By Paul Peirce Wed. November 28, 2012

Professor: Failure to clean power line connection helped cause Hempfield woman's electrocution

A metals expert told an Allegheny County jury Tuesday that a 7,200-volt power line failed and electrocuted a Hempfield woman in 2009 because a connection was not properly cleaned before it was installed five years earlier.

Dr. Campbell Laird, professor emeritus in material sciences at University of Pennsylvania's School of Engineering, testified in a wrongful death lawsuit that his examination of pieces of the failed line showed it corroded at a splice after West Penn Power Co. crews first erected it in 2004 outside the home of Carrie and Michael Goretzka on West Hempfield Drive.

"Why did that line fall on a calm and sunny day on June 2, 2009?" attorney Shanin Specter of Philadelphia asked Laird.

"It came down because it was given a start degrading by not having been cleaned properly. You see no signs of wire brushing on it," Laird said.

By failing to clean the connection first with a wire brush as its manufacturer suggested, Laird explained to the jury that the failed connection was able to "pick up impurities from the environment, giving it a strong potential to decay over time."

The line subsequently burned off at the connection and fell onto Carrie Goretzka, 39, as she stood outside her home using a cell phone to call authorities about the power outage. She died of her injuries three days later at UPMC Mercy in Pittsburgh.

Her husband, Michael, and daughters, Chloe, 8, and Carlie, 6, filed a wrongful death lawsuit against the utility, now owned by FirstEnergy of Akron, Ohio. Chloe and Carlie witnessed the accident along with Carrie's motherin-law, Joann.

Laird testified in the seventh day of the trial. He told jurors that the "red-hot" line was about 1,300 degrees Fahrenheit when it struck Carrie Goretzka.

Power company attorney Avrum Levicoff of Pittsburgh extensively questioned Laird about whether rain and snow could enter the splice. He referred to Laird's analysis that there was evidence of sulfur and chloride particles inside the splice.

"They don't have a mechanism to completely seal out rain," Laird said.

Laird concurred with Levicoff's assessment that sulfur and chloride are components of acid rain, which also

corrodes metal.

Levicoff questioned Laird about a 49-page report he prepared in September on the line's failure that omitted "microscopic photographs" of other splices along the same line that indicated some of the connections were wire-brushed.

When West Penn Power begins its defense in the case later this week, Levicoff is expected to summon his own metallurgists to testify that microscopic examinations of some of the splices indicate they were cleaned with a wire brush before they were installed.

The trial is expected to resume Wednesday morning before Judge Michael A. Della Vecchia.