

At PPPL
THIS WEEK

TUESDAY, NOVEMBER 6

ELECTION DAY

NOVEMBER 6, 2012

Don't forget to vote!

WED. - THUR., NOVEMBER 7 - 8

PPPL Advisory Committee Meeting
All Day ♦ PPPL

WEDNESDAY, NOVEMBER 7

PPPL Colloquium

4:15 p.m. ♦ MBG Auditorium
Airborne Wind Energy - Harnessing a Vast, Untapped Renewable Energy Source

Kenneth Jensen, (Makani Power Inc.)
Refreshments at 4 p.m. in the LSB Lobby

UPCOMING EVENTS

November 12 - 16
Emergency Management System Annual Surveillance Audit
All Day ♦ PPPL

November 12 - 13
Synergize 2012
All Day ♦ Princeton University

November 14
Open Enrollment ends

November 14
United Way campaign begins

INSIDE...

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Hurricane Sandy forces Lab to close but damage is minimal

By Jeanne Jackson DeVoe

Hurricane Sandy wreaked havoc in the area and throughout New Jersey and closed down PPPL for two days. But a combination of careful planning and sheer good luck helped the Laboratory escape any major damage.

The hurricane left more than 2 million customers without power in New Jersey and caused severe damage everywhere especially in the Shore area. At PPPL, the power went out for about three and a half hours when one of the back-up generators failed. The Lab's Internet was out for two days and the phone system was almost completely down for the whole week.

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A tree damaged an awning at the Haz Mat Building.

(Photo by Darren Thompson)

PPPL welcomes community residents left without power by Hurricane Sandy

By John Greenwald

The promise of hot showers, wireless Internet access and laptop and cell phone charging stations turned PPPL into a warming center last week for persons whose homes lost power because of Hurricane Sandy. The Laboratory opened its doors from 4 to 8 p.m. on Thursday and Friday in a community outreach program arranged by Dolores Stevenson, deputy director of the Site Protection Division, and Jamie Alkhateeb, planning and training coordinator for site protection. Helping to greet and escort visitors were volunteers from departments throughout PPPL.

Among the 16 guest arrivals were Kerry and Em Kay of West Windsor. They learned about PPPL through the website Planet Princeton and happily plugged in

Hurricane Sandy

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"I think somehow we were lucky with the storm," said Michael Williams, the acting director of PPPL in Stewart Prager's absence. "The storm didn't hurt us that badly."

The awning of the Haz Mat Building was smashed by a fallen tree and a tree punctured the roof above an office in the Administration Building causing extensive water damage. Trees also knocked down two streetlights in parking lots. The storm took out the electric lines that power street lights around C site. There was also some damage to insulation on ducts at the RF Building and the CS Building.

PPPL lost power for a few hours

The Laboratory lost power on Monday from about 4:30 p.m. until about 8 p.m. when the PSE&G transmission line lost power. When that happens, two back-up generators are supposed to start up (a third generator is being repaired). However, only the generator powering the firehouse kicked in. The other generator, which was supposed to back up the communications center, failed to start up. John Lacenere, head of AC Power Engineering, and Art Wise came to PPPL during the height of the storm to restore power to the Laboratory. Lacenere is investigating why the generator didn't work.

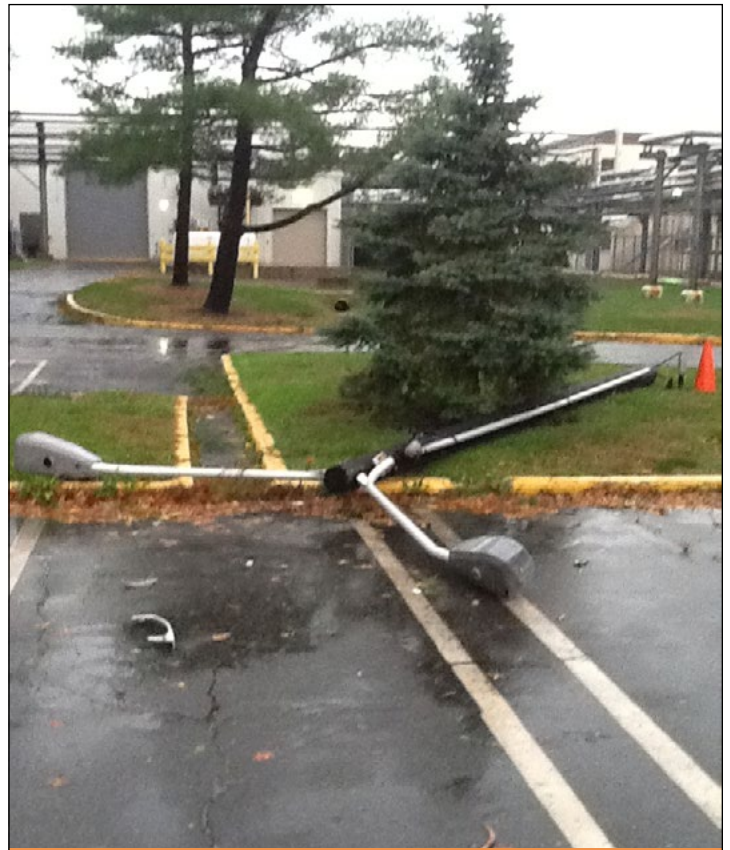
PPPL closed down on Monday and Tuesday and reopened at 10 a.m. on Wednesday. However, less than half the staff came to work on Wednesday. Many staff who lost power during the hurricane or had property damage stayed home and others stayed home because local roads were impassable due to downed trees and electric wires. About 120 researchers from the Lab were away, attending the American Physical Society Division of Plasma Physics conference in Rhode Island last week.

