

PPL Partners with United Way To Strengthen Communities

United Way agencies help to strengthen communities building and supporting families through education, health care and other essential services.

PPL is proud to partner each year with the United Way to raise funds for critical services that not only solve problems but also prevent them.

This year, PPL pledged more than \$348,000 in employee and company donations to United Ways serving the communities surrounding the Susquehanna plant during the annual campaign. Employee donations alone exceeded the company goal by \$15,000 for a total of \$240,000.

“PPL and its employees are generous supporters of United Way’s 16 local member agencies and the many community programs we offer,” said Jennifer Dunkelberger, executive director of the Berwick United Way.

“PPL employees contribute not just cash to the United Way, they also

organize fundraisers and contribute thousands of volunteer hours to our member agencies,” she said. “Among PPL employees you can find scout masters, blood donors, YMCA board members, campaign directors and big brothers.”

To raise awareness and encourage donations, United Way officials held meetings with employees to explain how the United Way benefits everyone in the communities surrounding the plant.

“Whether it’s providing an after-school program for children or a shelter for a family left homeless by a fire, United Way agencies are there,” said Steve Babczak, PPL Susquehanna’s campaign director and a manager in the Human Resources group. “PPL employees recognize that their families and neighbors depend on the services and programs available thanks to the United Way.”

Industry Team Notes Susquehanna’s Strengths

An international team of industry peers and advisers has rated PPL Susquehanna’s overall operations performance as “exemplary, with industry standards of excellence met in many areas and no significant areas of weakness noted.”

The World Association of Nuclear Operators conducted the on-site portion of its review of the plant Sept. 15-26. The industry evaluates and assesses nuclear power plants every 18 to 24 months to help identify strengths and areas of improvement for maximizing plant safety and reliability.

“The WANO team recognized how our employees work as a team to continue to make improvements in our procedures and programs,” said Bryce Shriver, senior vice president and chief nuclear officer. “This review also provides us with insights of industry best practices that will help us continue to improve.”

The review found that enhanced equipment reliability and workforce involvement and teamwork contributed to improved plant operations, resulting in fewer operational challenges and stronger outage performance.



PPL & United Way
**People
Helping
People**



Inside this Issue

- Continual Investment in Equipment
- Outage to Increase Generating Capacity
- Making a Difference One Person at a Time

Continual Investment in Equipment Keeps PPL Susquehanna Reliable

Communities in northeast Pennsylvania have long relied on PPL Susquehanna to provide the energy that runs their homes and businesses.

“PPL Susquehanna is committed to making sure customers have electricity when they need it,” said Rich Anderson, vice president of Nuclear Operations. “As a result, we invest millions of dollars a year upgrading and maintaining our equipment so we can operate safely and meet electricity demands well into the future.”

To increase supply, the plant is planning the second of two turbine replacement projects (see related story on this page). “The second half of the equation – improving reliability – isn’t as dramatic but it may be more important,” Anderson said. “It has to do with the day-to-day decisions made on equipment maintenance.”

For example, this fall plant crews replaced the startup transformer for Unit 1 because of a problem that occurred in the

Unit 2 startup transformer last year. These transformers reduce or “step down” the incoming transmission voltage so it can



This transformer was replaced in October. Electricity demand in the United States has doubled since 1975. Nuclear energy provides more than 30 percent of the electricity produced in Pennsylvania and about 20 percent nationwide.

be used by plant equipment.

“Since the Unit 1 transformer had been in service for more than 20 years, we decided to proactively make the investment

and replace it to help ensure its safe and reliable operation,” Anderson said.

This type of foresight also supports PPL Susquehanna’s plans to request a 20-year license extension from the Nuclear Regulatory Commission in 2006.

The plant’s 40-year licenses for its two boiling water reactors expire in July 2022 and March 2024. Those terms would be extended to 2042 and 2044 if the NRC approves PPL Susquehanna’s application.

