through such promising devices as the electric heat pump and electric car. In light of the electric car's potential and concentration of automobile manufacturing in Detroit, Detroit Edison is taking an active role in encouraging its development, as discussed later in this report.
- An extensive power plant maintenance program is continuing, with a goal of increasing both efficiency and availability of our generating equipment. This enables us to generate the maximum amount of electricity through the use of lower cost coal-fired equipment which benefits the customer through lower energy costs and benefits the Company through higher revenues provided by the MPSC under its power plant system availability incentive provision.
- As part of our continuing effort to find new, more efficient ways to improve operations and customer service, a computerized materials management system was placed in service in 1980, with full operation scheduled for 1981. Through one computer data base, this new system will control the requisitioning, purchase, delivery, invoicing and payment of 350,000 transactions processed each year.

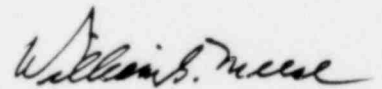
Despite the adverse effects of the current recession on the economy of our service area, major new industrial and commercial developments, including three significant auto industry expansions, are continuing. General Motors has announced plans to build two new automobile assembly plants, one in a redevelopment area of Detroit and adjoining Hamtramck for the Cadillac Motor Division and another in Orion Township for the Pontiac Motor Division. The third major addition is a new assembly plant by Volkswagen in Sterling Heights, resulting from the conversion of an idle Federal government facility. Developments such as these will help improve the economy of our service area and will add to our future sales of electricity.

These are only a few of the many programs and developments currently under way. With the support and cooperation of a dedicated and productive work force of about 10,800 employees, we will continue to find new and better ways to meet future challenges. We remain committed to meeting our obligation to our shareholders and customers and to assuring an adequate and reliable supply of electricity for Southeastern Michigan.

Sincerely,



Walter J. McCarthy, Jr.
President
and
Chief Operating Officer



William G. Meese
Chairman of the Board
and
Chief Executive Officer



Ernest L. Grove, Jr.
Vice Chairman of the Board
and
Chief Financial Officer

Revenues Increase as Sales Decline

Revenues at New High

Revenues for 1980 reached a new record level of more than \$1.8 billion, an increase of \$114 million, or 6.7%, over 1979. With kilowatthour sales down for the year, this increase was made possible by higher rates authorized by the Michigan Public Service Commission and by the recovery of increased fuel costs through the fuel and purchased power clauses in the Company's rate schedule.

Kilowatthour Sales Sharply Lower

The severe recession, which began in our service area in mid-1979, continued to depress sales of electricity. Total sales of 34.2 billion kilowatthours were 7.2% under the 36.9 billion kilowatthours sold in 1979. This is the second consecutive year sales decreased, with 1979 sales 0.7% below 1978.

Residential sales of 10.4 billion kilowatthours were 1.2% higher than 1979. This small increase reflected the positive effect of a somewhat warmer summer than 1979 and sales to new customers added in 1980. The number of kilowatthours used per average customer was almost the same as 1979, mainly as a result of continued conservation efforts by our customers. The average residential customer used 6,408 kilowatthours during the year, an increase of six kilowatthours over 1979.

Commercial sales were slightly higher in 1980, with sales of 6.3 billion kilowatthours showing an increase of 0.2% over 1979. Commercial sales have increased for each of the past six years, reflecting the effect of new or expanded office buildings and retail businesses. The only year in which sales to these customers declined was during 1974, following the OPEC oil embargo and the resulting energy conservation and recession.

The greatest impact from the current recession has been on the industrial class, with sales of 15.5 billion kilowatthours, down 13.9% from 1979. Lower sales volumes were especially evident in the automotive and steel

industries, with decreases from last year of 20.1% and 17.1%, respectively. Although decreases during the last several months of the year have moderated somewhat, recovery by these industries still continues to be relatively slow. While customer acceptance of the new lines of smaller, higher gas mileage cars seems to be generally good, extremely high interest rates continue to deter people from financing the purchase of new automobiles. As pointed out in another part of this report, each of the major manufacturers now produces a significant portion of these new, smaller cars in Detroit Edison's service area. Recovery of the industry is extremely important to us and, indeed, to the whole State of Michigan and the Nation.

Earnings Per Share Decline

Although earnings for common stock reached a new record of \$137.5 million, up 3.7% over 1979, earnings per share were lower during 1980 because of the greater number of shares outstanding. On a per share basis, earnings for the year were \$1.75, down 7.9% from the \$1.90 earned in 1979.

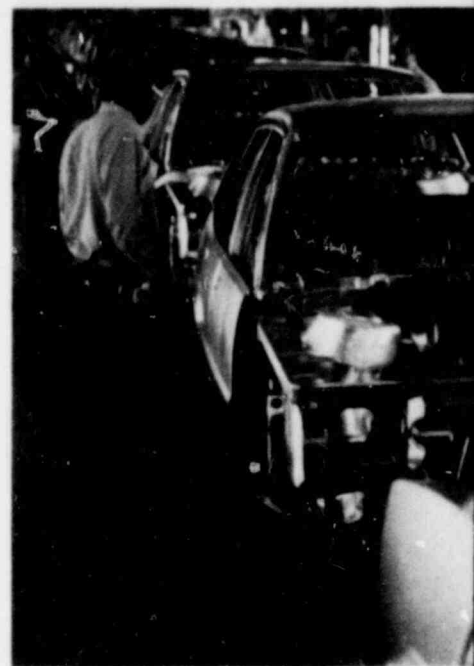
The average number of common shares in 1980 was 78.8 million, an increase of 8.9 million shares over 1979. This increase resulted from the two public sales of common stock, shares sold through the Dividend Reinvestment and Common Share Purchase Plan and shares issued as a result of the continuing conversion of the 5½% Convertible Preferred Stock into common shares.

Dividend Level Unchanged

The Company paid its 287th consecutive quarterly dividend on January 15, 1981. Because of the effect of the recession, the common stock dividend for 1980 was held at the \$1.60 rate established in 1979. The combination of continuing double-digit inflation, substantially lower kilowatthour sales and more shares outstanding have been very difficult to overcome even with large rate increases. We are aware of the need to increase earnings levels to support regular dividend increases, in order to provide returns sufficient to offset the effect of inflation on the income received by our shareholders and to continue to attract investors to our Company.

Expenses Tightly Controlled

Operation and maintenance expenses have been held as low as possible through an extensive and continuing



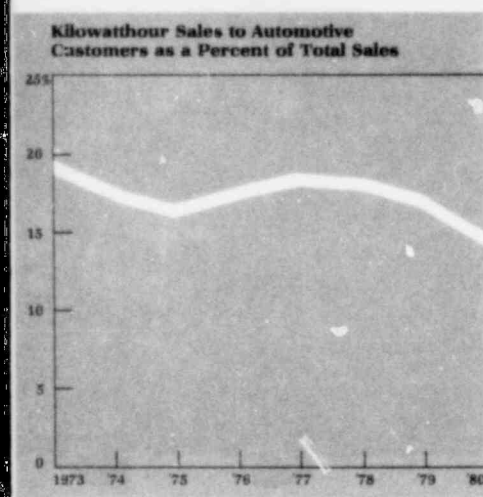
cost control program. In spite of inflation, total operation and maintenance expenses were held to \$1.2 billion, an increase of only 5.5% over 1979. Operation and maintenance expenses, excluding fuel and purchased power, increased 7.3% during the year.

Despite lower kilowatthour sales, the total cost of fuel and purchased power increased during the year because of higher unit fuel prices. Expressed in terms of heat value per unit of energy, the cost of all fuels rose from 163.4¢ per million Btu in 1979 to 178.3¢ in 1980, an increase of 9.1%. Fortunately, the cost of fuel reflected in our customers' bills is influenced by the type of fuel used. In 1980 over 90% of our kilowatthour generation was met with coal-fired units, the highest ratio in many years. With the cost of coal less than half that of oil, the benefits to our customers are substantial.

Maintenance expenses for the year were \$133.3 million, an increase of \$4.7 million, or 3.6%, over 1979. The largest part of this increase was associated with power plant maintenance. Power plant availability continued to be very good, averaging 84.48% for 1980, only slightly lower than the record level of 86.01% achieved in 1979. Our plants continue to be maintained in good condition.

Total Taxes Decline

Since income for tax purposes was lower in 1980, income taxes were also lower. As a result, total taxes charged to operations of \$152.5 million were \$1.7 million, or 1.1% lower than in



1979. Property and excise taxes, however, continued to increase as plant investment increased. These taxes totalled \$94.3 million, an increase of \$12.8 million over 1979. Total taxes are equivalent to \$1.94 per share, or more than the \$1.60 dividend paid to shareholders in 1980.

Interest Costs Soar

Record-breaking interest rates during 1980 resulted in substantial increases in the Company's financing costs for new issues of securities, as well as for all borrowings with rates which change with the prime rate. As a result, total interest charges, including that portion capitalized as part of the cost of constructing new facilities, reached \$233.3 million, an increase of 27.4% over the level in 1979.



With automotive customers a large part of our business, it is important that the new lines of fuel efficient, smaller cars be accepted by the American public. Each of the major manufacturers is producing a substantial portion of these new models in our service area.

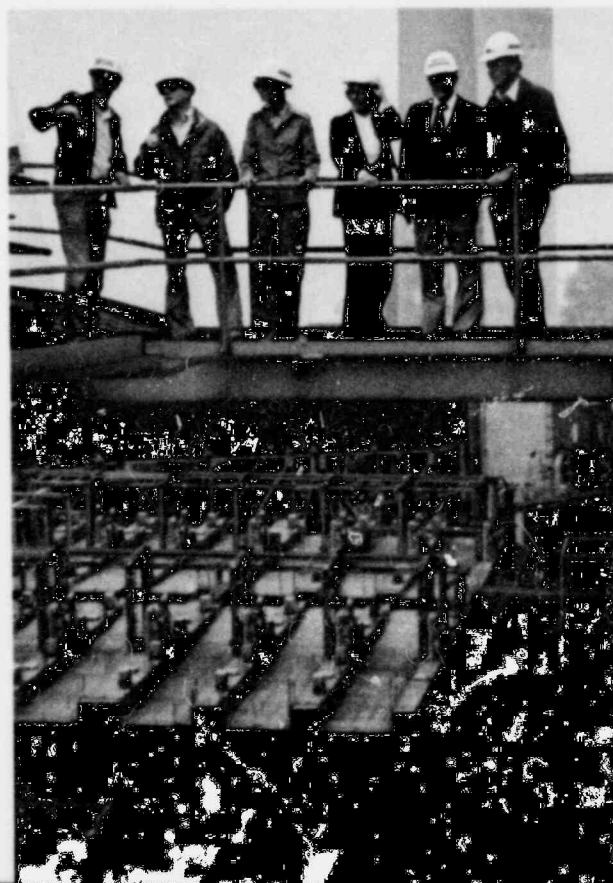


Financing Levels High

Largest Financing Ever

The highest level of capital expenditures in the Company's history, combined with the need to retire \$144 million of short-term debt outstanding at the end of 1979 and to refund outstanding issues which matured in 1980, required a record level of outside financing during 1980. A total of \$630.4 million was completed, including the \$800 million Belle River Project Financing described later.

Many types of financings were carried out through both private and public sales in 1980 in order to raise the large amount of new capital required. Early in January a public sale of \$50 million in intermediate term seven-year mortgage bonds was completed. A second mortgage bond issue of \$100 million, with a 20-year life, was sold to a group of 21 institutional investors and completed at mid-year. A tax-exempt pollution control revenue bond issue of \$40 million was publicly sold in August. Two issues of preferred stock were sold, with a 400,000 share public issue in May and a private placement of 250,000 shares to a group of institutional purchasers completed in December. There were also two common stock issues during the year, with 4,000,000 shares sold in May and 2,250,000 shares sold in December. In addition, 2,933,756 common shares



Top: Construction of cement supports and structural steel on the Belle River Power Plant is well underway.

Above: Ernest L. Grove, Jr., Vice Chairman of the Board (bottom center), signs the documents completing the \$800 million Belle River Project Financing as Senior Attorney Thomas P. Bingman, Jr. (top left), Assistant Treasurer Christopher C. Arvani (top, third from left), John C. Kennedy, Treasurer (top right) and representatives of Citibank and Barclays Bank, lead banks in the financing, look on.

Left: Regional Representative Weston F. Raven (right) guides officials of St. Clair County on a tour of the St. Clair Power Plant, where they were shown pollution control equipment financed by tax-exempt bonds sponsored by the County.

were sold throughout the year through the Dividend Reinvestment and Common Share Purchase Plan. Two unsecured financings were also completed in 1980, \$50 million with two New York banks in January and the \$800 million Belle River Project Financing in May. In 1980 \$212.7 was borrowed under the Belle River Project Financing.

1980 Financing

Type of Security and Month Sold	Gross Amount (Millions)	Cost to Company (After Expenses)
Mortgage Bonds		
January	\$ 50	13.0%
July	100	12.8%
Unsecured Term Notes		
January	50	11.1%
May-December	212.7*	
Pollution Control Bonds		
August	40.1	10.0%
Preferred Stock		
May	40	13.1%
December	25	13.6%
Common Stock		
May (4,000,000 shares)	52.5	
December (2,250,000 shares)	25	
Dividend Reinvestment (2,933,756 shares)	<u>35.1</u>	
Total	\$630.4	

*Borrowing under the Belle River Project Financing

\$800 Million Belle River Project Financing Completed

In May, an agreement was reached with a group of 29 U.S. and foreign banks to finance the cost of Belle River Unit No. 1 and those facilities used in common with Belle River Unit No. 2. This financing, unique because of its innovative design and magnitude, is the largest project financing of this type arranged for an investor-owned electric utility. The group of banks is led by Citibank, N.A. and Barclays Bank International Limited, with Citibank acting as agent for the banks.

The initial borrowing under the credit agreement was made upon completion of the arrangement on May 13, 1980. This drawdown of \$99.5 million represented the project expenditures which had been made to date, including capitalized interest. Subsequent drawdowns took place on a monthly basis in 1980 and future drawdowns will take place throughout the unit's construction period. Total borrowing under the agreement is limited to \$800 million, including the interest and commitment fee which will be capitalized and financed as part of the borrowing. Interest on the loan is based on a floating rate tied to the prime rate,

with the commitment fee payable on the unused portion of the borrowing.

Repayment of the loans will begin no later than January 1, 1985, with quarterly payments of \$50 million. The Company also has the option to begin repayment at an earlier date, with no penalty for early repayment.

The financing was designed to provide an assured source of funds for the project during the construction period, when large sums of money, which must be financed from conventional market funds, are also required for the Fermi No. 2 and Belle River No. 2 units. Repayment of the loan, during a later period of much lower anticipated construction and financing requirements, is expected to be financed through the sale of mortgage bonds.

Future Financing Large

The Company's extensive capital expenditure program, coupled with the need to meet maturity and sinking fund payments on debt, preferred stock and preference stock, will require large amounts of external financing over the next several years. It is presently estimated that more than \$600 million in external funds will be required in 1981, including amounts expected to be borrowed under the Belle River Project Financing and amounts expected to be realized through the Dividend Reinvestment and Common Share Purchase Plan. The amount of outside financing is expected to be even greater in 1982 and 1983. The amounts and timing of issues of securities in 1981 have not been determined at this time, and will depend on market conditions at the time and the maintenance of a balanced capital structure throughout the period.

Dividend Reinvestment is Significant

The Company's Dividend Reinvestment and Common Share Purchase Plan continues to be very popular with our shareholders and provides a substantial amount of funds to the Company. At year-end a total of 41,200 shareholders, or 16% of those eligible to do so, were participating in the plan. Total funds invested during the year were \$35.1 million, an increase of \$0.8 million, or 44.4%, over 1979. Of this amount \$23.5 million represented reinvested dividends, which qualify for the purchase of stock at a 5% discount from market price. The remaining

\$11.6 million were cash payments, which purchase shares at the market price. No service or other charge is added to the price paid by the shareholder, since all operating costs are borne by the Company. Any shareholder who wishes to enroll in the plan may obtain an enrollment card and prospectus by writing to Detroit Edison, Box 380-A, Detroit, Michigan 48232.

Shareholders Increase

The number of shareholders of the Company continues to increase, with 234,689 at year-end. This is an increase of 3,183 shareholders, or 1.4% over a year ago. The sale of new shares during the year, plus growth through regular market purchases, contributed to this increase.

A large number of shareholders continue to hold relatively few shares, with over 79% of all shareholders owning 300 shares or less. It is also significant that about 52% of our shareholders reside in Michigan, with many of these being Detroit Edison customers.

As we market new shares, we find that many shares are purchased by current shareholders and customers in Michigan. This solid base of support is appreciated.

Distribution of Ownership of Detroit Edison Common Stock, December 31, 1980

By Type of Owner

	Owners	Shares
Individuals	114,416	25,734,071
Joint Accounts	108,556	28,271,835
Trust Accounts	7,681	3,232,753
Nominees	660	23,464,644
Institutions and Foundations	410	199,860
Brokers and Security Dealers	63	356,188
Others	2,903	2,773,467
Total	234,689	84,032,618

By State and Country

	Owners	Shares
Michigan	121,953	39,235,913
Florida	18,758	5,727,020
California	13,639	3,965,980
New York	12,278	17,967,518
Illinois	10,373	2,913,208
Ohio	7,665	1,726,047
44 Other States	49,170	12,249,624
Foreign Countries	853	247,308
Total	234,689	84,032,618

Many Rate Activities Underway

Major Rate Case Completed

A final order in the Company's major electric rate case, filed on December 14, 1978, was issued by the Michigan Public Service Commission on March 14, 1980. This rate order granted an additional \$75.8 million over the \$56.9 million interim increase granted by the Commission in mid-1979, for a total increase of \$132.7 million.

The final order included the major features recommended in the Administrative Law Judge's proposal for decision, as reported to you in last year's Annual Report. The MPSC provided for a continuation of the operation and maintenance indexing and the power plant system generating availability incentive provisions, both of which were adopted in prior rate cases. The authorized rate of return on average common equity was maintained at 13.5%, the same level as in the last two rate cases. In addition, the Commission's order provides for monthly reading of all customer meters, a change from the prior system of estimating customer usage on alternate months.

