

New **Security** Strategy Boosts Assurance of **Safety**

PPL Susquehanna has refined its security strategy to better protect the plant, its employees and the nearby communities.

“The changes cover a broad range of security issues to defend the station from a potential attack,” said Roland Ferentz, manager of nuclear security. “While Susquehanna’s security force, strategy and equipment have always been recognized as being among the best in the industry, the upcoming changes will further strengthen our entire program.”

Modifications to the plant’s physical security features, such as additional fencing and delay gratings, new security towers, and equipment and system upgrades, are in progress. Less visible

changes to training, procedures and access processing also are underway.

“The plant’s security training program will include more intensive standards, drilling exercises and certifications to offer even more assurance that our officers are some of the most highly trained professionals in any U.S. industry,” Ferentz said.

The changes, a year in the planning, are the result of security orders issued by the Nuclear Regulatory Commission to all nuclear power plants last year. The nuclear industry will continue to adjust security measures as part of its ongoing commitment to protect both employees and the public.



NRC to Stop Posting Security Findings

The Nuclear Regulatory Commission announced in August that it would no longer post on its Web site physical security issues identified at nuclear plants through its oversight process.

State officials, local law enforcement agencies and other federal agencies will continue to receive from the NRC information regarding nuclear plant security.

“We deliberated for many months on finding the balance between the NRC’s commitment to openness and the concern that sensitive information might be misused by those who wish us harm,” said NRC Chairman Nils Diaz.

The nuclear industry reported spending \$1 billion last year enhancing security as a result of new NRC security orders.



PPL employees work on the additional security features that will be complete by the end of October.



Pa. National Guard Adjutant General Visits Susquehanna

(See page 6)

New Module Design Used for Dry Fuel Storage

Susquehanna has started to use a newly designed canister for its dry fuel storage system that holds more used fuel in the same amount of space, uses the same high safety standards and is licensed for eventual transportation to the planned federal nuclear waste repository at Yucca Mountain, Nev.

Through October, employees will load 287 used fuel bundles into five canisters using the last of the canisters that hold 52 fuel bundles and three of the new canisters that hold 61 fuel bundles. The canisters are then loaded into the concrete modules on the dry fuel storage pad, which is located in the protected area of the plant.

Used fuel removed from the reactor during refueling outages is placed in storage pools to cool for a minimum of five years and then transferred to dry storage.

Susquehanna began using a dry storage system on site in 1999. Forty-nine modules occupy a dry cask storage pad inside the protected area of the plant; 30 of them will be in use by mid-October.

The pad can accommodate 105 storage modules if necessary – enough capacity to store used fuel until 2017. Yucca Mountain is slated to open around 2010.



Workers lift one of the new dry fuel storage canisters onto a truck to take it into the plant to be filled.

Industry News

Yucca Mountain Update

The federal government has made available to the public 1.2 million documents related to the federal proposal to build a nuclear waste storage facility at Yucca Mountain, Nev. Most of the papers are supporting documents for previous reports, studies and assessments covering more than 20 years of scientific study.

The documents, totaling 5.6 million pages, will be part of the Department of Energy's permit application that is expected to be submitted this year to the Nuclear Regulatory Commission. The project won final approval from Congress in 2002, pending an NRC license.

The papers are available through the Energy Department and NRC Web sites.

Application for License Renewal Requires Extensive Analysis

Susquehanna employees have begun the extensive examination of plant equipment required by the Nuclear Regulatory Commission for license renewal.

The analysis will be captured in a 1,000-page application and will determine whether the NRC extends the operating licenses for Susquehanna's two reactors to 2042 and 2044.

The application explains how equipment will be managed to ensure continued safe operation of the plant and evaluates the environmental effects of the additional 20 years of operation.

"With a renewed license, PPL Susquehanna will continue to produce reliable, low-cost electricity and remain a valuable community partner by providing jobs, paying taxes, protecting the environment and supporting the local community," said George Jones, vice president-Special Projects.

"We already monitor equipment to ensure we repair or replace aging components before safety is affected," he said. "NRC's strict guidelines help ensure that we identify and address anything unique about extended operation."

PPL Susquehanna plans to submit its license renewal application in 2006. The NRC's thorough review process takes about one year, during which time it will conduct public meetings near the plant and at its offices in King of Prussia.

The application and results of NRC's assessment will be made available to the public.



Nevin Dressler, PPL Susquehanna offsite emergency management coordinator, trains local volunteers on the new system for classifying plant events.

Susquehanna Adopts New Descriptions for Classifying Emergency Events

This summer, emergency responders at the plant adopted a new system of descriptions, called Emergency Activation Levels, to quickly communicate the type and seriousness of an emergency.

“The new activation levels help us more quickly identify emergencies that actually might impact public health and safety,” said Jeff Grisewood, supervisor of Emergency Planning at Susquehanna.

