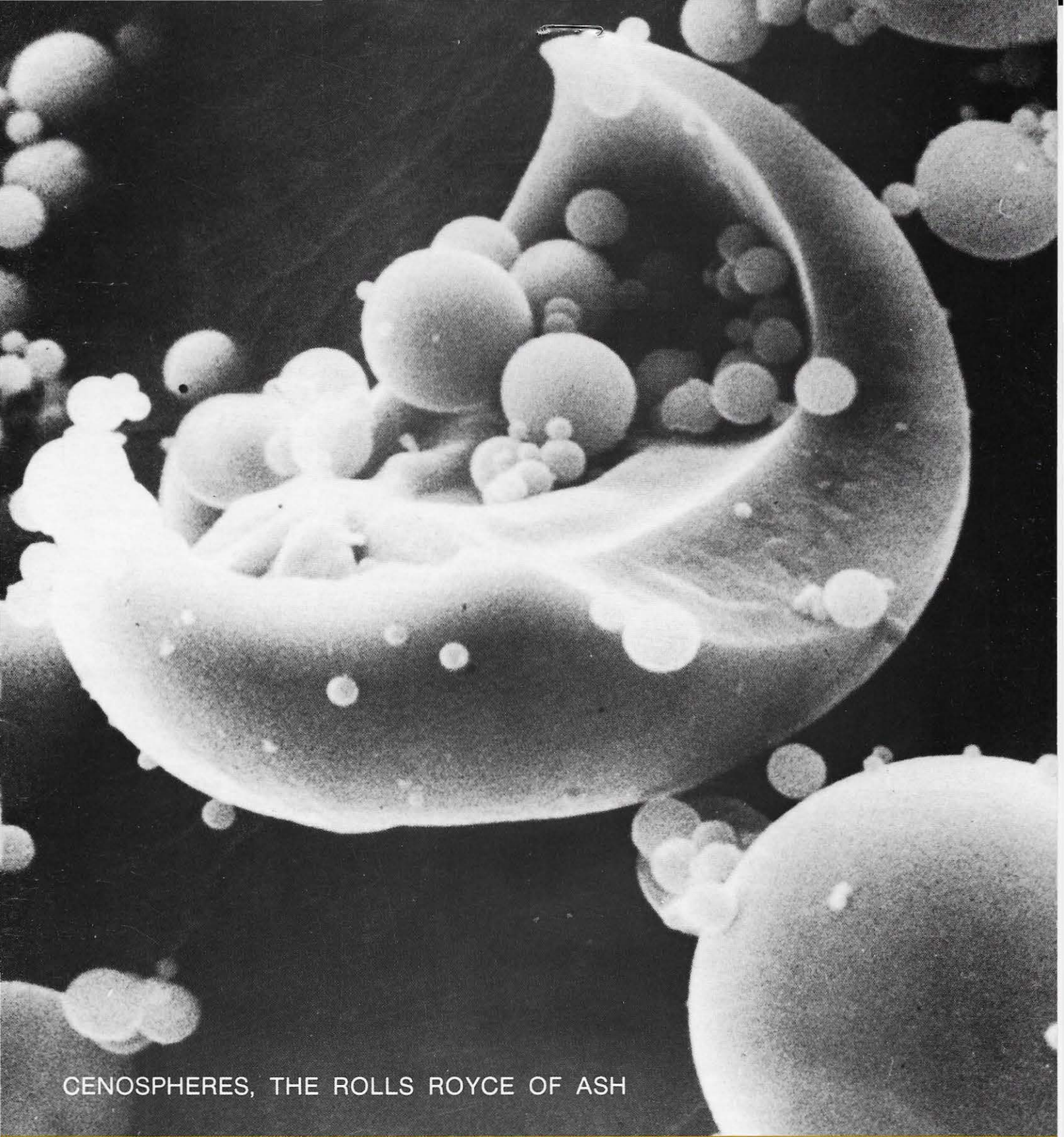

CENOSPHERES, THE ROLLS ROYCE OF ASH

OCTOBER 1983

THE ILLUMINATOR

THE ILLUMINATOR

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The Cover

Fly ash from many coal-fired power plants contains cenospheres, tiny, hollow, gas-filled particles shown here approximately 13,000 times their actual size. Appalachian Power sells cenospheres to manufacturers, who use them as a lightweight filler material in plastics, vinyls, and fiberglass. Thanks in part to the work of a group of AEP employees in Charleston, power plant ash has become a valuable resource for many other industries. For the full story of power plant ash and how its sale is helping Appalachian Power keep rates low, see pages 7-9.

AEP Savings Plan

Date	Fixed Income Fund		Equity Fund		AEP Stock Fund	
	VPU	UCPD	VPU	UCPD	VPU	UCPD
1/31/82	$1.6025	.6240	$2.1896	.4567	$1.5188	.6584
2/28/83	1.6188	.6177	2.2460	.4452	1.4850	.6734
3/31/83	1.6368	.6109	2.3268	.4298	1.5065	.6638
4/30/83	1.6537	.6047	2.5040	.3994	1.6094	.6213
5/31/83	1.6691	.5991	2.4926	.4012	1.5943	.6272
6/30/83	1.6863	.5930	2.5878	.3864	1.4817	.6749
7/31/83	1.7043	.5868	2.5113	.3982	1.5975	.6260
8/31/83	1.7214	.5809	2.5605	.3905	1.5396	.6495

VPU — value per unit

UCPD — units credited per dollar

HOW TO READ THE ABOVE CHART: The first column lists the days on which unit values are figured; the second shows the market price or value of each unit on that day; and the third indicates how many units you could have bought for $1 on that day. For example, if the market value or "value per unit" of the Equity Fund were 50¢ on the valuation date (last day of each month), then "units credited per dollar" would be 2.000. This also holds true for the AEP Stock Fund and the Fixed Income Fund.

The inside story

FIF interest rate changed

A new guaranteed interest rate of 12.65 percent has been established for contributions made to the Fixed Income Fund of the AEP System Employees Savings Plan.

The new rate is applicable to all contributions made between November 1, 1983 and October 31, 1984. The new rate will then continue to apply, on contributions made during the upcoming 12-month period, for another six years — i.e., until October 11, 1990.

The new rate is the result of a new agreement with the Equitable Life Assurance Society of the United States and is pegged to current interest-rate levels. The previous rate, which began April 1, 1981, when interest rates generally were much higher, and runs out this October 31, was 15.75 percent.

Eligible employees may invest up to 16 percent of their base salary in the Savings Plan, and the company matches the first 6 percent on a 1-for-2 basis. That is, for every $2 invested by the employee, up to 6 percent of base salary, the company adds $1 to the AEP Stock Fund on behalf of the employee. Earnings on all contributions, the employee's and the company's, are added to the employee's account.

The Savings Plan is made up of three funds, and the employee participant may elect to invest in one, two or all three. They are: the Fixed Income Fund, which has its earnings guaranteed by Equitable; the Equity Fund, a portfolio of securities; and the AEP Stock Fund, which consists entirely of AEP common stock. □

Most AEP Employees in Canton will be invited to relocate

Approximately three-fourths of the American Electric Power Service Corporation employees located in Canton, Ohio, will be invited to transfer to the new AEP headquarters in Columbus next summer.

W. S. White, Jr., AEP chairman, said that all employees in Canton except those in the Computer Systems and Business Systems Divisions and the Electrical Engineering Test Laboratory will be invited to relocate between June 15 and September 1.

The Service Corporation employs 544 people in Canton. The scheduled 1984 relocation of 44 employees of the System Operation Department had previously been announced. Of the remaining 500 employees, 374 more are involved in the new announcement.

AEP's Canton personnel are located in four downtown office buildings — the Ohio Power Company general office, the Citizens' Building, Bliss Tower and the AEP Computer Center — and at the test lab at Sunnyside Substation. Those affected by the upcoming relocation are housed in the first three buildings. The major groups involved are the Electrical Engineering, Environmental Engineering, Plant Engineering and Plant Maintenance Divisions, as well as several smaller groups.

"Giving consideration to all factors," White explained, "it has been decided to relocate most Canton employees of the Service Corporation next summer."

Meanwhile, Richard E. Disbrow, president, said that the AEP Service Corporation has no plans to move its Fuel Supply Department from Lancaster to Columbus.

He pointed out that the company's new headquarters, 1 Riverside Plaza, had not been designed to house Fuel Supply personnel, particularly with the closing of AEP's New York offices. □

Blackmore resigns from Fuel Supply

A successor will not be named immediately, W. S. White, Jr., chairman of the AEP Service Corporation, said following the resignation of Gerald Blackmore, executive vice president — fuel supply.

White said that interim, direct responsibility for fuel supply operations would be taken by President Richard E. Disbrow, to whom Blackmore had reported.

Blackmore resigned, effective September 1, to accept the chairmanship of Old Ben Coal Company, of Chicago, a subsidiary of Standard Oil Company of Ohio. □

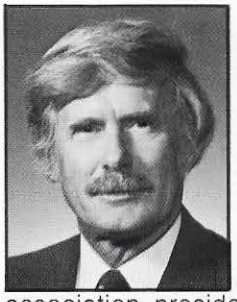
APCO may sell mining properties

Appalachian Power Company has disclosed that it might sell "all or a portion" of its coal-mining properties.

In a quarterly report filed last month with the Securities and Exchange Commission, Appalachian Power said that it was "involved in discussions with several parties to negotiate the sale of all or a portion of its coal-mining properties."

The company has four coal-mining subsidiaries, all in West Virginia: Cedar Coal Company, Cabin Creek; Central Appalachian Coal Company, Montgomery; Central Coal Company, New Haven; and Southern Appalachian Coal Company, Julian. Central Coal, which formerly provided coal to the Philip Sporn Plant, has been shut down for a number of years. And Southern Appalachian, which operates the Bull Creek and Julian mines, has been idled since May and is currently on standby status. □

Berg Elected PUAV President



James B. Berg, assistant secretary and assistant treasurer of Appalachian Power Company, last month was named president-elect of the Public Utilities Association of The Virginias. Berg will succeed William W. Berry as association president on January 1, 1984. Berry is president and chief operating officer of Virginia Electric and Power Company, Richmond, Virginia.

Taking office January with Berg is Donald L. Macke, executive assistant for Wheeling Electric Company, who will be first vice president of PUAV. In addition, Morris E. McCrary was re-elected treasurer and George E. Laurey was re-elected assistant treasurer of the association. McCrary is assistant accounting manager and Laurey is general accounting administrator of Appalachian Power. □

AEP Coal Mining Companies

(9th in a series)

With over 65 years of experience in producing coal for electric generation, the American Electric Power System has grown to its present position as the 11th largest such producer in the nation.

The System's seven coal-mining subsidiaries are presently operating 14 underground mines and 12 surface pits (the numbers vary from year to year) with a combined annual production capacity of more than 14-million tons.

AEP's mining activities date back to 1917, when the first of its "super" power plants, the former Windsor Plant north of Wheeling, West Virginia, was placed in operation. Coal for Windsor came from the Windsor Power House Coal Company, just across West Virginia Route 2 from the generating station. Windsor, the plant, has long since ceased production and been razed; however, Windsor, the coal company, is still going strong.

Both the plant and the coal company initially were jointly owned by Ohio Power Company of the AEP System and West Penn Power Company of the Allegheny Power System, with the station being operated by Ohio Power and the mine by West Penn. However, when the plant ceased operation, Ohio Power bought West Penn's interest in the mine.

The System's seven mining companies are as follows:

Cedar Coal Company (subsidiary of Appalachian Power Company), Chelyan, West Virginia, operating three surface and three underground mines that produced 1,731,700 clean tons in 1982.

Central Appalachian Coal Company (subsidiary of Appalachian Power), operating three underground mines that produced 814,040 clean tons in 1982.

Central Ohio Coal Company (subsidiary of Ohio Power Company), Cumberland, Ohio, a surface-mining operation best known for "Big Muskie," the world's largest mobile land machine; for the Muskingum Electric Railroad, its totally automatic coal-hauling rail system, and for its award-winning reclamation work that includes a public parkland known as "Re-creation Land." Central Ohio produced 3,257,430 clean tons in 1982.

Price River Coal Company (subsidiary of Indiana & Michigan Electric Company), Helper, Utah, with two underground mines that produced 1,167,800 clean tons in a 10-month period last year.

Central Ohio Coal Company's Big Muskie dragline is the world's largest mobile land machine, weighing 27-million pounds. Its 220-cubic-yard bucket can uncover coal at a depth of 100 feet below the surface.

Southern Appalachian Coal Company (subsidiary of Appalachian Power), Julian, West Virginia. Its one underground mine and four surface pits produced 1,724,028 clean tons in 1982.

Southern Ohio Coal Company (subsidiary of Ohio Power), which operates in two divisions:

MARTINKA DIVISION, Fairmont, West Virginia — its Martinka No. 1, one of the largest deep mines in that state, produced 1,831,891 clean tons in 1982.

MEIGS DIVISION, Wilkesville, Ohio — it has three of the System's largest deep mines: Meigs Nos. 1 and 2 and Raccoon No. 3, each of which produced more than 900,00 clean tons in 1982. Despite the fact that two of the mines were idled two months last year, that division still produced a total of 3,511,712 clean tons.

Windsor Power House Coal Company (subsidiary of Ohio Power), Beech Bottom, West Virginia, operates one underground mine that produced 664,000 tons of clean coal last year.

