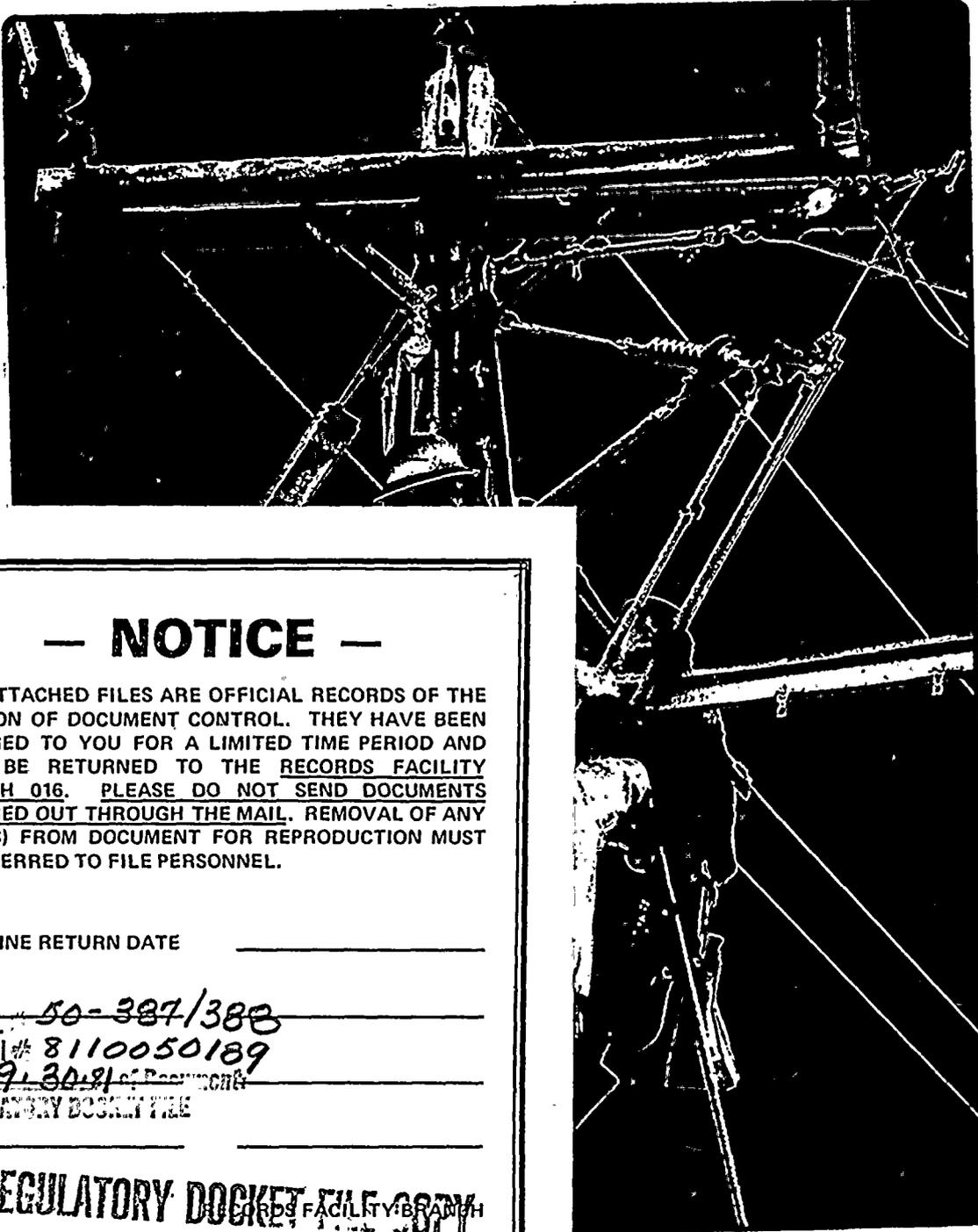


ANNUAL REPORT '80



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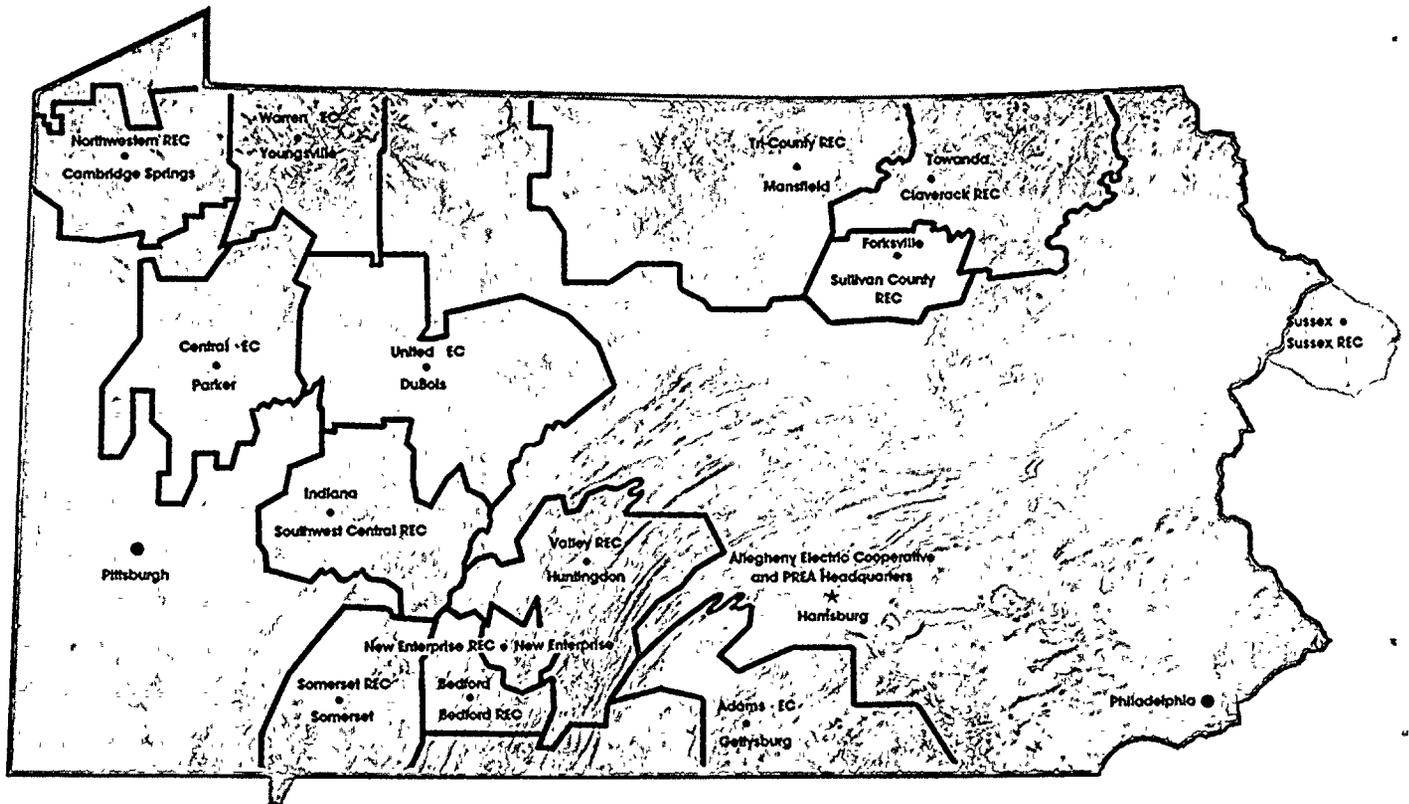
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Allegheny