Dolores Stevenson, deputy head of Site Protection, said eight Emergency Service officers were assigned to PPPL during the storm. The fire engine and ambulance did not respond to local calls from Sunday to Wednesday so Emergency Services officers would be ready for any emergencies at the PPPL site.

Patrolling in high winds

Officers continued patrolling except during the worst of the 85-mile-an-hour winds. With the Web system down, they improvised a communications system by using one of the officer's iPads to send out emails and access the Web. Erik Perry, the construction manager on the NSTX Upgrade Project, brought hot food to all of the staff at PPPL during the storm.

Emergency Services Unit Capt. Kevin Rhoades, who was at PPPL from Sunday through Tuesday, said the storm was the worst disaster he has ever seen in terms of its impact on the community, despite the fact that PPPL fared pretty well. "I worked during Irene, I've worked in blizzards," Rhoades said. "Just to stand outside in this was dangerous."



Another tree knocked down a streetlight in the lower parking lot.

(Photo by Darren Thompson)

Startling visuals

The storm also brought some startling visual effects. The whipping winds caused two high-tension wires to briefly touch on separate occasions near the Laboratory firehouse on Monday night. While the incidents did no damage, they created showers of sparks and intense flashes of light.

"It happened twice," said Emergency Services Unit Capt. Darren Thompson. The first time brought "a huge ball of blue arcing light and sparks literally raining down on the firehouse" at least 50 feet away. "It was quite a spectacular light show," said Thompson, who witnessed the incident through a firehouse window. Several hours later, a similar scene took place.

Williams and others credited careful planning for the minimal damage PPPL had during the storm. Williams said PPPL "learned a lot of lessons from Irene," in terms of planning in advance of hurricanes and other disasters.

Planning started early

The planning started when PPPL first heard about the storm on Oct. 23. On Friday, Oct. 26, about 50 people from every department at PPPL held a planning meeting to review emergency procedures and go over the steps they were taking to prepare for the storm. "Honestly, we were very proactive, we really were very well prepared," said Michael Viola, head of Facilities & Site Services Division.

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Hurricane Sandy

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They moved anything in danger of blowing away in the heavy winds of the hurricane and put pumps in place in areas that flood. They also asked staff members who were going to the APS conference to leave their cars in the lower parking lot, where there are fewer trees and less chance of damage.

Fran White, head of Site Protection, and other Site Protection staff from PPPL, also met with emergency services staff at Princeton University to prepare the response. White said PPPL staff did a great job taking care of any problems at PPPL. "I think the team really jumped into action to get the facility up and running," he said.

Computer servers down for less than 24 hours

The power outage that darkened the Laboratory for several hours starting about 5 p.m. on Oct. 29 took all the computer servers down with it. This kept the public from logging on to pppl.gov, the Laboratory's external home page, until efforts led by Ken Silber, a senior systems engineer, and Irena Johnson, a Unix system administrator, along with Kevin Ying, a systems administrator, brought the Web server back up Tuesday afternoon.

All PPPL servers were fully restored to service by Friday. Silber credits Kevin Ying, a systems administrator, and Johnson with restoring the major research computing clusters. Also contributing to the recovery were Jim Hirsch of the cyber security department, together with networking specialists Ashwini Borkar and Kenneth Tindall, Thomas Carroll, a senior systems analyst, and Harry Towner, head of Operations and User Support. "It was a very good effort to figure out all the problems and get the servers back up," said Silber. "Everybody did an excellent job."

Little evidence of damage

By Friday, there was little evidence of storm damage. A truck outside the LSB was out trying to repair streetlights



Workers repair lights outside the LSB lobby, where an electric line to streetlights was damaged.

(Photo by Jeanne Jackson DeVoe)

outside the building, the roof was repaired, and most of the fallen trees had been carted away. There was still limited telephone service, a problem many people in the area experienced due to problems with a Verizon line, but all phone service was restored by Sunday, Nov. 4.