In addition, the System has one inactive coal-mining company, Central Coal Company (jointly owned by Appalachian Power and Ohio Power), which owns the Philip Sporn mine near New Haven, West Virginia, where mining was suspended several years ago. And it has two companies that own coal reserves. They are the Blackhawk Coal Company (subsidiary of I&M), with coal properties in Utah, and Simco, Inc. (subsidiary of Columbus and Southern Ohio Electric Company), with properties in the vicinity of Coshocton, Ohio.

The Fuel Supply Department

Management of the System's affiliated mining operations, the procurement of coal through negotiated contracts with nonaffiliated suppliers and the transportation of coal to the System's power plants are the responsibility of the AEP Service Corporation's Fuel Supply Department, Lancaster, Ohio.

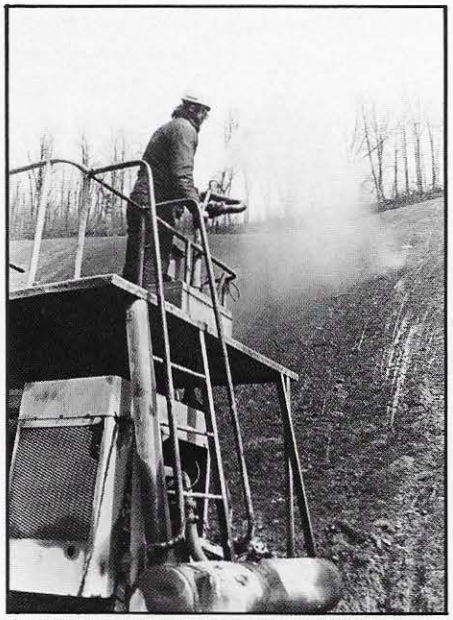
The department's role is a substantial one since American Electric Power is the nation's largest coal consumer and since strict environmental constraints have been placed upon the type of coal that can be burned at individual plants.

Fuel Supply's function — working on behalf of the operating companies which have coal subsidiaries or which generate electricity — is an important one, because the savings that can be realized in the mining, purchasing and transportation of coal will help hold down the ultimate cost of electricity to customers. Of every dollar the AEP System spends on operating expenses, approximately 50 cents go for fuel.

The goals of the Fuel Supply Department in providing this coal are several and inter-related. The coal must meet the sulfur-dioxide-emission regulations that vary from plant to plant. The coal also must be of a consistently high quality to maximize boiler availability in generating units. Low-quality coal tends to cause more boiler outages for maintenance and can even cause a generating unit to operate below its designed capacity. Finally, Fuel Supply strives to procure the most economical coal, over a period of years, that can meet these criteria.

Environmental Concern

The AEP System began surface mining activities in 1944 at a time when "rip-and-run" strip mining, for the most part, was the name of the game. But while such operators were leaving ugly scars upon the land, AEP was giving painstaking attention to returning the land to a valuable, useful purpose.



At Cedar Coal Company and Southern Appalachian Coal Company, hydroseeding crews spray a slurry of grass seed, fertilizer and water on regraded land after surface mining.

In 1945, Ohio Power's Central Ohio Coal began reclaiming surface-mined land — well before the state or federal government had even considered any legislation mandating reclamation — and, through the years, planted hundreds of thousands of trees to create new woodlands. Today, AEP is recognized as one of the pioneers in responsible surface mining and reclamation and has received numerous commendations and awards for its efforts in restoring surface-mined land in both Ohio and West Virginia.

Reclamation of land in the southern portion of Central Ohio Coal's property in the 1950s and 1960s gave rise to "Re-creation Land," a 35,000-acre area encompassing 14 campsites open to the public, free of charge. The subsequent adoption of new surface mining and reclamation legislation in 1972, however, called for a change in Central Ohio Coal's methodology. Today, land that is reclaimed after mining is turned into pasture and used to grow hay, alfalfa and no-till corn.

Recognized as perhaps the state's outstanding practitioner of high-quality reclamation techniques, Central Ohio Coal has won a number of reclamation awards, including the coveted Black and Gold Award for overall excellence in surface-mining reclamation from the Ohio Mining and Reclamation Association.

This tradition of excellence carries over to the AEP System's mining operations in West Virginia, as well. Cedar Coal, for example, has twice won reclamation awards from the state's Department of Natural Resources, while Southern Appalachian Coal has received another such award.

Windsor Power House Coal was cited by the West Virginia DNR for the state's outstanding overall reclamation achievement of 1982. The company was honored for its work in reclaiming two large refuse areas, as well as for the installation of a new coal-preparation plant and acid mine-drainage treatment plant.

Coal Procurement

While AEP mines produce about a third of the System's annual coal burn, the System, to meet its demand, must go "outside" for the rest of its coal — and is, in fact, one of the nation's largest *purchasers* of coal.

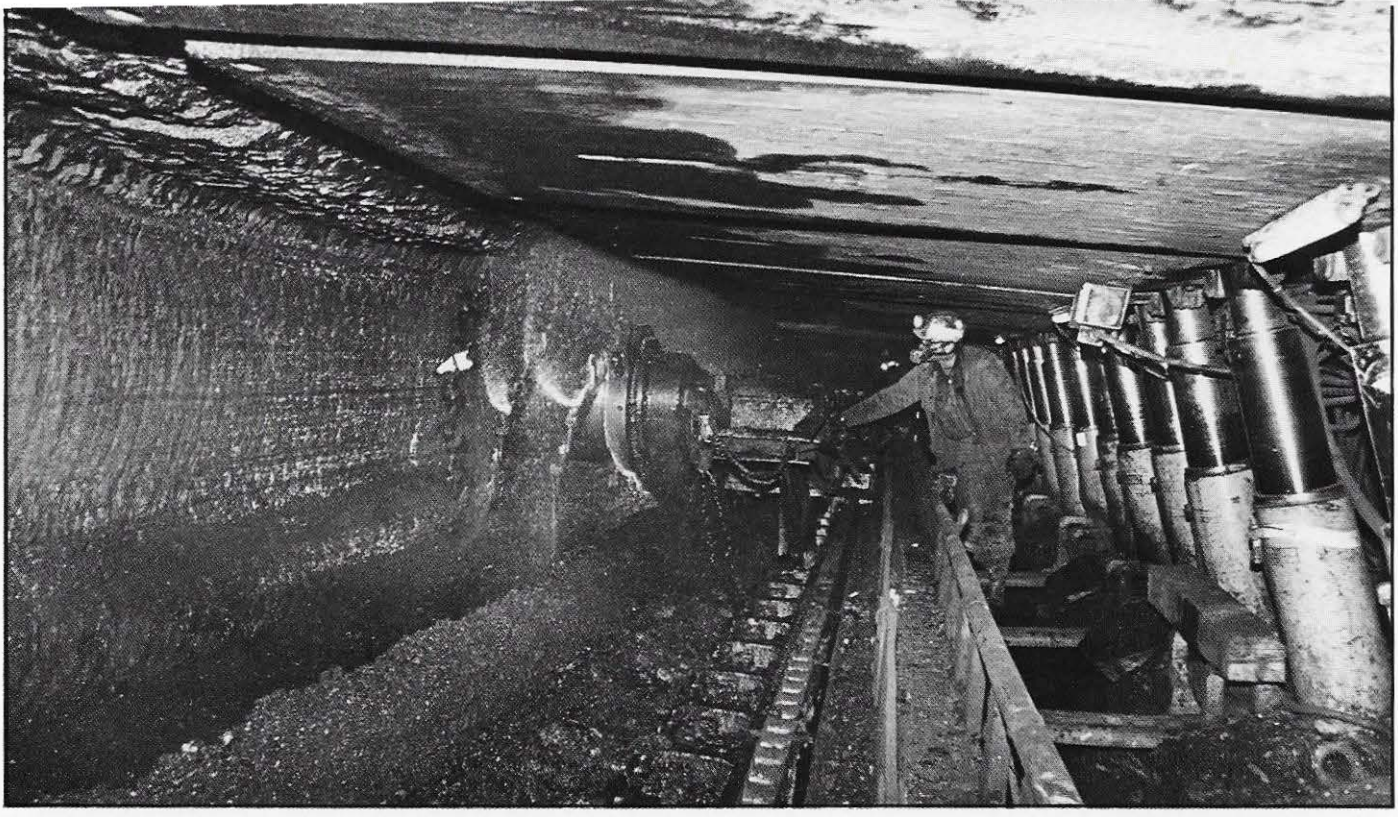
Fuel Supply's coal-procurement staff is responsible for negotiating and administering contracts for some 35-million tons of coal annually, including coal for the Ohio Valley Electric Corporation's Kyger Creek and Clifty Creek Plants and for Buckeye Power, Inc.'s two units at the Cardinal Plant. In all, Fuel Supply has long-term contracts with approximately 45 nonaffiliated coal suppliers.

Coal Transportation

The AEP System operates the most comprehensive coal-transportation network of any electric utility in the United States, a network that assures the timely and efficient delivery of coal to generating plants at costs well below those that would be charged if AEP relied solely on outside agents. AEP also is able to achieve a greater reliability of supply than if delivery were subject to disruption when commercial barge lines or haulers experience labor or other difficulties.

Several modes of transportation are utilized for AEP coal delivery, including conveyors, barges and rail transportation.

Nearly half the coal produced at AEP's own mines can be transported to its plants by conveyors. For example, coal from Southern Ohio Coal's two Meigs mines is carried by a 10-mile conveyor from the Meigs No. 1 preparation plant to Ohio Power's General James M. Gavin Plant at Cheshire, Ohio.



The AEP System operates six longwall mining sections. The coal is cut by a shearer, which has a revolving steel drum at each end.

Central Ohio Coal's production is carried over a four-and-a-half-mile conveyor from the Muskingum preparation plant to Ohio Power's Muskingum River Plant at Beverly, Ohio.

AEP's river-transportation activities began in the 1970s when the System purchased the assets of O. F. Shearer and Sons, a commercial barge line, then augmented that company's fleet by acquiring 16 new 5,600-horsepower towboats and 260 new barges.

The River Transportation Division (actually a unit of I&M) operates one of the largest fleets on the Ohio River with 25 towing vessels and 479 barges.

Because the division operates in such an extended area — from Brilliant, Ohio, to Paducah, Kentucky on the Ohio River, as well as on the Kanawha River in West Virginia and the Green River in Kentucky — the division's headquarters is at Lakin, West Virginia (near Point Pleasant) because of its central location.

In 1981, its peak year, the division transported 15.2-million tons of coal.

The Cook Coal Terminal, which began operation in 1976, was the nation's first utility-owned, rail-to-river coal-transfer terminal. Located on the Ohio River at Metropolis, Illinois, the terminal was built at a cost of more than $70 million and is capable of dumping two unit trains of coal simultaneously. It is owned by Ohio Power.

The terminal is capable of loading barges at a rate of 4,000 tons per hour and can fill a "tow" of 15 jumbo barges in one shift. It also has storage capacity for a half-million tons of coal.

AEP is able to realize considerable savings in rail freight charges by operating its own 100-ton hopper cars. The System's fleet of 3,122 rail cars is used in both Western coal movements and in the Appalachian coalfields. The System has its own rail-car-maintenance unit at the Cook terminal.

One AEP mining operation even operates its own railroad line. Central Ohio Coal's Muskingum Electric Railroad was the first totally automated, all-electric railroad built in North America. It transports coal from the company's mining pits at the northern end of the company's property to the Muskingum preparation plant at the southern end.

Coal Preparation

The replacement of conventional mining sections with continuous miners boosted coal productivity in the 1970s, but a lower-quality product was often the result. When it became apparent that a decline in the availability of generating units followed the same pattern as the decline in coal quality, AEP was faced with a decision. Should the System add additional generating capacity? Buy power from other utilities? Or boost the quality of the coal used in its plant boilers?

The response was to build, in the late 1970s and early 1980s, a number of state-of-the-art coal preparation plants at AEP-affiliated mining operations and thus improve the coal's quality.

A new plant at Cedar Coal was completed in 1978, and a new plant for Price River Coal in 1979. A new fine coal-cleaning circuit was added to Central Ohio Coal's Muskingum plant in the same year.

A new preparation plant began operation at Windsor Power House Coal in 1981, and a sizeable addition and renovation at the Meigs No. 1 preparation plant of Southern Ohio Coal was completed in 1982. The renovated plant, with a capacity of 2,000 tons per hour, is now one of the largest in the nation. Earlier this year, a renovation of the Raccoon prep plant was also finished, enlarging its capacity to 700 tons per hour.

AEP's newest prep plants have computer-assisted control centers in which a computer continuously scans the status of the plant's various components and systems and quickly responds to any changes.