ELECTRIC COOPERATIVE, INC.

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Allegheny Electric Cooperative Members

Providing low cost dependable electricity to 158,000 member/consumers in Pennsylvania and New Jersey.

serving in 44 counties

23,689 miles of line

158,000 member/consumers

156 directors - 698 employees

1.7 billion KWH purchased annually

\$242,000,000 invested in plant

Energy Projects

NUCLEAR

10% ownership in the Susquehanna Steam Electric Station.

HYDRO

Identifying and planning the use of existing dams for electric generation.

ANTHRACITE COAL

Exploring the feasibility of a large mine-mouth generating plant in the anthracite region.

SYNTHETIC FUELS

Exploring the potential of a generating station fueled by medium BTU coal-derived gas, to be built in conjunction with a major synfuels plant under study in Western Pennsylvania.

WIND

Operation of two wind turbines to study the economic and technical feasibility of this form of generation in Pennsylvania.

GROUND WATER

Installation of ground water heat pumps to determine economic and technical impact on water and space heating and cooling.

LOAD MANAGEMENT

Operation of test systems to control water heaters in order to reduce electricity consumption during peak demand periods.

President's Report

I am pleased to report that substantial progress was made during 1980.

Perhaps the most important progress in the viewpoint of the member systems was the Transmission Committee progress in developing guidelines under which Allegheny Electric Cooperative will provide transmission facilities. As Allegheny Electric Cooperative evolves into a "full service" generation and transmission cooperative, the "T" transmission portion will become very important in reducing outages and improving continuity of service.

On the energy management and conservation front, Allegheny was one of five Cooperatives in the United States selected to receive the President's Award for Energy Efficiency. Additionally, Allegheny was awarded grants by the Electric Power Research Institute and the U.S. Department of Energy to continue research into the ground water and ground-coupled heat pump.

I regret the further delays on the operation schedule of the Susquehanna nuclear station. There are two good news events pertaining to nuclear power. The first is that Congress made a small start on waste disposal legislation in 1980. We are optimistic for additional legislation in this "key"



James Henderson
President

area in 1981. The second is that the NRC has started to make some progress in licensing activities on nuclear plants. All license work had come to a complete halt as a result of TMI. We look forward to license progress on Susquehanna in 1981.

As 1980 ended, it began to look like the anti-nuclear tide had turned and maybe the nation will once again look at the alternatives and decide that nuclear power is not as dangerous as the scare tactics, put forth by the anti-nuclear groups, would lead the public-at-large to believe. Your Allegheny Electric Cooperative has a lot at stake in this area due to our 10% ownership of the Susquehanna Nuclear Plant. Printed elsewhere in this report is Allegheny Electric Cooperative's statement on nuclear energy adopted by the Board in 1980.

Speaking of nuclear energy and how public policy changed from nuclear development to one of opposition, it is fascinating to look at nuclear energy in other nations. For example, France expects to bring a new nuclear unit on line EVERY TWO MONTHS on the average between 1980 and 1985. It is also interesting to note that France is going forward in developing and building "fast breeder reactors" to generate electric power. It is estimated that the fast breeder reactor multiplies the energy potential of natural uranium sixty to seventy times.

All of us in rural electrification, dedicated to providing power at as low a cost as possible, must work to get nuclear power to the point where it can provide a substantial portion of our generation capacity.

Although there are many obstacles and challenges to overcome in planning ahead for your future power supply, the true spirit of cooperation and working together for mutual benefits will provide the energy to accomplish our objectives.

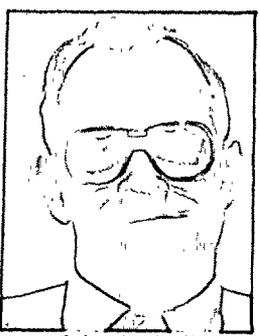
Board of Directors



James Henderson
President • Sussex



Myron Ludwick
Vice President • Warren



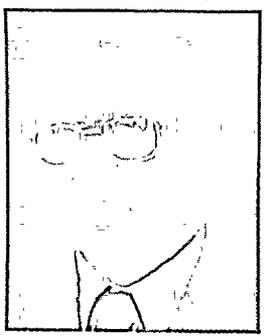
John Anstadt
Secretary • Sullivan



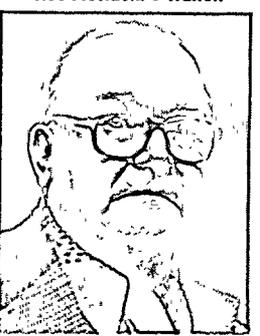
Robert Sterrett
Treasurer • Central



Clair O. Buterbaugh
Southwest Central



John Drake
Claverack



Lloyd Dugan, Sr.
Tri-County



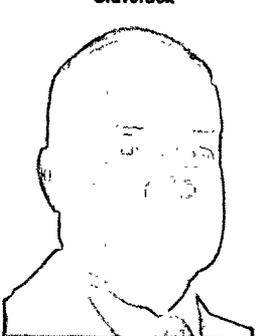
Don Hill
Valley



Harold Hines
Northwestern



Harris Horn
Adams



Robert E. Leonard
United



Dennis Shaffer
Bedford



Benjamin Slick
New Enterprise



Hiram Walker
Somerset

Employees



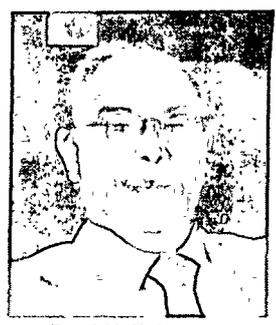
William F. Matson
Executive Vice President
&
General Manager



David L. Mohr
Engineering/Power Supply
Director



William E. Mowatt
General Counsel
& Assistant Secretary



Paul N. Tetherow
Assistant General Manager



C. D. Blackburn
Office Manager



Joseph Dudick
Public Affairs Director

General Manager's Report

In spite of rapidly-escalating prices, constant increases in the energy markets, and two reductions in our allocation of low-cost PASNY power, Allegheny Electric Cooperative can report to its membership that 1980 has been successful in several areas. First and foremost, Allegheny was able to refund to our members over \$4 million in rate settlements from our major power suppliers. These refunds helped to keep the increases in our wholesale power cost to our members within reason in this extremely inflationary period. The added good news is that our projections for 1981 suggest that little or no increase in our basic wholesale power rates will be required.



