

SUCCESS STORIES DUKE ENERGY

CAYUGA STATION UNITS 1 & 2 SCR PROJECT

LOCATION CAYUGA, IN, U.S.A.
CAPACITY (2) 525 MWS
CONTRACT SELECTIVE CATALYTIC REDUCTION (SCR) SYSTEM

PROJECT OVERVIEW

Riley Power was contracted to design, procure, fabricate and deliver two (2) complete Selective Catalytic Reduction Systems (SCRs) to control NO_x emission from two (2) Combustion Engineering, coal fired units ranging in capacity from 260 - 525 MW.



RILEY POWER SOLUTION

Riley supplied reactors, ductwork, two layers of plate catalyst and one spare layer, complete anhydrous ammonia system including unloading stations, ammonia tanks (2 each at 30,000 gal), forwarding and injection skids, NO_x and NH₃ slip monitoring systems and large particle ash (LPA) removal system.

- + Two reactors per boiler - 41'-7" L x 41'4" W
- + Three layer reactor - Two layers of Johnson-Matthey plate catalyst initially installed and one spare layer
- + Total duct/reactor weight - 1.9 million pounds per unit

PERFORMANCE MEASUREMENTS

NO _x Removal	> 90% at High Load
Avg. NH ₃ Slip	< 2 ppmvd @ 3% O ₂
SO ₂ to SO ₃	< 0.5%
NH ₃ /NO _x Dist.	All pts < 5% from average