* * *

Producing electric power at the lowest possible cost per kilowatt-hour requires that the entire mining, transportation, generation, transmission and distribution process be viewed as a total energy system. The system begins when the first core hole is drilled at a potential minesite. It continues through the active mining operations, to the busbar, and finally to the customer's meter. In almost any circumstances, however, the cheapest ton of coal will not produce the cheapest unit of electricity. □

ASH

a valuable resource

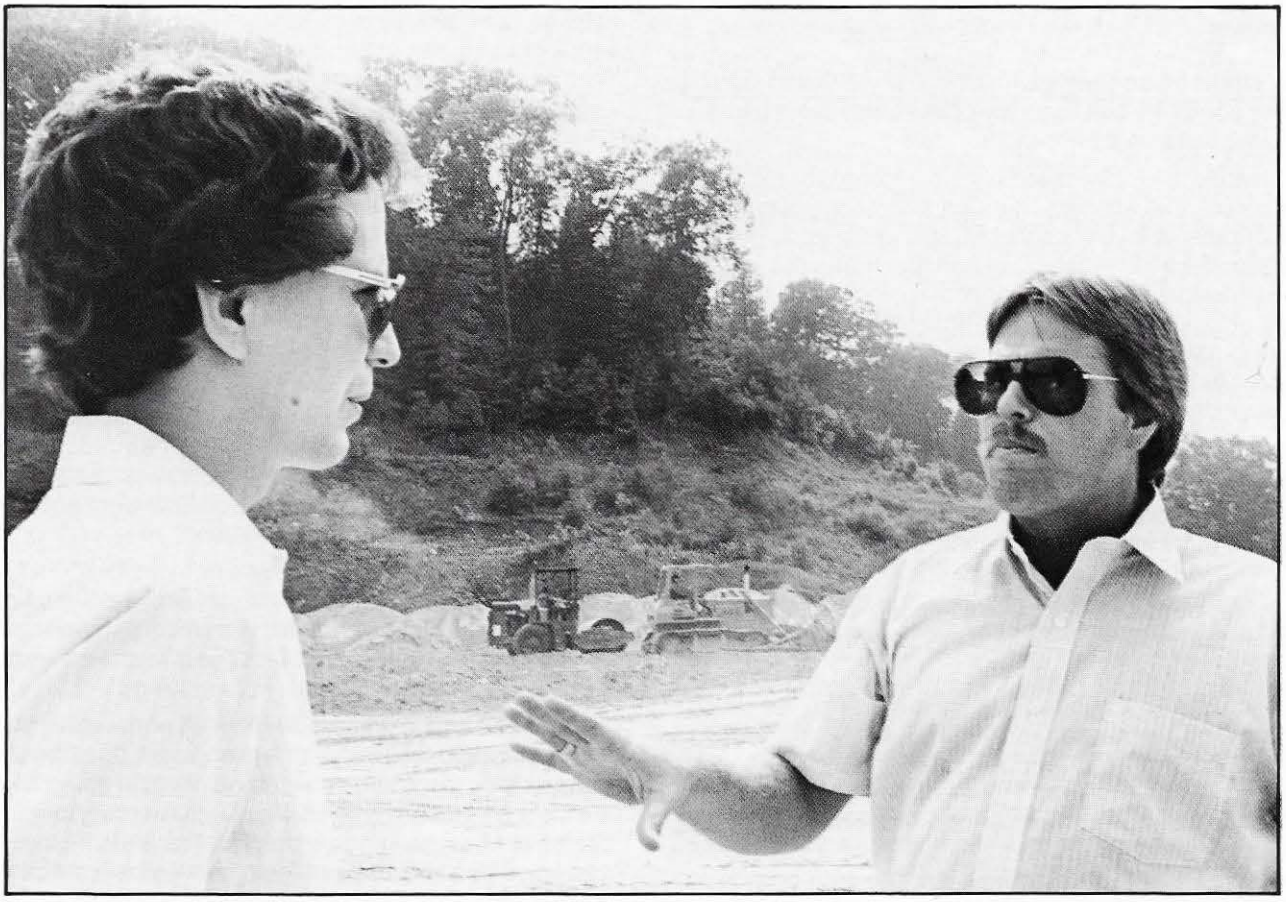
Ash, once the bothersome by-product of power plant emission control, has become a valuable resource. And thanks in part to a group of enthusiastic people in Appalachian Power's Virginia Street Office in Charleston, ash has a very bright future.

A small suite on the third floor houses the AEP Ash Utilization and Research Section, a group of seven dedicated and hard-working people who are, well, positively **excited** about ash. They have pictures of ash on the walls. Bottles and jars of it set in cabinets and atop most horizontal surfaces. Tucked in various places are samples of products containing ash.

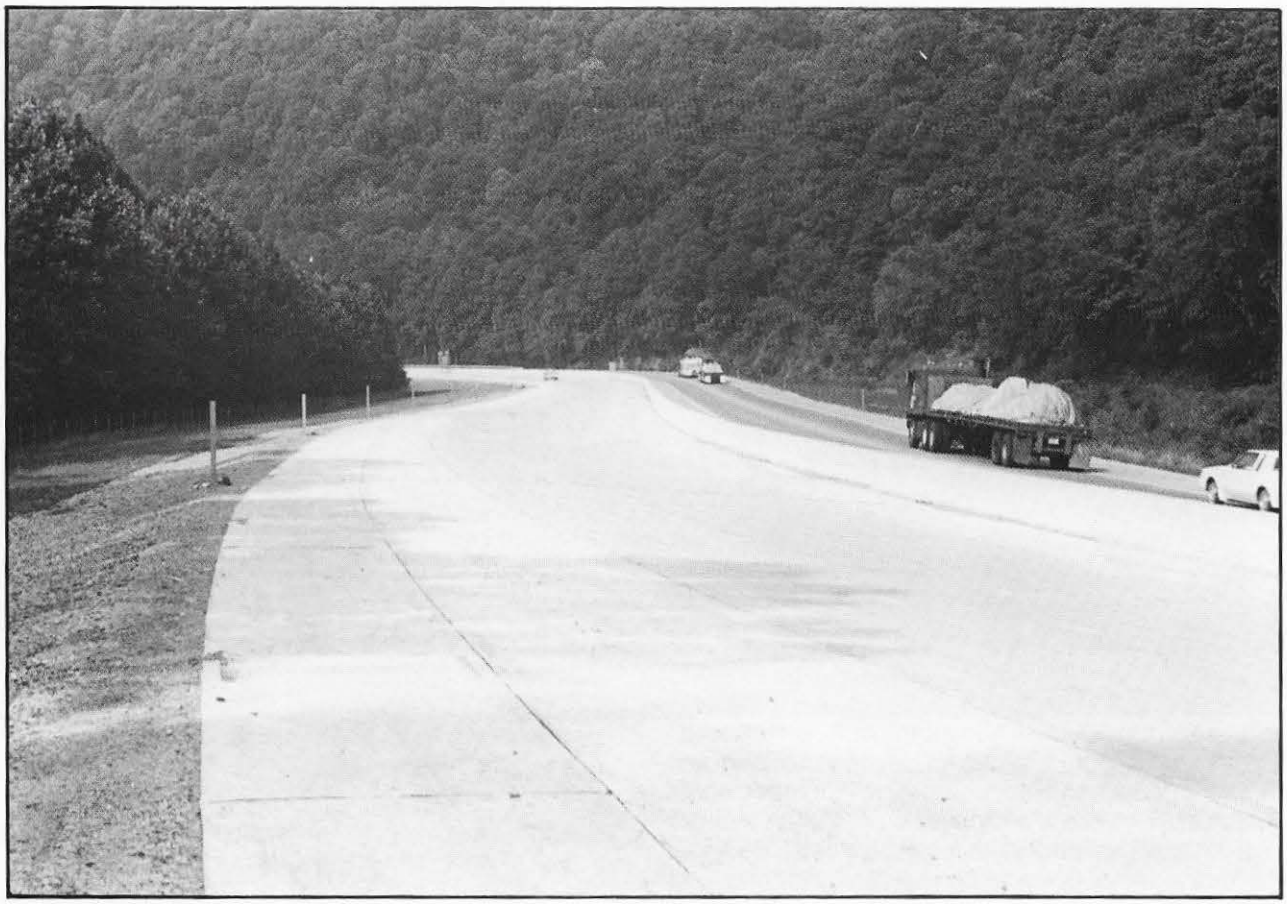
And it's paying off — paying off for consumers, taxpayers, and customers and stockholders of American Electric Power.

Four types of ash result from coal-fired electricity generation. Fly ash, amounting to about 72 percent of the ash produced by the nation's coal power plants, is collected from the flue gas by electrostatic precipitators. It is made up of very fine particles with the consistency of face powder.

Bottom ash is collected in the bottom of steam boilers in a trough of water and stored in a holding pond near the plant. Its consistency is similar to fine sand.



Al Gibson, left, and Rusty Nida, both of AEP's Ash Utilization and Research Section in Charleston, believe the future is bright for ash sales for the system. It is valuable as a fill material, an ingredient in cement, and many other uses. Here, the two are at the ash fill site across from the John Amos Plant. Workers in the background spread and compact the ash, which is trucked from the plant.



Power plant ash has been used extensively in concrete for road construction, including the roadway and median barriers on the West Virginia Turnpike. The median barriers are poured in place, thanks to the "near-zero-slump" concrete made possible partly through the use of ash in the mixture.

Boiler slag is also collected in a trough of water and stored in holding ponds. Its black, glassy consistency results from its hitting the water in a near-molten state.

Then there's the Rolls Royce of ash — cenospheres. These are microscopic spheres that can sell for many times the price of other ash. Cenospheres are hollow and very light. They are so-called "floaters" in ash ponds and are valuable as a lightweight filler in plastics, vinyls, and fiberglass.

Cenospheres are used in the manufacture of dozens of everyday products from paint brushes and bowling balls to automobile consoles and dashboards. And anyone who drives the new 1984 Corvette will be surrounded by cenospheres imbedded in the fiberglass body and other parts.

Coal-fired generating plants in the United States last year produced more than 65 million tons of ash. Ten percent of it was produced at AEP's plants.

Once a big headache for the electric utility industry, power plant ash has proven it can help pay its own way.

Ron Morrison, head of the AEP Ash Utilization and Research Section, proudly explains: "We've been involved in ash research and the sale of ash for 18 years now. It's been a constant challenge — and on more than one occasion frustrating — as we have struggled to convince some people in industry and government what a tremendous resource ash can be. But it's been worth it all. In those 18 years, AEP has realized a gain of more than $76.5 million both in ash sales and in disposal expenses we've been able to avoid. This has meant lower energy prices for our customers."

Ash sales benefit consumers in other ways, too. The biggest use of ash so far is as a structural landfill to improve property. Rusty Nida, associate engineer, explains that fly ash and bottom ash are excellent structural fill substances.

"Our pioneer site is a 55-acre housing development called Adena Village, near Montgomery, West Virginia," Nida says. "It used to flood regularly, but it's been improved with a 20-foot layer of fly ash — 750,000 tons of it — covered with topsoil. More than 100 homes have been built in the development. We've followed it very closely, and I don't know of even one of those houses out there that has settling cracks in its foundation. Once it's put down properly, ash just doesn't settle."

Nida added that ash is being used as structural fill at several other sites, including a recently constructed shopping center at Gauley Bridge, east of Charleston.

"They put a 13-foot layer on that site. In all, 45,000 tons of fly ash from the Kanawha River Plant was used. The shopping center has been in operation for almost two years, and a fellow from Kroger told us that's the first store they've built that hasn't developed cracks from settling."

Road base and paving is another important use for ash, according to Al Gibson, assistant engineer. "Bottom ash has proven to be excellent for a cement-treated base material," he says. "It's a combination of about 12 percent cement and 88 percent ash which is mixed with water and spread. The pavement is applied over it, and the result is a roadway that doesn't crack as readily." More than 300 miles of roads in West Virginia have been paved over cement-treated base material.

Ash is an ingredient in concrete, too. "Actually, we didn't discover that," Nida points out. "The Chinese used volcanic ash in building the Great Wall, and the Romans mixed ash from Vesuvius with lime to build roads and large structures such as the coliseum. Power plant ash is almost equivalent to volcanic ash in its composition."

Fly ash was used as early as 1910 in the United States as an additive in concrete. The ash makes it stronger, more watertight, and more resistant to corrosion from chemicals such as salt and sulfur compounds. For nearly 35 years, AEP has specified the use of ash in all of its construction projects, from structural landfills, concrete, and road-base material at power plants to the foundation for the corporation's new headquarters building in Columbus, Ohio.

"In West Virginia," Gibson says, "ash has been used extensively in concrete for paving in recent years. The paving work now being done in the West Virginia Turnpike construction utilizes concrete with ash in it." In another road building application involving ash, a fly ash grout was pumped into mined-out areas at the base of the bridge crossing the New River Gorge in southern West Virginia to provide a stable base for the structure.

The fly ash is also an important ingredient in the concrete used to pour the median barriers on the West Virginia Turnpike and other highways in the state. "The ash content allows a 'near-zero slump' concrete because of the low moisture requirement in the mixture. The contractors actually pour the barriers in a continuous operation right in place, and the concrete hardens without changing shape."

Nida adds that almost all cement and ready-mix companies in Appalachian's operating area use fly ash as an additive. "It improves the product, and it makes the mixture less expensive. That has proved to be very important to those companies because of the competitive nature of their business." Companies in neighboring states also are expanding their use of ash in concrete.

"The companies and the highway departments are finding that ash can be a real advantage to them, and it has meant savings for consumers and taxpayers." Bottom ash and boiler slag have been used in a cold-mix asphalt. The mixture, dubbed "ashphalt", can be stockpiled and stored ready to use and is a good cold-weather patching material.

The Ash Utilization and Research Section employees view ash as a product with a real future. "It's no accident that we produce an excellent quality ash," Morrison points out. "A good, salable ash results from efficient generating plant operation, because the best ash has the lowest content of unburned combustibles. If we didn't have good plant people running the plants and keeping a regular check on the ash quality, we wouldn't have such salable ash."

