



SUCCESSFUL SOLUTION

YC Power Provides McVicar Pump Station / Southern CA Water Municipality with a Diesel Powered Standby Emergency Backup Generator Solution

Application Background: Upgrade of existing booster station, equipped with 2-125hP pumps, required due to additional water customer demand. In addition to upgrading the water pumping capacity with an additional 125Hp electric pump motor, the replacement of the existing Standby Generator was needed due to the additional pump motor required for this booster station. Also, the diesel engine powering the existing generator package, no longer met the newly imposed air quality standards mandated by the local air district. The new generator package would need to meet the electrical starting requirements of the upgraded electric pump motors as well as meet the new, more stringent, air quality requirements. Since there are residences close by there would also be noise limitations for the upgraded plant and genset.



Solution: With the help of YC Power Systems and Generac's EPG Design Pro (generator sizing software) the sizing of the new generator was not a problem. After inputting the three 125HP motor loads, along with the site accessory loads, into the sizing program the recommended genset was Generac's 500 kW diesel model SD500. Meeting the sound requirements was achieved by providing Generac's Level 2 Sound enclosure which offers a sound level of 75 dBA while fully loaded and measured @23'. The emissions requirement was a bit more complicated but YC Power Systems' EPG account manager Paul Crafts, working with Miratech Group LLC, was able to easily meet the new air quality requirements by providing a Miratech Diesel Particulate Filter (DPF) and data logger. The upgraded booster plant now meets the growing water demands and the Emergency Standby Generator meets the Air District emissions requirements as well as the local sound ordinances.

Benefit: Meeting the requirement for the booster station to stay compliant by upgrading the water pumping capacity with an additional 125Hp electric pump motor as well as updating the existing generator in order for this station to stay compliant and meet the newly imposed air quality standards mandated by the local air district. All this as well as meeting the noise limitations with the new upgrade plant and genset because of the nearby location of residential homes.