New Rate Case Filed and Interim Increase Granted

Since the general rate increase granted by the MPSC on March 14, 1980 was less than the amount required by the Company and was received after a long delay, the Company was not in a position to earn a fair and adequate return on its investment in 1980. It was, therefore, necessary to apply for a further increase, which was done on April 30, 1980. The total increase requested was \$463 million, based on a three-step increase. The first interim increase of \$155 million, based on a 1980 test year, was requested as early as possible in 1980. The second interim increase of \$162 million, based on a 1981 test year, was

requested to become effective January 1, 1981, since it was necessary to have the higher rates in effect for the entire year if the Company were to have any opportunity to earn the rate of return presently authorized by the MPSC. The final increase of \$146 million was requested to cover a higher authorized rate of return, higher depreciation rates, amortization of the costs associated with the decision not to construct the proposed Greenwood Nos. 2 and 3 nuclear units and the effect of an order issued by the MPSC in a generic proceeding concerning construction work in progress.

Hearings began in July, 1980 and were concluded in November, 1980. An interim increase of \$96.1 million was granted by the MPSC on November 6, 1980. Although less than the first interim increase requested by the Company, the Commission action did recognize the urgent need to offset at least in part the effects of high inflation and interest rates on the Company's ability to adequately serve its customers. The Company is presently awaiting a final decision by the Commission.

Other Rate Increases Granted

Under the operation and maintenance expense indexing procedure, established by the MPSC in its September, 1978 rate order, the Company was permitted to increase rates \$32.7 million, effective February 1, 1980, based upon an increase of 12.04% in the Consumer Price Index. Under this same program, another increase of \$39.2 million was granted effective February 1, 1981, based upon an increase of 12.69% in the CPI.

Under the MPSC power plant system generating availability incentive provision, an increase of \$12.4 million was made effective on June 10, 1980. This increase was based on the achievement of a record power plant availability of 86.01% for 1979. Under the MPSC provision, availability above 85% entitles the Company to earn an additional one-half of one percent return on common equity above the authorized level of 13.5%.

During the year, the MPSC also approved rate increases applicable to the Company's steam heating customers and allowed the recovery of increased fuel costs through the fuel and purchased power clauses in the Company's rate schedule.

Rates to the Company's seven wholesale for resale customers were increased \$4.2 million, effective April

1, 1980. In that case a negotiated settlement, agreed to by the Company and the wholesale customers, was accepted by the Federal Energy Regulatory Commission on January 17, 1980. Current negotiations with the wholesale customers have resulted in an agreement to increase rates by an additional \$5.8 million, effective May 1, 1981. This settlement is pending before the FERC for approval.

Customer Concern Important

Throughout the Company's history, various programs have been in effect which are aimed at providing good customer service. In recent years, the emphasis has shifted to methods of conservation, bill payment counseling, assistance to senior citizens and other energy assistance matters. In addition to ongoing programs from prior years, several new services were initiated in 1980. These include:

- Television, radio and newspaper messages, using real-life examples such as a laid off worker, hospitalized person or senior citizen, show customers how help with an electric bill is available to those who need it.

- Various Company television commercials aimed at avoiding service cut-offs, bill payment counseling, etc have as an inset a person repeating the message in sign language for those who have hearing problems.

- In cooperation with the Michigan Consolidated Gas Company, two energy assistance centers have been opened in the City of Detroit to help customers in applying for energy assistance funds, arrange for partial payment of utility bills, obtain energy information or receive counseling on energy related matters.

- Company representatives are present at two Neighborhood Service Centers, operated by the City of Detroit, to provide customers assistance with any utility questions or problems.

- To assist those who are deaf or have speech problems, a device has been installed in our Detroit Division customer telephone center to allow them to communicate with the Company. The device transmits words over telephone lines, allowing anyone with similar equipment in their home to carry on a "conversation" with us in a written form on a video screen or typed on paper.

These new services are the latest in a series of steps in our "Help Us, Help You" communication program which began in 1979.



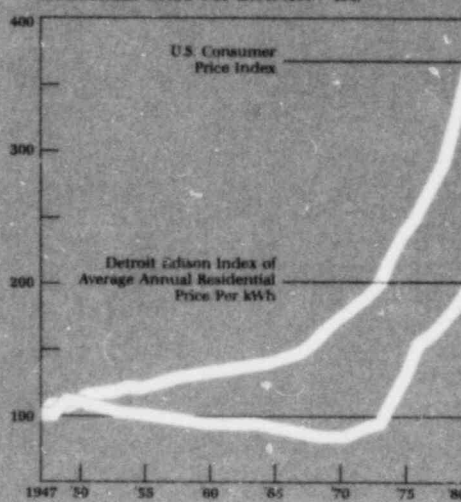
Domestic Electric Bills (Net)

For 500 kWh/Month, for selected Cities
as of December 31, 1980
(Includes Fuel and Purchased Power Adjustments)

NEW YORK	\$52.07
BOSTON	\$46.31
JACKSONVILLE*	\$40.40
PHILADELPHIA	\$38.68
LOS ANGELES*	\$34.28
CHICAGO	\$33.32
CLEVELAND	\$33.03
RICHMOND, VA	\$32.87
BALTIMORE	\$31.81
DETROIT EDISON	\$31.23
JACKSON, MI	\$27.11
WASH., D.C.	\$25.40
ST. LOUIS	\$21.78

*Municipally Owned

U.S. Consumer Price Index vs. Residential Price Per kWh (1947=100)



Comparison of Annual Residential Bill to Median Family Income

Year	Michigan Median Family Income*	Average Annual Residential Bill		Average Annual kWh Use Per Customer
		Amount	% of Income	
1959	\$ 6,256	\$ 90.49	1.45%	3,366
1969	11,032	130.02	1.18	5,563
1973	13,922	175.76	1.26	6,560
1974	14,537	196.21	1.35	6,330
1975	15,385	238.90	1.55	6,514
1976	16,954	263.71	1.56	6,518
1977	18,395	296.20	1.61	6,616
1978	19,776	313.08	1.58	6,529
1979	21,275	326.92	1.54	6,402
1980	22,205	359.86	1.62	6,408

*Source: 1959, 1969 and 1975—U.S. Department of Commerce. Estimate for other years based on percentage change in Michigan average weekly earnings in private employment.



Upper Left: Ernest L. Grove, Jr., Vice Chairman of the Board, holds a press conference to disclose the filing of a \$463 million dollar rate increase request with the Michigan Public Service Commission.

Upper Right: Leni J. Oblak, Staff Assistant in Customer Relations (left), discusses with a customer the various Company programs available to provide assistance to customers.

Above: Residential Market Planner Sheila L. Anthony (right) describes the many outdoor lighting options available to a young couple at the Detroit Builders Show.

Cost of Construction Program Increases

Capital Expenditures at Record Level

Capital expenditures of \$644.5 million in 1980 were the highest in the Company's history. The largest expenditures were for the construction of the Fermi and Belle River generating units and for environmental projects at the Monroe and St. Clair power plants.

The Monroe fuels and emissions project, a coal handling and blending facility, is scheduled for completion in 1983. The conversion of St. Clair Unit No. 6 from high-sulfur to low-sulfur coal is to be completed in 1982. These projects are required in order to meet the clean air standards established by the Federal government.

The 1981 capital expenditure program is budgeted for \$875 million, reflecting particularly the very high level of construction on the four projects mentioned above.



Above: A contract firm's welder works on structural steel being erected at the St. Clair Power Plant, part of the new precipitator being built to meet pollution control requirements.

Top Right: Aerial view of the Enrico Fermi Power Plant and its cooling towers, with construction well along to a 1983 in-service date.

Bottom Left: The blending of low and high sulfur coal will take place at the Monroe Power Plant with this new facility now under construction.

Bottom Right: The mid-summer wind storm which struck our area toppled power lines and trees over an 800-square mile area.



Fermi and Belle River Costs Increase and In-Service Dates Delayed

A combination of factors has resulted in significant cost increases and delayed in-service dates for both the Fermi nuclear and the Belle River coal-fired power plants. While such increases can be expected in today's inflationary economy and with the ever-increasing cost to meet more stringent safety and pollution control requirements, the increases place a significant additional financing burden on the Company. With a limited amount of funds for construction available from operations, any cost increases must be met by increasing the amounts and frequency of external financing.

Enrico Fermi No. 2, a 1,100 MW nuclear unit, was previously scheduled for service in March, 1982, and was expected to cost a total of \$1.3 billion. As a result of the many changes which must be made to meet the ad-

ditional safety-related systems required by the Nuclear Regulatory Commission and those recommended by Detroit Edison's own safety review committee, the in-service date has been delayed to at least November, 1983. The costs required for the many changes and the 20-month delay have increased the estimate of the plant's cost to \$1.8 billion.

Belle River Units No. 1 and 2, with a rating of 675 MW each and designed to burn low-sulfur coal, were delayed from March, 1984 and 1985, respectively, to July, 1984 and 1985. A complete review of the project, based on engineering and design data which were not complete when the prior estimate was prepared, increased the total cost of the project from \$1.37 billion to \$1.85 billion.

Greenwood Nuclear Units Not To Be Constructed

On March 24, 1980, the decision not to construct the \$4 billion Greenwood Nos. 2 and 3 nuclear units was announced. This decision was based on several factors, including uncertainty about licensing and other governmental policies, the poor state of the economy and capital markets and the uncertainty that the project could be completed within current cost estimates.

The Greenwood units were still in the early design stages. In fact, the project had been virtually inactive since the 1979 accident at the Three Mile Island plant in Pennsylvania.

Total engineering and licensing costs, including interest, incurred for the Greenwood nuclear units were about \$71 million. Application was made to the MPSC in April for approval to defer these costs as a charge against income until the costs can be considered for rate making treatment and recovered through customer billings over a 60-month period. Hearings began in December and are continuing.

Peak Demand Lower

Peak electrical demand on the Company's system was 6,703,000 kilowatts in 1980, a decrease of 1.8% from 1979.

This is the third consecutive year in which peak demand has decreased, after reaching a record high of 7,381,000 kilowatts in 1977.

Present forecasts indicate slightly lower long-term growth in demand than had been expected previously. The estimated compound annual rate of growth in peak demand is 2.3%, using 1978 as a base year, as compared to 2.8% forecast a year ago.

Severe Wind Storm Strikes

High winds and heavy rain, causing the most severe summer storm in the Company's history, struck the suburbs west and southwest of Detroit on the morning of July 16, 1980. Detroit Edison facilities over an 800-square mile area were severely damaged.

About 35 substations and 200 distribution circuits, serving over 300,000 customers, were out of service. Toppled trees and other hazards blocked access to streets and downed lines, making restoration efforts difficult. More than 500 utility poles were broken, including 12 steel towers which fell. About 8,000 spans of wire, the equivalent of 700 miles of overhead lines, were down. By the next morning, 347 Company line crews and 154 contract crews were at work in the damaged area. Assistance from other utilities was requested, and a total of 101 crews from Cleveland Electric Illuminating, Toledo Edison, Ohio Edison and Commonwealth Edison soon began working along with Company and contract crews on 16-hour shifts.

As this restoration effort was underway, a second storm hit the area on July 20, 1980, causing outages to an additional 15,000 customers. At this point a total force of over 5,300 worked to restore service.

Total restoration costs chargeable to operations were approximately \$9.7 million. An application is pending before the MPSC requesting approval to amortize these costs, which have been deferred as a charge against income, over a five-year period for accounting and rate-making purposes.

New Generating Units

Plant	Size	Fuel	Expenditures		Estimated Earliest Completion Date
			Actual to Date (12/31/80) (Millions)	Estimated Total Cost (Millions)	
Enrico Fermi Unit No. 2*	1,100 MW	Nuclear	\$1,104	\$1,800	1983
Belle River Unit Nos. 1 & 2	675 MW ea	Coal	292	1,850	1984, 1985

*Includes the 20% interest of two Michigan Cooperatives



Research, Conservation and the Environment Have High Priority

Wind Turbine Being Studied

As part of an on-going program of studying alternative methods of meeting energy needs, the Company is a member of a Michigan group studying the potential of a large wind-driven turbine generating system. This group, comprised of six Michigan utilities, Michigan State University and the Michigan Department of Natural Resources, has equipped an area of the Lake Michigan shoreline at the Ludington State Park with wind measuring equipment which was provided by the U.S. Department of Energy. The DOE will consider further assistance in the actual construction of three 2,500 kilowatt wind turbines if the test shows there is enough wind at the site.

Passive Solar Home Built

The Company is working on seven solar energy projects, including the

construction of a passive solar home. The projects are aimed at determining how the use of electric energy can best be integrated with the various applications of solar energy.

The passive solar home is a cooperative effort among Detroit Edison, the Bing Construction Company, the Builders Association of Southeastern Michigan and organizations which are contributing technical assistance, supplies, material and equipment. The term "passive" refers to the fact that only natural methods of collecting, storing and releasing heat from the sun's rays are used, instead of solar panels and mechanical equipment. Sunlight entering through an expanse of windows will heat walls and floors made of solid masonry. Some of the heat is released into the home immediately and the rest stored in the masonry for release during the night. This system is expected to provide about half of the home's winter heating needs, with the remaining requirements met by an electric heat

pump. The home will be open for public inspection for about a year, after which it will be sold but still monitored for an additional two years.

Vehicles Use Various Fuels

With 2,750 motor vehicles of all kinds in the Company's fleet, the most economical form of fuel is of vital importance. At the present time this fleet requires each month about 185,000 gallons of gasoline and about 16,000 gallons of diesel fuel.

Studies are now underway to determine the economics and feasibility of using other forms of fuel to power this fleet. The following tests were carried on throughout the year:

- Gasohol - Six vehicles burn gasohol and are being used for parts pick-up and road service.
- Propane - Two vehicles, used for hauling line materials, have been converted to burn propane gas.
- Electric - Three vehicles, part of a continuing program over the past several years, are electrically powered.



Above: Claudia A. Graham and Gregory Ostrowski, employee of the New Technology Marketing group, view the interior of an electric car which will be available for testing by employees.

Right: Gregory H. Presley, Engineering Research, Gerald G. Goetz, Oakland Division and William H. Hollar, Director of Industry Trade Group Services (left to right), review building plans of the passive solar home in its early stages of construction.

Upper Right: An aluminum line truck, with its much lighter weight, offers better fuel economy and lower maintenance costs.

Lower Right: The water cannon at the St. Clair Power Plant is one of many improvements made to control dust from the coal piles.



These vehicles are used mainly for deliveries in the Downtown Detroit area.

Aluminum Line Trucks Used

Over the past several years, extensive testing has been done with diesel-powered trucks with aluminum bodies. These tests have proven very successful, with the following advantages realized:

- Diesel fuel is more economical than gasoline for powering the vehicle.
- The approximately 25% less weight because of the aluminum body further reduces fuel consumption.
- The lower weight allows the trucks to meet winter weight restrictions on certain Michigan roads. The Company's heavier trucks are prohibited from using some roads during winter months.
- Maintenance intervals have been extended because of the lower weight.

Thirty-one of these trucks are in use throughout our system, with another ten on order for future delivery.

Electric Cars Offer Much Potential

Recognizing the future importance of

electric cars to Detroit Edison, both from the standpoint of electric energy required for charging batteries and the importance of the manufacture of automobiles to our service area, the Company is taking a very active role in its development.

The Company purchased its first modern electric car in 1977 and has added two more since then to enable us to acquire basic information relative to its capabilities. All responsibility for data collection, testing, demonstrations, etc. has been centralized within the Company to insure a complete and well-documented program. We have also begun a communication program designed to inform the public and prepare them for such a product when it is marketed.

The Company will soon have in operation a complete electric vehicle service center in Downtown Detroit, to be used for maintenance, battery testing, research and other functions relating to electric vehicles.

As part of a U.S. Department of

and cost of charging.

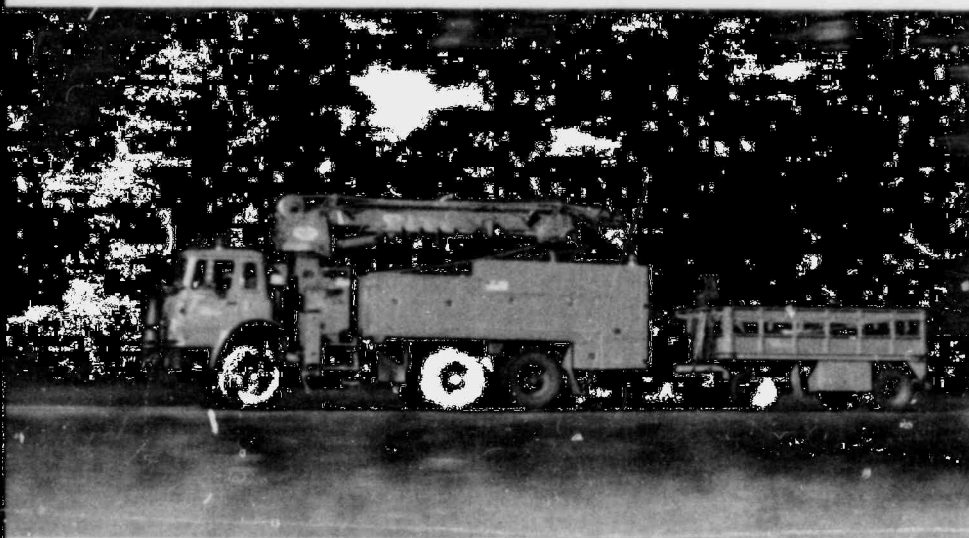
In addition to the programs being carried out within the Company, we are also exploring cooperative efforts with potential manufacturers of electric vehicles.

Dust Controlled at St. Clair

With some homes as close as 200 feet to the unloading equipment and coal storage areas of the St. Clair power plant, dust control has been a matter of continuing concern. With the plant now burning about three million tons of western low-sulfur coal a year, handling and storing the coal without creating a dust problem is not a simple task. Four major operations had to be considered: the coal unloading point; storage areas; the handling system used to transport coal; and the ash removal system. The following major improvements were made:

- A new belt scraper system, designed to remove dust clinging to the belt, was installed.
- Conveyor belt seals were modified in an effort to eliminate dust which would otherwise pass through to the atmosphere at these points.
- An extensive water spraying system to keep dust from blowing about was installed on the conveyor belt and in the ship's storage hold.
- An earth berm was constructed near the coal storage area to help shield nearby residential areas. Trees were also planted in these areas.
- Portions of the coal piles were covered with a mixture of mulched straw and asphalt to contain the dust which would otherwise blow off.
- A special 10,000 gallon water wagon regularly sprays water on both the coal storage piles and the various roads within the storage area.
- A 30-foot chute is used to feed coal into the plant, replacing the prior system where the coal merely fell free and was exposed to the wind.
- A special foam, which resembles shaving cream, is used as a wetting agent at several locations.

