



Notes:

The slide provides an example for the importance of using accurate performance information. The utility used incorrect performance information from the manufacturer (**red curve**), which led to thirty-five years of inefficient operation at 16.5 MW (**green line**). At this load, the units were operating about seven percent below the best efficiency, with resulting losses worth more than \$11,000,000 over the thirty-five year period. Without the benefit of the updated performance characteristics (**blue curve**), the plant's maintenance supervisor had tried for years, unsuccessfully, to convince the utility's management that the units should be operated at the low vibration "sweet spot" between eight and nine MW.

Reference:

Almquist, C. W., P. A. March, and H. Franseen, "The Sliding Gate Method: A Better Way of Turbine Efficiency Testing," *Hydro Review*, May 1997.