LIMESTONE WET SCRUBBING OF SULFUR DIOXIDE FROM POWER GENERATION FLUE GAS FOR HIGH AND LOW SULFUR FUELS. Robert J. Gleason, Research-Cottrell, P.O. Box 750, Bound Brook, New Jersey 08805; Frank Meacock, Arizona Public Service Company, P.O. Box 21666, Phoenix, Arizona 85036.

Limestone wet scrubbing has become the first process approach for sulfur dioxide emission control on coal-fired power generation boilers. Systems under development have been concerned primarily with operational reliability while SO_2 absorption efficiency has been given secondary treatment. Pilot plant studies on high and low sulfur fuels using packed tower absorbers have shown the inlet SO_2 concentration and slurry composition as significant factors in the removal efficiency and operational reliability. Mass transfer coefficients have been developed for a wetted film packing. Variable height packed absorbers can provide high absorption efficiency for both high and low sulfur fuels. Hence, compliance with state and federal regulations can be achieved even in the extreme low sulfur coal conditions.