William F. Matson
Executive Vice President
&
General Manager

As mentioned, Allegheny experienced two reductions in our allocation of low-cost PASNY power during the year. These actions contributed heavily to the need for Allegheny to increase its rates to members. It was fifteen years ago - July 28, 1966 - when the original deliveries of hydroelectric power from the Power Authority of the State of New York (PASNY) began to flow to our members. Through the years, our share of that economical power has shrunk considerably. Nevertheless, if in 1980 our PASNY power had been replaced by wholesale purchases from Penelec and Met-Ed, the additional cost to our members would have been \$16,200,000. At present, Allegheny is fighting for that already-curtailed allocation of Niagara power, now being challenged by several northeastern states. We feel under the law these states have no right to expect any allocation - and certainly not a share of ours. In years to come we can continue to expect significant activity by Allegheny in an area which was virtually unknown a short time ago, that of the almost never-ending challenges to the Federal Energy Regulatory Commission (FERC) with regard to this low-cost source of power.

Our efforts to become more independent of our major power suppliers moved ahead well during 1980. Considerable progress was made on our hydro development activities. A license application was filed with FERC on the Raystown project, and we received funding from DOE for detailed feasibility studies of Allegheny Locks and Dams 8 and 9.

The Susquehanna Steam Electric Station can be

categorized as progressing predictably, though not without its share of frustrations. Inactivity on the part of the Nuclear Regulatory Commission may account for licensing delays on the Susquehanna Plant that could cost electric consumers in Pennsylvania more than \$1 million per day on this plant alone. Add to that the \$400,000 a day attributed to a dormant Three Mile Island Unit 1, and it becomes clear what inaction on the part of a regulatory agency can cost consumers.

Allegheny's investigations into the feasibility of an anthracite-fired generating plant, which would boost the sagging economy of the hard coal region in northeastern Pennsylvania, has moved along more rapidly than anticipated. We are expecting "first draft" price quotes from Consolidation Coal Company, one of the potential coal suppliers for the project, in mid-1981.

There was also good news on the nuclear fuels front. Our partners in the Susquehanna Plant settled a damage suit with General Atomic Corporation (GAC). As a party to that suit, Allegheny will share in the settlement which will allow us to completely recover our investment in the URADCO mining venture, plus provide us with an assured supply of yellowcake at well below project market costs for a number of years in the future.

In 1980, Allegheny also received a refund of \$3,373,180.00 from the treasury of the Commonwealth of Pennsylvania. This was the result of an order of the Board of Finance and Revenue, granting Allegheny's Petition for Refund of this amount paid under protest during 1979 under the Pennsylvania Public Utility Realty Tax Act (PURTA).

During the last part of 1980, the new team in Washington made attacks on the REA Loan Program. Responding to these initiatives has taken its share of time, expense, and nervous energy from us all. At stake, of course, is access to the Federal Financing Bank (FFB) for G&T cooperatives with Federal loan guarantees. We have every reason to believe that if a strong, united, national effort in defense of the REA program continues, we will be able to retain a strong rural electric credit program.

While most of the Forbes 500 corporations probably would have to agree that it was just another year, those of us deeply involved in Allegheny have to say that it seemed like one of the toughest ever, but then we haven't seen what the next few years may bring. Throughout 1980, the close working relationships between Allegheny board members, employees of member cooperatives, and Allegheny staff has been responsible for timely completion of many important projects which have significantly enhanced our overall operation. For the cooperation, we are grateful.

FINANCIAL REVIEW

Operating Revenue

The operating revenue of Allegheny increased by 8.5 million (20% for the fiscal year which ended December 31, 1981) and is comprised solely of sales to members.

1980	\$51,123,060
1979	\$42,589,089

The revenue generated from sales increased \$8.5 million even though the kilowatt hour sales increased by only 12.9 million KWH (0.8%). The revenue increase from sales is due largely to the rate increases which were necessitated by the reduction of previously-apportioned PASNY power, and the continuing pass-through of the fuel charges.

Operating Expenses

The general operating expenses increased in 1980 by \$7.6 million. This was due largely to the increased costs of purchased power (19.3%). Also during 1980, general and administrative expenses increased \$123,000 or 16.6%. This was mainly due to Allegheny's increased involvement with EPRI as well as a number of engineering feasibility studies and projects undertaken in 1980.

Other Revenue

Allegheny's interest income for 1980 was \$555,776. This is compared to \$146,816 in 1979, or an increase of 279%. During 1980, because of the extremely high interest rates available on investments, continued emphasis was placed on the matter of money management. At all times during the year, Allegheny was able to keep its funds working, thereby making the optimum use of each available dollar. We feel that this money management program is well worth the time and effort expended.

Interest Charges

The interest on the long-term debt increased by \$6,300,000 (48.9%). This is the interest charged by the Federal Financing Bank on the monies which have been advanced to Allegheny for its involvement in the Susquehanna Steam Electric Station in Berwick, Pennsylvania. This figure will continue to grow in 1981 because of Allegheny's continued involvement with the Susquehanna Plant and also because of the increased interest rates now in effect. During the year of 1980, Allegheny did not use its line of credit with CFC and at no time during the year were any short-term funds borrowed. Therefore, all of the interest charges are on a long-term basis. All were

capitalized and allocated to the Susquehanna Plant.

Net Margins

Allegheny's net margin for 1980 was \$2.9 million compared to \$2.1 million in 1979. This is an increase of 35%. The increase in net margins was because Allegheny's actual sales were less than what was budgeted in 1980 and at the same time, expenses were under the projected budgeted amount.