“Susquehanna is a safe, efficient and reliable plant because of a highly qualified workforce and a comprehensive maintenance, testing and upgrading program that ensures the long-term reliability of our equipment,” Anderson said. “Nuclear power plants applying for license renewal must pass a thorough safety review by the NRC and demonstrate that they can manage the aging process on plant equipment.”

The NRC review process takes about two years. Since 1998, the NRC has approved extending licenses of 19 of the nation’s 103 operating commercial nuclear reactors.

Spring Outage to Increase Generating Capacity

Looking over the major projects for the upcoming Unit 1 refueling and inspection outage might seem like a case of déjà vu.

Similar to the Unit 2 outage this past spring, work crews will perform two significant equipment upgrades that will increase the generating capacity and improve the reliability of the Susquehanna plant.

When the Unit 1 reactor shuts down in late February for its 13th planned refueling and inspection outage since it began operation in 1983, crews will begin work on the second largest improvement project in the plant’s 20-year history.

Crews will replace all four of the Unit 1’s steam turbines, which spin the

generator to produce electricity. The new turbines are expected to increase the unit’s capacity by nearly 50 megawatts without using any additional fuel.

In addition, teams will modify the unit’s jet pumps, which are used to drive water from the recirculation system back through the reactor core. The modification will eliminate the excessive wear caused by vibration and increase the reactor’s fuel efficiency.

“On April 21, Susquehanna completed its most successful refueling and inspection outage in its history,” said Rich Conner, outage manager. “Since that day, we’ve been planning the Unit 1 outage so we can apply lessons learned and have the same result.”

Work crews also will replenish about 40 percent of the unit’s uranium fuel, perform inspections and provide routine maintenance.

“The long-term investments we make and the maintenance activities we perform during these refueling and inspection outages are crucial to the safe and reliable operations of the plant,” Conner said.



Last month, parts for the Unit 2 turbine replacement project began their journey from Germany to the Susquehanna plant. The casings for the Siemens-Westinghouse steam turbines will begin arriving this month. Starting in January, the three low-pressure turbines will arrive by train and the high-pressure turbine will arrive by truck.

Constant Practice Builds Emergency Skills

Protecting the public is the focus of Susquehanna's emergency plan

"To keep our skills sharp and continually evaluate how we can improve these comprehensive emergency systems and procedures, plant personnel and dedicated community emergency responders train together and individually throughout the year using mock emergency scenarios," said Jeff Grisewood, supervisor of Emergency Planning at PPL Susquehanna.

This year, PPL Susquehanna held plant-wide drills in January, June, September and November. These exercises test response through all

four levels of nuclear emergencies by playing out a virtually impossible cascade of events.

The drill for local emergency management agencies planned for this October was postponed until February so the agencies could incorporate new requirements from the state into their response plans. These agencies are required to drill only once every two years, however those around the Susquehanna plant choose to practice every year.

PPL Susquehanna's next full-scale emergency exercise, which includes municipal, county and state response organizations, will be held next year. These drills are held every two years and are evaluated by the Nuclear Regulatory Commission and the Federal Emergency Management Agency.

Siren Tests

As part of its comprehensive emergency response plan, PPL provides and maintains a network of 112 sirens in the communities around the Susquehanna power plant for use by Luzerne and Columbia county officials in any emergency, nuclear or non-nuclear.

The sirens undergo monthly, silent, system-wide tests and an annual full-scale test, which this year was held May 28.

PPL line crew members also run quarterly, regional "growl" tests during which they go to each siren and call the county notification system to activate the alarm. In most cases, only the closest neighbor will hear the short sound.

Upcoming growl tests

- **Wilkes-Barre area:** The weeks of Jan. 5 and April 12.
- **Hazleton area:** The weeks of Dec. 8 and March 1.
- **Bloomsburg area:** The weeks of Feb. 2 and May 10.

PPL Susquehanna employees participate in the November emergency drill. The plant's emergency response network covers a 10-mile radius around the plant known as the Emergency Planning Zone. Those who live and work in that area should be aware of the role they play in the unlikely event of a nuclear or non-nuclear emergency in the area. Instructions are in the blue pages of the local telephone book and are updated annually.





