Q&A

pepco Energy Services

Dismantling and Removal of the Benning Power Plant

BENNING POWER PLANT CLOSURE AND REMOVAL

Why is Pepco Energy Services (PES) demolishing the Benning Power Plant?
PES announced its intention to close the Benning Power Plant in 2007. As the electricity infrastructure ages, more efficient power plants come on-line to allow for older, less efficient plants to retire. These developments, together with upgrades to Pepco's transmission grid, eliminated the need for the electricity generated by the Benning Power Plant.

In June 2012, operations at the Benning Power Plant ceased as planned and PES placed the plant into an idle condition termed a "cold closure," a condition in which the major plant equipment such as the steam turbines, boilers and generators are no longer operable. Once the plant was removed from service and placed in a cold closure state, PES determined that dismantling and removing the plant would be in the best interest of PES, the District of Columbia, and the local community.

What does the plant removal process entail?
The dismantling and removal of the power plant is a carefully planned and executed project which includes decommissioning the plant equipment, removal of asbestos and other potentially hazardous building materials under carefully controlled conditions so they are not released during general demolition, conventional demolition of most of the building components, implosion of small, selected portions of the building frames, removal and recycling or off-site disposal of demolition debris, and restoration of the ground surface under the former plant site. Once all hazardous building materials have been properly removed as certified by the regulatory authorities, the buildings will be dismantled and taken down in accordance with best practices for safety, dust minimization and salvage recovery. We plan to use two primary methods to take down the plant structures – conventional demolition and implosion. In both cases, step-by-step work plans are established. Once the structures have been removed, the foundation will be graded and leveled. At the completion of the project, the site will be inspected and all construction equipment will be removed. The project is expected to be complete by the end of 2014.

How will the project progress?
The project will proceed in four phases. The first phase of the project, which is currently in progress, is the dismantling and removal of the two cooling towers adjacent to the power plant. The second phase of the project focuses on the dismantling and removal of the main power plant structures, located on the western end of the Benning Service Center site, by conventional means. This phase will include the demolition of the five smoke stacks and buildings that housed the power plant equipment. The third phase of the project includes taking down certain selected structures by implosion. The fourth and final phase of the project will be grading and restoration of the ground surface under the former power plant.

What happens during the removal of the cooling towers?
Crews have started to dismantle the two cooling towers adjacent to the power plant and are expected to complete this work by the end of December 2013. These structures are made primarily of wood, plastic,

fiberglass, and steel, so conventional methods of demolition — including hammers, shears and heavy equipment — will be used.

Before the cooling tower demolition began, PES commissioned AECOM, an independent firm of trained and certified environmental engineers, scientists and technicians, to conduct a thorough assessment to identify whether asbestos or other potentially hazardous materials were present in the cooling towers or the concrete basins in which the cooling towers are located. This was an important step to ensure that all such materials were properly managed during the demolition process and properly disposed maintaining safe working conditions for employees and environmental protection of the surrounding community. As required by regulations, asbestos materials were identified and removed under controlled conditions prior to demolition to prevent the release of asbestos fibers.

PES is taking appropriate precautions to minimize the emission of dust during this phase of the project. PES expects that the dismantling of the cooling towers will generate very little dust because of the type of materials involved. However, if dusting does occur, PES will control the dust by misting the cooling tower vicinity with water. Water is sprayed from a fire hose over the area to be demolished prior to demolition of that area. To date, dust from these activities has been minimal. Residents may see a small amount of smoke for two or three days per cooling tower as a result of metal cutting activities.

What happens to asbestos in the power plant?
Asbestos was previously a popular industrial material used for electrical insulation for wiring and building insulation. After equipment in and around the power plant has been disconnected and disassembled, a team of trained hazardous materials experts will safely remove all asbestos-containing materials from the power plant structures under controlled conditions to prevent the release of asbestos fibers. Crews will then appropriately dispose of the asbestos waste. Interior demolition, including removal of the piping and electrical equipment, can only occur after any asbestos has been removed.

What happens during the conventional dismantling of the remaining power plant structures?
The conventional demolition phase of the project involves dismantling the buildings and other structures and removing scrap material for recycling or proper disposal. This work will begin in the interior of the plant buildings with the removal of the piping and electrical equipment (which will occur only after any identified asbestos has been removed). Once all equipment and materials have been removed from the interior of the buildings, approximately 70 percent of the structures will be taken down using conventional demolition practices, such as grapples and hydraulic hammers. During this stage of the project, some noise and dust will be created. Noise levels from power plant demolition will comply with city noise ordinances and dust will be controlled.

What happens during the implosion phase and why is implosion necessary?
The company will hire an experienced and highly specialized contractor – with a proven safety record -- to use controlled explosive charges to take down a portion of the power plant structures (approximately 30 percent). The steel framed structures to be imploded will have roofs, wall coverings and any hazardous materials removed. The implosion will result in the structure falling upon itself and the stacks falling in a predetermined area. The debris will be confined to a small area thereby producing less dust and a safer means for the contractor to remove the debris. The implosion will be a one-time event lasting up to five minutes with public notifications and considerable planning, monitoring, safety measures and dust containment. PES is committed to working safely and respectfully in the neighborhood, and the implosion work will be coordinated with the Metropolitan Police Department and the DC Fire and Emergency Services Department. We will comply with all regulatory, environmental and local agency requirements regarding this process, and will provide more details as the plans for this work are finalized.

What happens during the restoration phase?
Once the plant equipment and structures have been removed, the foundation will be graded and leveled. At the completion of the project, the site will be inspected and all construction equipment will be removed.

ENVIRONMENTAL

How is the plant removal project related to the Benning RI/FS?