Financing

Allegheny's continued involvement in the Susquehanna Plant will require additional funds during 1981 to be advanced by the Federal Financing Bank. There is a possibility that during 1981, Allegheny may be forced to go to the open market to obtain future financing. However, it is hoped that the Federal Financing Bank will remain intact as Allegheny's prime source of borrowing. There are a number of projects Allegheny is anticipating or considering at this time, and front-end monies needed for these projects will come from either CFC or REA. During the calendar year Allegheny was issued an additional \$56,919,000 in long-term debt from the Federal Financing Bank. The current combined rate of interest for these monies is 11.631%.

It is essential in the coming years that Allegheny be able to maintain a strong financial base and that its equity level continue to strengthen. We are currently striving to maintain these positions by using a sound money management program, negotiating the best possible power purchase contracts, and by our continued effort in monitoring Allegheny's expenses in order that our overhead be kept at a minimum.

During 1980, Allegheny received from EPRI a grant in the amount of \$50,000. This grant is for research in the field of energy conservation. The funds are for the purchase of monitoring equipment such as computers and meters, travel, and related expenses in the operation of this equipment in order that a proper evaluation can be performed on the systems being tested. The systems consist of two ground water heat pumps installed in two homes in the Bedford and New Enterprise areas.

Also during 1980, Allegheny applied for and received from the Department of Energy a forgivable loan in the amount of \$100,000. This loan is for a feasibility study for Locks and Dams 8 and 9 located on the Allegheny River in Western Pennsylvania. These funds were received for the purpose of determining the feasibility of these small scale hydro projects. If the projects are deemed infeasible, then the loan funds may be forgiven by the Secretary of Energy.

Balance Sheet (Audited)

Assets

	1980	1979
Utility Plant In Service	\$ 12,039,819	\$ 7,438,926
Construction Work In Progress	229,748,469	173,701,203
Total Plant	241,788,288	181,140,129
Accumulated Provision for Depreciation	(66,654)	(41,352)
Net Plant	\$241,721,634	\$181,098,777
Non-Utility Property - Net	6,658,496	—
Capital Credits - NRUCFC	612,056	607,240
Investments In Associated Organizations	1,634,964	4,381,064
Cash - General Funds	27,795	25,656
Cash - Construction/Working Funds	3,725,852	3,587,410
Temporary Investments	3,305,000	1,037,000
Accounts Receivable	9,344,654	8,685,866
Other Current & Accrued Assets	143,240	42,921
Deferred Debits	1,444,435	1,618,397
Total Assets	\$268,318,126	\$201,084,331

Liabilities

	1980	1979
Memberships	\$ 2,800	\$ 2,800
Patronage Capital	11,329,301	8,509,752
Donated Capital	29,665	29,665
Long Term Debt - REA	239,956,000	183,037,000
Long Term Debt - Other	3,243,529	—
Accounts Payable	9,429,191	8,386,064
Accrued Interest	84,038	35,162
Other Current & Accrued Liabilities	1,085,989	1,075,734
Deferred Credits	3,157,613	8,154
Total Liabilities	\$268,318,126	\$201,084,331

Member Revenues

	1980	1979
Adams Electric Cooperative, Inc.	\$ 6,225,061.93	\$ 5,213,560.16
Bedford Rural Electric Cooperative, Inc.	2,316,682.84	1,965,522.59
Central Electric Cooperative, Inc.	4,975,920.66	4,080,577.51
Claverack Rural Electric Cooperative, Inc.	3,906,778.58	3,311,386.00
New Enterprise Rural Electric Cooperative, Inc.	941,901.57	796,629.29
Northwestern Rural Electric Cooperative Assn. Inc.	5,242,740.22	4,468,199.71
Somerset Rural Electric Cooperative, Inc.	4,919,086.65	4,063,345.84
Southwest Central Rural Electric Cooperative Corp.	6,430,996.83	5,317,066.82
Sullivan County Rural Electric Cooperative, Inc.	1,092,507.74	895,240.27
Sussex Rural Electric Cooperative	2,453,578.40	1,962,059.49
Tri-County Rural Electric Cooperative, Inc.	3,364,007.50	2,821,159.36
United Electric Cooperative, Inc.	3,603,828.16	2,970,617.28
Valley Rural Electric Cooperative, Inc.	4,376,195.66	3,711,442.02
Warren Electric Cooperative, Inc.	1,273,773.70	1,020,639.17
TOTAL	\$51,123,060.44	\$42,597,445.51

1980 Operating Expenses

Wholesale Power Cost

Power Authority of the State of New York (PASNY)	
West Penn	
JCP&L	
Metropolitan Edison	
Penelec	
Sub-Total	

COST IN DOLLARS

\$3,007,771
3,343,993
3,812,234
5,079,141
28,788,825
<u>\$44,031,964</u>

COST IN MILLS/KWH

5.42 M/KWH
23.56 M/KWH
47.66 M/KWH
50.39 M/KWH
36.09 M/KWH
<u>26.28 M/KWH</u>

PERCENTAGE OF TOTAL COST

6.20%
6.90%
7.86%
10.48%
59.37%
<u>90.81%</u>

Transmission Costs (Wheeling for PASNY Power)

New York Companies	
G.P.U. Companies	
Sub-Total	

\$ 676,080
2,715,762
<u>3,391,842</u>

0.40 M/KWH
1.62 M/KWH
<u>2.02 M/KWH</u>

1.40%
5.60%
<u>7.00%</u>

Total Power Supply Expense

\$47,423,806

28.30 M/KWH

97.81%

Other Expenses
Customer Accts.

