FISCAL YEAR 2007 SHORT-TERM INDUSTRY TRENDS RESULTS

The annual industry trend analysis compares the data for the most recent year with established short-term "prediction limits." The prediction limits are 95th percentiles of predictive distributions for the data. The predictive distributions are statistical probability distributions that describe expected future performance. They are derived from performance during "baseline" periods for each performance indicator (PI). Baseline periods are periods for each PI during which the data can be regarded as fairly constant and indicative of "current" performance. There is no requirement for favorable trends to continue, and any adverse trends would need to be reversed. Therefore, for each PI, a series of trend analyses was performed to identify, if possible, a baseline period in which no statistically significant trend exists. In the Industry Trends Program (ITP) methodology, the minimum baseline period is at least 4 years, ending in the year with the most recent data (initially fiscal year (FY) 2002). If the most recent 4-year period satisfies the criteria, then the most recent 5-year period is considered. Successively longer periods are selected, as long as the statistical models fit and the test for trends shows little evidence. In the current methodology, whenever a new baseline period is sought, the period selected is the one that shows the least evidence of a trend. The results of the evaluation of the FY 2007 ITP PIs using the established prediction limits are provided below followed by plots of each PI with its FY 2007 data and associated prediction limit.

No PI exceeded its associated prediction limit in FY 2007 as shown in the following graphs.
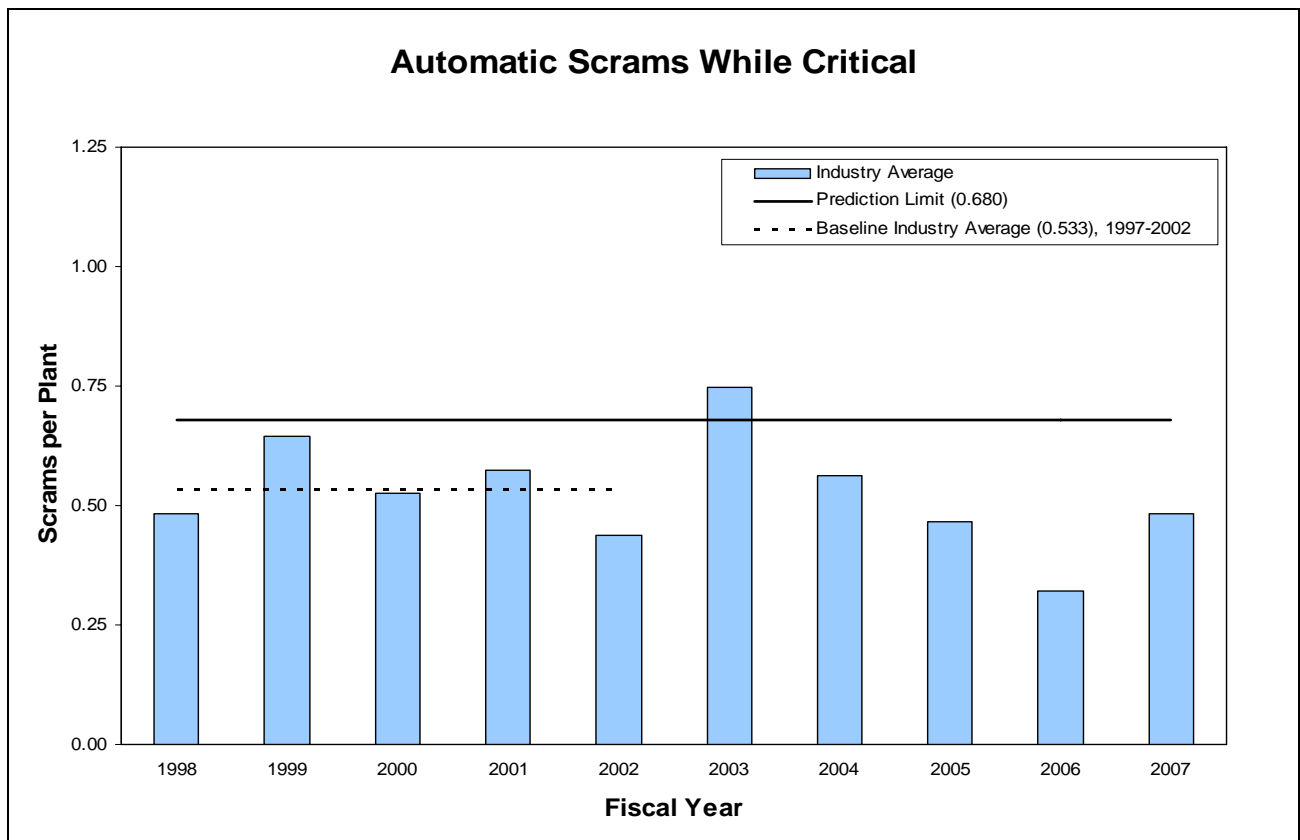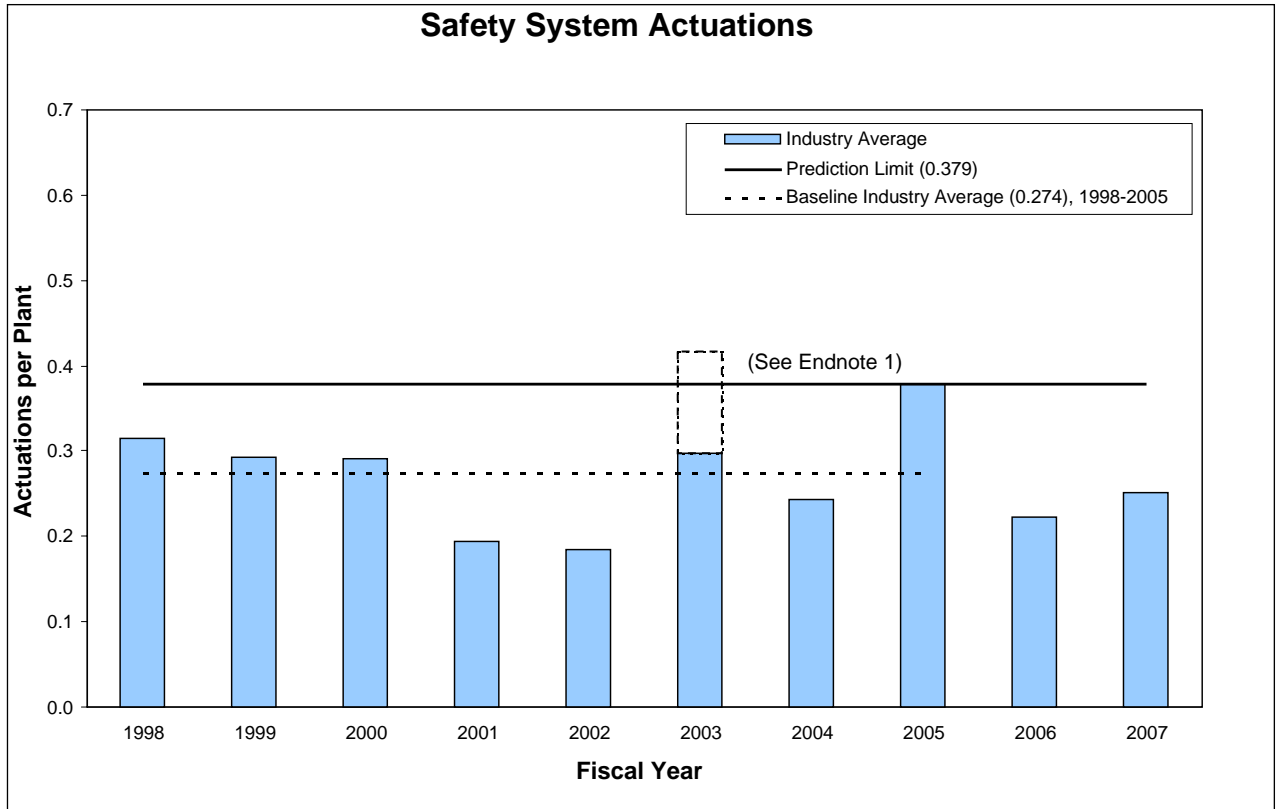

Figure 1 Automatic scrams while critical
