## THE MEROM STATION BACKGROUNDER

#### General

- Hoosier Energy's Merom Generating Station is located on a 600-acre tract in Sullivan County, Indiana. The plant site together with Turtle Creek Reservoir and surrounding land includes some 5,000 acres.
- The coal-fired power plant is equipped with two 500,000-kilowatt turbine/ generator units for a total generating capacity of 1,016,000 kilowatts.
- Groundbreaking for the \$850-million Merom Station was held in 1977. The first generating unit began commercial operation in 1981, followed by the second unit in 1982. The cost of the plant includes nearly \$180-million for pollution control equipment required to meet environmental regulations.
- The Merom work force consists of 210 employees, including maintenance mechanics, instrument technicians, control operators, auxiliary operators, electricians, material handlers, general laborers, FGD operators, engineers, supervisors and many others.
- In 2003, Hoosier Energy paid Sullivan County property taxes of more than \$3.5-million.
- The power plant site includes more than 14 miles of railroad track; 12 miles of underground water pipes; 2 miles of circulating water canals; and some 800 miles of wire and cable.
- The stack rises to 702 feet.

• In 2003, Merom Station generated 6.6 billion kilowatt-hours. That's enough electricity to supply 500,000 typical Indiana homes for one year.

#### **Fuel Facts**

- The Merom Station burned 3 million tons of Indiana coal in 2003. That's an av-erage daily burn of nearly 10,000 tons.
- That daily amount of coal is the equivalent of about 500 truck loads or 100 rail car loads of coal.
- An average 45-day supply of coal is kept stockpiled on-site at any given time.
- The average sulfur content of coal used at the facility in 2003 was about 3.1 percent.

## **Landfill Operation**

- Almost 700,00 (dry) tons of coal combustion by-products were placed in the on-site landfill in 2003.
- Of that amount, FGD by-products made up about 40 percent. Flyash made up 35 percent. The remaining 25 percent was bottom ash, quick lime and water.
- Some 290 acres are dedicated to on-site landfill operations.
- Several ground water wells are monitored on a regular basis to ensure that no substances are affecting groundwater.
- About 90 acres of landfill are developed and used for on-site storage of environmentally stable coal by-products.

# THE MEROM STATION BACKGROUNDER

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 More than 100 acres of the landfill have been completed since the Merom Station began operation 22 years ago. When the landfill height reached 60 to 70 feet, the material was covered with topsoil and seeded with grasses to prevent erosion.

### **Turtle Creek Reservoir**

- Turtle Creek Reservoir is the 1,550-acre cooling lake for the power plant.
- Water is drawn through the intake canal by four large pumps, each with an 85,000-gallon-per-minute capacity.
- Steam which drives the turbines is produced in the boiler. Water from a boiler feed pump is channeled to the boiler where it is heated and steam begins to form.
- Steam enters the turbine at 1,025 degrees and exits at about 120 degrees.
  At the condenser, steam from the turbine is converted into water and returned to the boiler to begin again the water-to-steam conversion process.
- Hoosier Energy in cooperation with the Indiana Department of Conservation manages Turtle Creek for public access including fishing and waterfowl hunting.

## **Preserving the Environment**

• The Merom Station is equipped with advanced environmental protection technology, ensuring that coal mined in southwestern Indiana can be burned while maintaining air quality standards.

- The flue gas desulfurization (FGD) system or scrubber operated at a 99.9 percent sulfur dioxide removal efficiency in 2003 a.
- Airborne particles, called flyash, are removed as combustion gases pass through the electrostatic precipitators before entering the scrubber.
- A \$73 million selective catalytic reduction project to control nitrogen oxide emissions was completed in 2003.

## **About Hoosier Energy**

- Hoosier Energy Rural Electric Cooperative was incorporated in 1949.
- The generation and transmission utility supplies power to 17 central and southern Indiana rural electric distribution cooperatives which serve more than 260,000 consumers in 48 counties.
- The 1,070-megawatt Merom Station and the 250-megawatt Frank E. Ratts Station in Pike County generate power which is transmitted over a 1,400-mile network of transmission lines, 14 primary substations and more than 200 distribution substations covering the southern half of the state. Interconnections link Hoosier Energy with 7 other major utilities in Indiana and neighboring states.
- Hoosier Energy, with headquarters and its system control center at Bloomington, employs more than 400 workers.