Throughout this program, meetings were held with nearby residents to keep them informed of progress being made. The St. Clair project is just another example of the many efforts of the Company to carry on its business in a sensitive manner consistent with concern for the environment.



Energy electric vehicle demonstration program, the Company will soon be receiving 24 electric cars. Six of the cars will be used as part of the pool car fleet, two for security patrols and the remaining 16 will be leased to employees for their personal use. A six-month lease agreement will be signed with each employee chosen for the program. This agreement will detail the monthly cost to be paid by the employee, the employee's responsibility for data collection and regular visits to a central operation center for checking and service. Each employee's home will be specially wired for battery charging, so that pertinent data can be collected as to duration

Organization and Corporate Affairs

Director and Officer Changes

At the Annual Meeting of Shareholders, held in Detroit on April 28, 1980, thirteen incumbent directors were re-elected for a period of one year. Two new directors, David M. Gates, Director of the Biological Station and Professor of Botany at the University of Michigan and Charles M. Heidel, Executive Vice President-Operations at Detroit Edison, were also elected to serve on the Board for the coming year. These two new directors fill the director vacancies created by the retirement of John R. Hamann and Kenneth D. Nichols, who reached mandatory retirement age. Mr. Hamann, former Vice Chairman of the Board, had been a Director since 1975 and a Company employee since 1936. Mr. Nichols, a retired U.S. Army Major General, had served on the Board since 1962. The Company appreciates the many years of outstanding service both gentlemen provided.

At the Board of Directors meeting in January, 1980, Mr. Ernest L. Grove, Jr. was elected Vice Chairman of the Board effective February 1, 1980, to replace Mr. Hamann, who retired on that date. Mr. Grove, previously Senior Executive Vice President-Finance, will continue as the Company's chief financial officer.

At the October, 1980 Board of Directors meeting, Mr. Robert O. Wagner was named Vice President-Rates and Financial Evaluation. He was previously Assistant Vice President-Rates and Financial Evaluation.

More Shares Authorized

At the annual meeting common shareholders also approved increases in the number of authorized shares of common stock from 85 million to 125 million, the number of authorized shares of preferred stock from 6 million to 9 million and the number of authorized shares of preference stock from 10 million to 20 million.

At special meetings of preferred and preference shareholders held on November 13, 1980, the two groups granted their approval of the increase

in authorized preferred and preference shares.

Employee Development Important

As part of the Company's Management and Professional Development Program, a review has been made of all management and supervisory positions to determine that potential replacements are available. All levels of supervision participated. This review not only enabled us to determine future needs in each area, but also provided an inventory of employees qualified to meet these needs.

Detroit Edison received the 1980 Employer Award from the Detroit Chapter of the American Society for Training and Development. This recognition was provided for outstanding support in the development of human resources. The basis for the award was the Company's recently implemented "Initial Professional Development Program." Under this three-year program, new employees, primarily college graduates, are prepared for more responsible and sophisticated assignments in various areas of the Company.

For a number of years, the Company has used advanced training methods for developing the technical skills of non-supervisory employees. Mainly self-instructional procedures require minimal instructor input, thus reducing both training time and cost. With the recent completion of a new Technical Training Center, training functions are now largely consolidated in one building formerly used for customer service activities. There are a number of other programs carried out on a regular basis, all designed to better prepare our employees to meet future challenges by improving their skills.

Employees Decrease

In view of the depressed sales experienced by the Company and poor economic conditions in our service area, normal cost control measures have been tightened even further, including continuing strict control of all hiring and replacement of employees. As a result, at the end of 1980 the number of employees was 10,789 a decrease of 119 since the end of 1979.

The total work force is presently at a level which is 3.5% below the number of employees ten years ago. This smaller number of employees is operating a system with 34.3% greater generating capability and serving 15.4% more customers. Our employees

are to be commended for this accomplishment.

Minority Efforts Continue

Although hiring was restricted in 1980 every effort was made to continue our commitment to increase minorities and women in our work force. With this effort it was possible to make some improvements in both categories with minorities comprising 15.7% of year-end employees and women 16.4%.

Health and Personal Problem Assistance for Employees

Efforts relating to employee health programs and employee assistance with personal problems were expanded in 1980. Employees have been encouraged to take responsibility for their own good health through educational programs and lectures on such subjects as heart disease, diabetes, high blood pressure, alcoholism and cancer.

The Company program to assist employees with personal problems that could interfere with job performance was also more active. Counsel is provided to employees in areas involving mental health, drug abuse, alcoholism and family or marital problems. When necessary, referrals are made to proper community agencies for further assistance.

These programs are not only beneficial to employees, but to the Company as well. Healthy employees are more productive and contribute to improved Company operations.

Union Contract Renegotiated

In August the Company negotiated a new three-year contract with Local 17 of the International Brotherhood of Electrical Workers, covering about 750 employees in overhead lines and related areas. The contract, ratified by the union on August 25, 1980, extends the agreement to August, 1983.

Although the settlement was within Federal wage-price guidelines, it nevertheless adds significantly to the Company's labor cost. A wage increase in each year of the contract, continuation of the full cost of living adjustment, increased early retirement benefits, improved health, dental and vision care insurance coverage and increased vacations were all part of the package. To help offset some of these increases, the new contract provides the opportunity to make productivity gains in several areas. There was also agreement to form a joint committee to study pro-

ductivity and working relationships in order to make further improvements.

Another three-year contract, covering about 3,500 employees in the construction, maintenance and operations areas, expires in June, 1981. These employees belong to Local 223 of the Utility Workers Union of America.

Annual Reports Win Awards

For the third consecutive year, Detroit Edison's Annual Report to Shareholders won a Nicholson Award in competition sponsored by the National Association of Investment Clubs. The award is based on effectiveness in providing pertinent information to meet the needs of the individual investor.

The 1979 Report received an award as the best annual report for a large electric utility in the central region of the country. Because of the large number of utility reports entered, the groups were split between large and small utilities and into three national regions. Judges rated reports on financial data, chairman's letter, management's analysis of the business, readability and attractiveness of the report and explicit and understandable



notes to the financial statements.

The NAIC is a group with almost 5,000 clubs throughout the country, with a total of over 50,000 members. The award is named after George A. Nicholson, Jr., who helped found the NAIC over 25 years ago.

Detroit Edison's Annual Report is prepared entirely within the Company, in contrast to many firms which hire outside agencies who specialize in this field to prepare their reports. Only the printing, for which the Company does not have facilities, is done outside the Company.



Top: Each of the last three years the Company's Annual Reports have won awards from the National Association of Investment Clubs.

Above Left: Power Plant Operator Michael F. Feiler checks information on a Greenwood Power Plant computer which monitors the operation of the generating unit or its sub-systems every three to five seconds.

Above: Training and Development Specialist Roosevelt King conducts a training session for power plant operators at the new Technical Training Center.

Left: Linemen John C. Hurtgam (left) and Patrick M. Fogarty (right) make repairs to a high voltage line switch, using a by-pass system which de-energizes the switch but keeps power flowing through the line.

Legal Efforts Protect the Company

Active Legal and Community and Governmental Affairs Efforts

The year 1980 was one of extraordinary legal activity and important achievements, including the following:

- Court approval was obtained for settlement of the employment discrimination case, after nine years of litigation, lifting the court order which had imposed severe restrictions on the Company's employment practices.

- The Company won dismissal in the United States Court of Appeals of a major class action lawsuit seeking over \$75 million in damages. The court rejected the claim that a 1972 Company prospectus did not properly disclose the effect on earnings of certain accounting items, and supported the Company's legal position by dismissing the suit.

- The United States Supreme Court agreed to review a legal challenge to the Montana severance tax, a challenge mounted under the leadership of Detroit Edison against a tax which could cost the Company and its customers over a billion dollars over the next 20 years.

- The Company successfully settled a number of lawsuits against manufacturers of equipment which we claimed was defective. The settlements included significant cash payments, technical improvements and other commercial benefits. The Company also negotiated several construction contract disputes on favorable terms which resulted in the reimbursement of expenses incurred due to deficient construction work

and in a substantial reduction of outstanding contractor claims.

- The Company successfully opposed in the courts an attempt by the Michigan Attorney General and a consumers group to block our 1980 financing program by challenging the Michigan Public Service Commission's authorization for the Company to issue its securities during the year. The Michigan Court of Appeals dismissed the challenge and also dismissed a later request for a delayed appeal. The appeal is presently before the Michigan Supreme Court.

- In an era of progressively larger verdicts in public liability cases, we have been able, through intensive legal activity, to maintain an exceptional record of resolving a large number of those cases against the Company on a very reasonable basis.

- In hard-fought actions before the Interstate Commerce Commission and the Courts, the Company won refunds of over \$9 million in freight rates that Detroit Edison had paid to ship coal by rail from Montana.

Some of the important community and governmental affairs developments include:

- A major effort which resulted in the Railroad Deregulation Bill being written in such a way that Detroit Edison customers may avoid millions of dollars of increases in freight rates over the next twenty years.

- Significant positive congressional action on bills which, if ultimately passed, will put a reasonable limit on state severance taxes, saving the Company and its customers hundreds of millions of dollars.

- Obtaining community approval of some \$83 million in pollution control revenue bonds.

- Helping obtain legislative approval for the extension of a state law insuring the validity of securities which are under challenge.

- Maintaining excellent relationships with the many local communities in which the Company's facilities are located and in which the Company serves customers.

Consolidated Financial Statements

Contents	Page
Responsibility for Financial Statements	17
Report of Independent Accountants	17
Consolidated Statement of Income	18
Consolidated Statement of Changes in Financial Position	19
Consolidated Balance Sheet	20-21
Consolidated Statement of Common Shareholders' Equity	22
Consolidated Statement of Cumulative Preferred and Preference Stock	23
Consolidated Statement of Long-Term Debt	24
Notes to Consolidated Financial Statements	25-33



Responsibility for Financial Statements

The consolidated financial statements of The Detroit Edison Company and subsidiary companies have been prepared by management in conformity with generally accepted accounting principles, based upon currently available facts and circumstances and management's best estimates and judgments of known conditions. It is the responsibility of management to assure the integrity and objectivity of such financial statements and to assure that these statements fairly report the financial position of the Company and the results of its operations.

To meet this responsibility, management maintains a high standard of record keeping and an effective system of internal controls, including an extensive program of internal audits, written administrative policies, and procedures to assure the selection and training of qualified personnel.

These financial statements have been examined by the Company's independent accountants, Price Waterhouse & Co. whose report appears below. Their examination was conducted in accordance with generally accepted auditing standards which include a review of internal

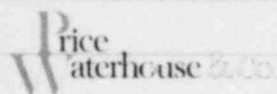
controls, as well as such other procedures they deem necessary to provide reasonable assurance as to the fairness of the Company's financial statements and to enable them to express an opinion thereon.

The Board of Directors, through its Audit Committee, meets with the independent accountants, representatives of management and the internal auditors to review the activities of each and to discuss accounting, auditing and financial matters and the carrying out of responsibilities and duties of each group. Price Waterhouse & Co. have full and free access to meet with the Audit Committee to discuss their examination results and opinions, without management representatives present, to allow for complete independence.

Ernest L. Grove, Jr.
Vice Chairman of the Board
and
Chief Financial Officer

William G. Meese
Chairman of the Board
and
Chief Executive Officer

Report of Independent Accountants



200 RENAISSANCE CENTER
DETROIT, MICHIGAN 48223
February 13, 1981

To The Board of Directors and Shareholders of
The Detroit Edison Company

In our opinion, the statements appearing on pages 18 through 31 of this report present fairly the financial position of The Detroit Edison Company and its subsidiary companies at December 31, 1980 and 1979, and the results of their operations and the changes in their financial position for each of the three years in the period ended December 31, 1980 in conformity with

generally accepted accounting principles consistently applied. Our examinations of these statements were made in accordance with generally accepted auditing standards and accordingly included such tests of the accounting records and such other auditing procedures as we considered necessary in the circumstances.

Consolidated Statement of Income

	Year Ended December 31		
	1980	1979	1978
		(Thousands)	
Operating Revenues			
Electric	\$1,776,364	\$1,667,679	\$1,561,296
Steam	38,150	30,832	28,546
Total Operating Revenues	\$1,812,514	\$1,698,511	\$1,589,842
Operating Expenses			
Operation expense			
Fuel	\$ 670,316	\$ 647,320	\$ 580,869
Other power supply	107,767	96,502	158,098
Other operation expense	290,566	266,410	235,720
Maintenance expense	133,270	128,660	124,804
Provision for depreciation (Note 1)	141,948	129,644	115,325
Provision for taxes (Notes 1 and 7)			
Taxes, other than income	115,520	99,552	91,488
Current income taxes	(307)	5,063	4,671
Deferred income taxes—net	59,159	40,359	27,980
Investment tax credit—net	(21,840)	9,284	24,035
Total Operating Expenses	\$1,496,199	\$1,423,034	\$1,362,990
Operating Income	\$ 316,315	\$ 275,477	\$ 226,852
Other Income and Deductions			
Allowance for other funds used during construction (Note 1)	\$ 38,815	\$ 38,323	\$ 32,273
Other income and deductions	692	3,664	2,371
Income taxes (Note 7)	(669)	(1,554)	(1,228)
Total Other Income and Deductions	\$ 38,838	\$ 40,433	\$ 33,416
Income Before Interest Charges	\$ 355,153	\$ 315,910	\$ 260,268
Interest Charges			
Long-term debt	\$ 211,857	\$ 167,585	\$ 140,288
Amortization of debt discount, premium and expense	1,776	1,644	1,403
Other	19,662	13,823	5,298
Allowance for borrowed funds used during construction (credit) (Note 1)	(66,708)	(43,171)	(33,590)
Net Interest Charges	\$ 166,587	\$ 139,881	\$ 113,399
Net Income	\$ 188,566	\$ 176,029	\$ 146,869
Preferred and Preference Stock Dividend Requirements	51,037	43,457	38,056
Earnings for Common Stock	\$ 137,529	\$ 132,572	\$ 108,813
Common Shares Outstanding—Average	78,780,863	69,848,484	61,898,763
Earnings Per Share	\$ 1.75	\$ 1.90	\$ 1.76

(See accompanying Notes to Consolidated Financial Statements.)

Consolidated Statement of Changes in Financial Position

	Year Ended December 31		
	1980	1979	1978
		(Thousands)	
Financial Resources Provided:			
Net Income	\$188,566	\$176,029	\$146,869
Items not affecting working capital:			
Depreciation	141,948	129,644	115,325
Deferred income taxes—net	59,176	41,777	28,910
Investment tax credit—net	(21,840)	9,284	24,035
Allowance for other funds used during construction (Note 1)	(38,815)	(38,323)	(32,273)
Other	1,982	3,129	(785)
Financial resources provided by operations	\$331,017	\$321,540	\$282,081
Funds received from Trustees:			
Collateralized pollution control bonds	30,963	37,947	41,867
Installment sales contracts	—	1,500	2,116
Sale of general and refunding mortgage bonds	148,773	247,131	137,442
Belle River Project Financing (Note 6)	212,729	—	—
Sale of preferred stock	93,660	35,024	59,158
Sale of unsecured promissory notes	49,956	—	—
Sale of common stock	109,022	110,554	97,478
Issuance of common stock on conversions of convertible cumulative preferred stock, 5½% series	8,043	16,442	13,220
Sale of capitalized costs relating to nuclear fuel (Note 9)	—	9,526	—
Other—net	6,642	(184)	(2,933)
Total	\$990,805	\$779,480	\$630,429
Financial Resources Used:			
Plant and equipment expenditures	\$644,234	\$588,473	\$639,494
Investment in fuel supply through subsidiaries	306	2,916	3,182
Total capital expenditures	\$644,540	\$591,389	\$642,676
Allowance for other funds used during construction (Note 1)	(38,815)	(38,323)	(32,273)
Dividends on common, preferred and preference stock	\$605,725	\$553,066	\$610,403
Conversions of convertible cumulative preferred stock, 5½% series	179,159	156,661	133,441
Redemption or reclassification of long-term debt and preference stock	8,055	16,469	13,223
Storm damage costs (Note 13)	69,200	65,695	78,700
Increase (decrease) in working capital*	9,712	12,783	—
Total	118,954	(25,194)	(205,338)
Total	\$990,805	\$779,480	\$630,429
*Analysis of changes in working capital:			
Increase (decrease) in current assets:			
Cash	\$ 3,792	\$ (1,685)	\$ (1,701)
Temporary cash investments	—	—	(85,134)
Accounts receivable	32,959	(11,332)	24,280
Inventories	49,461	69,191	31,393
Recoverable fuel costs	—	—	(1,106)
Prepayments	(2,620)	2,061	616
.....	\$ 83,592	\$ 58,235	\$ (31,652)
(Increase) decrease in current liabilities:			
Short-term borrowings	\$ 77,124	\$ (91,706)	\$ (33,224)
Long-term debt due within one year	(1,005)	15,505	(77,200)
Preference stock sinking fund requirement due within one year	1,356	(2,460)	—
Accounts payable	(2,852)	22,185	(30,118)
Property, general and income taxes	(14,556)	(11,491)	(5,231)
Other	(24,705)	(15,462)	(27,913)
.....	\$ 35,362	\$ (83,429)	\$ (173,686)
Increase (decrease) in working capital	\$118,954	\$ (25,194)	\$ (205,338)

(See accompanying Notes to Consolidated Financial Statements.)

Consolidated Balance Sheet

	December 31	
	1980	1979
	(Thousands)	
Assets		
Utility Properties (Notes 1, 9 and 16)		
Plant in service and held for future use		
Electric	\$4,590,497	\$4,397,250
Steam	44,169	41,964
	<u>\$4,634,666</u>	<u>\$4,439,214</u>
Less: Accumulated depreciation	(1,187,250)	(1,069,194)
	<u>\$3,447,416</u>	<u>\$3,370,020</u>
Construction work in progress	1,578,829	1,220,809
	<u>\$5,026,245</u>	<u>\$4,590,829</u>
 Other Property and Investments		
Investment in coal supply	\$ 4,200	\$ 4,550
Non-utility property and other	14,052	12,682
	<u>\$ 18,252</u>	<u>\$ 17,232</u>
 Current Assets		
Cash (Note 2)	\$ 6,226	\$ 2,434
Customer accounts receivable (less allowance for uncollectible accounts of \$8,800,000 and \$7,500,000, respectively)	176,490	152,248
Other accounts receivable	17,286	8,569
Inventories (Note 1)		
Fuel	260,112	224,472
Materials and supplies	88,033	74,212
Recoverable fuel costs (Note 10)	1,415	1,415
Prepayments	2,767	5,387
	<u>\$ 552,329</u>	<u>\$ 468,737</u>
 Deferred Debits		
Unamortized debt expense	\$ 20,186	\$ 19,072
Accumulated deferred income taxes (Note 1)	8,549	9,458
Extraordinary property losses (Note 13)	101,116	22,945
Other	15,009	17,750
	<u>\$ 144,860</u>	<u>\$ 69,225</u>
Total	<u>\$5,741,686</u>	<u>\$5,146,023</u>

(See accompanying Notes to Consolidated Financial Statements.)

