



Brunner Island scrubber project advances to help environment

One of the largest environmental improvement projects in PPL's history will soon be completed, enabling the Brunner Island power plant to generate electricity with almost no sulfur dioxide emissions and significantly lower mercury emissions.

The scrubber for Units 1 and 2 will go into service later this fall, part of a three-year project and an \$800 million investment in the Brunner Island plant.

The Unit 3 scrubber began operating earlier this year. The emissions coming from the stack contain mostly water vapor — the result of the moisture created by the wet scrubber process — and carbon dioxide. Synthetic gypsum, the byproduct of the scrubbing process, will be sold for use in manufacturing wallboard.

“When we make the final connections on the scrubber for Units 1 and 2, we will complete one of the largest construction projects ever done at the plant — a project with lasting benefits for the environment and a long-term commitment to the future of the plant,” said Steve Marbaise, plant manager. “All of us at PPL are proud of this accomplishment, which is part of our commitment to reduce the environmental impact of our generating plants.

“It's been a very successful project that has been done safely — more than 2.5 million hours worked so far without a lost-time injury — and to ensure the long-term viability of a power plant that every year produces enough dependable energy

to power more than 1 million homes.”

Montour, another PPL coal-fired power plant, completed its scrubber project last year. In its first year of operation, the north central Pennsylvania plant's scrubber system decreased sulfur dioxide emissions by more than 85,000 tons.

“This is the kind of environmental performance we're looking forward to at Brunner Island,” Marbaise said. “The scrubbers and other improvements at both plants represent a combined \$1.6 billion investment by PPL.”

PPL is also making significant

investments to increase generation from sources that do not use fossil fuels.

The company is increasing generation at its Susquehanna nuclear power plant near Berwick in stages through 2011 and plans to expand the generating capacity at the Holtwood hydroelectric plant in southern Lancaster County as well as a hydroelectric plant in Montana.

PPL also has developed renewable energy projects, including landfill methane energy projects locally in Cumberland, Lancaster and Lebanon counties.



Unit 1 and 2 scrubbers will go into service later this fall.

PPL's cool commitment to the environment

The cooling tower at the Brunner Island power plant is expected to go into service in the spring. At that time, the plant will have the most innovative cooling tower in the PPL Generation fleet.

“Unlike the large concrete structures often associated with power plant cooling towers, the one here at Brunner Island, at 65 feet high, has a much lower profile,” said Steve Marbaise, plant manager.

“The mechanical draft type cooling tower is about the length of three football fields,” he said. “It has a modern design compared with cone-shaped cooling towers that people have become accustomed to seeing.”

The tower will cool a half-million gallons of water every minute. The water will fall through thousands of thin plastic sheets as it's cooled by numerous fans. This will reduce the temperature

of the water before it is returned to the Susquehanna River.

Built in the 1960s, Brunner Island uses water from the river for cooling purposes.

Water gains heat through its use in the plant, and is returned to the river warmer than when it was taken out of the river.

The \$125 million cooling tower will remove more than half of the added heat in the summer, when low river flows and higher temperatures have the greatest impact on aquatic life.

“Water vapor rising from the tower will be the only visible byproduct of the cooling system,” Marbaise said. “PPL is committed to operating the Brunner Island plant — and all of our generating facilities — responsibly while minimizing the environmental impact.”

Bypass road project enters final stages

Paving has begun on the bypass road that will help keep truck traffic away from residential areas of York Haven. PPL hopes to open the bypass by the end of the year.

The road, nearly a mile in length, will start just off the north end of Brunner Island and reconnect with Route 382 west of York Haven. Route 382 will be widened near the entrance as part of the work.

River Road will be closed during the remainder of the project, requiring a detour from Route 382 to Cly Road (Route 262).

As the project moves toward completion, the intersection at Front and Locust streets (at Shelley's Restaurant) will be closed. There will be signs directing motorists to a detour for access onto Brunner Island. And the intersection will be open and passable for residents living in the apartments along Front Street and near Shelley's.

“We appreciate everyone's patience as we work to finalize this project and begin to reroute truck traffic safely around York Haven,” said Steve Marbaise, plant manager.

“This project was the direct result of listening to concerns from our neighbors and working with community leaders and local police on common sense ways to make the roads around the plant safer for everyone,” he said.

