## Consol Energy Research Shows Coal Milling Technology Reduces Toxic Emissions While Plant Data Documents Significant Increase in Available Power

January 28, 2013, Techinomics, Inc. today released a final report on late 2012 testing conducted at a major coal-fired power plant in the Western United States. The data analysis and combined final report were issued by Consol Energy R&D Laboratory in South Park, PA.

During the study, Consol Energy analyzed the pyritic rejects of two pulverizers sharing the same coal and primary air supply. One was equipped with Techinomics rotating throat technology, the second with another rotating throat technology.

Consol found that the Techinomics equipped pulverizer consistently rejected two to ten times more total pyritic rock during each test period. In addition, Techinomics rejects averaged less than 10% carbon (coal) content while the other pulverizer rejects contained between 30% and 35% coal content. Because of the strong correlation between pyretic rock and mercury/arsenic concentrations, significantly larger volumes of these toxic metals were removed pre-combustion by Techinomics in comparison to the competing throat technology. Consol Energy's testing also documented Techinomics rejects having significantly higher concentrations of limestone, sandstone and silicon, substances that not only cause breathing difficulties but also equipment damage and increase maintenance costs if not removed.

The utility plant's testing department validated that the Techinomics technology used 7.9% less primary air flow than the other system and significantly reduced pulverizer system amperage required during the milling process. The related reduction in pulverizer system amperage usage means more than two additional megawatts of available power with Techinomics - every hour of operation.

The full report can be seen at: <u>www.techinomics.com</u>

Techinomics, headquartered in Pittsburgh, PA designs and installs pulverizer rotating throat systems that are in use in coal burning utility plants throughout the world.