Admin. & General

\$1,064,200

0.64 M/KWH

2.19%

Depreciation & Amortization

Total Operating Expense

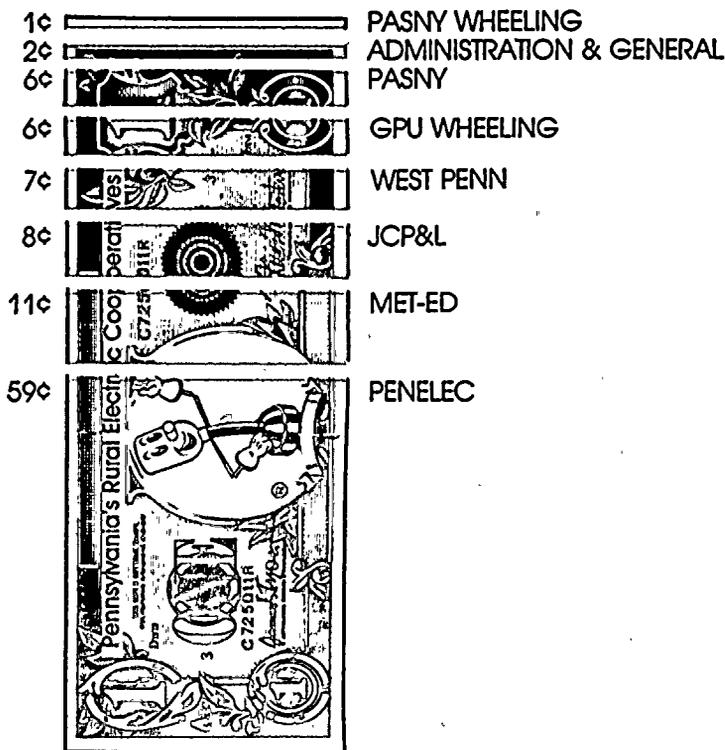
\$48,488,006

28.94 M/KWH

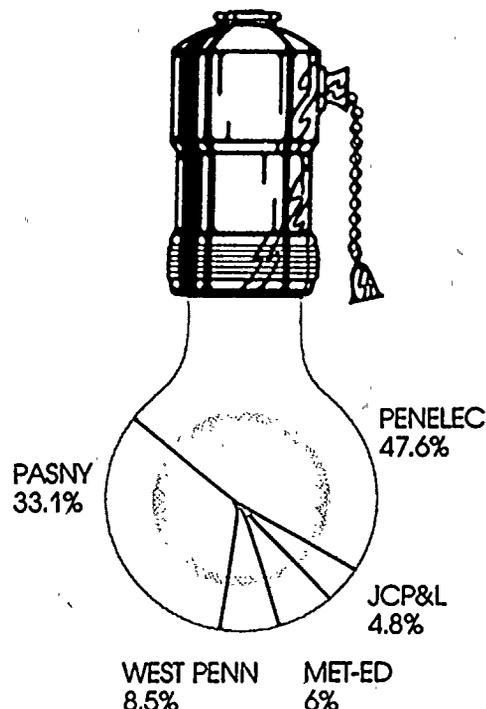
100.00%

— 1980 —

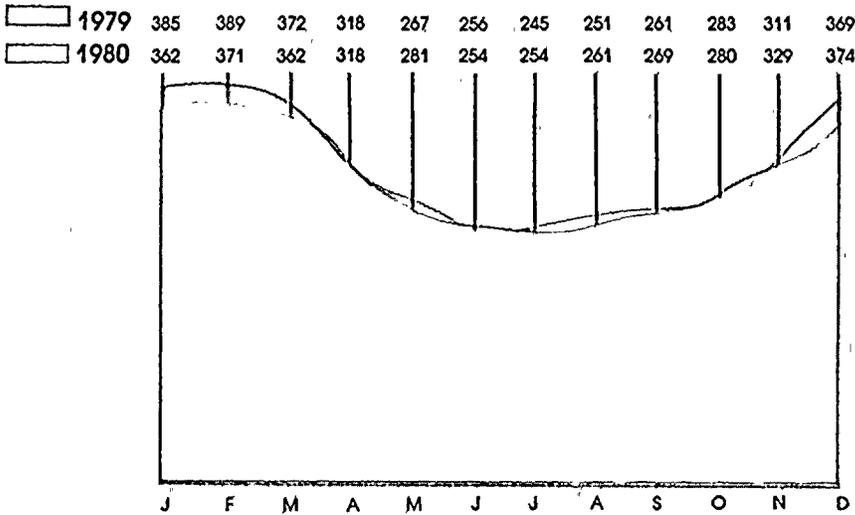
COST OF OPERATIONS DOLLAR DISTRIBUTION



PURCHASED POWER SOURCES BY PERCENTAGE—31 DECEMBER 1980 TOTAL KWH — 1,675,479,842

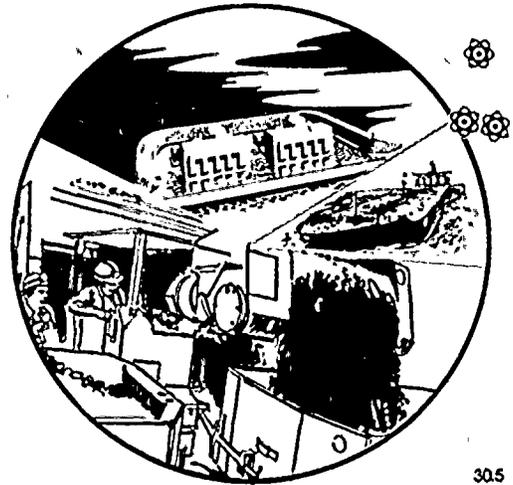


Monthly MW Demand

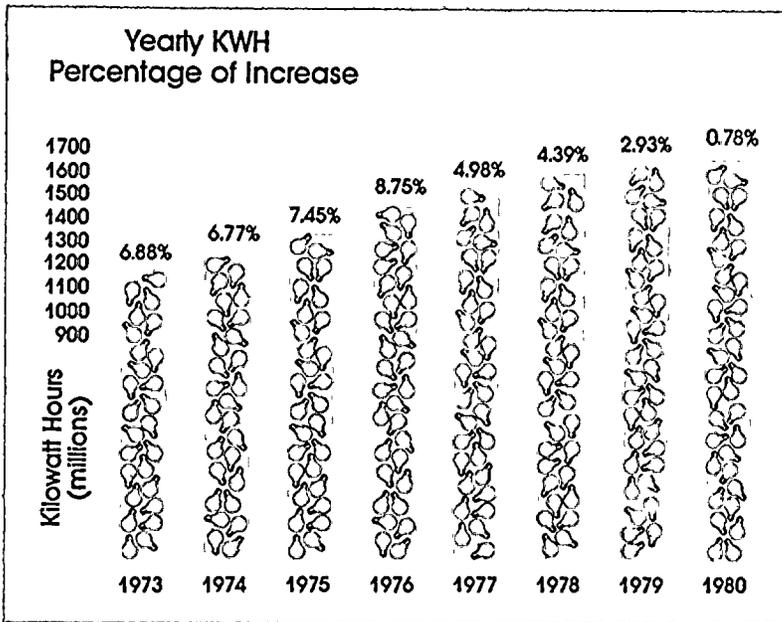


Purchased power fuel types

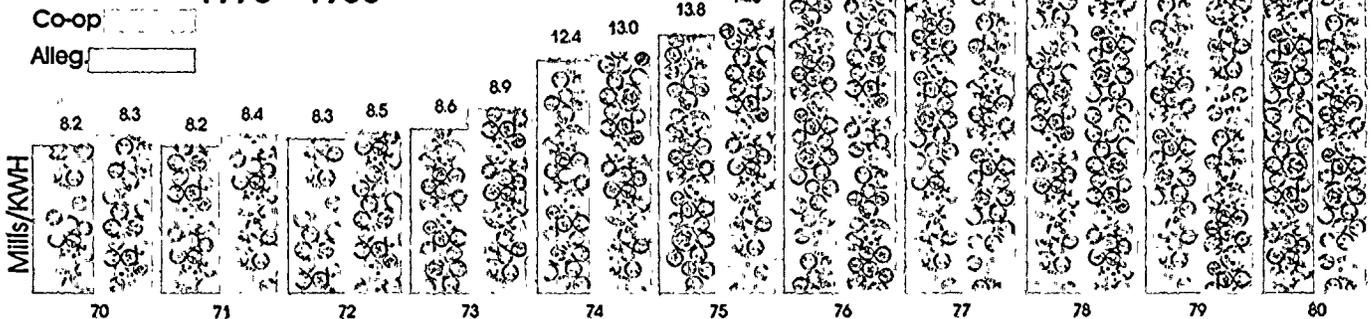
Coal 56% 9% Oil
 Hydro 34% 1% Nuclear



Yearly KWH Percentage of Increase



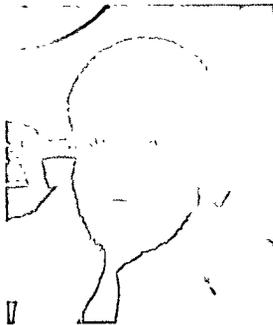
Average Wholesale Power Cost 1970 - 1980



Review of Power Costs

As of December 31, 1980, Allegheny's average purchased power cost from its five wholesale power suppliers reached 28.30 MILLS/KWH or 2.830¢/KWH. Last year, average cost reached 23.93 MILLS/KWH. Accordingly, total power cost dollars rose from \$39,790,671.48 in 1979 to \$47,423,806.47 in 1980. This represents a substantial increase of \$7,633,134.99 or 19.2 percent in only one year.

A small portion of this power cost increase can be directly attributed to normal system load growth which automatically requires Allegheny to purchase additional high cost supplemental power from the Pennsylvania Electric Company and Metropolitan Edison. Total system power requirements increased from 1,662,548,241 KWH in 1979 to 1,675,479,842 in 1980 — an increase of only 12,931,601 KWH or 0.8 percent. System peak demand actually decreased from 389 MW in 1979 to 374 MW in 1980 or by 3.7 percent. However, a new system peak of 396 MW was established in January of 1981.



Alvaro Domingos
Staff Engineer

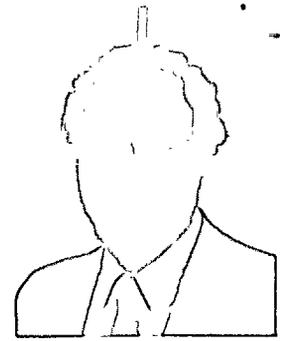


Jan Ivanoff
Engineering Aide

The majority of the purchased power cost increase was due to the reduction of Allegheny's allocation of low-cost hydro power furnished by the Power Authority of the State of New York. On January 1, 1980, the Power Authority reduced Allegheny's hydro allocation from 130 MW of firm power and associated energy at system load factor to 105 MW of firm power and associated energy at system load factor and 25 MW of peaking power with a fixed load factor of 12.5 percent. Unfortunately, this low cost