

On March 23, 2013, several hot spots developed in the chute of Coal Silo #3 to Coal Feeder F in Unit 1, while the Unit was down on forced outage. The coal had been static in the 1,200 ton silo for over 2 weeks and the hot spots were discovered by a boiler operator when he tried to clear the feeder off for calibration. A thermal imaging camera detected temperatures of 125°F to 135°F on the outside steel casing of the chute. It was fortunate that we just had Silo/Bunker Bulk Storage Firefighting Best Practice training provided by Hazard Control Technologies, Inc. and bought an HCT Piercing Rod with some F-500 Encapsulator Agent (EA). Based on the training, we were aware of the volatility and explosive nature of this hazard, as well as how to properly approach and mitigate the hazard. Due to the training, our incipient fire brigade team was confident as we implemented the firefighting best practices. We used the HCT Piercing Rod and 1% F-500 EA solution to cool the hot spots from the top of the chute. Once the HCT Piercing Rod was inserted and F-500 EA solution started flowing and penetrating the coal, we saw the temperature drop immediately through the thermal imaging camera. We let the solution soak the coal for about 10 minutes and were then able to safely empty the coal chute. I am very pleased with the performance of the HCT Piercing Rod and F-500 EA solution, as well as the training that allowed us to apply the knowledge gained to confidently mitigate this hazard.

Weili Yu, Material Handling area manager

AES Puerto Rico

787-866-8117