In 2001, the Cedar Bayou Plant launched a comprehensive monitoring program for its two charge gas compressors and two refrigeration compressors.

The process monitoring program uses existing resources and software to:
- Increase compressor efficiency by lowering turbine steam usage.
- Increase compressor reliability by detecting problems early.

The program continually gathers process data and calculates variables such as heat transfer coefficients for access by more than 300 individual PCs throughout the plant.

The program has supported improvements such as on-line cleaning of surface condensers and installation of a “jump over,” which provides colder, high-pressure water to the condensers to improve performance and reduce fouling.

**Benefits**

- Increases compressor efficiency (saves up to $180,000 per year for every 1% increase in efficiency).
- Requires no capital funding (uses existing plant resources and software).
- Saved approximately $5,000,000 in throughput by prompting on-line cleaning of the surface condensers.
- Reduces frequency of circumstantial unit shut down.