Liabilities

Capitalization

	December 31	
	1980	1979
	(Thousands)	
Common stock—\$10 par value, 125,000,000 and 85,000,000 shares authorized, respectively; 84,032,618 and 74,459,897 shares outstanding, respectively (1,817,472 and 2,142,764 shares, respectively, reserved for conversion of preferred stock) (Note 3)	\$ 840,326	\$ 744,599
Premium on common stock	341,739	316,314
Common stock expense	(31,504)	(27,346)
Retained earnings used in the business	376,281	366,874
Total common shareholders' equity	\$1,526,842	\$1,400,441
Cumulative preferred stock—\$100 par value, 9,000,000 and 6,000,000 shares authorized, respectively; 4,630,204 and 3,767,560 shares outstanding, respectively; 3,789,827 and 1,734,827 shares unissued, respectively (Notes 3 and 4)		
Non-redeemable preferred stock	267,682	276,038
Redeemable preferred stock	187,839	94,182
Cumulative preference stock—\$1 par value, 20,000,000 and 10,000,000 shares authorized, respectively; 5,744,100 and 5,998,400 shares outstanding, respectively (Notes 3 and 4)		
Non-redeemable preference stock	47,896	47,906
Redeemable preference stock	87,929	92,622
Long-term debt (Notes 5 and 6)	2,450,457	2,069,518
Total Capitalization	\$4,568,645	\$3,980,707

Current Liabilities

Short-term borrowings (Note 2)		
Commercial paper	\$ —	\$ 20,284
Bank loans	46,000	75,500
Trust demand notes	17,092	20,000
Promissory notes	4,000	28,432
Long-term debt due within one year (Note 5)	64,200	63,195
Preference stock sinking fund requirement due within one year (Note 4)	1,104	2,460
Accounts payable	147,365	144,513
Property and general taxes	167,927	151,932
Income taxes	15,488	16,927
Interest	54,654	46,729
Dividends payable	46,770	41,156
Payrolls	31,015	29,830
Other	41,322	31,341
	\$ 636,937	\$ 672,299

Deferred Credits

Accumulated deferred income taxes (Note 1)	\$ 401,789	\$ 340,513
Accumulated deferred investment tax credits (Note 1)	110,852	132,692
Other	23,463	19,812
	\$ 536,104	\$ 493,017

Commitments and Contingencies (Notes 9, 10, 11, 12, 13, 14 and 15)

Total	\$5,741,686	\$5,146,023
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(See accompanying Notes to Consolidated Financial Statements.)

Consolidated Statement of Common Shareholders' Equity

	Common Stock		Premium on Common Stock	Common Stock Expense	Retained Earnings Used in the Business*
	Shares	\$10 Par Value			
			(Dollars in Thousands)		
Balance at December 31, 1977	59,204,021	\$592,040	\$225,379	\$(20,759)	\$534,078
Issuance of Common Stock:					
Public offering (August 1978)	5,000,000	50,000	31,875	(2,787)	
Dividend Reinvestment and Common Share Purchase Plan	1,146,980	11,470	6,232	(101)	
Conversion of convertible cumulative preferred stock, 5½% series	590,889	5,909	7,606	(296)	
Net income					146,869
Cash dividends declared:					
Common stock - \$1.52 per share					(95,342)
Cumulative preferred and preference stock**					(38,099)
Balance at December 31, 1978	65,941,890	\$659,419	\$271,002	\$(23,943)	\$347,506
Issuance of Common Stock:					
Public offering (July 1979)	6,000,000	\$ 60,000	\$ 29,250	\$ (2,972)	
Dividend Reinvestment and Common Share Purchase Plan	1,750,353	17,504	6,836	(63)	
Conversion of convertible cumulative preferred stock, 5½% series	767,654	7,676	9,133	(368)	
Gain on preference stock purchased and retired			3		
Net income					\$176,029
Cash dividends declared:					
Common stock - \$1.60 per share					(112,628)
Cumulative preferred and preference stock**					(44,033)
Balance at December 31, 1979	74,459,897	\$744,599	\$316,314	\$(27,346)	\$366,874
Issuance of Common Stock:					
Public offerings (4 million shares in May 1980 and 2.25 million shares in December 1980)	6,250,000	\$ 62,500	\$ 15,031	\$ (3,379)	
Dividend Reinvestment and Common Share Purchase Plan	2,933,756	29,337	5,731	(199)	
Conversion of convertible cumulative preferred stock, 5½% series	388,965	3,890	4,333	(180)	
Gain on preference stock purchased and retired			330		
Expense of increase in authorized number of common shares				(400)	
Net income					\$188,566
Cash dividends declared:					
Common stock - \$1.60 per share					(127,952)
Cumulative preferred and preference stock**					(51,207)
Balance at December 31, 1980	84,032,618	\$840,326	\$341,739	\$(31,504)	\$376,281

* \$14,000,000 restricted as to payment of common dividends.

** At established rate for each series.

(See accompanying Notes to Consolidated Financial Statements.)

Consolidated Statement of Cumulative Preferred and Preference Stock

	Month of Issuance	December 31	
		1980	1979
(Thousands)			
Non-Redeemable Preferred Stock (Note 3)			
5½% convertible series, 381,124 and 463,480 shares, respectively	October 1967	\$ 38,112	\$ 46,348
9.32% series, 499,080 shares	October 1970	49,908	49,908
7.68% series, 500,000 shares	March 1971	50,000	50,000
7.45% series, 600,000 shares	November 1971	60,000	60,000
7.36% series, 750,000 shares	December 1972	75,000	75,000
Non-redeemable preferred stock expense		(5,338)	(5,218)
Total Non-Redeemable Preferred Stock		<u>\$267,982</u>	<u>\$276,038</u>
Redeemable Preferred Stock (Note 4)			
9.72% series, 600,000 shares	*	\$ 60,000	\$ 60,000
9.60% series, 650,000 shares and 355,000 shares, respectively ...	**	65,000	35,500
12.80% series, 400,000 shares	May 1980	40,000	—
13.50% series, 250,000 shares	December 1980	25,000	—
Redeemable preferred stock expense		(2,161)	(1,318)
Total Redeemable Preferred Stock		<u>\$187,839</u>	<u>\$ 94,182</u>
Non-Redeemable Preference Stock (Note 3)			
\$2.28 series, 2,000,000 shares	December 1977	\$ 2,000	\$ 2,000
Premium on non-redeemable preference stock		48,000	48,000
Non-redeemable preference stock expense		(2,104)	(2,094)
Total Non-Redeemable Preference Stock		<u>\$ 47,896</u>	<u>\$ 47,906</u>
Redeemable Preference Stock (Note 4)			
\$2.75 series, 1,844,180 and 1,998,400 shares, respectively	July 1975	\$ 1,844	\$ 1,998
\$2.75 series B, 1,899,920 and 2,000,000 shares, respectively	December 1975	1,900	2,000
Premium on redeemable preference stock		89,858	95,962
Redeemable preference stock sinking fund requirement due within one year		(1,104)	(2,460)
Redeemable preference stock expense		(4,569)	(4,878)
Total Redeemable Preference Stock		<u>\$ 87,929</u>	<u>\$ 92,622</u>

*500,000 shares (\$50 million) issued in December 1978 and 100,000 shares (\$10 million) issued in January 1979.

**355,000 shares (\$35.5 million) issued in October 1979 and 295,000 shares (\$29.5 million) issued in January 1980.

(See accompanying Notes to Consolidated Financial Statements.)

Consolidated Statement of Long-Term Debt

	December 31	
	1980	1979
	(Thousands)	
General and Refunding Mortgage Bonds (substantially all property subject to lien of Mortgage)		
Series I, 2¾%, due 9/1/82	\$ 59,975	\$ 59,975
Series J, 2¾%, due 3/1/85	35,000	35,000
Series N, 2¾%, due 3/15/84	39,995	39,995
Series O, 3¼%, due 5/15/80	—	59,795
Series P, 4¾%, due 8/15/87	66,325	66,325
Series Q, 4¾%, due 6/1/89	37,695	37,695
Series R, 6%, due 12/1/96	100,000	100,000
Series S, 6.4%, due 10/1/98	150,000	150,000
Series T, 9%, due 12/1/99	75,000	75,000
Series U, 9.15%, due 7/1/00	75,050	75,000
Series V, 8.15%, due 12/15/00	100,000	100,000
Series X, 8¼%, due 6/15/01	100,000	100,000
Series Y, 7¾%, due 11/15/01	60,000	60,000
Series Z, 7½%, due 1/15/03	100,000	100,000
Series AA, 9¾%, due 5/1/04	100,000	100,000
Series CC, 12¾%, due 1/15/82	50,000	50,000
Series DDP Nos. 2-9, 7.25% to 9¼%, due 11/1/81-11/1/95 (Series D-Monroe)	13,505	14,305
Series EE, 11¾%, due 12/15/00	40,000	40,000
Series FFR Nos. 2-14, 5.75% to 8.5%, due 2/1/81-2/1/01 (Series E and E-1977-Superior)	45,100	45,600
Series GGP Nos. 1-22, 4.4% to 8¼%, due 6/15/81-6/15/96 (Series F and F-1977-St. Clair)	42,300	42,300
Series HH, 10¾%, due 7/15/06	50,000	50,000
Series IIP Nos. 1-22, 5% to 7%, due 3/1/82-3/1/05 (Series G and G-1979-Harbor Beach)	3,750	3,750
Series JJP Nos. 1-8, 5% to 7¼%, due 3/1/82-3/1/05 (Series H and H-1979-Trenton)	6,850	6,850
Series KKP Nos. 1-8, 5% to 7¼%, due 3/1/82-3/1/05 (Series I and I-1979-Monroe)	14,890	14,890
Series LLP Nos. 1-15, 5% to 6.7%, due 3/1/82-3/1/91 (Series J and J-1979-Detroit)	8,850	8,850
Series MMP, 6¾%, and MMP No. 2, 7¼%, due 2/15/97 (Series K and K-1979-River Rouge)	5,430	5,430
Series NNP Nos. 1-21, 4.8% to 7%, due 7/1/82-7/1/97 (Series L and L-1979-River Rouge)	47,950	47,950
Series OOP Nos. 1-18, 4.4% to 7¼%, due 10/1/82-10/1/07 (Series M and M-1979-St. Clair)	18,880	18,880
Series PP, 9¾%, due 6/15/08	70,000	70,000
Series QQP Nos. 1-19, 5.6% to 9½%, due 6/1/83-6/1/94 (Series N and N-1980-Detroit)	13,650	9,300
Series RR, 9.8%, due 10/15/08	70,000	70,000
Series SS, 10¾%, due 3/15/99	150,000	150,000
Series TTP Nos. 1-15, 5.85% to 7¾%, due 7/1/84-7/1/09 (Series O-St. Clair)	3,800	3,800
Series UU, 10¾%, due 9/15/09	100,000	100,000
1980 Series A, 12¾%, due 1/1/87	50,000	—
1980 Series B, 12¾%, due 4/1/00	100,000	—
1980 Series CP Nos. 1-12, 7¾% to 10%, due 8/15/85-8/15/07 (Series P-St. Clair)	25,000	—
1980 Series DP Nos. 1-11, 7¾% to 10%, due 8/15/85-8/15/10 (Series Q-Monroe)	10,750	—
Less: Unamortized net discount	(2,674)	(2,789)
Funds on deposit with Trustee	(9,043)	(1,238)
Amount due within one year	(2,100)	(61,095)
	\$2,025,878	\$1,845,568
Installment Sales Contracts		
Monroe County Bonds Series A, 4.9% to 5¾%, due 6/1/81-6/1/03	\$ 43,000	\$ 44,000
Monroe County Bonds Series B, 6.4% to 7¾%, due 5/1/81-5/1/04	21,550	22,050
St. Clair County Bonds Series C, 7¾%, due 7/15/81-7/15/84	4,400	5,000
Less: Amount due within one year	(2,100)	(2,100)
	\$ 66,850	\$ 68,950
Unsecured Promissory Notes		
Belle River Project Financing (Note 6)	\$ 212,729	\$ —
Variable interest rates, due 1981, 1983 and 1984	155,000	155,000
Fixed interest rates, due 1/2/82 (11½% first quarter of 1980 and 11% thereafter)	50,000	—
Less: Amount due within one year	(60,000)	—
	\$ 357,729	\$ 155,000
Total Long-Term Debt (Notes 5 and 6)	\$2,450,457	\$2,069,518

(See accompanying Notes to Consolidated Financial Statements.)

Notes to Consolidated Financial Statements

Note 1—Significant Accounting Policies:

Industry Segment—The Detroit Edison Company ("Company") is a public utility engaged in the generation, purchase, transmission, distribution and sale of electric energy.

Regulation—The Company is subject to regulation by the Michigan Public Service Commission ("MPSC") and the Federal Energy Regulatory Commission ("FERC") with respect to accounting matters and maintains its accounts in accordance with the Uniform Systems of Accounts prescribed by these agencies.

Principles Applied in Consolidation—The consolidated accounts include those of all subsidiary companies, all of which are wholly-owned.

Revenues—Revenues are recorded as billed to customers.

As authorized by the MPSC, the Company makes monthly purchased and net interchange power billing adjustments to recover costs which are approved by the MPSC following monthly hearings. Recovery of costs is limited to 90% of changes in both Company system fuel costs and net purchased power costs. Annual hearings are conducted by the MPSC to determine whether adjustments will be made to customer bills to offset the over-recovery, if any, of energy costs arising from fluctuations in billing lag factors. The Company's policy is to reserve the temporary net over-recovery of energy costs arising from fluctuations in billing lag factors which will be adjusted in subsequent months. The temporary net under-recovery of these energy costs is not accrued because subsequent recoveries are dependent upon MPSC authorization.

Employees' Retirement Plan—See Note 8.

Property, Depreciation, Plant Retirement and Maintenance—Utility and non-utility properties are recorded at original cost and cost, respectively, and the annual provision for depreciation is calculated on the straight-line remaining life method for financial statement purposes. The composite percentage of annual provision for depreciation to average depreciable property was 3.20% for 1980 and 1979 and 3.15% for 1978. In general, the cost of properties retired in the normal course of business is charged to accumulated depreciation. Expenditures for maintenance and repairs are charged to expense, and the cost of betterments and new property installed which replaces property retired is charged to property accounts.

Income Taxes—The Company provides for deferred income taxes when authorized by orders of the MPSC.

The Company follows the normalization method of accounting which provides for income taxes deferred to future years because of accelerated amortization, liberalized depreciation, shorter depreciation periods used under the class life asset depreciation range system, recoverable fuel costs and extraordinary property losses, and amortizes the investment tax credit to income over the estimated composite service life of the property involved. See Note 7.

The Company does not provide for deferred income taxes arising from current deduction of items such as interest and

taxes which are capitalized in the books or from additional straight-line income tax depreciation resulting from the difference between income tax guideline rates and book rates.

Michigan Single Business Tax—Pursuant to orders of the MPSC, no provision is made for deferred Michigan single business tax arising from the current deduction of capital acquisition expenditures which are capitalized and depreciated in the books.

Allowance for Funds Used During Construction—The allowance for funds used during construction ("AFUDC"), a non-operating non-cash item, is defined in the FERC Uniform System of Accounts as the net cost for the period of construction of borrowed funds used for construction purposes and a reasonable rate on other funds when so used.

AFUDC is an accounting procedure whereby the approximate interest expense and cost of other (preferred, preference and common shareholders' equity) funds applicable to the cost of construction are transferred from the income statement to construction work in progress in the balance sheet. This accounting procedure is intended to remove the effect of the cost of financing construction activity from the income statement, and results in treating such cost in the same manner as charges to construction for labor, employee benefit costs, property taxes and material costs. Under current ratemaking practice, the cash recovery of AFUDC, as well as other costs of construction, occurs when completed projects are placed in service and the related depreciation is reflected in customer rates.

The AFUDC rates for borrowed and other (equity) funds were established by the Company consistent with the methodology set forth in the FERC Uniform System of Accounts. The Company capitalized AFUDC at the following rates: 1980—9% effective January 1, 1980 and 9¼% effective June 1, 1980 except for AFUDC related to the Belle River Project Financing which was capitalized at the actual amount thereof (see Note 6); 1979—8½%; 1978—8%.

The allowance for other funds used during construction in the Consolidated Statement of Changes in Financial Position excludes the allowance for borrowed funds used during construction of \$66.7 million for 1980, \$43.2 million for 1979 and \$33.6 million for 1978 in accordance with accounting requirements of the FERC. The total allowance for both borrowed and other funds used during construction amounted to \$105.5 million for 1980, \$81.5 million for 1979 and \$65.9 million for 1978.

AFUDC amounted to 77%, 61% and 61% of earnings for Common Stock for 1980, 1979 and 1978, respectively.

Inventory Valuation—Inventories are stated at average cost.

Extraordinary Property Losses—See Note 13.

Note 2—Compensating Balances and Short-Term Borrowings:

At December 31, 1980, the Company had bank lines of credit aggregating \$200.1 million pursuant to which interim financing was available, of which \$19.6 million of these lines of credit required compensating balances, \$117.5 million had

commitment fees in lieu of compensating balances and \$63.0 million had both commitment fees and compensating balances. In support of the lines of credit requiring compensating balances, the Company maintained bank balances which during 1980 averaged \$3.5 million in Company accounts and \$1.5 million in the accounts of construction contractors. None of these balances are subject to usage or withdrawal restrictions. Commitment fees in lieu of compensating bank balances for 1980 amounted to \$2.1 million. At December 31, 1980 unused lines of credit were \$137.0 million.

Bank loans are available at the banks' prime lending rate. Temporary arrangements have been made for up to \$116 million of borrowings through the above bank lines of credit at rates below the banks' prime rates. Commercial paper is issued on a discount basis at prevailing market rates. Trust demand notes have variable interest rates based on the highest rate adopted by General Motors Acceptance Corporation on its 30-180 day commercial paper borrowings.