The demolition project is separate from the environmental study currently being performed at the Benning Road site (referrred to as a Remedial Investigation/Feasibility Study) (the "Benning RI/FS"), but these projects are being coordinated, with input from the District Department of the Environment, to ensure that the demolition work does not delay or interfere with the field work for the Benning RI/FS. Because the Benning RI/FS is focused on soil and groundwater conditions at the Benning Service Center site, the removal of the power plant structures does not affect the sampling plan or site assessment activities for the Benning RI/FS. However, the removal of the power plant structures may enhance the RI/FS by allowing for sampling, if warranted, in areas that were previously inaccessible.

What will PES do to protect people in the area who are sensitive to airborne contaminants?

Respecting the health and safety of the public, workers and the environment is our top priority for the dismantling and removal of the Benning Power Plant. The creation of dust is inherent to this process; however, PES has developed a comprehensive program to monitor and minimize dust so that it is not a hazard or nuisance for the workers or the community.

Dust Prevention - Weather conditions will be monitored regularly for temperature, relative wind speed and general direction. Weather conditions will also be monitored for exceptionally high winds or unusually dry conditions, which may contribute to dust generation. Additionally, heavy equipment will be confined to the immediate area around the plant to minimize the migration of dust. Trucks delivering equipment and moving materials will use approved entrances/exits and haul routes to minimize opportunities for dust to enter the community.

Dust Control - Dust control procedures will be utilized for all work areas, debris stockpiles, and access / haul roads. Airborne dust will be controlled by spraying the materials before demolition with an adequate amount of water to suppress dust particles and limit any impact of dust on areas beyond the Benning Service Center fence line. Appropriate erosion control/filtration measures will be used as necessary to prevent sediment from entering the storm drainage system.

Dust Monitoring - PES has hired AECOM to conduct air monitoring for the project. AECOM's air monitoring program begins with a measurement of the air quality prior to commencement of project activities to establish a baseline, and the establishment of risk-based action levels consistent with EPA guidelines to protect human health and the environment.

During the project, AECOM will collect air measurements in 15-minute intervals at six stations located along the perimeter of the Benning Service Center site during the workday. AECOM will also perform monitoring with hand-held instruments two times per day adjacent to active work areas and along the fence line. These instruments will measure the level of particulates, which also will be used as a proxy for individual constituents of potential concern, such as lead and other metals, polycyclic aromatic hydrocarbons (PAHs), and polychlorinated biphenyls (PCBs). Samples will also be collected for off-site laboratory analysis of individual constituents to confirm the results of measurements taken at the perimeter monitoring stations and with the hand-held instruments. If real time particulate levels ever become elevated, the nature and intensity of work being done will be reviewed, mitigation steps initiated as needed, or, if necessary, stopped all together to ensure that particulate levels remain within established action levels.

What about dust from the implosion?

Dust may linger in the immediate area for one to five minutes following the implosion and appropriate precautions, such as closing doors/windows, can be employed to protect against the possibility of dust from the implosion. How far the dust travels will depend on wind speed and weather conditions at the time of the implosion. Given the large non-residential area surrounding the portion of the power plant to be imploded, it is expected that the majority of the dust will remain on the site. Air monitoring will continue throughout the

implosion to ensure that dust levels remain within the levels established under the air monitoring program (as described above) to protect human health and the environment.

PROJECT IMPACT

How will traffic be affected during demolition?

During the first phase of the project, 10 to 20 trucks are anticipated to enter and exit the site each day. However, as the project continues, the number of trucks entering and exiting the site will increase to between 20 and 50 trucks per day. PES submitted its traffic plan to the District of Columbia Department of Transportation (DDOT) and has obtained preliminary permission to use two exits onto Anacostia Avenue, NE. Pepco is also working with DDOT to identify the best times of travel to avoid creating traffic congestion.

How much vibration will occur from the implosion? Should we document the current condition of our homes or businesses?

The implosion will be designed to minimize the amount of vibration, but property owners are free to document the current, pre-implosion condition of their structures in the manner that they determine to be appropriate. The physical conditions of the site will be evaluated by experienced demolition personnel prior to the implosion to minimize vibration so as to prevent damage to public and private property beyond the power plant site boundary. In other similar power plant implosions, no perceptible vibration was felt but each project is different due to site and soil conditions. Seismic monitoring will be conducted to measure ground vibration levels on the day of the event and to verify that the implosion went as planned.

We've heard that surveys will be conducted on some of the homes and businesses in the area. How was this area determined?

The surveys of homes and businesses is related to the one time implosion event which is scheduled to occur during the summer/fall of 2014. At present, it is not expected that any surveys will be conducted beyond 1000 feet from the location of any implosion devices. This area only includes commercial and industrial facilities.

What is going to happen to the property after the demolition is completed?

Pepco will retain ownership of the property which will become part of the Benning Service Center. The service center will continue to function as a vital part of Pepco's electric distribution and transmission operations needed to continue to provide reliable electric service to their customers in the District of Columbia and Maryland.

COMMUNITY OUTREACH

How will PES keep the community informed about the demolition?

Information about the demolition will be provided to the community through community open houses, community listservs, mailings, fact sheets, and the Benning Service Center website (bennningservicecenter.com), and will be posted at libraries within the local community (Anacostia, Deanwood, Dorothy Height/Benning, Francis A. Gregory and Rosedale). Additionally, representatives of PES and Pepco will be available to attend the Advisory Neighborhood Commission (ANC) and civic and community association meetings to inform residents about the project. Residents can also call the Benning Demolition voice messaging system at (202) 730-1199. This voice messaging system was created to provide residents with the opportunity to have their questions addressed by the project team. The voice messaging system is checked daily and all calls are returned by PES representatives within two business days.