Recently Advanced Manufacturing & Power Systems, Inc. (AMPS) performed a RICE/NESHAP upgrade to two 2000 kW generator sets in Clearwater, Florida. The customer, a major multimedia corporation, had been taking advantage of the power company's interruptible rate pricing structure. Due to the requirements of the EPA's RICE/NESHAP legislation the customer would be in violation of the law to remain on the program with the generator engines as they were originally built. Their options were to either come off the program or lose a significant rebate every month, or to install catalytic controls to reduce the exhaust emissions by 75%.

The customer evaluated the loss of revenue vs. the total installed cost of the emissions control system and determined it was well worth the investment to install the catalysts and remain on the program. To perform these upgrades the customer chose the skilled personnel of AMPS.

AMPS selected MIRATECH, a leader in emissions control equipment, to work with on this project. MIRATECH evaluated the existing engine emissions, sized, packaged, and supplied the appropriate catalyst units to AMPS.

AMPS coordinated with the customer to perform the catalyst install on each engine, one at a time, since these units also serve as backup power to the facility. Over the course of three days, and working 15' above grade on scaffolding, the AMPS team cut out existing piping, installed new mating flanges and installed the new exhaust catalysts. In addition to the catalysts, new closed crankcase breather systems were installed. These are required by the EPA legislation to capture any crankcase ventilation blowby and further reduce emissions to the atmosphere.

Along with the catalysts and crankcase breather capture equipment, catalyst monitoring panels with sensors were provided and installed. These sophisticated panels monitor the catalyst performance on a continuous basis to ensure proper operation is maintained.

To verify that the system was performing properly after the installation AMPS had an emissions test performed on each of the generator sets. While some companies may perform self-testing of the exhaust emissions, AMPS contracted with a third-party, certified air quality testing laboratory to perform emissions sampling before and after the catalysts to document that the generator sets were now in compliance with the EPA RICE/NESHAP requirements. By having an outside company document the testing there is never a question that the customer is in compliance.

AMPS is proud to have been selected to bring the customer's generator sets into compliance, which allows them to continue saving money on their operations!