hydro power was replaced with additional high cost supplemental power purchases from the Pennsylvania Electric Company. Subsequently, on June 1, 1980, Allegheny's PASNY allocation was further reduced to 86 MW of firm power and associated energy at system load factor and 21 MW of peaking power with a fixed load factor of 12.5 percent. Again, additional supplemental power was purchased from Penelec. Year-end figures indicate that Allegheny's total 1980 purchased power cost increased by approximately five million dollars due to this allocation reduction. Further reduction of the valuable energy resource would be disastrous for Allegheny's member cooperatives.



Joseph Zullo
Staff Engineer

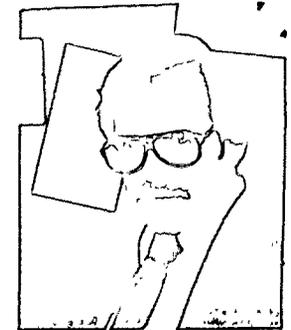


Richard Osborne
Staff Engineer

Aside from the increase caused by the PASNY reduction, Allegheny's total 1980 purchased power cost rose approximately two million dollars because of increased wholesale power costs from Metropolitan Edison Company and Jersey Central Power and Light. Average cost from Met-Ed increased from 39.03 MILLS/KWH in 1979 to 50.39 MILLS/KWH in 1980. Likewise, average cost from Jersey Central increased from 35.26 MILLS/KWH in 1979 to 47.66 MILLS/KWH in 1980. Both of these significant increases were a direct result of increased fuel adjustment charges caused by the Three Mile Island accident. Ironically, base rates charged by Met-Ed, Jersey Central, and Penelec were actually reduced in 1980 as a result of settlement agreements reached with the three companies.



Anthony Adonizio
Assistant General Counsel



Edward Stevens
Accountant

During 1980, Allegheny's total purchased power cost represented 92.9 percent of the total required operating revenue. Even though the PASNY allocation had been reduced, this non-polluting, dependable, low-cost hydro power from the Power Authority saved Allegheny and each of its member cooperatives a total of \$16,207,929.60 on purchased power expense. Without PASNY power, average purchased power cost would have increased from 28.30 MILLS/KWH to 38.00 MILLS/KWH — an increase of 9.70 MILLS or 34.2 percent. Our legal and engineering departments continue to work with the Federal Energy Regulatory Commission to maintain our PASNY current allocation through the end of the present contract which expires in 1985.