In 1979, the Company also entered into a nuclear fuel financing and credit arrangement (see Note 9). Pending use of the credit arrangement for nuclear fuel financing, the Company is permitted to issue promissory notes for general corporate purposes. At December 31, 1980, \$19.3 million of the nuclear fuel credit arrangement was available for borrowing for general corporate purposes, under which \$4 million of promissory notes were outstanding.

See Note 6 for information on the Belle River Project Financing.

Note 3—Common Stock and Non-Redeemable Cumulative Preferred and Preference Stock:

The Company has a Dividend Reinvestment and Common Share Purchase Plan under which record holders of its Common, Preferred and Preference shares and its regular employees may, through the automatic reinvestment of cash dividends and monthly optional cash payments of from \$20 to \$5,000, purchase Common Stock from the Company. The price of newly-issued shares purchased with reinvested cash dividends will be equal to 95% of, and in the case of optional cash payments will be equal to 100% of, the average of the high and low prices on the New York Stock Exchange on the pricing date, which will be the dividend payment date in the case of reinvested dividends and the last business day of the month in the case of optional cash payments. The Company has the right to amend, suspend, modify or terminate the Plan at any time.

The Convertible Cumulative Preferred Stock, 5½% Series, is convertible into Common Stock. The conversion price was \$20.97 per share at December 31, 1980 and was adjusted to \$20.42 per share effective January 21, 1981. The number of shares converted during 1980, 1979 and 1978 was 82,356, 168,373 and 135,187, respectively. The number of shares of Common Stock reserved for issuance upon conversion and the conversion price are subject to further adjustment in certain events. The Convertible Cumulative Preferred Stock, 5½% Series, may be redeemed at any time in whole or in part at the option of the Company at \$100 per share, plus accrued dividends.

The series of Preferred and Preference Stock redeemable solely at the option of the Company are redeemable at the following per share redemption prices, plus accrued dividends:

Series	Decreasing From	Prior To	To	On and After
Non-Redeemable				
Preferred Stock				
9.32%	\$107	10-15-83	\$101	10-15-86
7.68%	106	4-15-81	101	4-15-86
7.45%	106	11-15-81	101	11-15-86
7.36%	105	12-1-82	101	12-1-87
Non-Redeemable				
Preference Stock				
\$2.28	27.30	1-15-83	25.25	1-15-93

None of the shares of the \$2.28 Series Preference Stock may be redeemed through certain refunding operations prior to January 15, 1983.

Changes in non-redeemable Preferred and Preference Stock expenses were due to the increase in the authorized number of shares of Preferred and Preference Stock, offset by conversions of the Convertible Cumulative Preferred Stock, 5½% Series.

Note 4—Redeemable Cumulative Preferred and Preference Stock:

The series of Preferred and Preference Stock which are redeemable pursuant to sinking fund requirements may also be redeemed at the option of the Company at the following per share redemption prices, plus accrued dividends:

Series	Decreasing From	Prior To	To	On and After
Redeemable				
Preferred Stock				
9.72%	\$109.72	1-15-84	\$101	1-15-94
9.60%	110.00	10-15-84	101	10-15-94
12.80%	112.80	7-15-85	100	7-15-95
13.50%	113.50	1-15-86	100	1-15-90
Redeemable				
Preference Stock				
\$2.75	26.95	7-15-85	25.25	7-15-90
\$2.75 Series B	27.75	1-15-81	25.25	1-15-91

None of the shares of the Cumulative Preferred Stock, 9.72% Series, 9.60% Series, 12.80% Series and 13.50% Series or shares of the \$2.75 Series B Preference Stock may be redeemed through certain refunding operations prior to January 15, 1984, October 15, 1989, July 15, 1985, January 15, 1986 and January 15, 1981, respectively.

The redeemable series of Preferred and Preference Stock are entitled to the benefit of sinking funds (provided that no dividend arrearages exist) providing for the annual redemption of shares at the following per share prices, plus accrued dividends, commencing on the dates indicated below:

Series	Commencing on	Annual Number of Shares	Price Per Share	Non-Cumulative Option to Redeem Additional Shares in Any Year
Redeemable				
Preferred Stock				
9.72%	1-15-85	30,000	\$100	30,000
9.60%	10-15-85	32,500	100	32,500*
12.80%	7-15-86	20,000	100	20,000
13.50%	1-15-87	50,000	100	—
Redeemable				
Preference Stock				
\$2.75	7-15-80	100,000	25	100,000
\$2.75 Series B	1-15-81	100,000	25	100,000

*Not to exceed 220,000 total additional shares.

In 1979 the Company began purchasing shares of \$2.75 Series Preference Stock on the open market. During 1979,

1,600 shares were purchased and throughout 1980, an additional 98,400 shares of \$2.75 Series Preference Stock were purchased. These shares were applied toward the sinking fund requirement due on July 15, 1980.

Also, throughout 1980 the Company purchased on the open market 55,820 shares of \$2.75 Series Preference Stock and 100,080 shares of \$2.75 Series B Preference Stock. These shares will be applied toward the \$2.75 Series sinking fund requirement due on July 15, 1981 and the \$2.75 Series B sinking fund requirements due on January 15, 1981 and 1982, respectively.

In the event that a payment is not made that is due under the requirements of a sinking fund for any series of the redeemable Preferred and Preference Stock, no dividend shall be paid (other than a dividend paid in junior stock) or declared or other distribution made upon any junior stock (Preference and Common Stock in the case of Preferred Stock and Common Stock in the case of Preference Stock) until such payment shall have been made.

The combined aggregate annual amount of redemption requirements for all series of redeemable Preferred and Preference Stock for the next five years are \$5.0 million in 1981 through 1984 and \$11.3 million in 1985.

Changes in redeemable Preferred and Preference Stock expenses were due to the issuance of additional shares of Preferred Stock, offset by the purchase of shares of \$2.75 Series and \$2.75 Series B Preference Stock to meet sinking fund requirements.

Note 5—Long-Term Debt:

Agreements have been signed with certain municipalities, under which the municipalities have issued tax-exempt bonds to finance certain facilities of the Company and the Company is obligated to make payments sufficient to meet the principal and interest due on the bonds. To secure the Company's obligations under such agreements, the Company has issued General and Refunding Mortgage Bonds ("Mortgage Bonds") with principal amounts, interest rates and maturity dates corresponding to those of the tax-exempt bonds; accordingly, the Company's liabilities in respect of such collateralized bonds, aggregating \$260.7 million and \$221.9 million at December 31, 1980 and 1979, respectively, are included in General and Refunding Mortgage Bonds in the Consolidated Statement of Long-Term Debt.

Interest on the \$155 million Unsecured Promissory Notes due 1981, 1983 and 1984 is adjusted quarterly; the rates are variable based on the participating banks' prime rate for commercial customers. The weighted average interest rates on these notes for 1980 and 1979 were 16.2% and 13.6%, respectively.

On the basis of property additions and bond retirements, an estimated \$1.1 billion principal amount of bonds could have been issued under the Mortgage and Deed of Trust and terms of certain of the Unsecured Promissory Notes at December 31, 1980. Under the more restrictive earnings test provisions of the supplemental indenture creating the Series I Mortgage Bonds and assuming an interest rate on any additional indebtedness of 15%, approximately \$377 million principal amount of the Company's Mortgage Bonds could have been issued at December 31, 1980.

Long-term debt maturing in the period 1981 through 1985 consists of \$64.2 million in 1981, \$166.5 million in 1982 (which

excludes Belle River Project Financing unsecured promissory notes due May 1, 1982), \$81.9 million in 1983, \$69.9 million in 1984 and \$256.1 million in 1985 (which includes \$200 million for the Belle River Project Financing). See Notes 6 and 9.

Note 6—Belle River Project Financing:

In May 1980 the Company entered into an agreement with a group of commercial banks for an \$800 million project financing arrangement relating to Belle River Unit No. 1 and facilities to be used in common with Belle River Unit No. 2 ("Belle River Project Financing"). Under this arrangement, currently limited to \$400 million under existing FERC borrowing authority, the Company borrows against capital expenditures incurred in connection with the project, including interest charges (at interest rates which vary with the changes in the prime rate) and commitment fees (at the rate of 0.5% of the unused portion of the commitments). Until MPSC approval can be obtained for long-term unsecured promissory notes, borrowings are being made under unsecured promissory notes due May 1, 1982. Once such MPSC approval has been obtained and long-term unsecured promissory notes have been issued, amortization will begin January 1, 1985, with \$50 million repayable each consecutive calendar quarter thereafter. The Company may prepay borrowings pursuant to this transaction at any time without penalty. Consummation of periodic borrowings is subject to the satisfaction of certain conditions. The agreement contains a number of covenants, including an agreement by the Company not to pledge or sell any of its assets except in the ordinary course of business and except for the sale or conveyance to one or more utilities of undivided interests in generating plants; and not to create certain liens on its assets. As of December 31, 1980, the Company made borrowings and had accrued interest and commitment fees totaling \$212.7 million under this arrangement. For 1980, interest and commitment fees of \$16.3 million are included in interest charges, offset by an equal amount included in the borrowed funds component of AFUDC.

Note 7—Income Taxes:

Total income tax expense as a percent of income before tax was less than the statutory federal income tax rate for the following reasons:

	Percent of Income Before Tax		
	1980	1979	1978
Federal income tax statutory rate	46.0%	46.0%	48.0%
Allowance for funds used during construction	(21.5)	(16.1)	(15.4)
Construction overhead costs	(4.9)	(4.7)	(4.7)
Depreciation	3.5	4.4	4.5
Michigan income tax	(1.9)	(1.8)	(2.1)
Other—net	(4.5)	(3.6)	(2.0)
Total income tax expense	16.7%	24.2%	28.3%

In 1975 the State of Michigan enacted a "single business tax" effective January 1, 1976 and repealed the corporate income tax. The MPSC ordered that the accumulated balances of deferred Michigan income taxes at December 31, 1975 be written off as credits to income over the five-year period 1976 through 1980 for accounting and ratemaking purposes.

Components of income taxes were as follows:

	Year Ended December 31		
	1980	1979	1978
	(Thousands)		
Current Income Taxes			
Federal current	\$ (307)	\$ 5,063	\$ 5,246
Federal—Recoverable fuel costs	—	—	(489)
Michigan—Recoverable fuel costs	—	—	(86)
	<u>\$ (307)</u>	<u>\$ 5,063</u>	<u>\$ 4,671</u>
Deferred Income Taxes—Net			
Federal			
March 1976 storm damage costs	\$ (1,071)	\$ (1,071)	\$ (1,071)
April 1979 storm damage costs	—	5,880	—
July 1980 storm damage costs	4,468	—	—
Greenwood Unit Nos. 2 and 3 abandonment loss	24,771	—	—
Depreciation	32,529	33,493	26,693
Amortization of pollution control facilities	(1,211)	8,095	4,455
Sale of 20% interest in Enrico Fermi Unit No. 2	670	1,094	1,618
Other	3,222	(2,913)	504
Michigan	(4,219)	(4,219)	(4,219)
	<u>\$ 59,159</u>	<u>\$ 40,359</u>	<u>\$ 27,980</u>
Investment Tax Credit—Net			
Utilized	\$ —	\$ 13,091	\$ 27,270
Reduction due to tax loss carryback to 1977	(19,442)	—	—
Amortized	(2,398)	(3,807)	(3,235)
	<u>\$ (21,840)</u>	<u>\$ 9,284</u>	<u>\$ 24,035</u>
Other Income and Deductions			
Federal current	\$ 652	\$ 136	\$ 298
Federal deferred	17	1,418	930
	<u>\$ 669</u>	<u>\$ 1,554</u>	<u>\$ 1,228</u>
Total Federal and Michigan Income Taxes	<u>\$ 37,681</u>	<u>\$ 56,260</u>	<u>\$ 57,914</u>

Investment tax credit carryforwards aggregate approximately \$145 million at December 31, 1980.

Note 8—Employees' Retirement Plan:

The Company has a trustee and noncontributory retirement plan covering all regular employees who have completed six months of service. The Company's policy is to fund pension cost annually as it accrues. Accruals are based on the actuarial cost of the plan. Unfunded prior service cost is amortized over forty years and thirty years (for costs relating to amendments to the plan after April 1, 1977), as appropriate, and net experience gains and losses are amortized over fifteen years. The plan was amended on April 24, 1978, by shareholders' approval, to provide that benefits to be paid to participants who retire after September 1, 1978 be increased by changing the percentage of average final compensation allowed for each year of service from 1.2% to 1.3%, which resulted in an annual cost increase of approximately \$2.5 million effective January 1, 1979. Cost to the Company to fund the plan was \$32.5 million for 1980, \$28.8 million for 1979 and \$23.0 million for 1978. The comparison of accumulated plan benefits and plan net assets presented below is based on an actuarial valuation as of December 31, 1980.

Actuarial present value of accumulated plan benefits:	
Vested	\$217,751
Nonvested	13,377
Total	<u>\$231,108</u>
Net assets available for benefits	<u>\$214,954</u>

The interest rate used to determine the actuarial present value of accumulated plan benefits was 10%. This rate is the approximate interest rate as of the valuation date for long-term government bonds with an average maturity approximately equal to the average maturity of the liabilities for accrued benefits. The interest rate used for funding purposes is different from that used for the determination of the present value of accrued benefits because the rate used for funding purposes is designed to be consistent with the inflation allowance provided in other assumptions used to project future benefits.

Note 9—Leases:

Rental expenses were as follows:

	Year Ended December 31		
	1980	1979	1978
	(Thousands)		
	<u>\$33,153</u>	<u>\$29,037</u>	<u>\$25,845</u>

Future minimum lease payments under long-term non-cancellable leases, consisting of lake vessels (\$144.5 million), locomotives and coal cars (\$93.5 million), office space (\$44.8 million) and computers, vehicles and other equipment (\$41.7 million) at December 31, 1980 are:

	(Millions)		(Millions)
1981	\$32.1	1986-1990	\$ 77.4
1982	28.9	1991-1995	51.2
1983	26.2	1996-2000	42.8
1984	23.7	Remaining years	21.5
1985	20.7	Total	<u>\$324.5</u>

In addition to the leases described above, on January 23, 1979, the Company entered into a nuclear fuel financing and heat purchase contract with Renaissance Energy Company ("Renaissance"), an unaffiliated company, which provides for the financing of up to \$90 million of nuclear fuel. Simultaneously, the Company sold to Renaissance its capitalized costs of \$9.5 million relating to nuclear fuel. Under the heat purchase contract, Renaissance will purchase nuclear fuel and make all other related payments. Title to the nuclear fuel will be held by Renaissance. During the period that the nuclear fuel is generating heat, the Company will make quarterly payments to Renaissance for the cost of fuel consumed during the quarter plus all other costs of Renaissance. Renaissance's investment in nuclear fuel totaled approximately \$70.7 million at December 31, 1980.

The Company does not capitalize those leases which are defined as capital leases by Statement of Financial Accounting Standards ("FAS") No. 13, "Accounting for Leases", because the MPSC treats all leases as operating leases for ratemaking purposes. However, had such leases been accounted for as capital leases, balance sheet assets at December 31, 1980 and 1979 would have included leased property under capital leases, less accumulated amortization, of \$203.3 million and \$200.6 million, respectively. Also, balance sheet liabilities at December 31, 1980 and 1979 would have included long-term obligations under capital leases of \$204.2 million and \$199.5 million, respectively, and current obligations under capital leases of \$11.6 million and \$10.9 million, respectively. The charges to expense for amortization and interest related to such capital leases would have exceeded the rental expense actually recorded for 1980, 1979 and 1978

by \$2.5 million, \$1.8 million and \$1.8 million, respectively. The effect on net income is indeterminable since neither the leased property and capital lease obligations nor the increased expenses have been included in the ratemaking process which determines the Company's operating revenues and rate of return.

Note 10—Recoverable Fuel Costs:

On January 1, 1974, the Company changed its method of accounting for changes in fuel costs recoverable from customers by deferring recognition to the period in which such costs were recoverable under the fuel cost adjustment clauses. In February 1975, the MPSC directed the Company to revise the method of computing its fuel cost adjustment clauses by effectively eliminating any fuel cost billing lag caused by changes in fuel costs occurring on and after February 4, 1975. In February 1975, the Company applied to the MPSC for an accounting and ratemaking order allowing recovery of \$26 million of accumulated fuel costs deferred as of February 3, 1975. In December 1975, the MPSC issued an order denying the recovery of such accumulated deferred fuel costs. In September 1976, the Ingham County Circuit Court permitted the Company to recover such accumulated deferred fuel costs, by use of temporary surcharges, over a twelve-month period beginning October 1, 1976. The Company applied the surcharges and recovered, subject to refund, \$23.5 million of such costs. The Michigan Court of Appeals then reversed the 1976 Circuit Court decision and affirmed the original December 1975 order of the MPSC. In November 1978, the Michigan Supreme Court granted the Company leave to appeal the 1978 adverse decision of the Michigan Court of Appeals which would have required refund of the revenues collected to recover 1975 deferred fuel costs. Because of this action by the Michigan Supreme Court, no refunds have been made. In February 1980, the Michigan Supreme Court remanded the case to the MPSC for specific findings with respect to fuel cost adjustment clause billings for the months of February, March, April and May of 1975. Proceedings are continuing before the MPSC. If the Michigan Supreme Court should ultimately determine that such costs should not have been recovered through customer billings and must be refunded, the total and per share amounts of earnings for Common Stock for the year 1975 would be reduced by approximately \$12.7 million and \$0.27, respectively, and restated to \$59.3 million and \$1.23, respectively, with corresponding reductions in retained earnings used in the business at December 31, 1975 and subsequent years.

Note 11—Commitments:

In connection with its continuing capital expenditure program, the Company has entered into purchase commitments which amounted to approximately \$1.8 billion at December 31, 1980. The Company has also entered into substantial long-range fuel supply commitments.

Note 12—Rate Matters:

On April 28, 1976, the Company appealed to the Ingham County Circuit Court the MPSC's March 30, 1976 rate order, which granted an increase in electric rates of \$62.4 million annually, on the grounds that the relief granted was unreasonable and unlawful. On May 19, 1976, the Court issued

an order authorizing the Company to collect not more than an additional \$13.8 million through December 31, 1976. This order was temporarily stayed by the Michigan Court of Appeals on June 2, 1976. On September 30, 1976, the Court of Appeals vacated the stay. Effective November 1, 1976, a temporary surcharge was applied to electric customer billings which resulted in the collection of revenues of \$13.7 million, subject to refund, through December 31, 1976, pursuant to the Court's order. A trial was held in July 1977 and the Company is awaiting a decision on the merits.