License Renewal Efforts Continue

The Ohio-based Cook nuclear power plant has applied to the U.S. Nuclear Regulatory Commission to extend the operating license for its two reactor units for an additional 20 years.

The Cook units have a total generating capacity of 2,150 megawatts and are currently licensed by the NRC to operate until 2014 and 2017.

The NRC renewed Nebraska-based Fort Calhoun's operating license for an additional 20 years. With the extension, the one unit, 478-megawatt plant can now operate until 2033.

The license renewal process requires both a technical review of equipment important to safety and an environmental review.

Yucca Mountain Funding

The U.S. House-Senate appropriations conference committee has approved a \$27.3 billion energy and water development spending bill that sets aside \$580 million for the used nuclear fuel repository at Yucca Mountain, Nev.

The committee also funded nuclear energy programs at \$393 million, \$14 million above figures for fiscal 2003 levels, including \$44 million for the Nuclear Technologies program and \$11.6 million for the Nuclear Energy Research Initiative.

In addition, legislation was introduced in the House to overhaul the way funding for the Yucca Mountain repository is treated in the congressional budget process to avoid funding shortfalls.

The bill would allow money collected in the Nuclear Waste Fund to be used

for those programs. The fund was created in 1983 to cover the costs associated with a repository at Yucca Mountain and is financed by customers using nuclear-generated electricity.

The Nuclear Waste Fund has collected more than \$22 billion, including accrued interest. However, only about \$7 billion of that total has been spent on the project. Pennsylvania customers have committed \$1.87 billion to the fund.

By December 2004, the Department of Energy expects to file an application with the U.S. Nuclear Regulatory Commission for a license to build the Yucca Mountain underground disposal facility.

Impact of National Response Plan Likely to be Minimal

Many features and activities identified in the Department of Homeland Security's Initial National Response Plan already have counterparts in the nuclear industry and the U.S. Nuclear Regulatory Commission, said Alan Nelson, Nuclear Energy Institute senior project manager for emergency preparedness.

As a result, the NRC does not expect major changes to nuclear plant emergency response plans.

The Department of Homeland Security is integrating federal plans for emergency prevention, preparedness, response and recovery into one multidisciplinary, "all-hazards" plan. The Initial National Response Plan, issued Sept. 30, is the first step.

"The nuclear industry is far ahead of virtually everyone else covered by the plan in terms of emergency preparedness," Nelson said.

Susquehanna Riverlands Environmental Preserve

PPL provides year-round outdoor education and recreation at the Susquehanna Riverlands. Upcoming environmental programs, as well as natural and cultural history presentations, include:

- **Basic Boating Safety Class**, Feb. 7. For new and experienced boaters. Safety certification is required for all personal watercraft operators.
- **American Indian Artifact Exhibit**, Feb. 21. The Pennsylvania Indian Artifact Collectors Association will exhibit artifacts used by indigenous peoples who lived in the surrounding areas. Visitors may bring artifacts to be identified.
- **Who Made That Track?** Feb. 28. Animals leave a record of their travels and interactions. This program is an introduction to basic wildlife tracks and tracking.
- **White Gold: The Lost Art of Harvesting Ice**, March 20. Learn about "Ice Miners" through stories and vintage film footage.
- **Annual Spring Awakenings Walk**, March 28. Annual spring walk to search for the first frogs, salamanders, migrating birds and other animals busy with their spring agendas.
- **Pennsylvania Amphibians and Reptiles Educator Workshop**, April 6 and April 7. This curriculum is designed for classroom educators, K-12. The guide will cover Awareness (basic biology), Identification, Habitat and Responsible Human Action.

For more information about Susquehanna Riverlands programs or to start receiving PPL's Environmental Currents newsletter, call 1-800-354-8383 or visit our Web site at www.pplweb.com/seic.

Many programs require advance registration and have limited space so call early.

Making a Difference One Person at a Time

Ten-year-old R.J. loves building model cars and visiting museums. He likes watching movies and is eagerly awaiting the release of the next Harry Potter movie. He also enjoys baseball, hiking and working around the house.