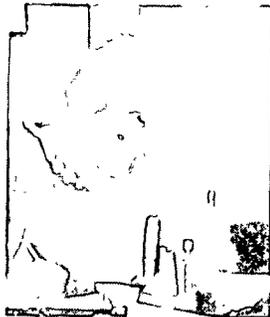


Robert S. Horn
S & JT Director



William Logan
Coordinator of Special Projects

In conjunction with Allegheny's average cost of purchased power, the cost of wholesale power purchased by member cooperatives from Allegheny increased from 25.62 MILLS/KWH in 1979 to an average of 30.51 MILLS/KWH in 1980 — an increase of 4.89 MILLS. In total dollars, member purchased power cost — Allegheny's revenue — increased from \$42,589,089.06 in 1979 to \$51,123,060.43 in 1980. This represents an increase of \$8,533,971.37 or 20.0 percent over last year. Of this total increase, 90.0 percent was required to cover the increased purchased power costs discussed previously. The remaining 10.0 percent contributed to increased engineering expenses and margins as approved by the Board of Directors.



Denise Chubb
Bookkeeper



Fred Fritz
S & JT Instructor

Turning now to current rate-related matters, through the efforts of Allegheny's special counsel William C. Wise, Southern Engineering Company of Georgia, and the Allegheny staff, the three major wholesale rate cases filed by Penelec, Met-Ed, and Jersey Central were contested before the Federal Energy Regulatory Commission and eventually settled without FERC hearings. Both the Penelec and Jersey Central rate reductions became effective with the March, 1980 power billings to Allegheny. In July, the Met-Ed wholesale rate was also reduced in accordance with the settlement terms. These rate settlements reduced Allegheny's total purchased power cost by approximately four million dollars or 7.2 percent.

As of this writing, Allegheny expects that the GPU companies (Penelec, Met-Ed, and Jersey Central) will not file major wholesale rate increases before the FERC until sometime after Unit 1 of the Three Mile Island Nuclear Generating Station returns to commercial operation. Depending upon a

number of interrelated events, the restart of Unit 1 may occur near the end of 1981. Based upon this very significant assumption, Allegheny now projects that its total average purchased power cost for 1981 should reach 29.41 MILLS/KWH. This represents an increase of only 1.09 MILLS or 3.8 percent over 1980. Average power cost to member cooperatives is now projected at 31.13 MILLS/KWH in 1981 as compared to 30.51 MILLS/KWH during 1980. This represents an increase of only 0.62 MILLS or 2.0 percent. These minimal power cost increases are a direct result of reduced system load growth.



David Moffitt
Editor



Elizabeth Brown
Production Supervisor

Allegheny's policy is and has always been, that any cash refund received from a wholesale power supplier as a result of a rate case settlement before the FERC will be refunded in its entirety, plus any accumulated interest, to member cooperatives. In April 1980, Allegheny refunded \$2,901,513.19 to members as a result of rate case settlements reached with Penelec and Jersey Central. In August, Allegheny refunded an additional \$708,668.79 to members as a result of a similar rate case settlement negotiated with Met-Ed. In total, 1980 power cost refunds amounted to \$3,610,181.98. No further refunds are pending during 1981.



Roseann Kovach
Legislative Research Assistant



Joanne Zinn
Executive Secretary

Hopefully, next year's Annual Report will confirm that average purchased power costs to member cooperatives remained relatively constant during 1981. Keeping the price of electricity — our most dependable and economical energy resource — reasonable has always been one of Allegheny's primary functions; to the ultimate benefit of member/consumers in Pennsylvania and New Jersey.

Energy Update

SUSQUEHANNA STEAM ELECTRIC STATION

Construction of the Susquehanna plant continued at an accelerated pace during 1980. Unit 1 is essentially 90% complete. Unit 2 is approximately 60% complete. Should the Nuclear Regulatory Commission (NRC) grant the plant an Operating License consistent with construction progress, the units will go into service in May of 1982 and March of 1983 respectively. Unfortunately, although many of the post-TMI issues have now been addressed, the NRC has found it difficult to "catch up" with their existing workload, giving rise to fears of a delay in the granting of an Operating License for the Susquehanna units. Both Allegheny and PP&L have been working diligently to prevent such a delay, one that could cost Allegheny's members millions of dollars annually.

Contracts for nuclear fuel for the Susquehanna plant have been executed through 1995. The majority of the contracts will provide fuel at a price substantially below that anticipated prior to the recent softening of the uranium market. The first delivery of fuel to the site is currently scheduled for June, 1981.

Several important construction milestones were completed during 1980. First the reactor vessel of Unit 1 was flushed with a million gallons of water to remove construction debris. Second, the vessel was subjected to and passed a hydrostatic test that subjected the reactor vessel to 1,600 pounds per square inch of pressure for a short duration with longer duration tests at 1,100 psi. Third, the 540 foot cooling tower for Unit 1 was completed in October. Finally, the massive turbine generator at Unit 1 was placed on the turning gear in mid-December. The turning gear will rotate the turbine generator three times per minute to prevent the weight of the system from bending its shafts. The placing of the turbine generator on the turning gear is considered a major milestone for any large generating station.



Charleen Beachler
Secretary



Mary Jane Branigan
Central File/Secretary

RAYSTOWN

Application to the Federal Energy Regulatory Commission (FERC) for a construction and

operating license was made on March 31, 1980 by Allegheny and Pennsylvania Electric Company (joint owners). The 20.3 run-of-the-river project will produce an average of 77 million KWH of energy annually. Although the project has generally received positive support from state and local interests, Allegheny has been required to perform a number of baseline environmental studies to insure that the project will prove to be environmentally benign. For instance, a fish sampling study has continued throughout the year to determine the types and quantity of fish in the proposed water intake area. The FERC license is expected in 1981. Construction should begin in 1982 with plant operation scheduled for 1985.

ALLEGHENY RIVER LOCKS AND DAMS 8 and 9

In June, Allegheny received a preliminary permit from FERC, giving it the exclusive right to study the feasibility of hydroelectric generation at these sites for a two-year period. The two sites, located in the same general area of the Allegheny River in Armstrong County, are being evaluated as a single project. Acres American of Columbia, Maryland, was awarded a contract to complete the feasibility study and license application. Preliminary results from analysis to date indicate excellent project potential with an estimated capacity of 13 MW and 17 MW at No. 8 and No. 9 respectively. Combined annual generation from the two units will approach 190 million KWH.

The two sites have also been granted a forgivable feasibility study loan from the Department of Energy. This loan, intended to encourage the development of small hydro generation at existing dams, will greatly assist Allegheny in the costly front-end studies required for projects of this type.

EMSWORTH AND MONTGOMERY

A three-year preliminary permit was granted to Allegheny by FERC in March to study the feasibility of a hydroelectric installation at the existing Emsworth Lock and Dam site on the Ohio River. The Chas. T. Main Company of Boston was selected to perform the project feasibility study and prepare the license application should the project prove feasible. Preliminary studies place the installed capacity at 20-25 MW, generating an average of 135 million KWH annually.