He commented that another electric utility recently purchased some of AEP's ash to be used in concrete in a huge new hydroelectric dam. "Their own ash wasn't high enough quality to do the job."

"We rely heavily on the AEP Civil and General Labs to keep us informed on the chemical and physical properties of the system's ash," Gibson adds. "Those physical properties are very important to marketability. For instance, the Civil Lab has just completed a major testing program on Mountaineer Plant fly ash use in concrete. The results encouraged us to begin marketing the Mountaineer fly ash. It is now sold extensively throughout southeastern Ohio and western West Virginia."

Uses of Fly Ash

Cement replacement in concrete
Component in Portland cement
Ingredient in artificial aggregate for road base and highway subgrade
Structural fill
Mine fire control
Strip mine site reclamation
Amelioration of soil
Grouting ingredient
Water filtration and purification
Material for absorbing oil spills
Filler material in plastics
Raw material for manufacture of roofing felt, mineral wool insulation, brick and lightweight aggregates

Uses of Boiler Slag

Sand blasting grit
Water filtering medium
Raw material for manufacture of mineral wool insulation
Roofing granules in asphalt shingles
Structural fill and road bases
Aggregate for highway construction
Grit for ice-covered roads
Aggregate in cold mix asphalt ("ashphalt")

Uses of Bottom Ash

Ingredient in road bases and cement-treated base material
Filter material
Structural fill
Grit for ice-covered roads
Pipe bedding and backfill

Another use for ash now being researched is as a mixture in soils. Already, experimentation has shown that ash can be important in the successful reclamation of strip mine sites, and the nutrients in ash have helped improve plant growth. (See the list accompanying this article for other uses of ash.)

And what about the future?

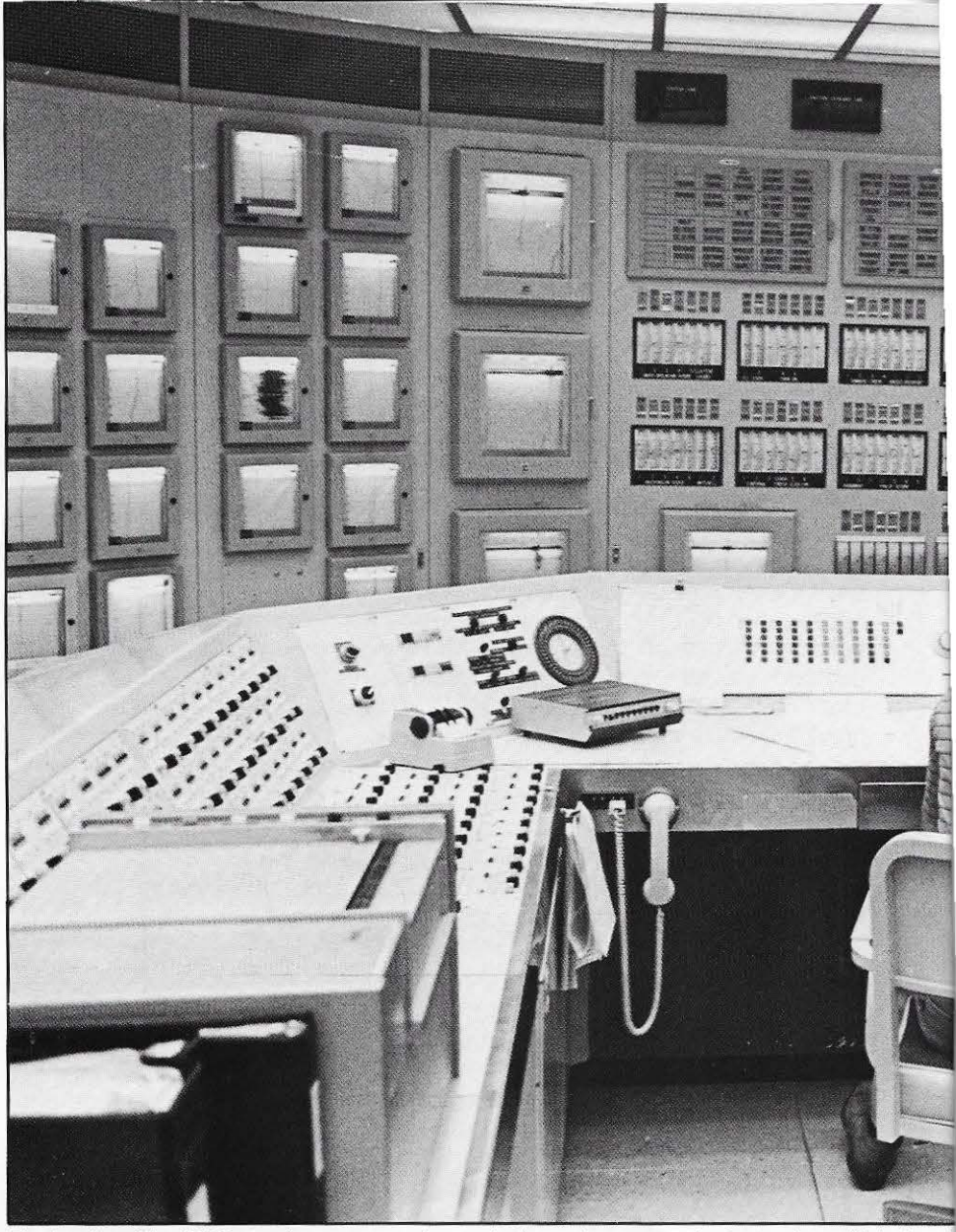
"We all feel that structural fill will be the biggest market for ash in the coming years," Morrison says. "That's an ideal use. We can sell the ash at a low price. Construction can start immediately after it's put down on the site, and it's available in the quantities needed. We expect to see this market really grow."

Ask about possible hi-tech uses for ash, and people in the ash utilization group get a kind of faraway look in their eyes. Nida explains:

"One of these days, we'll find an economical way to recover valuable minerals from ash. About a fourth to a third of the ash is aluminum oxide. We can recover the aluminum, but the process is too expensive to be commercially feasible yet. Eventually, I think the price will be right to replace a lot of our imported aluminum with aluminum taken from ash.

"We envision the day when giant industrial complexes may consume the ash electric utilities can produce.

"We have a big job to do. Right now, we sell or use about twenty-two percent of the ash we produce. Our objective is to find or develop new uses and commercial markets for the rest." □



The function of the AEP System's power control center in Canton is to operate the System in an efficient and

Economic

Economic Dispatch. It's not something you'll find at the neighborhood newsstand, next to the Columbus *Dispatch,* the Huntington *Herald-Dispatch,* or even *The Wall Street Journal.*

At the AEP Service Corporation's power control center in Canton, Ohio, economic dispatch is a bylaw, a standard operating procedure that governs which AEP generating units are producing electric energy at any given time.

Simply stated, economic dispatch means that the power control center in Canton dispatches electric energy to AEP System customers by calling upon the generating units which can produce that power at the lowest possible cost.

If the power control center resembles the command bridge of the Starship Enterprise, or one of the sets from *Star Wars,* it's because this facility is truly the nerve center of the seven-state AEP System.

The power control center constantly monitors the output of AEP's 21 major generating plants, the power flow between the AEP System and the 26 other electric utilities with which AEP is interconnected, and the status of the AEP System's high-voltage transmission lines.

"It has been and will continue to be the objective of the AEP System to produce electric power at the lowest possible cost on a reliable and continuous basis," says David H. Williams, Jr., senior vice president — operations for the AEP Service Corporation.

"I emphasize *reliable and continuous basis* because if we have an opportunity to take some action that will lower our costs by some fraction today, but will end up costing our customers twice as much somewhere down the road, we won't take that action," Williams explains.

"Economic dispatch fits into our objective because we serve the loads on the AEP System with the most economical generation that is available," Williams says. "And as a public utility, the principle of economic dispatch is part of our charter to do business.

"On a typical day, as the demand for power increases, we meet that demand by calling on units with successively higher-cost generation. The highest-cost generation is the last to be called on line, and, when the demand for power begins to decrease later in the day, is the first to be taken off line."

Williams says there are two major components in the price of generating a unit of electric power: the cost of the fuel itself, and the efficiency of the generating unit.

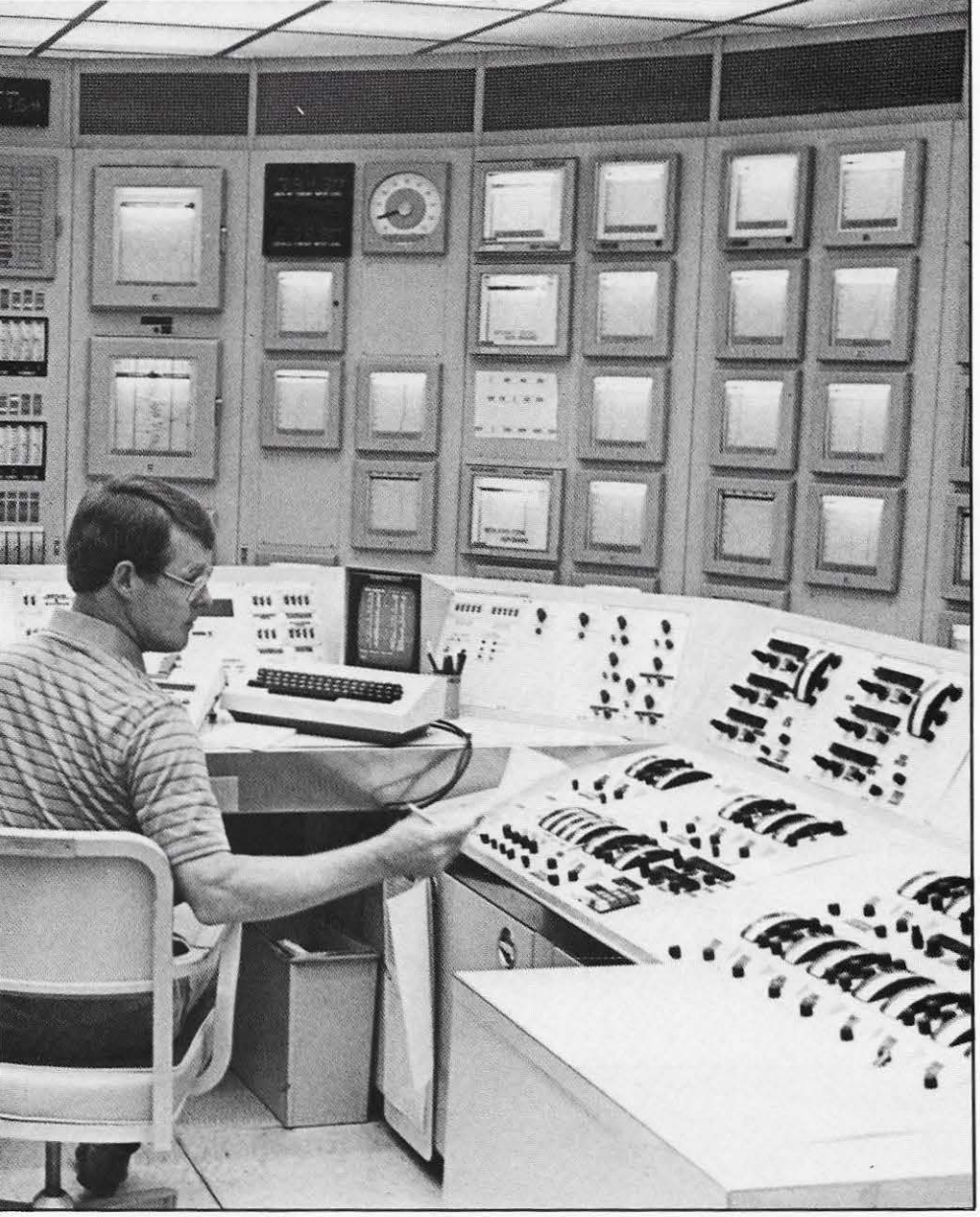
"The coal costs are usually expressed in the number of cents per million BTUs of heat energy," he says, "and the efficiency of a generating unit is reflected in its heat rate, or the number of BTUs that are needed to produce a kilowatt of electricity. Multiplying these two components together gives you the cost per kilowatt.

"Total production costs are very heavily oriented toward the cost of coal," Williams points out. "The cost of generating a unit of electricity is 90 percent related to the cost of the coal and unit efficiency, and 10 percent related to the labor and maintenance costs of operating the unit."

Essentially, the plant-by-plant differences in the costs of generating a unit of electric power come down to differences in the cost and the quality of the coal that feeds the boilers.

"At the present time, some 25 percent to 30 percent of our total generation is being sold to other electric utilities — sold in an open marketplace, actually, where a number of other utilities besides AEP are vying for an opportunity to sell surplus capacity," Williams says.

"As is the case with any other marketplace," Williams notes, "price determines the amount of product you sell. Our ability to sell our capacity to other utilities,



nomical manner while meeting the variations in customer demand during the course of the day.

Dispatch

therefore, depends directly on the cost and quality of our coal supplies, and to some extent, on the efficiency of our generating units."

There is a very definite relationship between coal quality and the operation of a generating plant's boiler, Williams says, "and this is why the coal with the lowest price per ton usually will not generate the cheapest unit of electric energy.

"Coal with a high ash content, with high slagging characteristics, and with a varying or fluctuating level of BTUs, will have an adverse effect on a boiler on both a short-term and long-term basis," he adds.

