

ENEL I&R EXPERIENCE ON MERCURY BEHAVIOR ACROSS THE FLUE GAS TREATMENT SYSTEMS IN FOSSIL FUEL POWER PLANT

M.L.V. Di Blasi, S. Gasperetti, C. La Marca

silvia.gasperetti@enel.com

ENEL Ingegneria e Ricerca, Via A. Pisano 120, Pisa, Italy

Mercury emission control for fossil-fired facilities is not a one-size-fits-all technology.

The mercury emission reduction is based on the co-benefit effect of technologies designed to control other pollutant emissions (NO_x , PM and SO_x) and/or on specific technologies such as activated carbon injection, halogen addition to increase mercury removal and specific additive to minimize elemental mercury re-emissions.

Enel Research has a long experience on mercury monitoring and emission reduction in fossil fuel power plant, started in the early '90s

The projects have investigated different issues ranging from measurement methods to implementation of new emission control technologies, such as catalytic oxidation at low/high temperature, sorbent injection in DeDust systems and additive for w-FGD technologies.

An overview of the main achieved results will be presented, focusing on mercury monitoring, specific technologies and synergic effect of the existing flue gas treatment systems under coal-fired and co-combustion regime.

10.4405/profic2014.C15