A sister project at the Montgomery Lock and Dam is still under review by FERC to determine which of several competing license applicants will be awarded a preliminary permit for study and licensing. Allegheny is expecting to receive the preliminary permit based on earlier filing date and competitive project development.

ANTHRACITE GENERATING STATION

Through the continued good efforts of Lt. Governor Scranton and his office, an agreement was reached between Consolidation Coal Company of Pittsburgh and Reading Anthracite Company to begin evaluating 3,500 acres in Tamaqua, Pennsylvania as a possible site for a large anthracite coal mine. This development is a major step forward for Allegheny and its partners — Pennsylvania Power and Light and Philadelphia Electric Company — who together are investigating the economic feasibility of a large anthracite-fired generating station in the area. Both the federal Environmental Protection Agency and state offices such as the Department of Environmental Resources have lent active support to the project, which, if constructed, will provide both economic and environmental benefit to the local area and to Pennsylvania consumers.

During 1981, Allegheny and its partners will continue to evaluate the social, economic and environmental parameters associated with the project based on preliminary cost data output from Consolidation Coal. By year end, Allegheny and its partners expect to be able to make a go, no-go decision on more detailed project planning studies. Given the current licensing and construction lead times for a project of this size, the plant could be placed in service in the early to mid-1990's.

SYNTHETIC FUELS GENERATING PROJECT

Allegheny is evaluating the potential of a medium-scale 75-225 MW combined cycle generating station fueled by medium BTU coal-derived gas. The project would be built in conjunction with a large synthetic fuels plant currently under study by the federal Synthetic Fuels Corporation and the A.C. Valley Corporation. A.C. Valley has a proposal before the Synthetic Fuels Corporation requesting loan guarantees for the project which, as proposed, would be capable of producing 10,000 barrels per day of gasoline derived from high-sulphur bituminous coal. The process would first convert coal to medium BTU gas using the Koppers gasification process. Next the medium BTU gas would be converted to methanol using the ICI gas-to-methanol technology. Finally the methanol would be catalytically converted to gasoline. The generating unit would utilize gaseous fuel from the initial gasification process.



Patricia Poffelger
S & JT Secretary



Vonnie Zobitne
Receptionist

LOAD MANAGEMENT

In order to reduce its system peak loads and help keep its members' electric costs reasonable Allegheny embarked on a two-year test of load management systems for control of water heater loads. During 1980, the test period for the installed equipment commenced at four member cooperatives.

Two of the projects, located at Claverack Rural Electric Cooperative and Northwestern Rural Electric Cooperative began operation in February and March respectively. With the exception of downtime for repair and some modification of equipment, each system has controlled about 150 water heaters during peak demand periods, allowing the cooperatives to experiment with different control schedules for shedding and restoring water heater load. This will provide a good working knowledge of load use patterns, especially as they change from season to season.

The other two projects at Somerset Rural Electric Cooperative and Adams Electric Cooperative have been delayed by redesign work on water heater switches and in the Adams case, relocation of the load management transmitter.

WIND ENERGY

Through the combined efforts of Allegheny, Southwest Central Rural Electric Cooperative, NRECA and Alcoa, an 8 KW Vertical Axis Wind Turbine was installed near Ebensburg, Pennsylvania. From the very beginning, the windmill has been plagued with mechanical equipment problems. Throughout most of the year, the unit was operated for only short testing periods generally when technicians were at the site. These tests indicated the need for major redesign of the unit's blade supports and main bearing equipment. The recently-installed redesigned unit has generated 80 KWH to date while using 60 KWH for starting purposes (this windmill requires motor starting to get up to speed).



Teanna Byerts
Graphic Artist

A similar test of an identical Alcoa unit planned for Adams Electric Cooperative was cancelled due to the poor performance of the Alcoa unit. Adams personnel are continuing to work with Allegheny to develop an alternative project utilizing a significantly larger capacity unit of perhaps 40 KW.

Although success to date has proven minimal, Allegheny will continue to pursue this potential energy resource for its member/consumers.

Position Statement on Nuclear Power

It is the primary purpose of Allegheny Electric Cooperative, Inc. to secure and deliver economic wholesale power sufficient to meet our members' needs, consistent with the membership corporation's stated objectives. We clarify our position on nuclear power with the following statements:

1. We believe this Nation must achieve energy independence to insure our economic future and retain control of our foreign and domestic policies.
2. We sincerely believe that a major portion of our inflation can be attributed to the increase in OPEC oil prices, resulting in unemployment and high cost for those least able to afford them (e.g. elderly on fixed income).
3. We believe America's economic future well being requires continual energy usage, with electric power playing an increasingly vital role. We further believe that all forms of domestically available energy resources should be pursued and utilized where found to be economic; and in particular, conservation and renewable energy resources must play an important role in America's energy future.
4. We believe that the nation's electric generating capacity should be as diverse as possible to assure continued production in the face of energy supply disruptions (e.g. oil embargoes). A substantial part of this diversity should be nuclear generation.
5. It is a generally-accepted principle that some of the Nation's energy usage now dependent upon OPEC oil can be converted to electricity based on coal, nuclear, and renewable energy sources.
6. We do not favor the use of nuclear power over other means of generation for the sake of nuclear power alone but from the realization that closing out of this option would exacerbate our present weak energy position.
7. We have no vested interest in the promotion of nuclear power other than the fact that we sincerely believe that nuclear power has added diversity to this Nation's energy resources at a critical time in our history and, if the breeder reactor concept is allowed to be developed as other nations in the world have

developed it, fuel exists for continued long-term economic operation of existing and planned nuclear plants.

8. We believe that this Nation's media has made "anti-nuclear" protest movements a major news story regardless of merit and/or credibility to the detriment of the public's understanding and knowledge of this important energy option.



George Black
Printing Specialist



Wendy Bratton
Phototypesetter

9. We believe we have an obligation to inform all people, including elected officials, of the scientific facts regarding nuclear power which will eventually bring forth an accurate understanding of nuclear power by the citizens of Pennsylvania and this country.
10. We emphasize that Allegheny Electric Cooperative, Inc., is not "pro-nuclear" or "anti-nuclear" but rather that we pledge our efforts to energy independence and to reduce our balance of payment deficits while at the same time doing our share in combatting one of this Nation's most serious problems, inflation, by supplying our consumer-owners with sufficient low-cost, reliable electric power to meet their needs.

ALLEGHENY ELECTRIC COOPERATIVE, INC.

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