"The higher the percentage of ash, the more the wear and tear on the pulverizers which grind the coal, the more it accumulates on the tube surfaces of the boiler, cutting down on heat transfer. Coal with a high ash content can cause tube failures, plug up precipitators, even throw us into environmental problems with respect to particulate emissions. And, of course, the cost of disposing of the ash is significant in itself."

If an AEP generating unit is out of service for unscheduled maintenance, several bad things happen, Williams says. First, AEP may have to replace that power internally with higher-priced generation from another unit elsewhere. Second, AEP loses the chance to sell that capacity to an outside customer. Third, it can even cause the AEP System to purchase replacement power from an outside utility.

"What it comes down to is we don't make any money on a unit out of service. We don't burn any coal at this particular plant — we miss the sale," Williams concludes.

Williams sees Ohio Power Company's General James Gavin generating plant at Cheshire, Ohio, as "a classic example. Gavin is one of the largest generating plants in the System. When we can sell those 2600 megawatts of capacity, we can burn 20,000 tons of coal a day — supplied by our own miners from our own mining operations. But, again, the cost and quality of the coal are prime factors in whether that generating capacity can be sold."

Donald P. Nofsinger, vice president-system operation, explains that the power control center's function is to operate the AEP System in an efficient and economical manner while meeting variations in customer demand during the course of the day. That's no easy task, since the AEP System includes 23,000,000 kilowatts of installed generating capacity and 21,000 miles of high-voltage transmission lines.

"Our employees here in the center are assisted by a computer which is connected to an analog console," Nofsinger says. "Every five minutes, the computer determines the proper loading for each one of the System's generating units, and, from the console, sends pulses to these units, causing them to raise or lower their generation in accordance with changes in customer demand."

Clustered around the left-hand wall of the power control center are nearly 200 analog recorders which chart the generation of each unit on the AEP System, as well as power flow to and from neighboring utilities.

Among the instruments in front of the center's main console are digital readouts which indicate total System load and the elevation of Smith Mountain Lake. Indicators below those readouts compare the actual generation at AEP power stations with that which is desired according to economic dispatch.

One of the most striking sights inside the power center, however, is the dynamic display board which occupies most of the right-hand wall. The display board maps out the entire AEP System, illustrating the status of each high-voltage breaker or transmission line.

"If a line is illuminated, it means that it is out of service, either for a scheduled or

forced outage," explains Nofsinger, "while, if it is not illuminated, it is operating normally. Our breakers are color-coded on the display board, with red indicating a breaker that is closed, and green showing one that is open."

Although the AEP Service Corporation's System Planning Department is in charge of long-range load planning, the System Operation Department — including the power control center — forecasts energy demand "on an hourly, daily, weekly and monthly basis," according to Nofsinger.

"Forecasting demand is one of the prime requisites in having an efficient power dispatching operation," Nofsinger acknowledges. "We rely a great deal on weather forecasts which are supplied to us twice each day by a private forecasting service based in St. Louis, and we also keep in tune with current economic trends that can affect industrial or commercial demand."

A typical weekday at the power dispatch center begins with an early-morning staff meeting, at which "we review the units which we have on line, the schedule of planned outages for the upcoming few days, and the estimated date when each of those units could return to service."

At the same time, the power control staff is finalizing the load forecast for that day's peak, as well as a forecast for the following day's peak. "We determine the amount of generation we have available to meet those two peaks, and, at the same time, determine what generating capacity we have available to sell to other utilities," Nofsinger explains.

"If our reserve margin (the standby capacity needed to guard against an unexpected outage or problem with a generating unit that is on line) is adequate, the schedule is approved," says Nofsinger. "If not, additional generating capacity may be readied.

"During this period, we are on the telephone with the companies with which we are interconnected, determining what market there might be for sales of electric power during the next 24-hour or seven-day period.

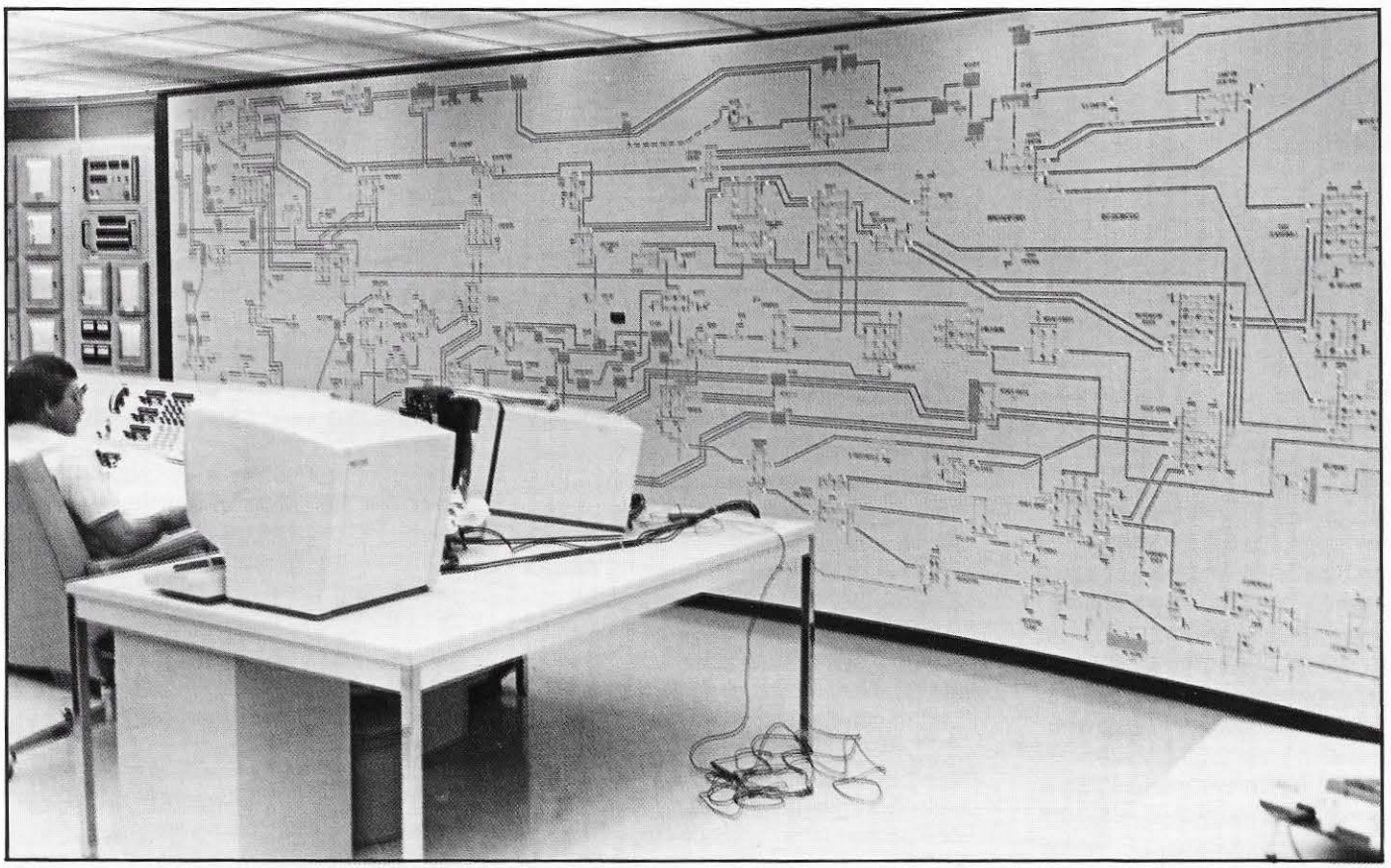
"If we're successful in making a transaction and this lowers our reserve capacity below an acceptable level, then additional generating capacity may be brought on line to cover the situation. Again, this additional capacity would be brought on line in accordance with the principle of economic dispatch.

"Because of the downturn in the nation's economy, and the resulting decline in the demand for electric power, there are more electric utilities trying to sell surplus capacity these days," Nofsinger agrees. "Usually the cost of coal has a direct bearing on whether or not we are able to complete a transaction."

Despite the fact that most customers think of an electric utility as a monopoly, Williams stresses that there is a very real need for the AEP System to be competitive with other electric utilities. "The sale of our generating capacity to other utilities can have a very positive effect on the AEP System's financial picture," he emphasizes.

"Our business is much like any other business in that, whether we're producing kilowatt-hours, or making cars, or selling groceries at the corner store, there are two important factors we have to keep in mind — price and quality," Williams reminds.

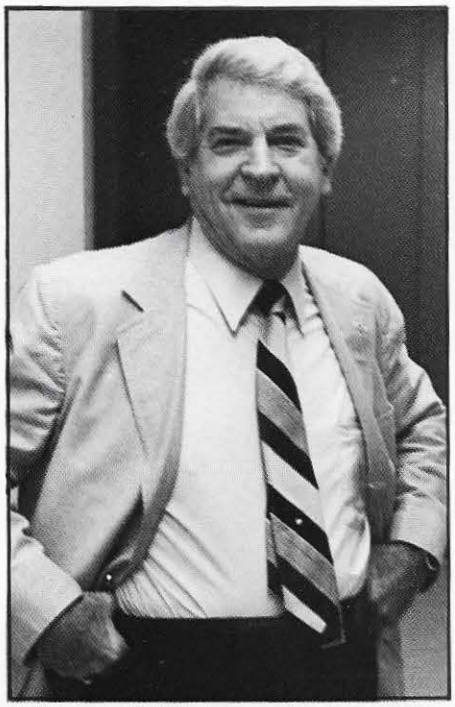
High-ash coal with fluctuating BTU levels can cause high anxiety for the staff at the power control center in Canton. It's quality coal — at a competitive price — which enables other utilities to tell them that "the price is right." □



The dynamic display board in the power control center maps out the entire seven-state AEP System, illustrating the status of each high voltage breaker and transmission line.

RETIREMENT

Lewis Buchanan



"When I left VPI, I came to Roanoke to see Davis Elliott, the-then assistant district manager, about a job with Appalachian," recalls L. R. 'Buck' Buchanan. "He was always busy, but I would come back every day and sit in the same chair, waiting. Finally he came out and said, 'Mr. Buchanan, I believe the only way I am going to get rid of you is to hire you', and he sent me over to John Stephens at Walnut Avenue."

Buck worked as a draftsman senior before becoming Roanoke building supervisor in 1949, when the new general office headquarters was completed.

"I have thoroughtly enjoyed it," Buck says. "This is a great company as far as I am concerned. I don't think you can find any better people, and they are what I will miss."

Buck and his wife Rosemary, who also retired October 1 from her job at First Federal Savings and Loan, plan a trip to Hawaii later this month. "After that, I don't have the slightest idea what we will do," he laughs.

A former mayor of the Town of Boones Mill, Buck is past master of the Masonic Lodge and past president of the Lions Club. □

Millie Bishop

A career spanning more than 31 years came to a close October 1 for Millie Bishop, Bluefield secretary stenographer A.

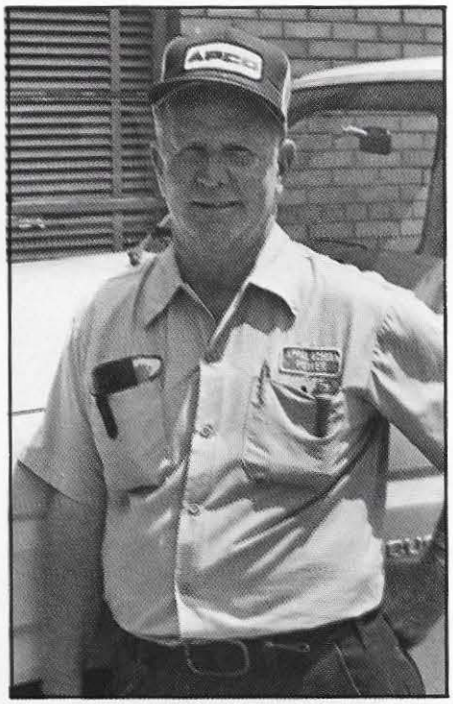
A graduate of West Virginia Business College, Millie was working for the Bluefield Telephone Company when Harry Strong, the-then Princeton accounting manager, asked her to apply for a vacancy in his department. "I haven't regretted that decision," she states.

Later, Millie transferred to Bluefield and since 1962 has worked for the division superintendent.

Millie says, "I love the people I work with. I have found loyal friends who have been dear to me in every way."

Millie's plans for retirement include trips to Texas to visit her daughter, son-in-law and three grandsons. She will also be caring for her 93-year-old mother, with whom she lives, as well as doing some volunteer work at the hospital. "I have lived in the same house since I was one year old." Millie adds, "and I am a collector of antiques. I enjoy doing needlepoint, and I have been secretary-treasurer of my Sunday school class at First Baptist Church in Princeton for at least 20 years. I have always loved working in the yard, and a couple of times have won the 'yard of the month' award." □

Willie Winebrenner



"The most interesting thing that happened during my years with the company was when Dan Ocela and I were involved in the capture of some bank robbers," says Montgomery Collector Willie Winebrenner.

"We were bringing some poles from North Charleston into Montgomery, and when we crossed the bridge to come into town, the state police made us pull the truck across to block the road. We didn't know what was happening with all the guns flying, and they didn't even tell us when they apprehended four men in a pink cadillac. It wasn't until we got into the office that someone asked if we heard about the big bank robbery in town."