On December 28, 1979, the Michigan Attorney General filed complaints with the Ingham County Circuit Court and the MPSC requesting orders prohibiting the Company from charging, over the period 1980 through the first quarter of 1985, approximately \$30 million under the fuel cost adjustment clause. These charges relate to certain costs resulting from the renegotiation of the Company's contract with Decker Coal Company, which reduced the tonnage of coal to be delivered between January 1, 1979 and December 31, 1984 and increased the cost per ton over the same period. On January 2, 1980, the Ingham County Circuit Court denied the requested relief and remanded the case to the MPSC. The MPSC consolidated the matter with hearings on reconciliation of the fuel and purchased power adjustment clauses. Hearings have been conducted and have been completed subject to a decision by the Michigan Attorney General to request further cross-examination.

See Note 13.

Note 13—Extraordinary Property Losses:

The unamortized balances of extraordinary property losses are as follows:

	December 31	
	1980	1979
	(Thousands)	
Being Amortized:		
March 1976 Storm	\$ 3,162	\$ 5,395
Enrico Fermi Unit No. 3	4,086	4,767
Not Being Amortized:		
April 1979 Storm	12,783	12,783
July 1980 Storm	9,712	—
Greenwood Unit Nos. 2 and 3	71,373	—
	<u>\$101,116</u>	<u>\$22,945</u>

Costs of the March 1976 severe ice and wind storm (\$11.2 million) and project costs of the cancelled Enrico Fermi Unit No. 3 (\$5.8 million) are being amortized to operating expenses as a cost of service over a five-year period ending in 1982 and a ten-year period ending in 1986, respectively, as authorized by the MPSC.

Severe storms in April 1979 and July 1980 caused extensive damage to the Company's transmission and distribution system. The Company filed separate applications with the MPSC seeking accounting and ratemaking orders which would permit recovery and amortization of the 1979 (\$12.8 million) and 1980 (\$9.7 million) storm service restoration costs over 60-month periods. Hearings with respect to the 1979 and 1980 storm damage applications concluded on January 4, 1980 and December 23, 1980, respectively. By order dated December 30, 1980, the MPSC authorized the amortization, over a 60-month period, of the 1979 storm

damage costs with amortization to commence simultaneously with an amortization schedule, as yet not established, with respect to the 1980 storm. The MPSC denied the Company's request for ratemaking treatment of the 1979 storm costs, such denial being without prejudice to raising such issue in a ratemaking proceeding. The Company has deferred costs of the storms and has not reflected such costs in current operating expenses. The Company believes that the recovery of such costs through customer rates will be authorized in the final order of the Company's current rate case.

On March 24, 1980, the Company decided not to construct Greenwood Nuclear Unit Nos. 2 and 3. Project costs incurred for these units amounted to approximately \$71 million, excluding land. The federal income tax effect related to the deduction in 1980 of the abandonment loss has been recorded and the related deferred tax liability of approximately \$25 million is included in accumulated deferred income taxes. On April 7, 1980, the Company filed an application with the MPSC for authority to defer the project costs until such costs can be considered in a ratemaking proceeding. The Company is seeking recovery of these costs in accounting and ratemaking proceedings which would, if granted, permit amortization and recovery through customer billings of such project costs over a 60-month period. Cross-examination of Company witnesses commenced on December 15, 1980 and is continuing. If full recovery and amortization over some period are not ultimately approved after all appropriate proceedings, such unrecovered project costs, less applicable federal income taxes, would reduce earnings for Common Stock by up to \$46 million in the period of such determination.

Note 14—Litigation:

The Company and two unions which represent certain of its employees were named as defendants in two actions alleging racial discrimination against a class of past and present black employees and certain rejected black applicants for employment (*Stamps, et al v The Detroit Edison Company, et al* and *Equal Employment Opportunity Commission v The Detroit Edison Company, et al*, filed in 1971 and 1972, respectively). Following a consolidated trial of these actions, the District Court for the Eastern District of Michigan found, in 1973, that the Company and the two unions had engaged in illegal racial discrimination. Thereafter, a series of appeals were taken by the parties during which the Company reached agreement with plaintiffs as to two settlements of these actions and the parties to these actions stipulated that an appeal by the defendants to the United States Court of Appeals for the Sixth Circuit be held in abeyance pending the outcome of settlement negotiations. In September 1980, the District Court approved the settlement with respect to the employee class which settlement provides for the distribution of a fund of \$4.25 million and the payment of \$250,000 in attorneys' fees. In December 1980, the District Court approved the settlement with respect to the rejected applicant class which settlement provides for the distribution of a fund of \$850,000. Absent substantive employee class appeals, distribution of all settlement amounts will commence in 1981 and continue throughout the year. The settlement amounts have been accrued by the Company.

See Note 10 for legal proceedings relating to recoverable fuel costs.

Note 15—Sale to Cooperatives:

On February 8, 1977, the Company sold a 20% undivided ownership interest in its Enrico Fermi Unit No. 2 to Northern Michigan Electric Cooperative, Inc. and Wolverine Electric Cooperative, Incorporated ("Cooperatives"). The Cooperatives made an initial payment to the Company at that time equal to 20% of construction expenditures, inclusive of AFUDC, and are obligated to make monthly progress payments of 20% of subsequent construction expenditures, exclusive of AFUDC. As of December 31, 1980, total payments of \$190.9 million had been received from the Cooperatives. See Note 16.

The agreements relating to that sale provide, among other things, that the Company will exercise control over construction and operation of the facility, the parties will share electricity generated and the costs of plant operations, maintenance and capital improvements in proportion to their ownership interests and the Company will have certain obligations to provide replacement power to the Cooperatives when the unit is out of service.

The Company is obligated to complete construction of Enrico Fermi Unit No. 2 promptly, but if the Company delays construction of the unit because more economical sources of power are available or because the Company decides that it does not then require the additional capacity, it would be obligated to supply each Cooperative with its entitlement of electricity otherwise expected to have been generated after the anticipated completion date and would have to indemnify the Cooperatives for additional construction costs resulting from the delay. If such delay extends to five years, the Cooperatives may demand that the Company repurchase their interests at the cost of their investment. The Company would not be liable for any delays in completion resulting from a default in payments by a Cooperative and may buy out a Cooperative's investment if such a default continues for 150 days.

From the anticipated completion date through 1990, the Company will be obligated to purchase part of the Cooperatives' entitlement to the output of the unit and has a right of first refusal to purchase the balance.

Note 16—Jointly-Owned Utility Plant:

The Company and Consumers Power Company ("Consumers") are co-owners of the Ludington Pumped Storage Plant which was placed into service in 1973. The Company has a 49% undivided ownership interest and Consumers the other 51%. The Company's investment at December 31, 1980 and 1979 in utility plant in service was \$168.3 million and \$167.9 million, respectively, and the accumulated depreciation at December 31, 1980 and 1979 was \$24.5 million and \$21.2 million, respectively. Operation, maintenance and other expenses of the plant are shared by the Company and Consumers, 49% and 51%, respectively. The Company's share of these expenses is included in other operation and maintenance expense in the Consolidated Statement of Income.

The Company and two Cooperatives are co-owners of the

Enrico Fermi Unit No. 2, a nuclear unit under construction. See Note 15. The Company has an 80% undivided ownership interest and the two Cooperatives the remaining 20%. The

Company's investment at December 31, 1980 and 1979 in construction work in progress was \$913.5 million and \$721.6 million, respectively.

Note 17—Supplementary Quarterly Financial Information (Unaudited):

	1980 Quarter Ended					1979 Quarter Ended			
	March 31	June 30	Sept. 30	Dec. 31		March 31	June 30	Sept. 30	Dec. 31
	(Thousands)					(Thousands)			
Operating Revenues . . .	\$431,396	\$425,453	\$474,321	\$481,344	Operating Revenues . . .	\$432,514	\$422,332	\$436,949	\$406,716
Operating Income	65,710	75,398	86,452	88,755	Operating Income	66,577	65,644	71,910	71,346
Net Income	34,412	41,650	56,382	56,122	Net Income	45,387	43,504	44,643	42,495
Earnings for					Earnings for				
Common Stock	22,400	29,151	43,138	42,840	Common Stock	34,623	32,726	33,967	31,256
Earnings Per Share . . .	0.30	0.38	0.54	0.52	Earnings Per Share . . .	0.52	0.49	0.47	0.42

Note 18—Supplementary Information Concerning the Effects of Changing Prices (Unaudited):

The following supplementary information is supplied in accordance with the requirements of FAS No. 33, "Financial Reporting and Changing Prices". FAS No. 33 deals with two different aspects of an inflationary environment: (1) the effects of general inflation, i.e., the decline in the purchasing power of the dollar (the "constant dollar" method) and (2) the effects of changes in the specific prices of certain assets used by the Company (the "current cost" method). The Financial Accounting Standards Board has taken this dual approach because there is presently no consensus on which method of reporting better portrays the effects of

changing prices on the operations of business enterprises.

The Company believes it is important for financial statement users to develop an understanding of the more significant impacts of inflation. However, the Company advises readers that the data adjusted for changing prices have been determined in accordance with experimental techniques prescribed by FAS No. 33. It is an attempt to display the approximate economic effects of inflation and should be considered an estimate of those effects rather than as a precise measure. The supplementary information should therefore be viewed with caution as should any other hypothetical data.

Consolidated Statement of Income Adjusted for Changing Prices

	Year Ended December 31, 1980		
	As Reported in the Primary Statements (Historical Cost)	Adjusted for General Inflation* (Constant Dollars)	Adjusted for Changes in Specific Prices* (Current Costs)
	(Millions)		
Operating Revenues	\$1,812	\$ 1,812	\$ 1,812
Operating Expenses (Excluding Depreciation)	1,354	1,354	1,354
Provision for Depreciation (Note B)	142	298	361
Total Operating Expenses	1,496	1,652	1,715
Operating Income	316	160	97
Other Income and Deductions	39	39	39
Income Before Interest Charges	355	199	136
Interest Charges	166	166	166
Net Income	189	33**	(30)
Preferred and Preference Stock Dividend Requirements	51	51	51
Earnings for Common Stock	\$ 138	\$ (18)	\$ (81)
Increase in Specific Prices of Net Utility Plant***			\$ 763
Adjustment of Net Utility Plant to Net Recoverable Amount (Note C)		\$ (407)	87
Effect of Increase in the General Price Level			(1,194)
Excess of Increase in the General Price Level over the Increase in Specific Prices of Net Utility Plant after Adjustment to Net Recoverable Amount			(344)
Reduction of Purchasing Power Loss through Debt Financing (Note D)		394	394
Net Effect on Common Shareholders' Equity		\$ (13)	\$ 50

* Average 1980 dollars.

**If the adjustment of net utility plant to net recoverable amount of \$407 million were reflected, and no recognition was given to the \$394 million reduction of purchasing power loss through debt financing, net income adjusted for general inflation would have been a loss of \$374 million.

***At December 31, 1980, the current cost of utility plant, net of accumulated depreciation, was \$9,816 million, while historical cost or net amount recoverable through depreciation was \$5,026 million.

Five-Year Comparison of Selected Supplementary Financial Data*

	Year Ended December 31				
	1980	1979	1978	1977	1976
	(Millions)				
Operating Revenues:					
As Reported	\$1,812	\$1,698	\$1,590	\$1,451	\$1,266
Adjusted for General Inflation	1,812	1,928	2,008	1,973	1,832
Net Income:					
As Reported	\$ 189	\$ 176	\$ 147	\$ 145	\$ 120
Adjusted for General Inflation	33	61	NA	NA	NA
Adjusted for Changes in Specific Prices	(30)	(16)	NA	NA	NA
Earnings for Common Stock:					
As Reported	\$ 138	\$ 133	\$ 109	\$ 110	\$ 85
Adjusted for General Inflation	(18)	12	NA	NA	NA
Adjusted for Changes in Specific Prices	(81)	(66)	NA	NA	NA
Earnings Per Common Share:					
As Reported	\$ 1.75	\$ 1.90	\$ 1.76	\$ 2.00	\$ 1.66
Adjusted for General Inflation	(0.23)	0.17	NA	NA	NA
Adjusted for Changes in Specific Prices	(1.03)	(0.94)	NA	NA	NA
Excess of Increase in the General Price Level over the Increase in Specific Prices of Net Utility Plant after Adjustment to Net Recoverable Amount	\$ (344)	\$ (402)	NA	NA	NA
Reduction of Purchasing Power Loss through Debt Financing	\$ 394	\$ 428	NA	NA	NA
Net Assets (Common Shareholders' Equity) at Year-End:					
As Reported	\$1,527	\$1,400	\$1,254	\$1,131	\$1,017
Adjusted for either General Inflation or Changes in Specific Prices after Adjustment to Recoverable Amount	1,458	1,504	1,524	1,499	1,439
Cash Dividends Declared Per Common Share:					
As Reported	\$ 1.60	\$ 1.60	\$ 1.52	\$1.4675	\$ 1.45
Adjusted for General Inflation	1.60	1.82	1.92	2.00	2.10
Market Price Per Common Share at Year-End:					
As Reported	\$ 10 $\frac{7}{8}$	\$ 12 $\frac{3}{4}$	\$ 13 $\frac{1}{2}$	\$ 16 $\frac{1}{2}$	\$ 15 $\frac{1}{8}$
Adjusted for General Inflation	10 $\frac{7}{8}$	13 $\frac{3}{4}$	17 $\frac{1}{4}$	22 $\frac{3}{4}$	22 $\frac{3}{4}$
Consumer Price Index (1967=100):					
Average	246.8	217.4	195.4	181.5	170.5
Year-End	258.4	229.9	202.9	186.1	174.3

*All data adjusted for changing prices are stated in average 1980 dollars except for market price per common share at year-end which is stated in December 1980 dollars.

NA—Not Available. These data are not required to be presented by FAS No. 33 and would have been costly and difficult to prepare. In the future, one year's comparative data will be added each year.

Note A—General:

The data adjusted for general inflation represent historical costs stated in terms of dollars of the same general purchasing power (constant dollars), as measured by the average level of the Consumer Price Index for all Urban Consumers (CPI-U) for 1980. This method is intended to measure income after giving recognition to the cost of maintaining the purchasing power of the dollars invested in utility plant.

The current cost data reflect changes in the specific prices of utility plant from the date such plant was acquired to the present, as measured by the Handy-Whitman Index of Public Utility Construction Costs. This method is intended to measure income after giving recognition to the cost of maintaining the capability of the Company's system to provide electric service at current price levels.

The difference between current cost data and the data adjusted for general inflation results from specific prices of utility plant increasing more or less rapidly than prices in general.

Note B—Net Income Adjusted for Changing Prices:

Adjustment of items in the historical cost income statement

to arrive at net income adjusted for general inflation and changes in specific prices was limited to depreciation expense. In accordance with procedures specified in FAS No. 33, revenues and all expenses other than depreciation were considered to reflect the current average price level for the year and accordingly remain unchanged from those amounts shown in the Company's primary financial statements.

Estimated utility plant was determined under both methods by applying the indexes specified above to the historical cost of utility plant by vintage year. Depreciation expense was then determined for the adjusted amounts of utility plant by applying the same composite depreciation rate used to compute the historical amount of depreciation expense shown in the Company's primary financial statements.

Fuel inventories and the cost of fuel used in the generation of electricity were not restated from their historical costs. Regulation limits the recovery of fuel expense through adjustments in basic rate schedules or through the operation

of fuel adjustment billing clauses, which include 90% of the changes in fuel inventory costs. For this reason, fuel inventories are effectively monetary assets. Materials and supplies inventories were not restated since they are not a cost of generating electricity and the amounts involved are insignificant. As with fuel inventories, materials and supplies inventories have been treated as monetary assets. See Note D.

Note C—Adjustment of Net Utility Plant to Net Recoverable Amount:

Under current ratemaking policies prescribed by the MPSC and the FERC, only the historical cost of utility plant is recoverable through depreciation charges as part of the cost of service billed to customers. Therefore, the excess of the cost of utility plant adjusted for both general inflation and changes in specific prices is not presently recoverable in rates as depreciation. In accordance with the requirements of FAS No. 33, the amount of this excess that accrued as a result of changing prices during 1980 is reflected as an adjustment to net recoverable amount.

Note D—Reduction of Purchasing Power Loss through Debt Financing:

During periods of inflation, the holding of monetary assets such as cash and accounts receivable results in a loss of general purchasing power because such items will purchase less at a future date. Alternatively, the holding of monetary liabilities such as long-term debt results in a gain of general purchasing power because the amount of money required to ultimately settle the liabilities represents dollars of diminished purchasing power.

Since the Company owed net monetary liabilities during a period in which the general purchasing power of the dollar declined (i.e., during a period of inflation), the Company experienced an economic gain in purchasing power. All assets and liabilities other than utility plant, as well as amounts applicable to preferred and preference stock, were treated as monetary items. Preferred and preference stock were treated in the same manner as long-term debt since they are treated as such for ratemaking purposes and because these shareholders have invested in the Company primarily for the dividends which are paid at a fixed rate, and not primarily in order to maintain the purchasing power of their original investment.

Note E—Discussion and Analysis of Financial Data Adjusted for Changing Prices:

The accompanying statement of income adjusted for changing prices reveals a significant decrease in reported net income when depreciation expense is adjusted for either general inflation or changes in specific prices. Theoretically, these decreases indicate that current revenues are not sufficient to either maintain the purchasing power of the Company's invested capital or to replace, at the assumed price levels, the portion of its existing productive capacity used up during the year. The decrease in net income of 116% under the current cost method compared to the 83% decrease under the constant dollar method points out the fact that the cost of the Company's investment in utility plant has in-

creased at a rate greater than the rate of general inflation.

The gain in purchasing power discussed previously which results from the Company's substantial use of debt financing is strictly an economic concept. The Company cautions readers that such gains will never be realized and therefore do not contribute to cash flow or distributable income. The regulatory process limits the Company to recovery of only the actual embedded interest cost of capital provided through debt financing. Thus, any gain in purchasing power resulting from the use of debt financing is passed on to customers through reduced rates.

Since a substantial portion of the Company's investment in utility plant was financed through debt, any purchasing power gain resulting from the use of debt can only be realized if depreciation on that portion of the inflation adjusted cost of utility plant financed with debt were recoverable as part of the cost of service billed to customers. Therefore, to properly reflect the economics of rate regulation, the Company believes that the economic gain in purchasing power related to debt should be considered an offset to the economic loss experienced as a result of regulatory restrictions related to the recovery of depreciation on the historical cost of utility plant.

