By Paul Peirce Saturday, Nov. 17, 2012

Engineer: Bad cleaning likely caused electrocution

West Penn Power Co. crews did not properly clean an electrical power line connection before installing it behind a Westmoreland County woman's home, causing it to fall and electrocute her in 2009, an engineer told an Allegheny County jury Friday.

Chris Havlik of Hubbell Electrical Products Co., which manufactures splice connections for utility companies, testified remnants retrieved from the downed line that killed Carrie Goretzka showed crews did not "wire brush" the connection before installation.

Under questioning by the Goretzka family's attorney, **Shanin Specter** of Philadephia, Havlik, of Birmingham, Ala., told jurors the materials left on the outside of the wires caused the connection to overheat, corrode and finally fall.

The 7,200-volt line fell on top of the 39-year-old Goretzka on June 2, 2009, outside her Hempfield home at 23 W. Hempfield Drive in full view of her two daughters, Cloe, then 4, and Carlie, then 2, and her mother-in-law, Joanne Goretzka.

Carrie Goretzka died three days later at UPMC Mercy Hospital in Pittsburgh after suffering burns on 85 percent of her body.

Havlik testified in the second day of trial for a wrongful death lawsuit brought by Goretzka's family, including her husband, Michael, against the utility company. The lawsuit seeks unspecified damages.

Havlik was part of a team from Hubbell that examined pieces of the failed line at the request of the utility following the accident. He confirmed the team's findings in a letter sent to Allegheny Power standards engineer Jill A. D'Angelo.

"Poor cleaning probably started the problem by causing the splice to run hot," the letter states.

D'Angelo is expected to testify.

Jurors were shown a copy of the letter the Hubbell team sent to West Penn. They viewed pieces of the downed wire, shown by Specter on a 12-by-12-foot overhead projection screen erected in the courtroom.

Havlik explained that the corrupt materials on the wires, including oxides in a splice, will speed the corrosion rate of the lines "until internal arcing caused this failure."

Havlik disputed the utility's claims that crewmen using a knife could properly clean the connections prior to installation. West Penn is owned by FirstEnergy Corp. of Akron.

"Will a knife properly clean the connection?" Specter asked.

"No. It will only scratch the outer surface and the inside strands will still have oxidation. It will allow more corrosive materials to form," Havlik said.

Specter then had Havlik point out other connections made along the same line that remained intact. Havlik noted those connections were made 10 years earlier than the failed connection, which was strung in 2004. The earlier connections still showed markings indicating they had been properly cleaned with a wire brush.

Jurors watched a training video Hubbell provides to utility companies to explain how to properly splice the lines. The video warns to "never install" a connection "without wire brushing, no matter how clean it looks."

Havlik said utility companies can use infrared equipment to locate faulty connections, or "hot" line connections.

Under cross-examination by West Penn attorney Avrum Levicoff, Havlik said that the 2009 failure was the only such connection burn he's seen during his career at Hubbell involving that specific model of splicing equipment.

He estimated that electric utilities in the United States and Canada have about 10 million such connections in use today.

"So you're telling this jury that the other 9,999,999 connections were all well-brushed?" Levicoff asked.

"I can't answer that," Havlik said.

The trial resumes Monday before Judge Michael A. Della Vecchia.