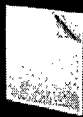


BRUNNER ISLAND POWER PLANT

York Haven, PA



INSIDE BRUNNER ISLAND
News For Neighbors of
PPL's Brunner Island Plant



PPL PROJECT EARTH



PLANT FACT SHEET

HOW IT WORKS

Have you ever wanted to know how a power plant works?

The Brunner Island power plant makes electricity by burning coal, our nation's most abundant energy source. Burning coal produces steam that turns a turbine that spins a generator to make electricity.

It starts with coal. The Brunner Island plant burns more than 3 million tons of coal per year. Coal is crushed into a fine powder and burned in large boilers, where water is heated to make steam. Brunner Island has three boilers.

The steam passes through turbines. Each turbine has rings of fan-like metal blades. As steam passes over the blades, the turbines turn very fast.

The turbines have a central metal shaft that is connected to a generator, where an electromagnet spins inside a ring of copper wire to produce electricity.

When the steam has done its work, it is cooled by water from the Susquehanna River, turns back into water, and is pumped back to the boiler to begin the cycle all over again.

PPL BRUNNER ISLAND

Welcomes You

Brunner Island fishing access to change

Because fishing is a popular activity around PPL's Brunner Island power plant, PPL would like to make you aware of changes to public access areas to the Susquehanna River.

For safety reasons, now that construction of a cooling tower for the power plant has begun, public access for fishing no longer will be allowed at the upper end (see map) of the discharge channel and on the east side of the discharge channel in the area of the Susquehanna Aquacultures fish farm.

Access to several popular fishing spots along the Susquehanna River and the lower end of the plant discharge channel still is permitted seven days a week, from dawn to dusk. >> [Click here for a map.](#)

The cooling tower project will help reduce river water temperature at times of the year when reductions will have the greatest benefits for fish and aquatic life.

When construction is completed in 2010, PPL will move the plant security fence several hundred yards to the south so that the cooling tower and nearby water treatment facilities will be inside the fence, permanently restricting public access

MEET Plant M

PPL's Brunner Island power plant has a northern discharge channel. Community members believe good access to the river is important for generating enough electricity to power the plant. Water quality investments of millions of dollars will improve the environment.

Our employees are committed to providing a safe and healthy work environment for our employees.

WHAT'S A Scrubber

Scrubbers are environmental controls that remove nearly all of the sulfur dioxide from the emissions of coal-fired power plants.

They work by spraying a mixture of crushed limestone and water onto the exhaust gas before it goes out the plant's chimney. The limestone and water react with the sulfur in the plant's exhaust to form synthetic gypsum, which will be collected and shipped to a company that manufactures drywall.

Two scrubbers are being built at the Brunner Island plant. These scrubbers will handle all of the exhaust from the plant's three boilers. The scrubber for Unit 3 will be completed in 2008. The scrubber for Units 1 and 2 will be completed in 2009.

Work on the scrubbers is now about 25 percent complete.

Scrubbers will remove about 100,000 tons of sulfur dioxide per year from emissions at Brunner Island. Sulfur dioxide contributes to acid rain and respiratory problems.

In addition to improving air quality, the scrubbers will enable the Brunner Island plant to operate for many years to come.

COMMUNITY BULLETIN BOARD

Find out what's going on in and around PPL Brunner Island

Two schools, Orendorf Elementary and Shallow Brook Intermediate, received PPL Project Earth Environmental Education grants. Orendorf Elementary will use the grant money to prepare its Envirothon Club for the York County Envirothon. Shallow Brook Intermediate will use the grant money for an orienteering program that combines science with physical education.

As a corporation, and as individuals, we understand our responsibility to do the right thing. Read [PPL's Corporate Responsibility Report](#).

HELPFUL LINKS

[Northeastern York School District](#)

to those fishing areas.



ENVIRONMENTAL Spotlight

Cooling tower to reduce water discharge temperatures at Brunner Island

Construction of a cooling tower at the Brunner Island power plant began in January, and it is expected to go into service in spring of 2010. 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 at Brunner Island will, at 65 feet high, have a much lower profile and won't crowd the skyline," said Dennis Murphy, vice president and chief operating officer of PPL's Eastern Fossil and Hydro Generation.

"Made of durable fiberglass, the mechanical draft type cooling tower will be about the length of three football fields," he said. "And it will have a more modern, sleek design compared with conical power plant cooling towers."

When completed, 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. The cooler water will then be 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 project 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.

"Clean, white water vapor rising from the tower will be the only visible byproduct of the cooling system," Murphy said. "PPL is committed to operating the Brunner Island plant — and all of our generating facilities — responsibly while minimizing the environmental impact."



AT THE Preserve

Ospreys, peregrine falcons, eagles and barn owls are soaring throughout Pennsylvania's skies, thanks in part to PPL Corporation's efforts to help restore the once-dwindling populations of raptors. And now PPL is offering the public a bird's-eye view of the birds of prey that nest at the

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company's power plants and other facilities.

PPL is launching a [Web site](#) and webcam so the public can watch the falcons that have taken up residence on the emissions stacks at PPL's Montour power plant in north central Pennsylvania. The peregrine falcons began nesting at Montour in 2007, and this year have four eggs that are expected to hatch around Mother's Day.

In addition, the Web site, birdsofpreyatppl.com, will provide updates and photographs on all the birds of prey that live at PPL facilities.

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