Since the higher depreciation expenses under constant dollar or current cost accounting are not tax deductible, income taxes included in the accompanying data adjusted for changing prices were not adjusted from those amounts shown in the Company's primary financial statements. Thus, the Company's effective tax rate under both the constant dollar and current cost methods exceeds the statutory rate of 46%. Such a tax policy effectively results in a tax on shareholders' investment in the Company.

The constant dollar data, because they are developed using the broad based CPI-U, are not necessarily representative of the effects of inflation on the Company. However, a primary value of constant dollar data is that they provide a common basis for comparison that can be particularly useful in trend analysis. The accompanying summary of selected financial data, for example, shows that operating revenues for the five-year period 1976 through 1980 increased 43%. If each year were restated in average 1980 constant dollars, operating revenues for the same period would decrease 1%, which indicates that the growth in operating revenues is the result of inflation rather than increased volume, since total kilowatthour sales in 1980 were actually 3% lower than in 1976 due to the severe recession.

In summary, the regulatory process limits the amount of depreciation expense recoverable through revenues to the historical cost of the Company's investment in utility plant. Such amount produces cash flows which are inadequate to replace such property in future years or to preserve the purchasing power of common equity capital invested. As a result the Company must increasingly rely on the capital markets to provide necessary financial resources, thus further exposing the Company to the effects of inflation in the form of increased financing costs. The Company, therefore, incurs a significant purchasing power loss which is experienced by the common shareholder and can be overcome only as a result of adequate rate relief in the regulatory process.

Management's Discussion and Analysis of Financial Condition and Results of Operations

Consolidated Statement of Income

General—Throughout the three-year period, the Company experienced increased operating expenses reflecting the effects of inflation, and high costs of capital associated with its continuing capital expenditure program. Also, beginning in mid-1979 and throughout 1980, recessionary conditions existed throughout much of the Company's service area, marked by reduced industrial activity, related employee layoffs and continued energy conservation, which resulted in substantially lower kilowatt-hour sales to customers.

Although rate increases were received during this three-year period, they were neither timely nor adequate to permit the Company to earn its authorized rate of return on common equity.

Operating Revenues—Approximately 97% of the Company's operating revenues are subject to the jurisdiction of the MPSC, with the remaining 3% subject to the jurisdiction of the FERC.

Operating revenues increased in each of the last three years due primarily to rate increases, revenues received under the fuel and purchased power adjustment billing clauses which were in effect throughout the period, and a 1.5% increase in kilowatt-hour sales in 1978. The estimated significance of these factors is shown in the following table:

	Estimated Increase (Decrease) From Prior Year		
	1980	1979	1978
	(Millions)		
Rate increases and fuel and purchased power adjustment billing clauses	\$180	\$120	\$136
Kilowatt-hour sales	(83)	(5)	16
Other—net	17	(6)	(13)
	<u>\$114</u>	<u>\$109</u>	<u>\$139</u>

Rate increases authorized by the MPSC include \$86.8 million annually effective in September 1978 (including interim of \$35.4 million in February 1978) and \$132.7 million annually effective in March 1980 (including interim of \$56.9 million effective in July 1979 when Greenwood Unit No. 1 was placed into service). Effective in November 1980, the MPSC authorized an interim annual rate increase of \$96.1 million in the Company's pending application for an increase in rates. Rate increases in 1979 and 1980 also include billing surcharges under the MPSC, other operation and maintenance expense indexing and the system generating availability incentive provisions. The rate increase amounts authorized by the MPSC are based on the respective test years governing the Company's rate cases; however, revenues actually realized depend upon levels of kilowatt-hour sales.

In 1978, revenues received under the fuel and purchased power adjustment billing clauses were increased by the recovery of 90% of the significantly higher fuel and purchased power costs incurred in the first quarter of 1978 as a result of the coal miners strike, severe winter weather and weather-related coal handling problems.

During 1979, the Company experienced a 0.7% reduction in kilowatt-hour sales (with industrial sales down 2.1%, residential sales down 1.1% and commercial sales up 2.9%) due to reduced industrial activity reflecting slowdowns in automotive and automotive-related activities, cooler than normal weather during the air conditioning season, mild weather affecting heating sales, and customer conservation.

Kilowatt-hour sales in 1980 decreased 7.2% (with industrial sales down 13.9%, residential sales up 1.2% and commercial sales up 0.2%). The decline in sales reflects reduced industrial activity, particularly on the part of automotive and automotive-related manufacturers, with automotive production down significantly from 1979 levels, other recessionary conditions in the Company's service area and continued customer conservation. The increase in residential kilowatt-hour sales in 1980 reflects an increase in residential customers, warmer summer weather which increased customer use of air-conditioners and dehumidifiers and colder fall weather which increased customer use of furnaces and other heating equipment.

Operating Expenses—Operating expenses increased during the three years ended December 31, 1980, as did the total cost per kilowatt-hour sold. Fuel expense increased during this period due primarily to the higher costs of all fuels consumed resulting from greater use of higher cost low-sulfur coals to comply with environmental requirements, United Mine Workers contract wage increases, mine reclamation costs, coal freight rate increases, other escalations and significant oil price increases. Coal consumption at the Company's electric generating plants, as a percentage of total fuel consumed, was approximately 82%, 86%, and 90% in 1978, 1979, and 1980, respectively, and the average cost per ton of coal consumed was \$28.52, \$33.35 and \$37.72, respectively. Increased higher cost generation from oil-fired units was necessary in 1978 due to the coal miners strike. A significant increase in other power supply expense occurred in 1978 as a result of severe winter weather, the coal miners strike and higher costs of purchased power. Other power supply expense decreased in 1979 and 1980, as compared to 1978, due to a reduction in purchased power and increased sales of energy to other utilities, reflecting increased Company generation and declines in kilowatt-hour sales. Other operation expense increased due primarily to higher labor and employee benefit costs, general inflationary increases in other costs and accruals for settlements of two cases which involved claims of employment discrimination (see Note 14 to Consolidated Financial Statements). Maintenance expense increased due primarily to higher labor and material costs and continuing efforts to improve the availability and efficiency of all generating equipment. Depreciation expense increased as a result of higher composite depreciation rates approved by the MPSC effective in September 1978 and an increase in depreciable property, including Greenwood Unit No. 1 which was placed into service in 1979. Taxes other than income increased due to increased property taxes, payroll taxes and the Michigan single business tax. (See Note 7 to Consolidated Financial Statements for components of income taxes and a reconciliation of the federal income tax statutory rate with total income tax expense.) Current income taxes and investment tax credits decreased in 1980 to negative amounts because the Company will report a loss for federal income tax purposes in 1980 as a result of claiming an abandonment loss for the costs associated with Greenwood Unit Nos. 2 and 3 (see Note 13 to Consolidated Financial Statements). The loss for federal income tax purposes in 1980 will be carried back to 1977 and will result in a reduction in the amount of investment tax credits previously claimed by the Company. Deferred income taxes increased in 1980 due primarily to recording the deferred tax liability of approximately \$25 million related to the Greenwood abandonment loss, which has been deferred for financial reporting purposes. The \$4.2 million credit adjustment to deferred Michigan income taxes in each of the three years ended December 31, 1980 (shown in Note 7 to Consolidated Financial Statements) will not be recorded in 1981 because the Company has completed amortization of the accumulated balances of deferred Michigan income taxes as ordered by the MPSC.

Costs of Capital—Interest on long-term debt, preferred and preference stock dividend requirements and dividends on common shares outstanding increased due primarily to the issuance of additional securities at higher interest and dividend rates to finance the Company's continuing capital expenditure program and, to a lesser extent, refunding of maturing security issues at higher costs of capital. Interest on long-term debt has also increased due to higher interest rates on the \$155 million Unsecured Promissory Notes, which are adjusted quarterly based on the prime rate. Other interest expense has increased due primarily to higher levels of short-term borrowings at higher interest rates. The average interest rate for short-term borrowings increased from 8.4% in 1978 to 12.0% in 1979 and 15.1% in 1980.

Earnings for Common Stock—In light of the foregoing, earnings declined for 1978 as the Company experienced lower than anticipated growth in kilowatt-hour sales, inadequate and delayed rate increases and higher operating expenses. The improvement in earnings for 1979, despite lower kilowatt-hour sales, was due primarily to increased operating revenues resulting from rate increases. In 1980, earnings for common stock increased

despite lower kilowatthour sales and increases in operating expenses and financial costs. However, earnings per share declined due to the substantial increase in the average number of common shares outstanding.

Earnings for common stock include AFUDC, a non-operating non-cash item, consisting of the net cost of borrowed funds used for construction purposes and a reasonable rate on other funds when so used. AFUDC increased due to increases in the AFUDC rate (in recognition of increasing costs of capital), additional construction work in progress expenditures and capitalization of the actual interest expense and commitment fees applicable to the Belle River Project Financing arrangement entered into in May, 1980. AFUDC amounted to 61%, 61% and 77% of earnings for common stock in 1978, 1979 and 1980, respectively. See Note 1 to Consolidated Financial Statements.

Return on average common equity was 9.16%, 9.91% and 9.39% for 1978, 1979 and 1980, respectively, as compared with the 13.50% return authorized by the MPSC since May 1977.

Consolidated Balance Sheet

Increases in total assets and total liabilities are due primarily to expenditures for and external financing of the Company's continuing capital expenditure program.

Electric plant in service was increased by \$381 million in 1979, with a corresponding decrease in construction work in progress, when Greenwood Unit No. 1, an oil-fired generating unit, was placed into service. Construction work in progress was decreased by \$71 million in 1980, with a corresponding increase in extraordinary property losses as a result of the decision not to construct Greenwood Unit Nos. 2 and 3.

At December 31, 1980, non-utility property and other deferred debits included approximately \$4 million for St. Clair Energy Corporation ("SCE") and approximately \$12 million for Washtenaw Energy Corporation ("WEC"), both of which are wholly-owned subsidiaries of the Company. SCE is a 51% partner in the mining of coal. The partnership discontinued mining operations in June 1978 and a purchase agreement for certain coal properties has been rescinded. Legal proceedings in this matter are continuing. WEC has a 79% undivided interest in certain uranium mining claims and leases. Uranium mining operations were terminated in November 1979 due to the high mining costs encountered. WEC plans to resume mining operations when the current depressed market price for uranium improves and mining operations become economical.

Customer accounts receivable reflect 30.0 and 35.2 days of revenues outstanding at December 31, 1979 and 1980, respectively. Uncollectible expense increased from \$6.8 million in 1978 and 1979 to \$8.4 million in 1980, reflecting higher unemployment and recessionary conditions in the Company's service area.

Materials and supplies inventories have increased due to longer lead times on reordering certain stock items, additional spare parts and operating supplies to support the Company's capital expenditure and maintenance programs and higher unit prices reflecting the effects of inflation. Fuel inventories have increased due to higher inventory quantities of fuel at higher unit prices.

The Company's long-term debt to total capitalization ratio increased from 52.0% at December 31, 1979 to 53.6% at December 31, 1980, reflecting a higher proportion of external financing through long-term debt borrowings in 1980, including the Belle River Project Financing arrangement. Common shareholders' equity decreased from 35.2% at December 31, 1979 to 33.4% at December 31, 1980, notwithstanding the issuance of 9,572,721 additional common shares in 1980.

Accumulated deferred investment tax credits decreased at December 31, 1980 due primarily to the decision not to construct Greenwood Unit Nos. 2 and 3, which resulted in a reduction of investment tax credits previously claimed by the Company.

Liquidity and Capital Resources

In the past several years, the Company's large capital expenditure program

and increased working capital requirements (especially fuel inventories) and capital costs (interest and dividends) have created increasing cash needs which have had to be met to a greater degree through external sources. Internally generated cash flow provided 20%, 23% and 15% of capital expenditures (excluding total AFUDC) in 1978, 1979 and 1980, respectively, with the balance being provided by external financing. Internal cash generation at the 15% to 20% level is expected to continue during the periods when the largest expenditures for the Fermi and Belle River power plants are scheduled, and cash needs for total capital expenditures from 1981 to 1985 are estimated to approximate \$3.1 billion (excluding \$0.6 billion of AFUDC), including expenditures expected to average about 20% of annual totals to meet pollution control regulations. In 1981, the Company expects capital expenditures (excluding AFUDC) of approximately \$710 million and approximately \$645 million of external financing (including approximately \$265 million under its Belle River project financing arrangement). The sale of substantial amounts of debt and equity securities, which is dependent upon receipt of periodic financing authority from the MPSC, will be required for the Company to meet its short and long range cash needs. When the Fermi No. 2 and Belle River units are in service, cash flow from operations is expected to increase.

In addition to its continuing needs for long-term debt and equity funds, short-term borrowings are used as a part of normal day-to-day operations and to meet interim cash needs for capital projects, pending periodic reduction or repayment through long-term financing. At December 31, 1980, the Company had bank lines of credit aggregating approximately \$219 million. Any material disruption in the securities markets or any other circumstance that might significantly delay or restrict the Company's access to long-term debt or equity financing would increase reliance on short-term borrowings and, depending on the circumstances, could adversely affect the Company's financial condition, result in delays or suspension of major construction projects, and could in the future adversely affect service.

The Company plans to carry out a financing program to achieve a capital structure objective of approximately 50%-55% long-term debt, 10%-15% preferred and preference stock, and 35% common equity. Considering the large number of common shares that must be sold to achieve and maintain this ratio, and currently depressed common stock prices, common equity may remain below the 35% goal over the next several years. When the present major power plant construction program is completed, external needs for additional funds are expected to decrease and a common equity ratio above 35%, and a debt ratio closer to 50%, are likely.

In order to provide a specific source of funds to finance Belle River Unit No. 1 and the common facilities for Unit No. 2, an \$800 million project financing arrangement with a number of banks was completed in 1980. Under this financing arrangement, funds are drawn down on a monthly basis as required for construction. Repayment of the loans (including interest and commitment fees which are now being capitalized) will begin not later than January 1, 1985 at the rate of \$50 million per quarter, with refunding expected through sales of General and Refunding Mortgage Bonds.

A portion of capital needs have been met through leases for such equipment as computers, cars, trucks, unit trains, lake vessels and buildings. Nuclear fuel financing of up to \$90 million, through an agreement whereby repayments will be made as the fuel is consumed, was completed in 1979. The Company has also sold 20% of the capacity of its proposed Fermi plant to two Michigan cooperatives, with the cooperatives agreeing to bear 20% of construction costs of that plant.

Inflation

The Company's business and operations have been and will continue to be impacted by a highly inflationary economy. See Note 18 to Consolidated Financial Statements for information concerning the approximate effects of inflation on the Company.

Comparative Results of Operations

	1980	1979	1978	1977
Operating Revenues				
Electric	\$ 1,776,364	\$ 1,667,679	\$ 1,561,296	\$ 1,423,909
Steam	36,150	30,832	28,546	27,012
Total Operating Revenues	\$ 1,812,514	\$ 1,698,511	\$ 1,589,842	\$ 1,450,921
Operating Expenses				
Operation expense				
Fuel	\$ 670,116	\$ 647,620	\$ 580,869	\$ 538,325
Other power supply	107,767	96,502	158,098	108,648
Other operation expense	290,566	266,410	235,720	203,300
Maintenance expense	133,270	128,600	124,804	110,736
Provision for depreciation	141,948	129,644	115,325	102,304
Provision for taxes				
Taxes, other than income	115,520	99,552	91,488	96,597
Current income taxes	(307)	5,063	4,671	1,334
Deferred income taxes—net	59,159	40,359	27,980	14,787
Investment tax credit—net	(21,840)	9,284	24,035	50,596
Total Operating Expenses	\$ 1,496,199	\$ 1,423,034	\$ 1,362,990	\$ 1,226,627
Operating Income	\$ 316,315	\$ 275,477	\$ 226,852	\$ 224,294
Other Income and Deductions				
Allowance for funds used during construction	\$ —	\$ —	\$ —	\$ —
Allowance for other funds used during construction	38,815	38,323	32,273	23,750
Other income and deductions	692	3,664	2,371	4,821
Income taxes	(669)	(1,554)	(1,228)	(1,700)
Total Other Income and Deductions	\$ 38,838	\$ 40,433	\$ 33,416	\$ 26,871
Income Before Interest Charges	\$ 355,153	\$ 315,910	\$ 260,268	\$ 251,165
Interest Charges				
Long-term debt	\$ 211,857	\$ 167,585	\$ 140,288	\$ 129,078
Amortization of debt discount, premium and expense	1,776	1,644	1,403	1,339
Other	19,662	13,823	5,298	1,959
Allowance for borrowed funds used during construction (credit)	(66,708)	(43,171)	(33,590)	(25,726)
Net Interest Charges	\$ 166,587	\$ 139,881	\$ 113,399	\$ 106,650
Net Income Before Cumulative Effect of a Change in Billing Practice	\$ 188,566	\$ 176,029	\$ 146,869	\$ 144,515
Cumulative effect to October 1, 1973 of a change in billing practice, net of income taxes of \$6,063,000	—	—	—	—
Net Income	\$ 188,566	\$ 176,029	\$ 146,869	\$ 144,515
Preferred and Preference Stock				
Dividend Requirements	51,037	43,457	38,056	34,095
Earnings for Common Stock	\$ 137,529	\$ 132,572	\$ 108,813	\$ 110,420
Common Shares Outstanding—Average	78,780,863	69,848,484	61,898,763	55,202,974
Earnings Per Share	\$ 1.75	\$ 1.90	\$ 1.76	\$ 2.00
Dividends Declared Per Share of Common Stock	\$ 1.60	\$ 1.60	\$ 1.52	\$ 1.4675
Ratio of Earnings to Fixed Charges (S.E.C. Basis)	1.90	2.17	2.28	2.48
Ratio of Earnings to Fixed Charges and Preferred and Preference Stock Dividend Requirements (S.E.C. Basis)	1.53	1.69	1.71	1.85

(a) 1975 earnings for common stock, earnings per share, ratio of earnings to fixed charges, and ratio of earnings to fixed charges and preferred and preference stock dividend requirements will be restated to \$59.3 million, \$1.23, 1.85 and 1.45, respectively, if certain deferred fuel cost revenues are ultimately required to be refunded. See Note 10 of Notes to Consolidated Financial Statements.

(b) Includes earnings per share of \$0.14 for cumulative effect to October 1, 1973 of a change in billing practice, net of income taxes.

(c) Before cumulative effect to October 1, 1973 of a change in billing practice.

