SOUTHWIRE’S NOVINIUM UNDERGROUND SERVICES RESTORES MORE THAN 42,000 FEET OF CABLE AT DAYTON INTERNATIONAL AIRPORT

COMPANY: AES OHIO, FORMERLY DAYTON POWER & LIGHT
LOCATION: DAYTON, OH, USA
WEBSITE: WWW.AES-OHIO.COM
CABLE LENGTH: 42,255 FEET
CABLE SIZES: 1000 MCM AND 500 MCM
METHOD: Cablecure® 732 fluid and Sustained Pressure Rejuvenation (SPR) injection process

HIGHLIGHTS
• 42,255 feet of cable were successfully rejuvenated
• Saved $530,161 over estimated replacement costs
• Entire project completed in two months

OVERVIEW
One of AES Ohio’s, formerly Dayton Power & Light, most critical customers is the Dayton International Airport. After one of the main feeder cables supplying power to the airport terminal experienced several disruptions, the utility used Southwire’s Novinium Underground Services Sustained Pressure Rejuvenation (SPR) process to restore 42,255 feet of cable.

THE COMPANY AND SITUATION
AES Ohio is responsible for ensuring the reliability of the Dayton airport’s electrical supply and eliminating any potential electrical cable failures. However, after one of the main feeder cables supplying power to the airport terminal experienced several disruptions, AES Ohio needed a solution to ensure reliable power for this critical customer.

Special concerns for the utility on this project included time, physical and security constraints. The airport wanted the project to be completed in less than two months, and airport security required all on-site personnel to be escorted when on airport property. In addition, the cable involved was both direct-buried and cable in a manhole and conduit system.

EVALUATION PROCESS
AES Ohio chose Southwire’s Novinium Underground Services to rejuvenate both the 1000 MCM and 500 MCM feeder cables supplying the airport. They had worked with Southwire’s Novinium Underground Services on a feeder cable rejuvenation project several years ago, and selected Southwire’s Novinium Underground Services for this project because of their efficient and experienced craft team, ability to complete the project on time, and a post-injection reliability rate comparable to that of replaced cable.

SOLUTION
AES Ohio chose to inject the Cablecure® 732 fluid, using Novinium’s Sustained Pressure Rejuvenation (SPR) process to treat 42,255 feet of 1000 MCM and 500 MCM cable. Southwire’s Novinium Underground Services fielded several crews to ensure the critical time requirements were met. Five crewmembers worked six- and seven-day shifts inside the airport property, while two additional crews worked outside.

RESULTS
This solution, a proven alternative to cable replacement, restored the feeder cable’s dielectric strength for a fraction of the cost and with minimal operational disruption.
• Rejuvenation saved $530,161 over estimated replacement costs.
• The rejuvenated cable has been restored to as-new condition.

“I was very pleased with Southwire’s Novinium Underground Services dedication to the project. They were able to mobilize several crews out here to make sure it got done. They had good people with good experience both on the 1000 MCM cable that we have and the 500 MCM cable that was involved in the project.” - Jeff Dahlinghaus, Operations Manager AES Ohio