The levels were developed by the Nuclear Energy Institute for use industry-wide. All of the other Pennsylvania nuclear utilities have adopted them, as did most nuclear plants across the U.S.

Using the new descriptions also will allow employees to better communicate the status of plant events with state and federal agencies, Grisewood said.

Nevin Dressler, offsite emergency planner for Susquehanna, has trained responders for the 22 emergency management agencies surrounding the plant on the new descriptions. Plant and community responders successfully used the new descriptions during their August drills.

Susquehanna Employees Prepare for Drill

Two separate teams of Susquehanna employees are quietly working toward the same goal: performing a successful test of how plant employees respond to a mock emergency in October.

The “controller” team is developing a complicated set of conditions concealed from the “responder” team to unfold over the course of the drill. The responders are preparing by reviewing procedures and practicing skills.

On Oct. 26, the controllers will set off emergency pagers to trigger the second team into action. The Nuclear Regulatory Commission and the Federal Emergency Management Agency will carefully scrutinize how well the responders

handle the unfolding events.

Susquehanna employees held full-scale practice drills in May and August to prepare for the October exercise. Likewise, local emergency management agencies in 22 municipalities surrounding the plant and the Pennsylvania Emergency Management Agency held a training session in August and will participate in the October drill.

“Employees and community members responded well to the summer training exercises,” said Jeff Grisewood, supervisor of Emergency Planning at Susquehanna. “We feel prepared to demonstrate to the NRC and FEMA in October that we can properly protect the health and safety of the public.”

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.

The sirens undergo monthly, silent, system-wide tests and an annual full-scale test. Upcoming regional “growl” tests, in which sirens are triggered for a few seconds, are:

- Bloomsburg area: The week of Nov. 9.
- Hazleton area: The week of Dec. 7.
- Wilkes-Barre area: The week of Oct. 13.

Evacuation is the most effective protective measure in the unlikely event of a severe nuclear emergency because it protects the whole body. However, the state provides potassium iodide pills to the public as an added precaution.

Potassium iodide can provide temporary protection for the thyroid gland against cancer and hypothyroid conditions in case of a radioactive iodine release.

The pills are available at any local or state health department office.

Evacuation routes and emergency instructions are in local telephone directories.

Health Physics Responds

The expertise of two PPL Susquehanna employees helped the Mifflinville Fire Company this summer assess liquid leaking from a truck carrying low-level radioactive waste and avoid an unnecessary evacuation of nearby residents.

“PPL’s willingness to help ensure and protect public safety was a valuable service to our community,” said Dan Dreisbach, a member of the Mifflinville Fire Company.

The truck driver was transporting the low-level radioactive waste from a Department of Energy laboratory in Long Island, N.Y., to a disposal site in Utah. He discovered the leak when he stopped at the Mifflinville rest area on Interstate 80 to perform a routine

shipment check.

The fire company responded to the driver’s call for aid. After learning that the lab needed at least five hours to respond, fire company officials requested help from PPL Susquehanna.

Health Physics employees Bill



Tom Novotney (right) and Bill Gearhart demonstrate the radiation monitoring equipment they used to scan a truck carrying low-level radioactive waste.

Gearhart and Tom Novotney immediately went to the site and surveyed the liquid. Finding no evidence of radioactive contamination outside the container, they inspected the leak and discovered that it was coming from a hollow

support underneath the container and not from the container itself.

After the pair assured fire company officials that the truck was safe, the truck was allowed to proceed.

PPL Susquehanna Receives Award for Peace Efforts

PPL Susquehanna was recognized for its involvement in the Megatons to Megawatts program, which reduces the Russian stockpile of nuclear weapons by converting weapons-grade uranium to nuclear fuel for the safe production of electricity.

The program is one outcome of the historic 1993 United States-Russia nonproliferation agreement.

The conversion process reduces the fissionable material in weapons-grade uranium by 90 percent so that it is safe to use as nuclear fuel.

“We’re very proud of our role in eliminating the equivalent of more

than 250 Russian warheads by using the converted uranium to fuel Susquehanna and generate electricity for northeastern Pennsylvania,” said John Kulick, manager of PPL Susquehanna’s Nuclear Fuels and Analysis group.



By 2013, when the program ends, the equivalent of 20,000 warheads will have been recycled into enough fuel to power the entire United States for about two years, according to the United States Enrichment Corp., the American agent for the Megatons to Megawatts program.

The award is a statue of the prophet Isaiah, who foretold of a time when nations would “beat their swords into plowshares and their spears into pruning hooks.”