Marbaise said efforts are being made to minimize erosion and environmental effects along the road.



Tower will cool a half-million gallons of water every minute.



PPL community relations director Jim Nulton (left) greets Leg Up Farm founder Lou Castriota Jr. during a groundbreaking ceremony in East Manchester Township.

PPL helps support new treatment center for children

As part of its outreach in the community, PPL recently donated \$25,000 to a local nonprofit organization that will help young people overcome developmental disabilities in a unique, peaceful setting.

Leg Up Farm will use PPL's donation to help treat infants, children, adolescents and adults up to age 21 who are affected by physical disability and developmental disorders.

Local officials joined the nonprofit organization on Sept. 10 to break ground for its new facility in East Manchester Township, five miles from the Interstate 83 and Route 30 intersection.

"We're proud to be part of this exciting project to help this organization improve the lives of

children with special needs," said Jim Nulton, PPL community relations manager. "This new facility will be a welcoming, pastoral spot for children in the rolling hills and fields of York County.

"Its staff will provide not only physical and occupational therapy on an outpatient basis, but also equine activities and farming programs for a holistic approach to treatment," he said.

Leg Up Farm has been the vision of founder Lou Castriota Jr., who saw a local need for treatment services for children with special needs after his daughter was born with mitochondrial disease. Leg Up Farm is expected to open in the spring.

For more information, visit www.legupfarm.org.

Responsible water use – the PPL way

Water is an essential ingredient to operate fossil fuel and nuclear power plants. Lots of water. In fact, billions of gallons of water are used in power production, largely for cooling.

As an environmentally responsible company, PPL understands that water is an important natural resource that needs to be managed effectively.

"As with any natural resource, we have to be thoughtful as to how we use water to generate power," said Steve Marbaise, Brunner Island plant manager.

PPL works with the state Department of Environmental Protection and the Susquehanna River Basin Commission for its water use. The DEP concentrates on water quality, while the commission provides comprehensive water resources planning.

Water use at the Brunner Island plant was about 206,000 million gallons in 2008. "All of the water we return to the river must meet strict permit limits approved by the DEP to ensure that the river is not adversely affected," Marbaise said. "The water we use is tested to show that we are in compliance with permit limits, and there are maintenance programs that monitor equipment and water use so that water is not wasted.

"It comes down to protecting water resources and being sensitive to the economic and environmental value of our rivers," he said.



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Join today to start following pplpreserves's tweets.

PPL Brunner Island
Wago Road
York Haven, PA 17370

Upcoming Events at Brunner Island

Bluebird Box Maintenance
Saturday, Nov. 14, 2-3:30 p.m.
Rain date: Sunday, Nov. 15

Please join us as we monitor and maintain the bluebird trails in the Brunner Island Environmental Preserve. You'll also learn how you can put up your own box to attract these beautiful birds to your home.

Please meet at the Wood Duck Pavilion at the Brunner Island Wetlands. From Wago Road across from the Main Gate A of PPL's Brunner Island power plant, turn onto the stone road. Continue to the sign for the Wood Duck Pavilion, turning right into parking area. The GPS coordinates at the pavilion are N 40 05.755 W 076 42.287. For directions, visit www.pplpreserves.com.

For more information, contact Karen Ament at 717-284-6274 or kament@pplweb.com.

Nature Walk and Animal Tracking
Sunday, Dec. 6, 2-3:30 p.m.
Brunner Island Wetlands
Presenter: Jim Smith, PPL naturalist

What is happening at the Brunner Island Wetlands at this time of the year? What animals remain here, and how do they prepare for the winter? Join us as naturalist Jim Smith leads us on a hike around the ponds at the wetlands. Come discover all of the exciting things to make the season come alive and learn how to identify and track the animals that remain.

This program is free. Please dress for outdoor weather and wear proper footwear for cold and wet conditions. We will meet at the Wood Duck Pavilion. Bring binoculars if you have them.

The wetlands entrance is directly across from Gate A on Wago Road. Follow the stone road until you see the sign for Wood Duck Pavilion. The GPS coordinates at the pavilion are N 40 05.755 W 076 42.287.

For additional information contact Karen Ament at 717-284-6274 or kament@pplweb.com or Jim Smith, 717-284-4458 or jimsmith0212@aol.com.