







CASE STUDY:

DESERT VIEW POWER STATION

DSI Sorbent Savings with Gas Blender® Technology





GAS BLENDER® INSTALLATION FOR SORBENT REDUCTION

PLANT OVERVIEW

OUTPUT: 45MW

FUEL: Woody biomass **EQUIPMENT:** 2 CFB boilers

Single turbine 2 baghouses

SORBENT: Hydrated lime

CASE BACKGROUND

- Boiler MACT resulted in significant HCL compliance challenge.
- Injection system modeling and analogous applications indicated 500#/hr (250#/boiler/hr) hydrated lime requirement
- Once operational, system required 900#/hr hydrated lime.
- Sorbent usage exceeded operating expense exceeded budget by 80%

CASE DATA

- 8 specialty hardened Gas Blender® mixers installed April 2017
- Significant savings realized immediately
- 600 #/hour (300 #/hr/boiler) sorbent usage (i.e., 33% sorbent reduction)
- Pressure drop within expected range
- Installation during scheduled outage. No installation issues.

PAYBACK ANALYSIS

- Equipment costs recouped in 71 days
- 2.3 months payback (does not include installation costs - plant installed units themselves)
- Logistics problems reduced significantly (i.e. truck traffic, material storage, etc.)

