

Colorado River Commission
ACTION PLAN

OW

2007 – 2008 Progress Report

1. The renovation of one set of rotating elements and synchronous motor at our Booster Pumping Plant was completed in 2008.
2. Completed the installation of one solid state exciter at our Booster Pumping Plant in 2007 and one in 2008.
3. Completed the upgrade of the pump room lighting at both of our pumping plants which includes the replacement of the existing 500 watt incandescent lamps with fluorescent fixtures equivalent to a 400 watt metal halide high bay fixture. This will save approximately 5,000 kWh per year.
4. The renovation of one of our vertical turbine pumps at our Intake pumping plant was completed in 2007. Rebuilds of the high efficiency pump reduces energy consumption over the previous pump design while maintaining similar flow rates.

Short-Term 2009 - 2010

1. We will complete the replacement of one motor-generator set with a solid-state exciter at our Booster One pumping plant in 2009 and 2010. When installed, the solid-state exciter will monitor and automatically maintain unity power factor for the synchronous motor to which it is connected. The replaced motor-generator sets had no automatic capability to adjust output to maintain unity power factor.
2. Continue with the upgrade program to complete the replacement and/or renovation of our existing pumps with high efficiency designs at both of our pumping plants. We remain on schedule with one unit to be renovated at each location in 2009 and 2010.

Long Term 2011 – 2014

1. Continue with the renovation of one Booster pumping plant drive motor and associated centrifugal pump rotating elements (two for each drive motor).
2. Continue with the annual renovation of one vertical turbine pump and motor each year at our Intake facility.
3. Complete the replacement of the final motor-generator set with a solid-state exciter for the remaining synchronous motor at our Booster One pumping plant in 2011. The cost for each solid-state exciter is approximately \$80,000 per unit.