“Well, working around the house isn’t at the top of my list of favorite things to do,” R.J. admitted. So he appreciates the person who makes all of these other activities possible — his big brother, Chris Davis.

Davis, a computer engineer at the Susquehanna plant, has been R.J.’s big brother for two years and has worked with the Berwick area Big Brothers/Big Sisters organization for nearly three years. Davis is one of more than 1,000 PPL Susquehanna employees who donated over 40,000 hours to more than 100 local organizations.

“When I retired from the Marine Corps reserve, I wanted another way to serve



the community,” Davis said. “Being a big brother is a great way to make a difference one person at a time.”

The Big Brothers/Big Sisters organization pairs children, mainly from single-parent families, with an adult volunteer. The adults spend an average of one to three hours a week providing

the child with opportunities they may not normally have. The children also see how other people live, making them more likely to strive for a better quality of life as adults, according to Tracy Byrne, case manager of the Berwick area Big Brothers/Big Sisters program.

“I see a clear difference with the children who take advantage of our program,” Byrne said. “The kids do better academically, are more likely to participate in sports, less likely to engage in destructive behaviors and overall have a better outlook. Their enhanced self-esteem is apparent in their personal appearance and permeates all of their personal relationships.”

Davis said the program benefits his family as well. “My two daughters better appreciate how they are blessed and are already volunteering at church and school.

“Besides, R.J. and I have something in common,” he said, “How else can I get out of cleaning the garage to work on that model PT boat I always wanted to build?”



*A message from
Herb Woodshick,
special assistant
to the president
for Susquehanna*

Community Leaders and Susquehanna Share Information

Our elected officials and local leaders have an important role in shaping our communities for long-term success. To help communities grow, they need accurate information about the businesses and industries in their areas.

PPL Susquehanna is committed

to making sure the community leaders in Susquehanna’s 10-mile Emergency Planning Zone have the information they need to make sound decisions and to address any concerns they may have about the energy and nuclear industries.

Toward that end, we recently held our annual dinner meeting with local elected officials and community leaders. William F. Hecht, PPL’s chairman, president and chief executive officer, along with senior plant managers, updated officials about the plant’s activities and industry issues.

The annual meeting is only one of the ways we continually strive to keep the community informed about nuclear issues. Along with this newsletter and meetings with individual community

leaders, we also provide local officials with a 24-hour telephone number for questions. In addition, we have a citizens committee made up of leaders from the 27 municipalities in the EPZ that meets quarterly.

But for this information sharing to be truly valuable, it must be a two-way street. And for that, we thank all the dedicated community leaders and volunteers who interact with us. It is through their efforts that we are able to gain insights into issues facing our communities and where we might be able to help in the future. By working together, PPL Susquehanna is able to be an active, responsible corporate citizen and good neighbor.

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Giving Back

Employees from PPL Susquehanna and the Berwick Marathon Association raised nearly \$1,000 for the Berwick YMCA/ YWCA during the 5th Annual Pumpkin Run in October.

Nearly 50 PPL Community of Volunteer members winterized the Boy Scouts' Camp Lavigne in Benton, Pa., and the Girl Scouts' Camp Louise in Berwick, Pa., during the sixth annual United Way Day of Caring on Oct. 24. PPL also donated the use of a backhoe

that volunteers used to clean out drainage ditches and grade roads at the Girl Scout camp.

PPL Susquehanna employees donated 155 units of blood to the Berwick Red Cross during blood drives held in August and October at the plant.

PPL Susquehanna employees raised more than \$4,500 for the Berwick Relay for Life fundraising event for the American Cancer Society.

PPL Susquehanna employees held a motorcycle benefit ride in late September that netted nearly \$1,300 for the Berwick Area United Way.



We're Listening

If you would like to know more about any of the subjects covered in this issue, or if you have questions or comments about the plant, please call us at the Susquehanna Special Office, 570-759-2281 or 570-542-2131.

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