Susquehanna Riverlands Environmental Preserve

PPL provides year-round education and recreation at the Susquehanna Riverlands. Upcoming programs on the environment, energy and other topics include:

- Healthy Eating, Oct. 10 – If we are what we eat, what are we choosing to be? Presentation followed by an exercise walk conducted along the trails of the Susquehanna Riverlands. Partnership between the Berwick Hospital Center and PPL’s Susquehanna Riverlands.
- Fall Colors on Council Cup, Oct. 16 – The sights, sounds, and smells of the season will come alive as we explore the unique habitat of Council Cup.
- The Story of Frances Slocum, Oct. 24 – Northumberland storyteller John L. Moore will tell about the remarkable life of Frances Slocum, a Wyoming Valley child kidnapped by Indians during the Revolutionary War.
- 5K Great Pumpkin Run/Walk, Oct. 30 – Sponsored by PPL Community of Volunteers, the Berwick YMCA and the Berwick Marathon Association, the walk takes place along the trails of the Susquehanna Riverlands. All proceeds will benefit the Berwick YMCA.
- Canals and Canal Life, Nov. 6 – An overview of the region’s canals, their engineering and construction, as well as life of canal families, various canal occupations and recreation on the canals.
- Teaching Environmental Awareness Workshop: Rock Box, Nov. 11. An introduction to the geology of the Keystone State. Workshop will provide materials, activities and lesson plans for use in classrooms.

For more information about Susquehanna Riverlands programs or to receive PPL’s Environmental Currents newsletter, call 1-570-542-2306 or visit our Web site at www.pplweb.com/seic.

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

Susquehanna Plant Employee Performs Heroic Act

The ride to work on July 20 was anything but routine for Harry Riley, a PPL Susquehanna employee.

On that morning, Riley noticed thick, black smoke was coming out of the back of a house along his way north on Route 309.

Seeing another person knocking on the front door, Riley turned down a side street to get a view of the back of the house. In the back yard, he saw a woman with her clothes on fire.

Riley ran to the

woman, wrapped his shirt around her and smothered the flames.

The man at the front door called for help and then both Good Samaritans stayed with the woman until the fire department and ambulance arrived.

“Harry’s actions are typical of how any Susquehanna employee would respond without forethought and hesitation when tragedy strikes another or when an emergency occurs,” said Rich Anderson, vice president-Nuclear Operations at the Susquehanna power plant.



Harry Riley's concern for others is reflected in his job as a Radiation Protection technician at the Susquehanna plant where he works daily to protect employees.

Giving Back

- About two dozen children at the Bloomsburg and Berwick women’s shelters will start school with new supplies thanks to the contributions of Susquehanna employees. The back-to-school donation drive was sponsored by the plant’s Women In Nuclear group. Some clothing and personal supplies also were donated to the shelters for general use.
- PPL Susquehanna workers donated 160 pints of blood during two blood drives held at the plant in June and August. The Berwick Red Cross will hold two more blood drives at the plant later this year.



A message from Lou Ramos, Community Relations Manager for PPL Susquehanna.

My first two months as Community Relations Manager for PPL Susquehanna have been very busy, getting to know many of you in the communities surrounding Susquehanna.

I appreciate your eagerness in discussing local strengths and needs with me, and I hope to be able to share the benefits of nuclear power

with you. By learning from each other, we can work together to build a stronger and more vibrant place in which to live and work.

Like me, PPL Susquehanna plant employees are dedicated to creating better neighborhoods by providing the reliable electricity our society needs while supporting many worthy causes and organizations.

Just one example of their dedication is their annual participation in the Berwick Relay for Life event, which benefits the American Cancer Society. Throughout the year, Susquehanna employees held and generously supported their own fund-raisers to raise money for this cause.

The result for the 2004 campaign was \$11,000 — the largest donation from a single team.

Our employees are just as industrious when operating and maintaining the plant as they are with supporting our communities. They know their dedication to safety is what really stands behind the solid concrete walls of the reactor building.

I am looking forward to getting to know everyone better over the next several months and years. And to make it easier for us to meet, I’ve bought my first season’s worth of Berwick Bulldog football tickets. See you there!



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Pa. National Guard Commander Visits Susquehanna Plant

The adjutant general of the Pennsylvania National Guard toured Susquehanna in August to learn about the plant and its security features.

During the visit, Gen. Jessica Wright, commander of the nation's largest National Guard, spoke with employees about the military organization's role in protecting the plant and the state.

About 1,200 Pennsylvania National Guard troops are stationed in Iraq, while another 20,000 members remain in Pennsylvania for homeland protection and emergency response.

Over the past three years, Pennsylvania's governor has periodically deployed the National Guard to the state's five nuclear plant locations, including PPL Susquehanna, as a precautionary measure to offer additional protection. The most recent use of the

National Guard was over the July 4 holiday weekend.

"PPL works in a collaborative and cooperative manner with federal, state and local governments and their agencies to enhance plant security," said Roland Ferentz, manager of nuclear security at Susquehanna. "Having the adjutant general tour Susquehanna, meet our employees and discuss security issues with our managers helps to improve communications and strengthen those relationships."

Photo on front: Gen. Jessica Wright speaks with Terry Harpster, general manager of nuclear support, about Susquehanna's security features during a tour of the plant.

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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