



## Energy

# Nine Mile Point Nuclear Station Chooses Polycom® for Safe and Efficient Wireless Communications

### Daily Use

- Comply with difficult and complex frequency regulations, functioning dependably without interfering with sensitive equipment
- Integrate seamlessly with existing PBX system
- Deliver advanced calling features such as conferencing, call transfer, and dial by extension

### Solution

- Polycom® SpectraLink® 6000 Wireless Telephone System

### Results and Benefits

- Deliver seamless wireless communications to employees at the 900-acre campus
- Fast transition from cellular to more efficient mobile communication system
- Improved accessibility to teams and technicians anywhere throughout the campus – even outdoors, between buildings or on rooftops
- Durable handset withstands the demands of power plant users without incurring airtime charges

### Background

With critical output at stake every second of the day, the management of Nine Mile Point Nuclear Station has been long aware of the advantages in making its employees wireless. Since the 1960s, the power plant has had wireless systems in place designed to free employees' hands. The power plant's experience with various voice communications systems makes the recent installation of Polycom® SpectraLink® Wireless Telephones all the more noteworthy.

Given the challenging tasks of working with radioactive materials and the critical need for specific materials and tools, employees must be equipped with communication devices to instantly contact coworkers. After using four different wireless telephone systems, Nine Mile Point Nuclear Station, which sits on a 900-acre campus, chose the Polycom SpectraLink 6000 Wireless Telephone System because of its excellent coverage, durability, call features, and ability to integrate with existing telecom equipment.

### Meeting the Challenge

Today, Nine Mile Point Nuclear Station employees carry the lightweight, durable SpectraLink Wireless Telephones on their belts to save them the trouble of carrying additional communication equipment with them. The handsets also are designed to take the pounding typical of a tough workday at the nuclear power plant.

Nine Mile Point Nuclear Station deployed more than 220 SpectraLink Wireless Telephones in its first nuclear site, which is comprised of three buildings and one nuclear reactor. Within months of that successful deployment and employees' rave reviews, the nuclear power plant decided to expand the SpectraLink system by deploying 230 additional SpectraLink Wireless Telephones in the second half of its facility, called Unit 2, which houses three other buildings and the station's other nuclear reactor.

The nuclear facility keeps SpectraLink Wireless Telephones in use at all times. Kenneth Johnson, Nine Mile Nuclear Division Manager, says most of the voice communications at the power plant are internal. Employees in operations, maintenance, and other support groups use the handsets in different shifts, depending on activities and projects.

*"We've reaped enormous benefits from the Polycom® SpectraLink® Wireless Telephones, including working around the very difficult and complex frequency issues, given the equipment we have here. We can honestly say we've looked into all the available wireless systems out there and the SpectraLink Wireless Telephones by far satisfy all the requirements we were looking for."*

*Kenneth Johnson, Division Manager, Nine Mile Point Nuclear Station*

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*Kenneth Johnson, Division Manager, Nine Mile Point Nuclear Station*

Johnson says employees' transition to the SpectraLink Wireless Telephones has been seamless and quick. The rave reviews from employees, however, focus on the system making their jobs that much more efficient.

Employees have seen the immediate benefits, with managers being able to reach their teams in the facility at any time. Locating technicians also has become much easier as managers know that their staff is accessible anywhere, in the buildings, outdoors between buildings, or on the roof, wherever there is a SpectraLink 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.

“Employees do a lot of testing at the facility, with coworkers located in multiple work areas,” Johnson says. “Employees are able to communicate on an individual channel. We have people working in radiological areas that are able to call and ask for assistance at a particular job site, without ever having to leave the job site in search of assistance.”

The nuclear plant placed Base Stations throughout its plant to ensure sufficient coverage around machinery and other reception obstacles. The SpectraLink 6000 Wireless Telephone System integrates with Nine Mile Nuclear Station's existing PBX and calls from the handsets are relayed through Base Stations across the nuclear power plant. Because calls are routed through the network of Base Stations, no airtime charges are incurred. The SpectraLink 6000 Wireless Telephone System allows employees to utilize advanced telephone features such as conduct conference calls, transfer calls, and dial by extension, to name a few.

### **No Live Wires**

Nine Mile Point Nuclear Station has moved toward making its employees more mobile for decades, deploying its own wireless communication system in the 1960s. The system was more like a headset that allowed employees to work hands-free, but did not allow them to roam extensively throughout its 34 acres. Despite that fact, the system was quite innovative for its time.

However, expansion plans for the hands-free telephones came to halt when the aging system's replacement parts were no

longer manufactured. It was then that Johnson decided to review other wireless voice systems.

The other voice communication system Nine Mile Point Nuclear Station used was an analog cellular system. The plant considered expanding that system, but did not move forward when it became evident that coverage of the system was very limited throughout the facility. The other problem with the system was that it did not allow more than four calls on the network at a time.

Some employees at the nuclear facility were equipped with a walkie-talkie system, to allow them to communicate with each other. Pleased with the system, Nine Mile Point Nuclear Station considered expanding the system, but found disappointment once again when the high-powered radios began interfering with sensitive equipment in the facility.

The issue of radio usage in a facility subject to heavy federal regulation steered Nine Mile Point Nuclear Station away from its short-lived walkie-talkie system. The federal government regulates what frequencies can be used at nuclear power plants, including those used by two-way radios. These changes would render the plant's communications both ineffective and noncompliant. The SpectraLink 6000 Wireless Telephone System, however, operates at 902 – 928 MHz, a pre-approved frequency for nuclear power plant use, and therefore is fully compliant with government regulations.

“We've reaped enormous benefits from the SpectraLink Wireless Telephones, including working around the very difficult and complex frequency issues, given the equipment we have here,” said Johnson. “We can honestly say we've looked into all the available wireless systems out there and the SpectraLink 6000 Wireless Telephone System by far satisfies all the requirements we were looking for.”

### **Learn more.**

To find out how Polycom solutions can help your organization, visit us at [www.polycom.com](http://www.polycom.com) or speak with a Polycom Account Representative.

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