"We did relatively well," said White, "especially considering the damage and destruction in all the areas around us." 📍

PPPL Science Writer John Greenwald contributed to this story.

PPPL helps community

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their laptops in the cafeteria, where Em worked on homework and Kerry Kay surfed the Web. The mother and son had first tried the West Windsor Senior Center but found it crowded. "This is a great thing," Kerry Kay said of the outreach program.

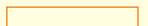
Hot showers for guests

Guest Dave Beard made straight for the showers in the Shop Building section of the Laboratory. Beard said his Pennington house had limited generator power, creating what he called "frontier vacation" conditions. He brought his laptop to the cafeteria after taking his shower and sat down at a table to work.



While Em Kay worked on homework, mother Kerry surfed the web.

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PPPL helps community

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Some visitors hailed from a considerable distance. Ethan Quan and his wife Pauline Yuan showered at PPPL after learning about the outreach program from the Residence Inn where they were staying, which suffered a loss of power. The couple had just come from China to the Princeton area, where Quan is starting job to which he has been transferred.

Also drawn to the Laboratory were Alan and Darlene Birnbaum, who heard about the outreach program from the West Windsor Police Department and brought their iPad and cell phones for charging. They settled in the cafeteria near an overhead TV screen, chatted with engineer Mark Smith, who monitored the area, and watched news programs on CNN. Television “is something we haven’t seen in five days,” Darlene Birnbaum said.

Planning for the outreach program got started last Wednesday. “We thought if we could get together a plan that would be great,” recalled Stevenson, who discussed the idea with Alkhateeb. Support for the program came from the DOE site office, which encouraged the Laboratory to consider how it could help local persons affected by



Darlene and Alan Birnbaum charged their cell phones and iPad and watched TV.



Dave Beard first showered and then brought his laptop to the cafeteria.

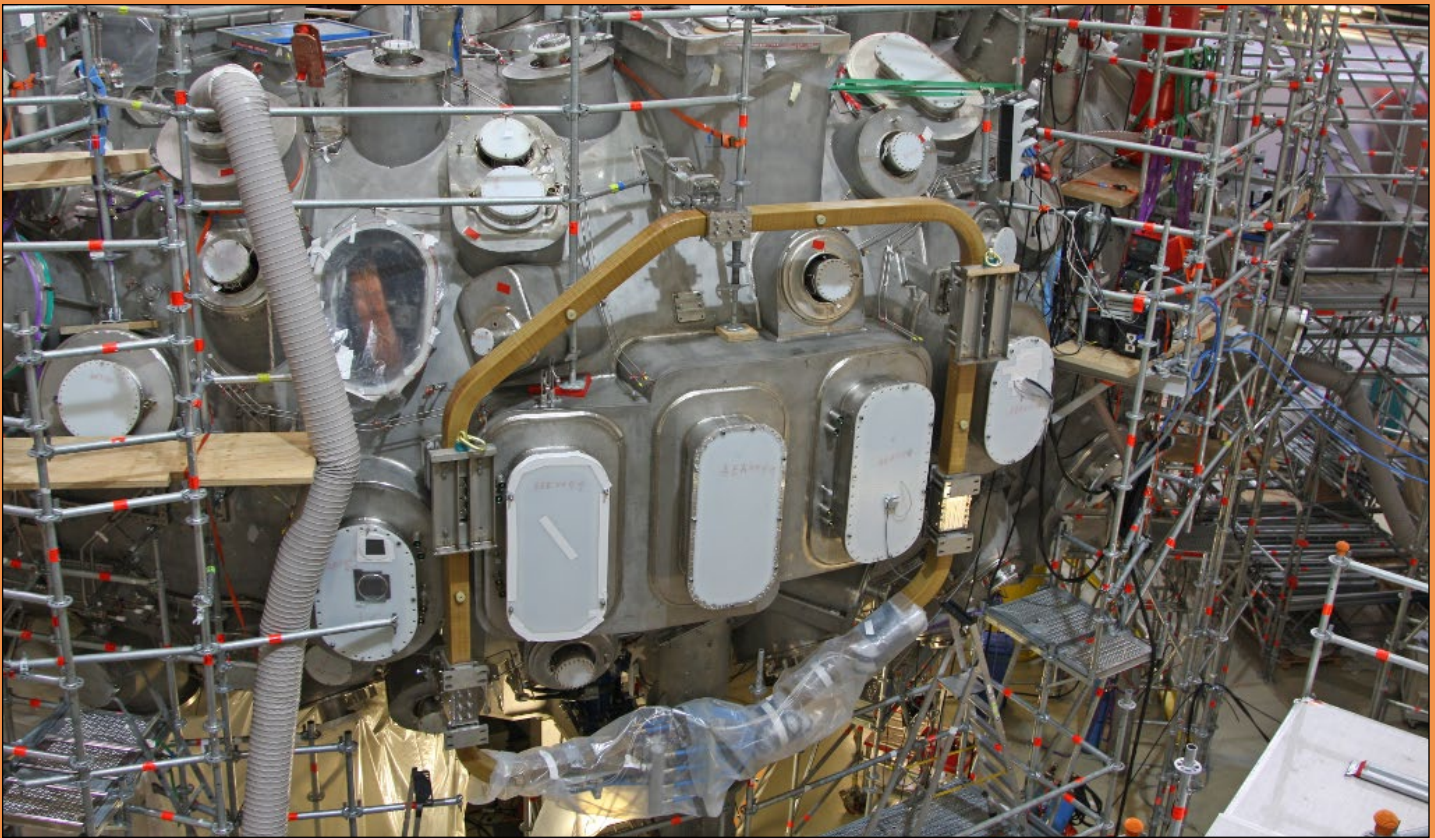
Sandy. Stevenson and Alkhateeb worked out the details with PPPL Associate Director Michael Williams, along with Jerry Levine, head of Environment, Safety, Health and Security, and Susan Murphy-LaMarche, director of Human Resources.

