



## Energy

### Daily Use

- Wireless communication coverage to the campus' ten buildings to help technicians coordinate detailed operations with colleagues that can be acres away
- Compliant with government regulated frequency requirements

### Solution

- Polycom® SpectraLink® 6000 Wireless Telephone System

### Results and Benefits

- Seamless integration to Peach Bottom's Nortel Meridian 81C PBX
- Durable handset withstands the demands of power plant users without incurring airtime charges
- Managers work more efficiently with the Wireless Telephones and can reach their teams in the field at any time

# Exelon's Peach Bottom Power Plant Chooses Polycom Wireless Communication

## Background

Communication in the average enterprise is a relatively simple issue: make sure that there are telephones where people sit or congregate. If the person you're looking for isn't near a phone, a shout may often find them. But when a facility is measured in acres rather than square feet, management faces a host of new communications challenges. Two-way radios can be useful, but their reception is often spotty, they disrupt others around them, and they do not allow for private conversations. Cell phones are often useless in hallways, elevators, and basements, plus airtime charges quickly add up. These communications hassles restrict workplace mobility, as well as frustrate managers and employees. Thus, many companies are scrambling to find cost-efficient methods to improve internal communications systems that enhance operational productivity.

One company facing such challenges was Exelon's Peach Bottom power plant in York County, PA. Peach Bottom is a two unit nuclear power generating facility covering several acres alongside the Susquehanna River. It generates over 2200 Megawatts for consumers all across North America. The plant has ten buildings as well as vital equipment that is kept outdoors, and, in some cases, right in the middle of the river. The massive scope of the facility presented major obstacles in coordinating operations between technicians, stalled information flow between management and employees, and created a drain on overall productivity levels.

After examining a broad range of communication technologies, Exelon's management found the solution to their problems with Polycom® SpectraLink® 6000 Wireless Telephone System. The SpectraLink System integrates wireless handsets with Peach Bottom's Nortel Meridian 81C PBX. Calls from the handsets are relayed through Base Stations across the facility and because they are routed through the PBX, no additional airtime charges are incurred. The facility has been using the SpectraLink Wireless Telephones since the spring of 2001 and has deployed over 160 handsets to employees. Managers and technicians now wear their SpectraLink Wireless Telephones in order to be accessible while performing their jobs in the large facility.

*"With SpectraLink Wireless Telephones we don't have to worry about getting our phone set up and hoping the other team got theirs connected. We have our handsets with us and they have theirs. It couldn't be easier."*

*Chris Moser, instruments & controls technician for Peach Bottom*

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*Chris Moser, instruments & controls technician for Peach Bottom*

### **Wireless at Work**

Technicians working in large environments often have difficulty coordinating detailed operations with colleagues that can be acres away. Calibrating equipment in a plant such as Peach Bottom can be a long and arduous process taking hours of work and involving several teams of technicians.

"Previously, technicians had to bring traditional wired phones out in the field with them to do work," said Chris Moser, instruments & controls technician for Peach Bottom. "Then they had to hook the phone up at the site and test that it was working before going about their work. Afterwards, they would have to break everything down and pack it up again. It was a frustrating waste of time. With SpectraLink Wireless Telephones we don't have to worry about getting our phone set up and hoping the other team got theirs connected. We have our handsets with us and they have theirs. It couldn't be easier."

The lightweight, durable SpectraLink Wireless Telephones are easily worn on a belt and save the technicians from having to carry additional telephone equipment with them. The handsets are also designed to take the pounding typical of a tough workday. "They really take a beating here. I once dropped my Wireless Telephone over two stories," said Moser. "All I had to do was reconnect the Battery Pack and turn it on. It worked fine."

Technicians are not the only ones to reap the benefits of the SpectraLink System. Managers have discovered that they work more efficiently with the Wireless Telephones. An immediate benefit of the system is that managers can reach their teams in the field at any time.

Locating technicians has become a much easier as managers know that their staff is accessible anywhere - in the field, the buildings, or on the roof - wherever there is a Base Station nearby. Managers also have the added value of caller ID, so they know which calls are priorities and which calls can be sent through to voicemail where they can be handled at a more convenient time.

### **Wireless in a highly regulated space**

A primary factor in choosing a wireless solution for the plant was bandwidth regulation. The federal government regulates what frequencies can be used at nuclear power plants and the FCC began implementing changes that would eliminate certain frequencies employed by Peach Bottom's existing two-way radio system. These changes would render the plant's communications both ineffective and non-compliant. However, the SpectraLink System operates at 902 - 928 MHz, a pre-approved frequency for nuclear power plant use, and therefore fully compliant with government regulations. Since the SpectraLink System was installed, the plant's reliance on two-way radios has dropped dramatically.

"We have not only improved our ability to work and communicate at the plant, but we have a system that meets the strict regulatory guidelines that we face," said Moser.

### **Communication is power**

Providing electricity for its users is an important task and one that Peach Bottom handles effectively. However, like all successful businesses, plant managers are constantly looking for ways to improve the efficiency and performance of their plant and employees. The SpectraLink System allows managers and technical staff to move throughout the large Peach Bottom facility while remaining in constant contact with each other and the outside world. SpectraLink Wireless Telephones bring improved communications and efficiencies to Peach Bottom, ensuring that the power keeps flowing smoothly throughout Pennsylvania and the rest of North America. "SpectraLink Wireless Telephones provide us with a level of connectivity that we had always hoped for, but never realized that we could achieve," said Moser.

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