Case Study

PLASTICS · PIPE · INSTITUTE®

THE VOICE OF AN INDUSTRY

105 Decker Court, Suite 825
Irving, Texas 75062
Phone: 469.499.1044
www.plasticpipe.org

OVERHEAD POWER LINE REPLACEMENT PROJECT EARNS TOP INDUSTRY AWARD

IRVING, Texas - The Columbia Basin Electric Cooperative recently replaced some 20 miles of overhead conductor with high-density polyethylene (HDPE) Cable-In-Conduit (CIC) in the Condon, Oregon area. Because this installation reduced maintenance and unplanned outages in an area plagued with fog, ice, and other severe weather, it received the Project of the Year Award from the Plastics Pipe Institute, Inc. (PPI) for the organization's Conduit Division.

The Pacific Northwest is known to have highly variable weather. During just a few months, the area can have more than 90 feet of snow in the mountains, 30 inches of rain in the valleys, and summer temperatures in the 90s in the high desert plains. These dramatic weather conditions present numerous challenges for energy providers such as Columbia Basin Electric Cooperative.

"Part of the solution for Columbia was installing the lines underground using HDPE conduit that came ready to go with the cable inside," said Tony Radoszewski, president of PPI, the major trade association representing all segments of the plastic pipe industry.

"Overhead conductors are constantly being exposed to the elements. This exposure to weather extremes such as ice, wind, heat, etc., can result in damage to the cables and eventual failure of the lines, especially in this area of the country," Radoszewski said. "By switching to CIC, the cable is buried underground and is protected by HDPE conduit. This protection significantly reduces the number of failures and often eliminates outage time completely." Southwire Company's SIM*pull*® (CIC), was used. The 1/0 stranded15kV 220 mil EPR installed in 1.5" Schedule 40 Grey HDPE SIM*pull* CIC was delivered to the job site on 2,500-foot reels.

Radoszewski presented the award to PPI member company Southwire Company, LLC (Carrollton, Ga.) during the association's annual membership meeting held in May 2014 in Palm Springs, California for this 2013 project.

Columbia Basin Electric has turned to a protected underground solution using HDPE Cable-In-Conduit

According to the PPI, CIC can provide cost savings when compared to other, traditional methods of installing underground conductor into another type of pipe. With the cable already installed into the duct, plus its availability in long lengths, there is no need for pulling equipment, elbows, glue, etc. This saves both time and money plus improves the overall reliability of the cable life cycle. CIC allows a crew to come and make sure that the

PLASTICS · PIPE · INSTITUTE®
THE VOICE OF AN INDUSTRY

105 Decker Court, Suite 825
Irving, Texas 75062
Phone: 469.499.1044
www.plasticpipe.org

job is done correctly because they no longer need to worry about pipe joints that may be improperly installed or conduit that is full of mud or water. CIC also allows them to move in and out of a job more quickly which, in turn, saves the customer money versus using traditional methods of conduit installations. The Columbia Basin EC project was installed during a two week period in 2013 using both trenching and plowing.

The Columbia Basin Electric replaced some 20 miles of overhead conductor with high-density polyethylene (HDPE) Cable-In-Conduit in the Condon, Oregon area. Do so reduced maintenance and unplanned outages in an area plagued with fog, ice, and other severe weather.

"Putting utility wires underground is a practical and necessary thing to do," offered Radoszewski. "It eliminates interrupted power services due to weather or accidents such as a car hitting a pole. Plus, it protects workers and citizens. And on the 'green side', it saves the community's beautiful trees from costly and gross trimming practices and eliminates the need to cut down others to make the many wooden poles that will eventually rot and crack necessitating replacement. Electrical co-ops in the United States buy nearly 800,000 wooden poles each year! Now just think of many fewer poles Columbia Basin EC will have to purchase and replace, and how much happier its customers will be."

For more information, visit the Plastics Pipe Institute website: www.plasticpipe.org.

# # #

About PPI:
The Plastics Pipe Institute Inc. (PPI) is the major trade association representing all segments of the plastic pipe industry and is dedicated to promoting plastics as the material of choice for pipe applications. PPI is the premier technical, engineering and industry knowledge resource publishing data for use in development and design of plastic pipe systems. Additionally, PPI collaborates with industry organizations that set standards for manufacturing practices and installation methods.