Willie was employed in 1949 as a laborer and elected early retirement October 1.

"I have big plans for retirement — to keep living," he laughs. "I have a home on Summersville Lake, which I built with the help of some buddies. There wasn't any paid labor. My two big interests are hunting and fishing, and I have a big spot for gardening, so I'll be spending most of my time at the camp. Maybe I'll get to travel around a little bit."

A member of the Baptist Church at Gauley Bridge, West Virginia, he is also a Noble Grand in the Montgomery Odd Fellows. □

APCo employees earn PE status

Ralph Mudgett

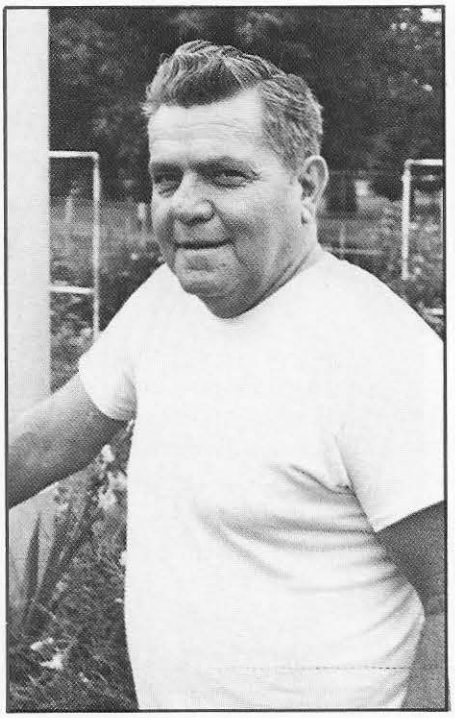
"Since 1955 I have been gone from home about a third of the time," says Ralph Mudgett, who retired October 1 as civil engineering superintendent in GO T&D, Roanoke.

"I joined AEP two years before that during construction of OVEC's Kyger Creek Plant. Then I started going on the road for Don Parsons, first at Kammer and then at Smith Mountain. Between Smith and Blue Ridge, Earle Snodgrass and I had a vast number of projects. We performed the preliminary field engineering topographic dimensional control layout work for Mitchell, Cook, Amos, Gavin, Breed and several more that never materialized. The only big plants I missed were Tanners Creek and Rockport.

"About 15 years ago I began planning for early retirement. Because of the quality of our retirement program and savings plan, I will get a nice bundle of cash, which will give me working capital for a very small house building business.

"I have designed plans for an Eastern Carolina farm house, which we plan to build on a lot in Wytheville next year. Depending on how I like the experience of building my own place, I may build small 1000 to 1200 sq. ft. homes for either singles or couples." □

Ebb Overstreet

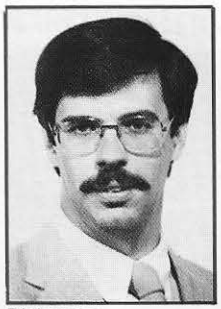


"I was discharged from the service in September 1945 and was hired at Appalachian the following month," recalls W. E. 'Ebb' Overstreet, who elected early disability retirement September 1.

Ebb has a photo album filled with pictures of the men he has worked with. "Before I made lineman, you had to buy your own hooks and practice climbing during lunch or at the end of the day," he says. Ebb enjoys reminiscing about line work in and around Roanoke: rural line construction, substation construction, installing the underground network in downtown Roanoke and dismantling the overhead trolley lines.

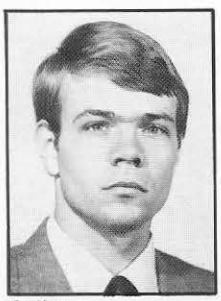
He also recalls with pleasure some of the pranks that were played on him. "Everybody knew how much I feared snakes. Once we were working inside on a rainy day, and everybody wanted me to sit next to them at lunch. I should have known something was up. They had put a rubber snake in my lunch box. When I opened it up, I threw that box against the wall, and it looked like a truck had hit it," he laughs.

Ebb and his wife Eleanor live in northwest Roanoke, where he keeps busy tending to his garden, flowers and two greenhouses. □



Dickerman

Webb



Coffey

Mike Coffey, Roanoke energy services engineer; Larry Dickerman, Rocky Mount area supervisor; and Isaac Webb, Gate City area supervisor, have been certified as registered professional engineers in the Commonwealth of Virginia.

Coffey holds a bachelor of science degree in electrical engineering from the University of Virginia and a masters degree in business administration from Lynchburg College. He was employed in 1979 as an electrical engineer in Roanoke. He became a commercial engineer in 1979 and energy services engineer in 1980.

Dickerman joined Appalachian in 1974 as an electrical engineer in the General Office Transmission and Distribution Department. He transferred to the Roanoke Division in 1977 and was promoted to electrical engineer senior in 1981. He became Rocky Mount area supervisor in 1982. Dickerman holds a bachelor of science degree in electrical engineering from North Carolina State University.

Webb, an electrical engineering graduate of Virginia Polytechnic Institute and State University, began his career in 1980 as an electrical engineer in Roanoke. He was promoted to Gate City area supervisor last month. □

WHO'S NEWS

Abingdon

Cathy Lynne, daughter of Jim Cook, station mechanic B, was crowned "Miss Petite Independence" at Rich Valley High School.

Sharon Gobble, secretary stenographer B, was elected vice president of the Washington County Chapter, Professional Secretaries International.

Lori Hope, daughter of Bill Lindamood, customer accounting supervisor, received a master of science degree in communication disorders from Radford State University.

B. L. Long, marketing and customer services supervisor, was chairman of the 1983 American Cancer Society crusade in Washington County. Under his leadership, the county goal of $15,000 was reached for the first time in several years. □

John Amos

Chris, son of Joseph Harris, performance technician A, graduated from Marshall University with a bachelor of science degree in business administration.

Scott, son of Joseph Harris, performance technician A, was a member of the Cavaliers team which placed first in regular season play in the Hurricane Basketball League and second in the League Tournament. Scott was the only seventh grader out of ten boys selected for the all star basketball team. He was also a member of the Giants team which placed first in Hurricane Little League baseball. Scott, who had a .600 batting average, including eight homeruns, was selected for the all star baseball team. He pitched 64 strike-outs. □

Bluefield

Paul Baker, station mechanic A, was ordained a minister in services at the Mt. Hermon Baptist Church, Nemours, West Virginia, on September 4. Paul is pastor of the Mowels Church, located at Stoney Ridge near Bluefield. □

Central Machine Shop

Dawn, daughter of Lynda Gross, plant clerk C, was awarded a scholarship to Lisa's School of Modeling after participating in F.A.M.E. EXPERIENCE sponsored by the Girl Scouts.

Karen, daughter of Andrew Zagayko, assistant manager, is a semi-finalist for the 1984 National Merit Scholarship competition. About 15,000 students across the country will have the opportunity to compete for 5,300 Merit Scholarships, worth more than $18 million, to be awarded in the spring of 1984. Karen is a senior at Nitro High School. □

Charleston

Cal Carlini, division manager, was named by the Charleston Regional Chamber of Commerce to the Charleston Downtown Development Corporation's Organization Structure Committee.

Tracy, daughter of Karen Smith, office messenger, has been named a cheerleader for the Kanawha City Colts Midget League football team. □

The Bluefield Station Department won the second annual Bluefield Division slow pitch softball tournament. Seven teams from Bluefield and the outlying areas of the division competed in the double elimination affair, held August 20 at the Bluefield City Park. The Station Department won five games in copping first place honors, with Pineville (last year's winner) finishing as runner-up. Members of the winning team are: front row, l. to r., Floyd Wilson, station mechanic B; John Meadows, station mechanic A; Tony Rasi, T&D clerk A; Johnny Odham, line mechanic C; and Lewis Crouch, station mechanic C. Back row, Joe Johnson, station mechanic C; Merve Anderson, station crew supervisor; Jerry Blessing, station mechanic B; Herman St. Clair, station superintendent; Bill Ball, communication specialist, GO T&D Communications; and Mike Clayton, station crew supervisor.

General Office

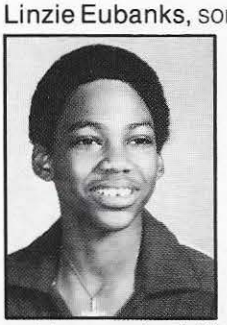
Kathy, wife of Dave Baumgardner, station mechanic C-GO, GO T&D Station, Roanoke, has been promoted to property management officer in the western region division of United Virginia Bank. She will assist in managing property matters for 60 banking offices in western Virginia.

Terry, son of Joe Plunk, manager hydro generation, GO Hydro, Roanoke, represented William Byrd High School at the American Legion Boys' State held at Lynchburg College.

Teresa, daughter of Joe Plunk, manager hydro generation, GO Hydro, Roanoke, was a member of the Vinton Baptist Church Youth Choir which made a mission tour to Florida. The choir held a one-week vacation Bible school at Celebration Baptist Church, Tallahassee, and presented numerous concerts in the area.

Michele Lynn, daughter of Dean Price, right of way agent senior, GO T&D R/e & R/w, Roanoke, was awarded a Veterans Administration Health Professionals Scholarship. She is a fourth year nursing student at the University of Virginia and is on the dean's list.

Linzie Eubanks, son of W. R. Newsome, stores accounting clerk C, GO Accounting, Roanoke, has completed the summer session of UPWARD BOUND '83 at Roanoke College, where he received an award in animal husbandry. He was also initiated into the Upward Beta Bound Psi Phi Fraternity.



Lawson Bailey, retired marketing and customer services director, and **Margie Cahill,** marketing and customer services associate, were presented engraved plaques for outstanding service to 4-H at the recent Virginia 4-H Electric Congress. Margie is chairperson of the Roanoke City Extension Advisory Council, a member of the 4-H committee of the Virginia Farm and Home Electrification Council, and a member of the West Central District Volunteer 4-H Leaders Association.

Stephen, son of A. L. Turner, civil engineer senior, GO T&D Civil Engineering, Roanoke, was ordained a minister in services at his home church, Waverly Place Baptist, Roanoke. An AEP Educational Award winner, he graduated from James Madison University and is enrolled in Southern Baptist Theological Seminary.

Todd, son of Emmett Blackwell, employee relations supervisor, GO Personnel, Roanoke, graduated from Virginia Polytechnic Institute and State University with a bachelor of science degree in marketing management. He is now employed with the Amecon Division of Litton Industries in College Park, Maryland as a price analyst. □

Judy Topping, Huntington meter electrician C, and her son, Mike, won trophies for their entries in the modified class of the National Chevelle Owners Association Second Annual Convention. Mike won first place for a 1968 Malibu convertible he built from scratch, and Judy won third place with her 1971 El Camino. The pair belong to the River City Chevelle Club in Huntington, whose members own 1964-1973 Chevelles, El Caminos or Malibus. Judy is club photographer, and David Adkins, Huntington station mechanic C, is club treasurer.

Glen Lyn

Jolene, wife of Sandy Pennington, assistant plant manager, has passed the West Virginia Board of Examination for Registered Nurses. She graduated with honors from Bluefield State College in May with an associate of science degree in nursing. During her senior year, she was elected to "Who's Who Among American Colleges and Universities".

Corky Buckland, maintenance supervisor, won the Tennessee Walking Horse owner-trained class at the Blue-Gray Horse Show in Bluefield, West Virginia, with his seven-year-old gelding, "Star Hill's Spec". Corky has been showing walking horses for thirty years. □

Giles and Leafy White celebrated their 68th wedding anniversary with a reception in their home in Peterstown, West Virginia. Giles is a retired Glen Lyn Plant auxiliary equipment operator. The couple, who was married July 21, 1915, has five children, twenty grandchildren, twenty one great grandchildren and one great-great grandchild. Their son, Jim, is a unit supervisor at Glen Lyn.

Logan-Williamson

Crystal, daughter of Williamson Line Crew Supervisor Charles Burchett, was crowned "Miss Kiwanis Senior Bowl 1983". The senior bowl pits the finest in high school football talent for southern West Virginia and eastern Kentucky. Crystal, who attends Marshall University, represented Williamson High School. While at Williamson, she was homecoming queen, a majorette, band member, and member of the Drama and Tri-Hi-Y Clubs. ☐

Pulaski

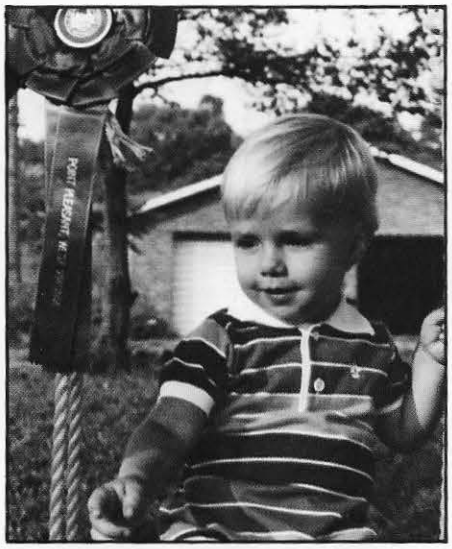
Raymond Lyons, Christiansburg office supervisor, and his wife **Brenda** have been appointed to the Christiansburg Elementary PTA board of directors.

