

## Kennedy Industries Restores the Largest Pumps in Michigan

**Problem:** Two cooling tower pumps at a nuclear power plant were operating at low efficiency due to wear, and a recent system change that reduced the required flow. The pumps were in service for 14 years and needed attention.



**Solution:** The Kennedy team worked around the clock to remove, rebuild, upgrade, and install both pumps in just 20 days. The project had some key benefits for the client. It developed a procedure for vertical tear down and assembly that improved safety, and reduced on-site work time by several days. Kennedy coordinated all repair logistics and 10 semi-trucks to transport components to and from Kennedy Industries. Kennedy trimmed and under-filed the 98" impellers by 6% to shed 864 BHP, this resulted in a 4 million Kw hours per year savings. The 12,000 lb. impellers were then balanced to 4W/N to ensure smooth operation. All pump components were glass bead blasted to bare metal at our facility to allow N.D.E. (Non destructive examination) inspection and precision measurements of all critical diameters. Kennedy Industries also witnessed all installation and start up to ensure 100% customer satisfaction. Each pump weighed 233,000 lbs., had a discharge size of 96", and had an initial capacity of 205,000 GPM at 90 ft. The 7,000 HP-253RPM pump motors weighed in at 86,000 lbs. each. These pumps were the largest ever rebuilt at Kennedy Industries and the project was a complete success.