1976	1975	1974	1973	1972	1971	1970
(Thousands)						
\$ 1,241,883	\$ 1,052,061	\$ 881,301	\$ 738,216	\$ 659,148	\$ 585,324	\$ 518,632
24,284	18,719	17,158	14,919	14,443	13,872	10,626
\$ 1,266,167	\$ 1,070,780	\$ 898,459	\$ 753,135	\$ 673,591	\$ 599,196	\$ 529,258
\$ 477,231	\$ 445,437	\$ 342,398	\$ 218,150	\$ 197,016	\$ 187,323	\$ 145,725
88,350	(9,464)	(2,118)	20,830	9,985	(5,177)	5,046
179,867	160,224	142,789	134,266	129,296	123,691	114,559
100,577	91,253	61,816	56,556	52,065	49,877	48,687
93,875	89,240	84,885	72,967	63,532	56,898	50,076
94,234	76,365	74,382	65,720	56,636	53,702	46,385
3,467	389	3,992	7,194	5,348	3,781	16,250
28,379	29,785	26,187	21,968	22,660	13,382	10,222
4,094	7,987	(2,428)	7,583	7,299	6,793	583
\$ 1,070,074	\$ 891,216	\$ 731,903	\$ 605,234	\$ 543,837	\$ 490,270	\$ 437,533
\$ 196,093	\$ 179,564	\$ 166,556	\$ 147,901	\$ 129,754	\$ 108,926	\$ 91,725
\$ 49,833	\$ 43,463	\$ 37,561	\$ 36,520	\$ 39,395	\$ 26,823	\$ 16,760
—	—	—	—	—	—	—
1,728	2,412	5,829	2,413	97	(523)	(204)
451	(1,353)	(3,280)	(1,162)	(22)	331	179
\$ 52,012	\$ 44,522	\$ 40,110	\$ 37,771	\$ 39,470	\$ 26,631	\$ 16,735
\$ 248,105	\$ 224,086	\$ 206,666	\$ 185,672	\$ 169,224	\$ 135,557	\$ 108,460
\$ 124,992	\$ 116,267	\$ 102,672	\$ 84,627	\$ 70,244	\$ 58,964	\$ 40,913
1,084	945	618	455	394	351	229
2,404	8,420	14,124	6,043	3,434	1,700	4,667
—	—	—	—	—	—	—
\$ 128,480	\$ 125,632	\$ 117,414	\$ 91,125	\$ 74,072	\$ 61,015	\$ 45,809
\$ 119,625	\$ 98,454	\$ 89,252	\$ 94,547	\$ 95,152	\$ 74,542	\$ 62,651
—	—	—	5,585	—	—	—
\$ 119,625	\$ 98,454	\$ 89,252	\$ 100,132	\$ 95,152	\$ 74,542	\$ 62,651
34,589	26,463	23,759	23,762	18,488	13,385	6,105
\$ 85,036	\$ 71,991(a)	\$ 65,493	\$ 76,370	\$ 76,664	\$ 61,157	\$ 56,546
51,277,789	48,120,898	44,922,938	40,028,797	36,701,834	33,767,445	30,138,387
\$ 1.66	\$ 1.50(a)	\$ 1.46	\$ 1.91(b)	\$ 2.09	\$ 1.81	\$ 1.88
\$ 1.45	\$ 1.45	\$ 1.45	\$ 1.45	\$ 1.40	\$ 1.40	\$ 1.40
2.13	2.05(a)	2.01	2.44(c)	2.74	2.59	2.92
1.61	1.60(a)	1.59	1.80(c)	2.06	2.02	2.46

Statistical Review

	1980	1979	1978	1977
Operating Revenues (Thousands)				
Residential—Electric	\$ 583,701	\$ 524,613	\$ 497,988	\$ 464,906
Commercial—Electric	382,018	345,576	313,673	291,220
Industrial—Electric	658,051	647,438	611,404	539,469
Other	188,744	180,884	166,777	155,326
Total	\$1,812,514	\$1,698,511	\$1,589,842	\$1,450,921
Sales (Millions of kWh)				
Residential	10,394	10,274	10,386	10,385
Commercial	6,265	6,251	6,073	6,027
Industrial	15,472	17,960	18,354	17,915
Other	2,104	2,406	2,335	2,287
Total	34,235	36,891	37,148	36,614
Electric Customers (Year End)				
Residential	1,623,162	1,622,768	1,600,988	1,579,607
Commercial	136,983	135,788	127,634	118,942
Industrial	2,293	2,264	2,201	2,126
Other	1,750	1,713	1,675	1,648
Total	1,764,188	1,762,533	1,732,498	1,702,323
Average Annual Use				
Per Residential Customer (kWh)	6,408	6,402	6,523	6,616
Average Annual Bill Per Residential Customer	\$359.86	\$326.32	\$313.08	\$296.20
Average Revenue Per kWh				
Residential	5.62¢	5.11¢	4.79¢	4.48¢
Commercial	6.10	5.53	5.16	4.83
Industrial	4.25	3.60	3.33	3.01
Capitalization (Thousands)				
Long-Term Debt	\$2,450,457	\$2,069,518	\$1,843,036	\$1,738,185
Preferred/Preference Stock	591,346	510,743	494,691	448,892
Common Shareholders' Equity	1,526,842	1,400,441	1,254,074	1,130,738
Total	\$4,568,645	\$3,980,707	\$3,591,801	\$3,317,815
Capitalization (Percent)				
Long-Term Debt	53.6	52.0	51.3	52.4
Preferred/Preference Stock	13.0	12.8	13.8	13.5
Common Shareholders' Equity	33.4	35.2	34.9	34.1
Total	100.0	100.0	100.0	100.0
Common Stock Data				
Earnings Per Share	\$1.75	\$1.90	\$1.76	\$2.00
Dividends Paid Per Share	\$1.60	\$1.58	\$1.52	\$1.45
Payout	91%	83%	86%	73%
Shares Outstanding—Average	78,780,863	69,848,484	61,898,763	55,202,974
% Earned on Average Common Equity	9.35%	9.91%	9.16%	10.38%
Book Value Per Share	\$18.00	\$18.63	\$18.81	\$18.88
Market Price				
High	13 ⁷ / ₈	15 ⁷ / ₈	16 ⁷ / ₈	18
Low	10	12 ¹ / ₄	13 ³ / ₈	15 ¹ / ₂
Miscellaneous Financial Data				
Average Interest Rate on Long-Term Debt	9.0%	8.5%	7.7%	7.5%
Average Dividend Rate on Preferred/Preference Stock	9.5%	9.0%	8.8%	8.6%
Long-Term Debt Obligations and Redeemable Preferred and Preference Stock Outstanding (Thousands)	\$2,809,976	\$2,332,200	\$2,096,540	\$1,888,740
Total Assets (Thousands)	\$5,741,686	\$4,146,023	\$4,631,487	\$4,132,724
Gross Utility Plant (Thousands)	\$6,213,495	\$5,660,023	\$5,102,843	\$4,481,885
Net Utility Plant (Thousands)	\$5,026,245	\$4,590,829	\$4,140,521	\$3,608,509
Capital Expenditures (Thousands)	\$ 644,540	\$ 791,389	\$ 642,676	\$ 383,458
Miscellaneous Operating Data				
System Capability at Year End—MW	8,234	8,964	8,591	8,745
System Capability at Time of Peak—MW	8,531	8,877	8,984	8,751
System Peak Demand—MW	6,703	6,829	7,312	7,381
Reserve Margin at Time of Peak	27.3%	30.0%	22.9%	18.6%
System Load Factor	63.1%	66.2%	62.3%	60.7%
Heat Rate—Btu Per kWh	10,140	10,280	10,530	10,360
Fuel Cost—¢ Per Million Btu	178.3¢	163.4¢	149.0¢	130.2
Number of Employees at Year End	10,789	10,908	10,729	9,953

1976	1975	1974	1973	1972	1971	1970
\$ 408,828	\$ 366,381	\$ 297,072	\$ 261,166	\$ 236,957	\$ 213,724	\$ 193,540
254,363	218,474	183,732	160,686	145,751	132,644	124,863
463,174	363,732	307,353	247,891	215,968	184,830	156,357
139,802	122,193	110,302	83,392	74,315	67,998	54,498
\$1,266,167	\$1,070,780	\$ 898,459	\$ 753,135	\$ 673,591	\$ 599,196	\$ 529,258
10,105	9,989	9,584	9,748	9,309	8,802	8,314
5,802	5,610	5,590	5,907	5,513	5,169	5,030
17,253	15,036	16,419	17,687	16,224	14,654	13,769
2,168	1,784	1,819	1,852	1,809	1,950	2,065
35,328	32,419	33,412	35,194	32,855	30,575	29,178
1,560,669	1,541,981	1,526,562	1,499,524	1,470,458	1,437,720	1,410,104
118,107	117,373	117,648	117,060	116,957	116,098	115,677
2,018	1,931	1,849	1,781	1,686	1,612	1,522
1,589	1,546	1,524	1,435	1,323	1,283	1,229
1,682,383	1,662,831	1,647,583	1,619,800	1,590,424	1,556,713	1,528,532
6,518	6,514	6,330	6,560	6,400	6,183	5,931
\$263.71	\$238.90	\$196.21	\$175.76	\$162.91	\$150.13	\$138.06
4.05c	3.67c	3.10c	2.63c	2.55c	2.43c	2.33c
4.38	3.89	3.29	2.70	2.64	2.57	2.48
2.68	2.42	1.87	1.40	1.33	1.26	1.14
\$1,681,998	\$1,573,077	\$1,542,542	\$1,331,700	\$1,193,522	\$1,094,965	\$ 935,858
412,699	418,312	324,534	324,809	324,895	249,778	142,872
1,016,797	939,593	903,980	854,982	789,326	690,028	601,300
\$3,111,494	\$2,930,982	\$2,771,056	\$2,511,491	\$2,208,043	\$2,034,771	\$1,680,030
54.1	53.7	55.7	53.0	51.7	53.8	55.7
13.2	14.2	11.7	13.0	14.1	12.3	8.5
32.7	32.1	32.6	34.0	34.2	33.9	35.8
100.0	100.0	100.0	100.0	100.0	100.0	100.0
\$1.66	\$1.50	\$1.46	\$1.91	\$2.09	\$1.81	\$1.88
\$1.45	\$1.45	\$1.45	\$1.45	\$1.40	\$1.40	1.40
87%	97%	99%	76%	67%	77%	75%
51,277,789	48,120,898	44,922,938	40,028,797	36,701,834	33,767,445	30,138,877
8.65%	7.68%	7.32%	9.40%	10.57%	9.36%	9.91%
\$18.64	\$18.92	\$19.62	\$19.86	\$19.72	\$19.16	\$18.81
15½%	14½%	18	21¼	22¼	23¾	23½
13	8¾	7½	15½	19¼	19¼	17½
7.6%	7.5%	7.4%	6.9%	6.3%	6.2%	5.9%
8.4%	8.3%	7.3%	7.3%	7.3%	7.3%	7.0%
\$1,793,340	\$1,770,340	\$1,556,535	\$1,351,485	\$1,194,965	\$1,095,465	\$ 936,358
\$3,857,332	\$3,649,940	\$3,450,875	\$3,052,342	\$2,751,248	\$2,394,080	\$1,984,078
\$4,209,699	\$3,934,752	\$3,765,369	\$3,439,667	\$3,093,551	\$2,717,596	\$2,312,353
\$3,414,558	\$3,221,932	\$3,120,348	\$2,840,954	\$2,536,709	\$2,195,019	\$1,828,696
\$ 297,240	\$ 241,186	\$ 399,918	\$ 390,915	\$ 405,628	\$ 423,220	\$ 352,412
8,965	8,780	8,701	7,721	6,538	6,539	6,132
8,999	8,556	8,689	8,536	7,110	6,970	6,317
6,613	6,467	6,614	6,935	6,049	5,986	5,465
36.1%	32.2%	31.4%	23.1%	17.5%	16.4%	15.6%
65.5%	61.8%	62.1%	62.3%	67.4%	63.7%	66.6%
10,250	10,190	10,140	10,150	10,310	10,500	10,510
120.8c	110.1c	89.3c	53.5c	49.2c	45.0c	38.1c
9,579	9,567	10,035	10,304	10,902	11,309	11,176

Market for the Company's Common Stock and Related Security Holder Matters

The Company's Common Stock is listed only on the New York Stock Exchange, which is the principal market for such stock. The following table indicates the reported high and low sales prices of the Company's Common Stock on the Composite Tape and dividends paid per share for each quarterly period during the past two years:

Calendar Quarter	Price Range		Dividends Paid Per Share
	High	Low	
1979 First	\$15½	\$13¼	\$0.38
Second	15¾	13¾	0.40
Third	15¾	13¾	0.40
Fourth	15½	12¼	0.40
1980 First	13½	10¾	0.40
Second	13¾	11¼	0.40
Third	13¼	11¾	0.40
Fourth	12¾	10	0.40

At December 31, 1980, 84,032,618 shares of the Company's Common Stock were outstanding. These shares were held by a total of 234,689 shareholders, based upon the number of record holders as of that date.

The amount of retained earnings of the Company at December 31, 1980 was \$376.3 million, of which \$14 million was restricted under a covenant relating to the Company's General and Refunding Mortgage Bonds, Series I, as to payment of dividends and other distributions, except dividends payable in Common Stock. The amount of future dividends will depend upon the Company's earnings (which in turn are dependent, among other things, upon levels of kilowatt-hour sales and timely and adequate rate relief), capital requirements, financial condition and other factors.

Miscellaneous Corporate Data**Corporate Address**

Detroit Edison
General Offices
2000 Second Avenue
Detroit, Michigan 48226
Telephone: (313) 237-8000

Independent Accountants

Price Waterhouse & Co.
200 Renaissance Center
Detroit, Michigan 48243

Form 10-K

Copies of Form 10-K, Securities and Exchange Commission Annual Report, are available. Requests should be directed to:
Frank M. Kehoe
Vice President and Secretary
The Detroit Edison Company
2000 Second Avenue
Detroit, Michigan 48226

Transfer Agents

Bradford Trust Company
Two Broadway
New York, New York 10004

Charles A. Babcock
Ronald J. Gdowski
Irene C. Kata
Frank M. Kehoe
2000 Second Avenue
Detroit, Michigan 48226

Registrars of Stock

Bradford Trust Company
Two Broadway
New York, New York 10004
(Preferred, Preference and Common)

National Bank of Detroit
611 Woodward Avenue
Detroit, Michigan 48232
(Preferred and Preference)

The Detroit Bank and Trust Company
211 West Fort Street
Detroit, Michigan 48231
(Common)

Common Stock

Listed on the New York Stock Exchange.

Unlisted trading on the Boston, Cincinnati, Midwest, and Philadelphia Stock Exchanges.

New York Stock Exchange Symbol
—DTE.

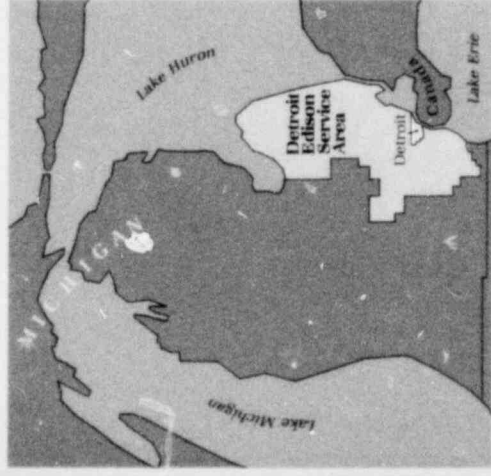
Meeting the Electric Energy Needs of Southeastern Michigan

Detroit Edison's expansion plans are designed to meet the electric energy needs of its 7,600-square mile Southeastern Michigan service area. We expect to meet those needs with a system that is presently over 90% coal-fired, with two coal-fired and one nuclear generating unit under construction.

An expansion of energy needs by industry, business and homes is taking place. While this growth is not as great as was experienced prior to the 1974 energy crunch, it does point out the continuing need for a dependable supply of electric energy. In addition, this region offers an unlimited supply of fresh water from the surrounding Great Lakes, while water shortages are becoming a critical factor in some areas of the country.

At the present time three large auto assembly plants are under construction; office space, including two additional towers at the Renaissance Center, are under construction; and apartment developments are being built or are in the planning stages. Several of these residential developments are in the heart of Downtown Detroit.

It is with a great deal of confidence that we look ahead to the future of Southeastern Michigan.



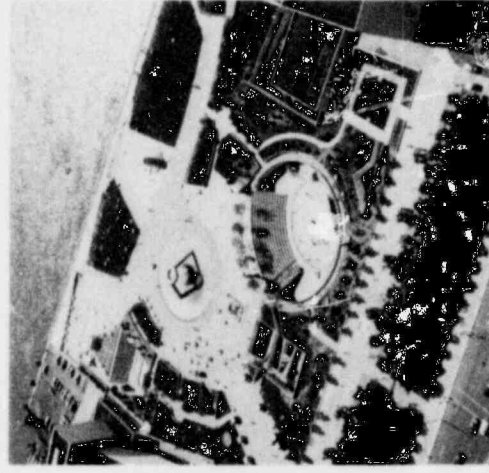
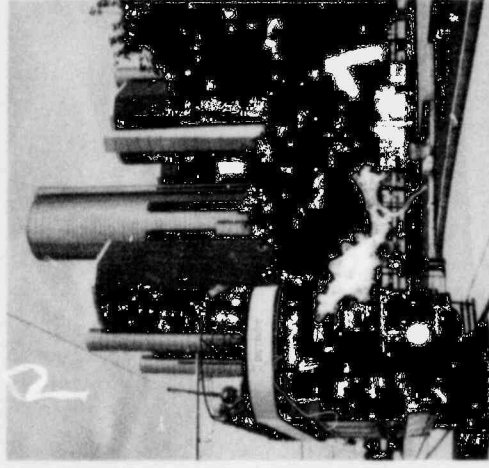
Top: Spectators line the Windsor, Canada shoreline to watch the tugboat race which is part of the annual Detroit-Windsor International Freedom Festival.

Upper Left: The only double-deck trolley car in the United States moves people around Downtown Detroit.

Upper Right: The Hart Plaza, with its amphitheater, shops, restaurants, fountain and other attractions, is a new Downtown Detroit development.

Bottom Center: This 24-story apartment tower, being built in Downtown Detroit, will have 350 apartments above a parking garage, a swim and health club and commercial space.

Right: The City of Detroit received much favorable recognition for its outstanding job of hosting the 198 Republican National Convention.



**Detroit
Edison** 2000 Second Avenue
Detroit, Michigan 48226