Elizabeth, daughter of Gleaves Shrader, meter supervisor nonexempt, was presented a certificate for superior rating in solos at the Blue Ridge Festival piano recital sponsored by the Virginia Federation of Music Clubs. She also received a gold cup for having three consecutive superior ratings.

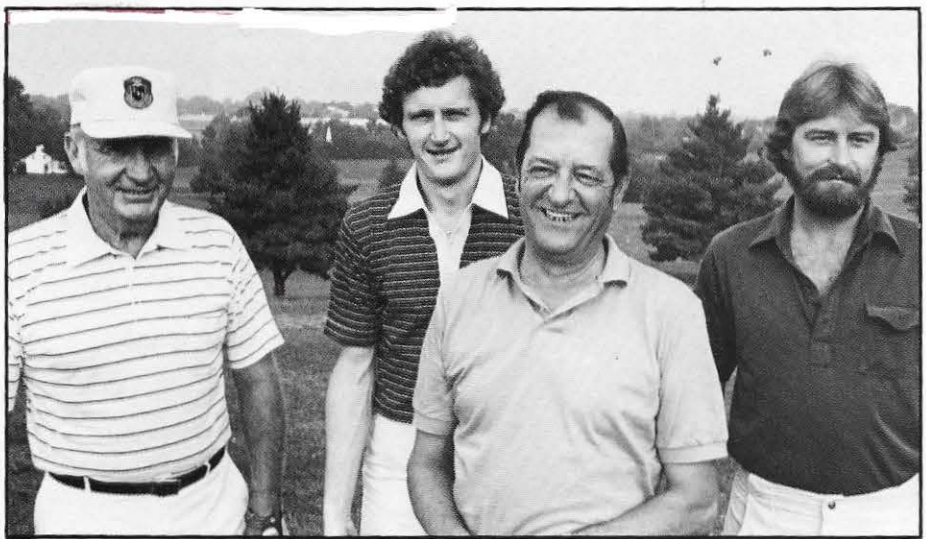
Chester Robinson, Galax meter reader, placed second in the Crestview Golf Course Invitational Tournament. He had rounds of 82 and 74 for a 156 total.

Pat, son of Claud Kirkland, retired division manager, has been promoted to vice president and general manager of Pulaski Motor Company, Inc. ☐

Mountaineer



Grant, son of Carl Matheny, performance engineer senior, won first place in the one-year-old division of the pretty baby contest at the Mason County Fair.



The winning foursome in the 1983 APCo Golf League at Roanoke's Ole Monterey Golf Club were, l. to r., Ted Carroll, relays supervisor; Ron Hogan, electric plant accountant; Jack Whitenack, associate systems analyst; and Ron Payne, drafter B. The second place foursome included Dave Trout, wage and salary supervisor; Chester Robinson, Jr., retired supervising circuit breaker engineer; Mike Thacker, administrative assistant; and F. E. Cook, associate programmer. Sue Cook, stores attendant, won golfer of the year honors.

Heather Dawn, daughter of Carl Pettry, stores attendant, won second place in the one-year-old division of Mason County Fair pretty baby contest. ☐

Huntington

Joe Haynes, administrative assistant, was appointed by the Huntington Chamber of Commerce as its representative on the municipal Fire Civil Service Commission.

Tim Rockel, line mechanic C, was chosen "Jaycee of the year 1982-83" by the Hamlin Jaycees. ☐

Kingsport

Richard, son of Keen White, personnel director, graduated cum laude from the University of Southern California with a master of science degree in electrical engineering.

Emory Fugate, T&D manager, and **Greg Smith,** associate rate analyst, received certificates of excellence for completing an 18-month self-study course entitled "Public Utility Reports".

Billy, Jr., son of B. C. Dishner, station mechanic A, graduated from Tri-Cities State Technical Institute with an associate of science degree in electrical technology.

Bill, husband of Carolyn Gibson, marketing and customer services representative, has been elected lt. governor of zone 11 of the Tennessee District, Optimist International, for 1983-84.

Danny, son of Jesse Williamson, retired general line crew supervisor, won the pole climbing contest during annual Fun Fest activities. Danny, a lineman with Vanderpool Electrical Contractors, scaled the 65-foot pole in 15.2 seconds. ☐

WEDDINGS


Kidd-Angle


Gilliam-Dougan


Cassell-Lester


Ervin-Hudnall


Eagle-Hall


Gentry-Yates


Thompson-Dunn


Walker-Summers

Susan Eugenia Angle to James E. Kidd, Jr., September 3. "Skip" is the son of Jeannette Kidd, retired personnel assistant, GO Personnel, Roanoke.

Della N. Dougan to **Otis M. Gilliam, III,** surveyor assistant-rod, GO T&D Civil Engineering, Roanoke, August 13. Della is the daughter of Larry Dougan, retired GO personnel supervisor, Roanoke.

Retina Laverne Lester to Gregory Lee Cassell, June 18. Retina is the daughter of Hubert Lester, Williamson line crew supervisor.

Carla Lynn Hudnall to **Craig Allen Ervin,** Kanawha River Plant utility worker A, September 3.

Robin Annette Hall to **Kenneth Ray Eagle,** Lynchburg station mechanic B, September 3.

Pamela Elaine Yates to Greg Gentry, May 27. Pamela is the daughter of Onsbie Yates, Grundy office supervisor in the Bluefield Division.


Harris-Raines

Gina Michelle Dunn to **Gary Wayne Thompson,** August 6. Gary is the son of Don Thompson, Glen Lyn Plant shift operating engineer.

Joyce Ann Summers to Kelly Walker, September 2. Joyce Ann is the daughter of Bonnie Harper, Charleston meter reader.

Kristy Ann Cook to **Stephen Douglas Frazier,** August 6. Stephen is the son of Bob Frazier, Pearisburg line crew supervisor nonexempt in Pulaski Division.

Kristy is daughter of...

Betty Ann Unangst to Bob January, August 4. Betty Ann is the daughter of the late George Unangst, former Charleston division superintendent.

Janice Annette Summers to **Joe Sawyers,** Charleston meter reader, May 28. Janice is the daughter of Bonnie Harper, Charleston meter reader.

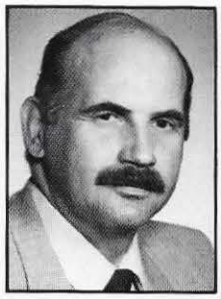
Teresa Raines to **Christopher J. Harris,** August 26. Christopher is the son of Joseph Harris, Amos Plant performance technician A.

Patricia H. Milliron, secretary stenographer B, GO Operations, Roanoke, to William A. Drummond, August 26.

Angela Shawn Walls to Anthony R. Wagoner, August 16. Angela is the daughter of James E. Walls, Logan-Williamson station supervisor.

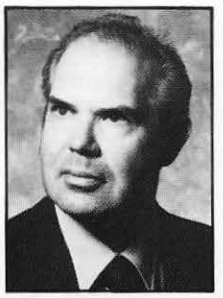
Linda Lee Whitehead to **Richard S. Frymyer,** Glen Lyn Plant maintenance mechanic C, August 19. □

PROMOTIONS



Gordon R. Parker, engineering technician senior, GO T&D Station, Roanoke, was promoted to building supervisor, GO General Services, Roanoke, on July 1. He succeeds Lewis R. Buchanan, who retired October 1.

W. Ray Parcell, station mechanic A in the Fieldale area of Roanoke Division, was promoted to regional assistant chief operator, GO Operations, Fieldale, on October 1. He succeeds D. G. Merriman, regional chief operator, who will retire December 1.



Michael T. Smith, unit supervisor at Kanawha River Plant, was transferred to Rockport Plant in the same position on August 16.

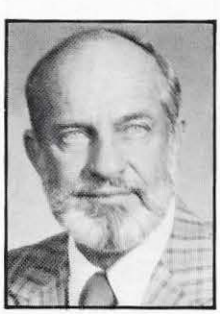
Gary Ellis, equipment operator nonexempt, was promoted to unit supervisor at Mountaineer Plant on September 1, succeeding Roger Smith, who transferred to Rockport Plant. Ellis attended Mt. Vernon Nazarene College.

T. Paul Dalton, garage supervisor nonexempt, was promoted to garage supervisor exempt in Bluefield on August 1. He succeeds E. W. Linkous, who elected early retirement.

Bill Crump, assistant shift operating engineer, was promoted to shift operating engineer at Mountaineer Plant on August 1, succeeding Glenn Douglas, who transferred to Rockport Plant.

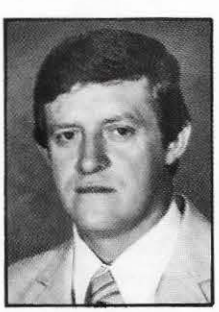
Dave Hall, equipment operator nonexempt, was promoted to unit supervisor at Mountaineer Plant on August 1, succeeding Beryl Wilson.

Beryl Wilson, unit supervisor, was promoted to assistant shift operating engineer at Mountaineer Plant on August 1, succeeding Bill Crump. Wilson attended the West Virginia Institute of Technology.



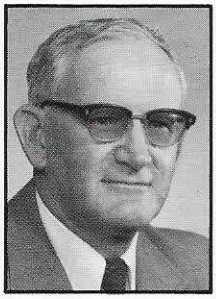
W. H. "Bill" Kahle, station crew supervisor nonexempt, was promoted to station crew supervisor exempt in the Fieldale area of Roanoke Division on September 1.

Ken Cooper, equipment operator nonexempt, was promoted to unit supervisor at Mountaineer Plant on August 1, succeeding Jerry Cunningham, who was promoted to assistant shift operating engineer. □

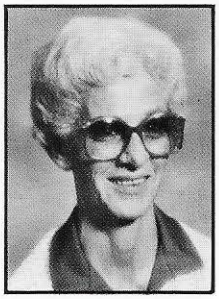


SERVICE ANNIVERSARIES

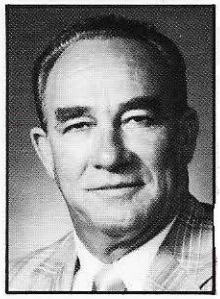
James Moore
meter reader
Abingdon
35 years



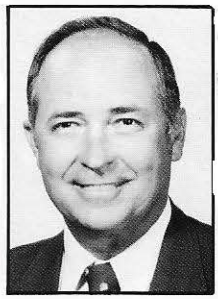
Paul Lethcoe
electrical eng. sr.
Abingdon
35 years



Audrey Harlowe
secretary/steno. A
Fieldale (Rke.)
35 years

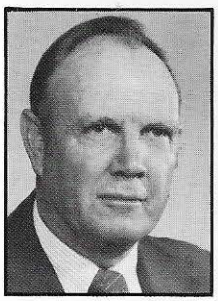


Chester Smith
line con. & main. rep.
Bluefield
35 years

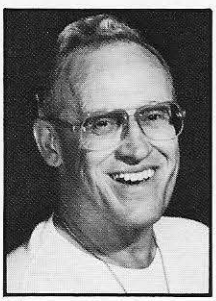


Jimmy Earles
line crew supv. NE
Pulaski
35 years

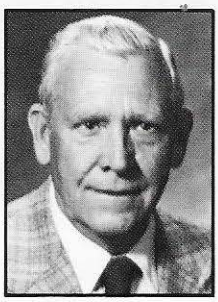
Charlie Young
meter reader (LTD)
Charleston
35 years



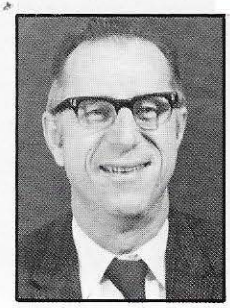
John Orr
line crew supv. NE
Abingdon
35 years



Jack Kern
inst. mech. A (LTD)
Kanawha River
35 years

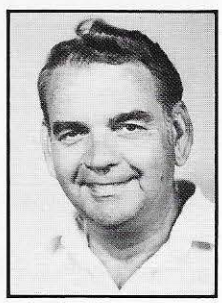


Fred Dooley
area serv. restorer
Charleston
35 years

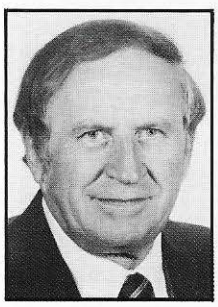


Eugene Gloss
plant manager
Philip Sporn
35 years

Ralph Persinger
T&D clerk A
Huntington
35 years

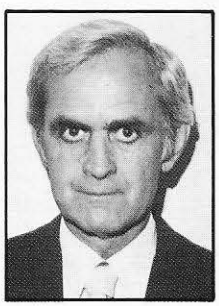


Robert Dennis
line crew supervisor
Roanoke
35 years

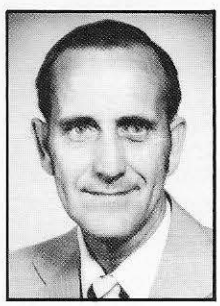


Lloyd Pomykata
mkt. & cust. serv. mgr.
Charleston
30 years

Jack Allen
plant janitor
Kanawha River
30 years

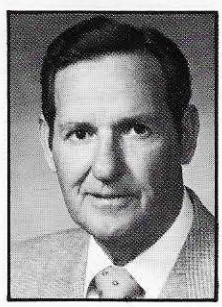


Zeke Burdette
maint. mechanic A
Philip Sporn
30 years

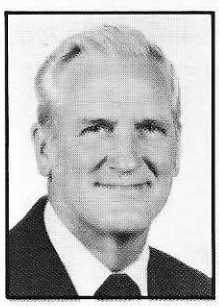


Ernest Colegrove
meter reader
Huntington
30 years

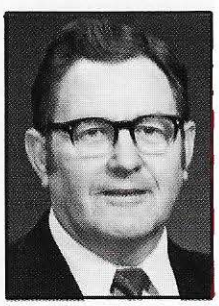
Paul Roush
regional chief disp.
GO-Turner
30 years



James Sutphin
station mech. A-GO
GO-Bluefield
30 years

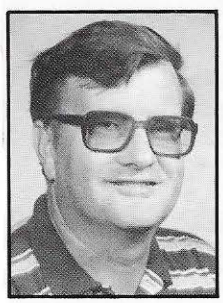


Jack Hawks
line crew supv. NE
Bluefield
30 years

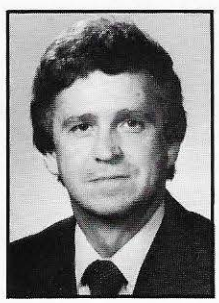


Dusty Rhodes
maintenance supv.
Philip Sporn
30 years

Adelene Newman
cust. serv. clerk A
Pulaski
30 years



Dean Stover
line con. & main. rep.
Bluefield
25 years



Charles Hinchey
perf. supv. eng.
John Amos
25 years

Clyde Lavinder
sta. con. rep. sr.
GO-Roanoke
20 years

James Dunbar
stores supervisor
Kanawha River
20 years

James Hagy
meter reader
Abingdon
20 years

Abingdon

10 years: **Garnet Mullins,** customer accounts representative B. 5 years: **Wayne Thomas,** customer accounting supervisor nonexempt.