To publicize the program, members of the Site Protection Division distributed flyers to the Plainsboro Emergency Operations Center and other key locations. Jeanne Jackson DeVoe of the Communications Department expanded the effort by drafting a notice that went to local media, including websites and radio stations. 📺



Dolores Stevenson, front, kicked off the outreach program by briefing volunteers. From rear left: Sandy Shaw, Ed Busch, Mark Cropper, Jamie Alkhateeb, Mark Smith and Capt. Kevin Rhoades.

(Photos by John Greenwald)



IN PLACE: The first of five barn-door sized trim coils that PPPL is producing for the Wendelstein 7-X (W7-X) stellarator at the Max Planck Institute for Plasma Physics in Greifswald, Germany, was installed in October on the complex machine. The copper coils will fine-tune the shape of the plasma that the W7-X will use to study conditions required for fusion when the machine begins operating in 2015. In exchange for the coils, PPPL scientists will be able to lead and carry out experiments on the W7-X.

Photo Credit: Max Planck Institute for Plasma Physics



PPPL Café Menu

BREAKFAST 7 a.m. • 10 a.m.
 CONTINENTAL BREAKFAST 10 a.m. • 11:30 a.m.
 LUNCH 11:30 a.m. • 1:30 p.m.
 SNACK SERVICE until 2:30 p.m.

MONDAY NOV. 5

TUESDAY NOV. 6

WEDNESDAY NOV. 7

THURSDAY NOV. 8

FRIDAY NOV. 9

**COMMAND PERFORMANCE
CHEF'S FEATURE**



SPAGHETTI WITH MEAT SAUCE & GARLIC KNOTS



CREATE YOUR OWN BEEF BURRITO



BAKED MACARONI AND CHEESE



COUNTRY-STYLE FRIED CHICKEN BREAST



SWEET ITALIAN SAUSAGE HOAGIE

EARLY RISER

Chocolate Chip Pancakes with Bacon

The XL Greek Omelet with Home-fried Potatoes

Sausage, Egg & Cheese on a Fresh-baked Croissant

Steak, Egg, Onion, Pepper and Cheese Quesadilla

2 Eggs Any Style, Pancake, Choice of Meat and Home Fries

COUNTRY KETTLE

Chicken Noodle 🍎

Broccoli and Cheddar

Beef Barley 🍎

Cream of Country Vegetable

Minestrone 🍎

GRILLE SPECIAL

Three Cheese and Mushroom Quesadilla

Cajun Grilled Chicken Club with Onion Rings

Grilled Turkey Reuben with Fries

Old-fashioned Sloppy Joe on a Kaiser Roll with Home-made Chips

Chicken Quesadilla with Cilantro Cream Sauce

DELI SPECIAL

Roasted Eggplant, Red Pepper & Portobello Mushroom Stacker 🍎

Muffuletta with Ham, Salami, Roasted Red Peppers, Tapenade

Turkey Cobb with Bacon, Avocado, Hard Boiled Egg, Tomato

Crispy Chicken BLT with Ranch Dressing

Egg Salad with Smoked Bacon and Tomato on Marble Rye

PANINI

Buffalo Chicken with Bleu Cheese Spread

Classic Tuna Melt

Cajun Roast Beef with Pepper Jack, Roasted Peppers, Tomato

Smoked Ham and Swiss Cheese on a Baguette w/ Honey Mustard

The Cubano

MENU SUBJECT TO CHANGE WITHOUT NOTICE

[CLICK HERE FOR A PRINTABLE WEEKLY MENU](#)

WEEKLY

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Comments: commteam@pppl.gov ♦ **PPPL WEEKLY** is archived on the web at: <http://www.pppl.gov/ppplweekly.cfm>