John Amos

15 years: **Rexford Shoemaker,** plant performance superintendent. 10 years: **Gregory Adkins,** assistant yard superintendent. **Ronnie Sergent,** maintenance mechanic A. **Keith Wentz,** maintenance mechanic A. **John White,** maintenance mechanic A. **Timothy Frazier,** utility operator A. 5 years: **Raymond Carroll,** performance engineer.

Bluefield

15 years: **Robert Viney,** line mechanic A. **Kenneth Sigmon,** general servicer. 10 years: **William Goode,** line mechanic A. 5 years: **Ocal Smith,** line mechanic C.

Central Machine Shop

5 years: **John Joyce,** machinist 1st class. **Sam Tawney,** machinist 1st class.

Charleston

15 years: **Keith Shahan,** stores attendant. 5 years **Terry Tucker,** line mechanic C.

Clinch River

15 years: **Roger Mullins,** maintenance mechanic A. 10 years: **John Salyers,** maintenance mechanic B.

General Office

15 years: **Wayne Pugh,** marketing and customer services training coordinator, GO Marketing and Customer Services, Roanoke. **Jane Glover,** electric plant clerk A, GO Accounting, Roanoke. **Jessie Chitwood,** maintenance mechanic A, GO Hydro, Roanoke. **Ronnie Walls,** transmission mechanic A, GO T&D Transmission, Charleston. **Robert Johnson, Sr.,** T&D representative, GO T&D Transmission, Roanoke. **Ed Bradley,** labor relations supervisor, GO Personnel, Roanoke. 10 years: **Leon Epperly, Jr.,** station operator A, GO Operations, Roanoke. 5 years: **Robert Porter,** engineering technician, GO T&D Communications, Roanoke. **Carl Jones,** custodian, GO General Services, Roanoke. **Angie Martin,** custodian B, GO General Services, Roanoke. **Michael Shafer,** engineering technician senior, GO T&D Station, Huntington. **Amando Hernandez,** electrical engineer, GO T&D Meter, Charleston. **Simon Herman, Jr.,** station operator C, GO Operations, Kingsport.

Kanawha River

10 years: **James Craig,** maintenance mechanic C. **David Coleman,** equipment operator. 5 years: **Timothy Hunt,** auxiliary equipment operator. **Robert Rawlings,** auxiliary equipment operator.

Kanawha Valley Power

5 years: **Jim Stamper,** hydro utility operator B. **Cathy Batten,** plant clerk C.

Logan-Williamson

5 years: **Vanessa Phillips,** T&D clerk C. **Billy Smutko,** line mechanic B. **James Holstein,** line mechanic B. **Johnny Mullins, Jr.,** line mechanic A.

Lynchburg:

15 years: **Charlie Holloway,** line mechanic A.

Mountaineer

10 years: **George Shamblin,** assistant yard superintendent. 5 years: **Terri Hamilton,** stores attendant. **Diana King,** plant clerk C.

Pulaski

10 years: **John Collins,** T&D clerk A.

Roanoke

15 years: **Donald Johnson,** stores attendant. **William Valley,** line superintendent. **Glen Poindexter,** automotive mechanic A.

Philip Sporn

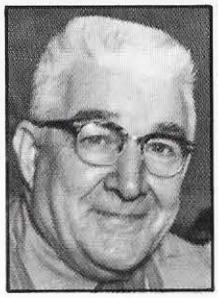
10 years: **Max Drenner,** maintenance mechanic B. **Brenda Nollge,** plant clerk B. **Kenneth Carsey,** maintenance mechanic A. **Everett McDaniel, Jr.,** maintenance mechanic A. **Richard Lake,** conveyor operator. **Junior Gillispie,** maintenance mechanic B. 5 years: **Gary Jones,** production superintendent-maintenance. **John Davis, II,** plant staff accountant junior. □

Pulaski Division employees were treated to cake and ice cream in recognition of their having completed one year without a disabling injury. Personnel Supervisor Warren Vaughan, right, cuts cake to be served to Christiansburg employees.

FRIENDS WE'LL MISS

Harold Craft Johnson, 83, retired assistant shift operating engineer at Philip Sporn Plant, died August 10. A native of Newark, Ohio, he was employed in 1936 as a maintenance man at Newark and retired June 1, 1964. Johnson is survived by his widow Helen, 124 East Greer Drive, Newark, Ohio.

Marcellus Charles Coles, 44, express driver, GO General Services, Roanoke, died unexpectedly August 29. A native of Radford, Virginia, he was employed in 1969 as a messenger in GO Accounting. Coles is survived by his widow Hazel, 2041 Fairhope Road, Roanoke, Virginia.

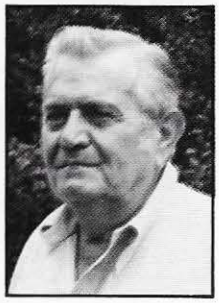


Arnold Vandan Hannah, 77, retired station operator A, GO T&D Station, Turner Dispatch, died August 22. A native of Dry Branch, West Virginia, he began his career in 1928 as a laborer at Logan Plant and retired March 31, 1971. Hannah is survived by his widow Elizabeth, 3901 Grapevine Road, Huntington, West Virginia.

James Staples Dodd, 82, retired Bluefield division dealer sales coordinator, died September 14. A native of Buena Vista, Virginia, he was employed in 1924 as a bookkeeper in Bluefield and retired October 1, 1965. Dodd is survived by his widow Clara, 1201 Baltic Avenue, Virginia Beach, Virginia; two daughters; five grandchildren and one great grandchild.

Gordon W. Underwood, 51, senior engineer in the AEP Service Corporation's Mechanical Engineering Division, Columbus, died September 14 after an extended illness. A native of Richlands, Virginia, he began his utility career in 1958 as a test engineer at Clinch River Plant. Underwood is survived by five daughters, two sons, his mother, two sisters and one brother.

Wilbur Donald Stoots, 58, transmission mechanic A, GO T&D, Bluefield, died September 8. A native of Wythe County, Virginia, he was hired in 1958 as a system transmission man C. Stoots is survived by his widow Ozella, Box 573, Austinville, Virginia.



Paul Charles Gosney, 71, retired Madison area supervisor in the Logan-Williamson Division, died August 17. A native of Mount Gay, West Virginia, he was employed in 1936 as a groundman in Logan and retired September 1, 1977. Gosney is survived by his widow Ella, 326 First Street West, Madison, West Virginia, and one daughter.

John Lewis McDaniel, 67, retired Philip Sporn maintenance mechanic A, died September 20. A native of Mason County, West Virginia, he began his career in 1950 as a maintenance man and elected early retirement May 1, 1979. McDaniel is survived by his widow Evelyn, Route 1, Box 25, Mason, West Virginia; one son and three daughters. □

NEWCOMERS

Bluefield

Susan Ratliff Ellison, junior stenographer.

Centralized Plant Maintenance

Fred W. Gaul, Jr., field clerk C. **Michael F. Blaine,** maintenance mechanic B.

Charleston

Terry Mathes and **Laven Prowse,** meter readers.

General Office

Robert S. Howard, rate design and research clerk A, GO Rates & Contracts, Roanoke. **Gregory Dale Arrington,** station mechanic D-GO, GO T&D Station, Roanoke. **Kurt Dailey,** safety assistant, GO Personnel, Roanoke.

Mountaineer

Lonnie Newell and **Kevin Rawlings,** utility workers. **Keith Wolfe** and **Richard Skeen,** coal handlers. **Donna Morris,** junior clerk. □

Mary Whitehurst relaxes in front of part of her Summer Porch Series on display at the Fine Arts Center for New River Valley.

A second chance at life

Recovering from a serious illness in the prime of her life, Mary Whitehurst made a decision that has changed her life. She says in a Roanoke hospital she decided "I had wasted so much time . . ."

She began painting after years of work as a writer. Today she has found success in painting and, in the past five years, has had eight one-woman shows and has exhibited her work in various parts of the country.

Mary's Summer Porch Series is on display at the Fine Arts Center for New River Valley in Pulaski through October 3.

"Not many people get a second chance at life," Mary says, so she took art lessons at Cherry Hill in Roanoke, and her work has progressed since.

By the age of three, Mary was making up little songs and poems, and her mother felt Mary was a natural writer. She encouraged the young girl to write, and write she did.

She was first published at the age of 12 when poetry was accepted for the *Norfolk Ledger Dispatch*. The paper carried an adult poetry section. Her mother submitted Mary's work several times. She then became a regular contributor. Mary said when the page editor finally met her, he was quite surprised at her young age.

Mary's writing was strengthened and encouraged as an English major at William and Mary. Although she was a young student at 16 years of age, her professors found a unique quality in her writing.

Mary married, had three children, and "writing became harder and harder to do", she says. She reached a point where she had to decide whether to write or be a mother to her children. She said when she shut the door to write she "felt like I shut the children out".

At that time she was working on her first novel, having all the chapters outlined and part of the book completed. She never finished writing the book.

Mary says she has a few books of poetry and a couple of short stories written but probably will never try to have them published.

Although much of her poetry and short stories have been published, she feels her greatest triumph in her writing career was "that I quit!" She says she would never have accomplished all she has in painting if she had not stopped writing.

Mary's teacher, Peyton Klein of Roanoke, has given her much encouragement in her work. "If everyone could find a Peyton . . ." Mary implies everyone could paint.

She says she is "pretty lucky" to be married to Jerry Whitehurst, Pulaski division manager. He has learned to mat her work, and she says he does a much better job than anyone who has ever matted work for her.

To him, she says, "it doesn't matter how many classes I take or where they are". She added he even is the one who buys her $60 brushes for her birthday.

Her husband puts a studio in every home in which they live. She says her studio in their Pulaski home is one "to end all studios". She said she keeps the cleanest studio . . . because if she didn't keep it clean, Jerry would clean it for her.

She says she is now painting eight to ten hours a day in her studio. "A lot else in your life goes", she says when so much time is devoted to an art.

Although the Whitehursts have been in Pulaski for about three years, they are not newcomers to the area. They were transferred there in 1968 and stayed nearly a year. When Mary left the Catskill Mountains in New York, as a child, she says she felt "I had lost Eden". But when she saw Pulaski County, "I thought I had come home".

She appreciates her second chance at life and a new career. Quoting a poem she lives by, Mary will paint "till the chariot catches up with me". □

Bledsoe saves girl from drowning

Gary Bledsoe

The sand bar in the Elk River by the Clendenin Water Plant is a popular spot for swimming, washing cars, picnicking and fishing. The river is shallow at the sand bar, but it gradually deepens as it flows downstream. And it's easy for kids playing in the water to wander downstream, unaware they are getting in over their heads.

That's what happened one Sunday this past summer, but Clendenin Meter Reader Gary Bledsoe and his brother-in-law, David Woods, were close enough to prevent tragedy.

Gary recalls, "David and I were sitting on some rocks on the river bank, talking and watching some children having a good time. The water was swift, and they weren't paying attention to the fact they were coming down the river. The next thing we knew they were down almost in front of us, where the water gets deep. One little girl got in trouble. I think she panicked when she found she couldn't touch the bottom. She was kicking and screaming. The other three kids were doing their best to try to get her out, and she almost pulled one of them under.

"I looked at David and said, 'She's not kidding.' We were on the opposite side of the river, and we took off swimming to get to them. When we got there, I got the little girl just as she went under. I got her away from the other kids who were trying to save her, and talked to her and eased her in. Her father was across the river and saw what was happening, but there was no way he could have gotten to her before we did."

Gary, a member of the Clendenin Volunteer Fire Department, has worked in dragging operations in the past, but this was the first time he has prevented a drowning. He concludes, "It all happened so fast we didn't have time to think about it until it was over. But after I got the little girl out of the water, I was shaking as bad as she was."

THE ILLUMINATOR

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