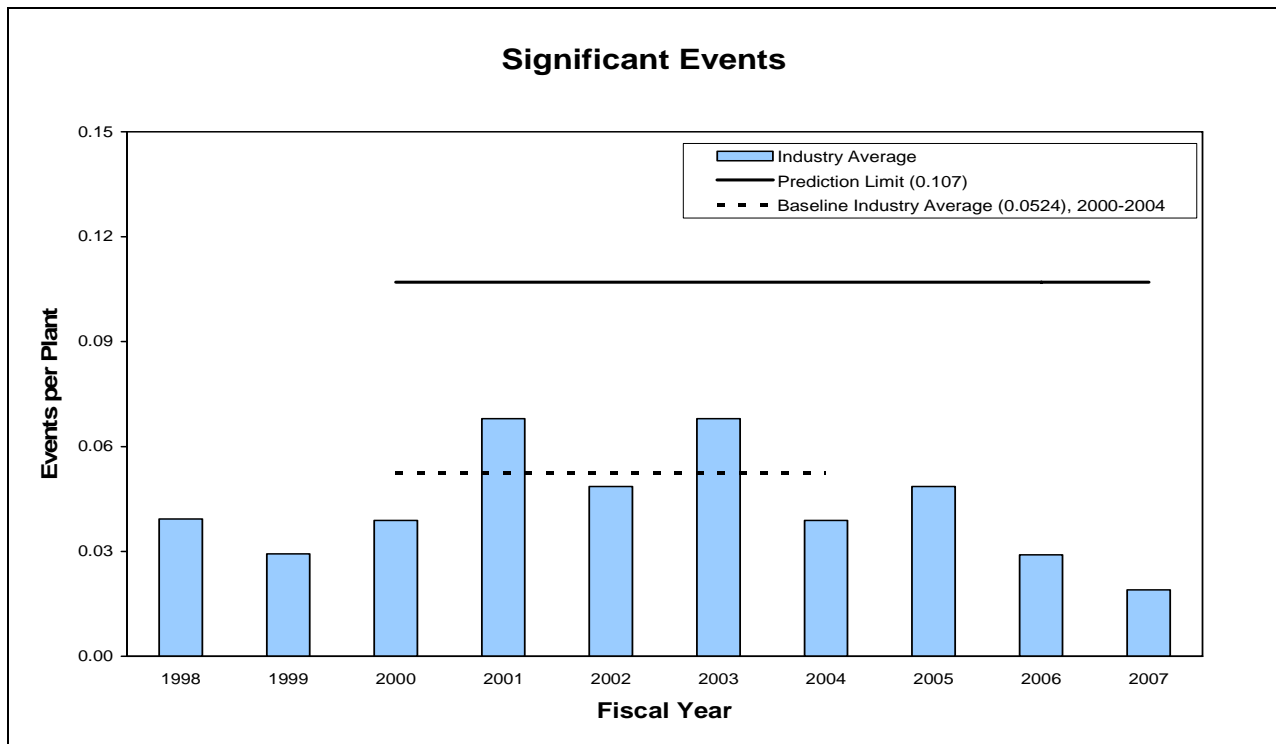
Figure 2 Safety system actuations
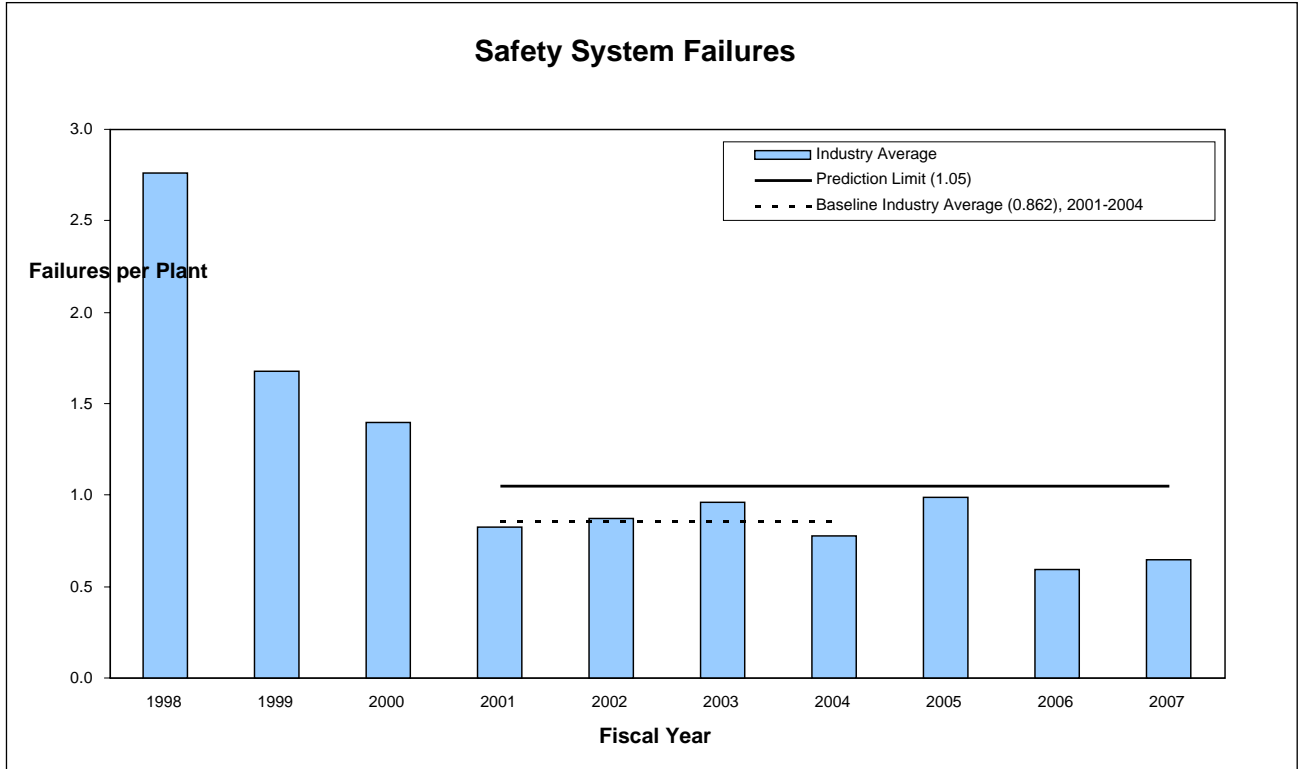

Figure 3 Significant events

Figure 4 Safety system failures
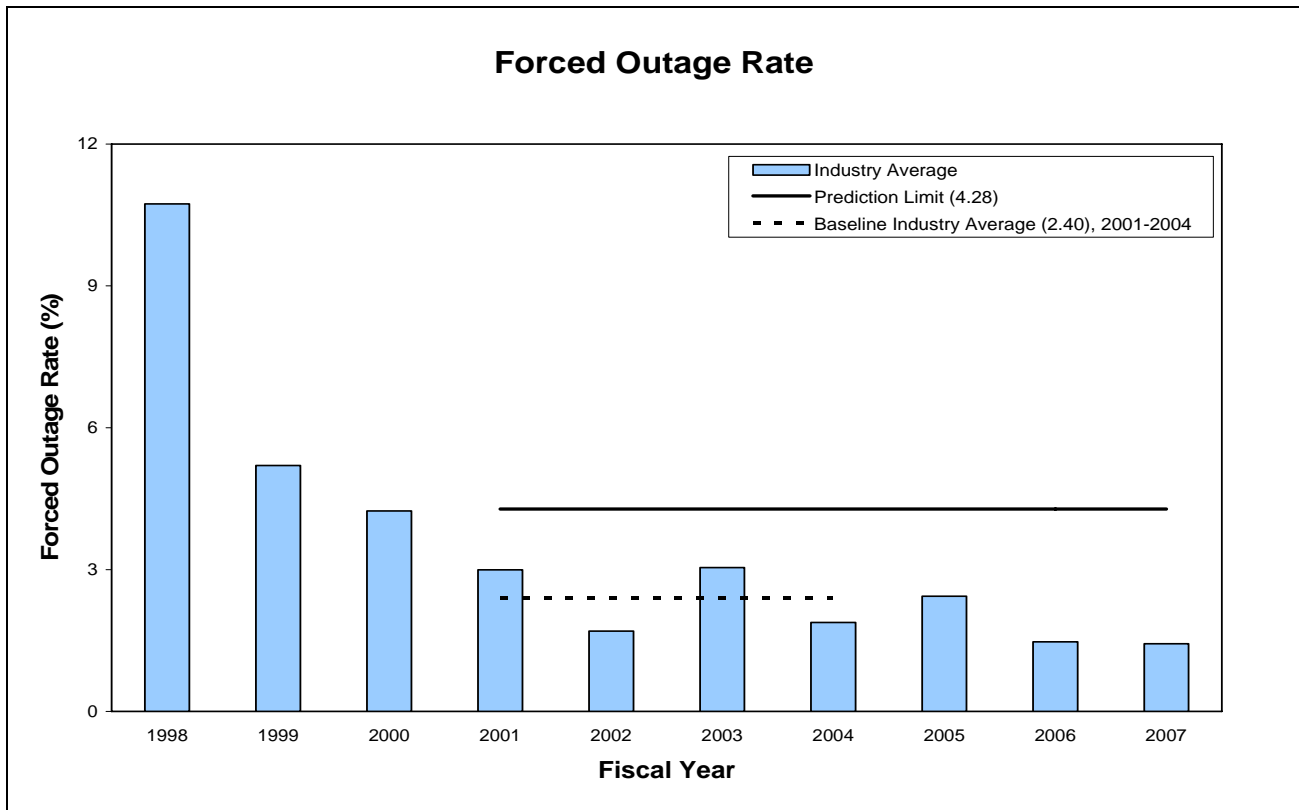
Figure 5 Forced outage rate

Equipment Forced Outages/1000 Commercial Critical Hours
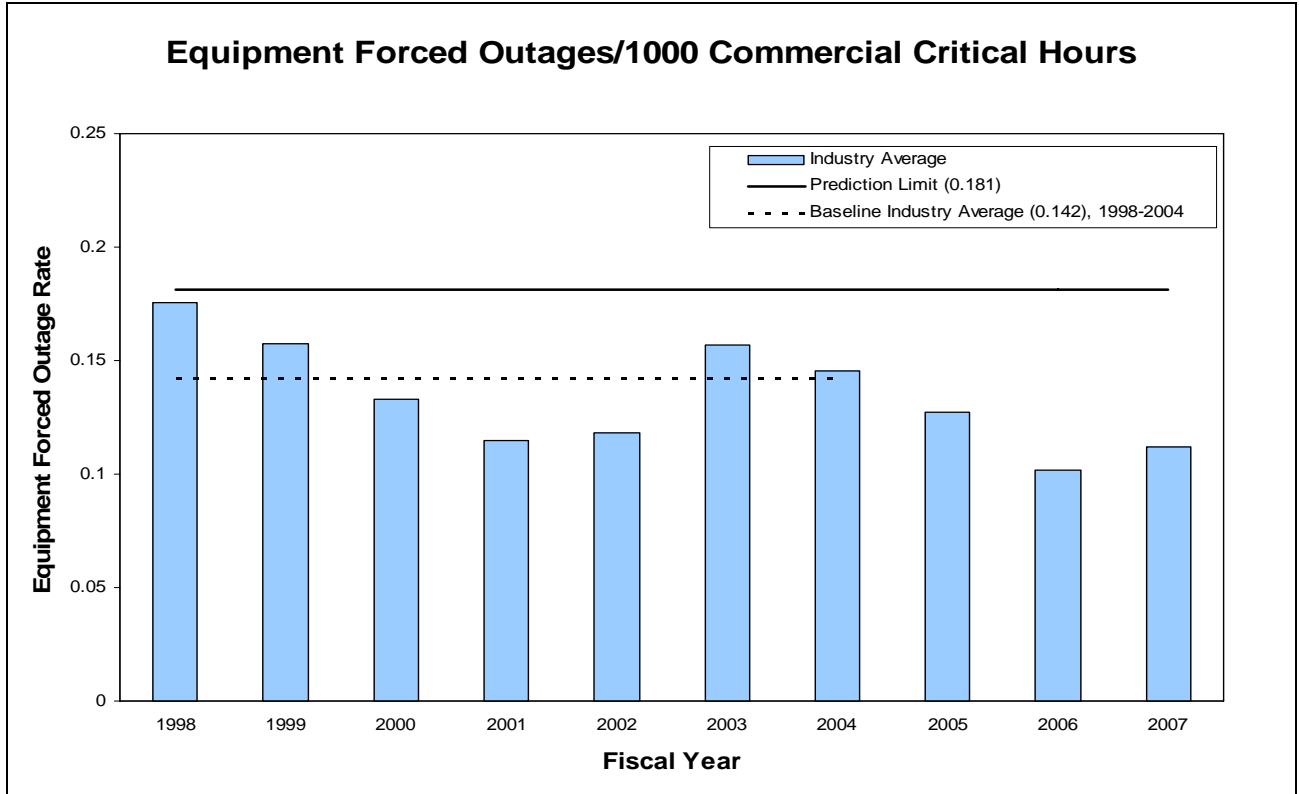
Figure 6 Equipment forced outages per 1000 commercial critical hours

Collective Radiation Exposure
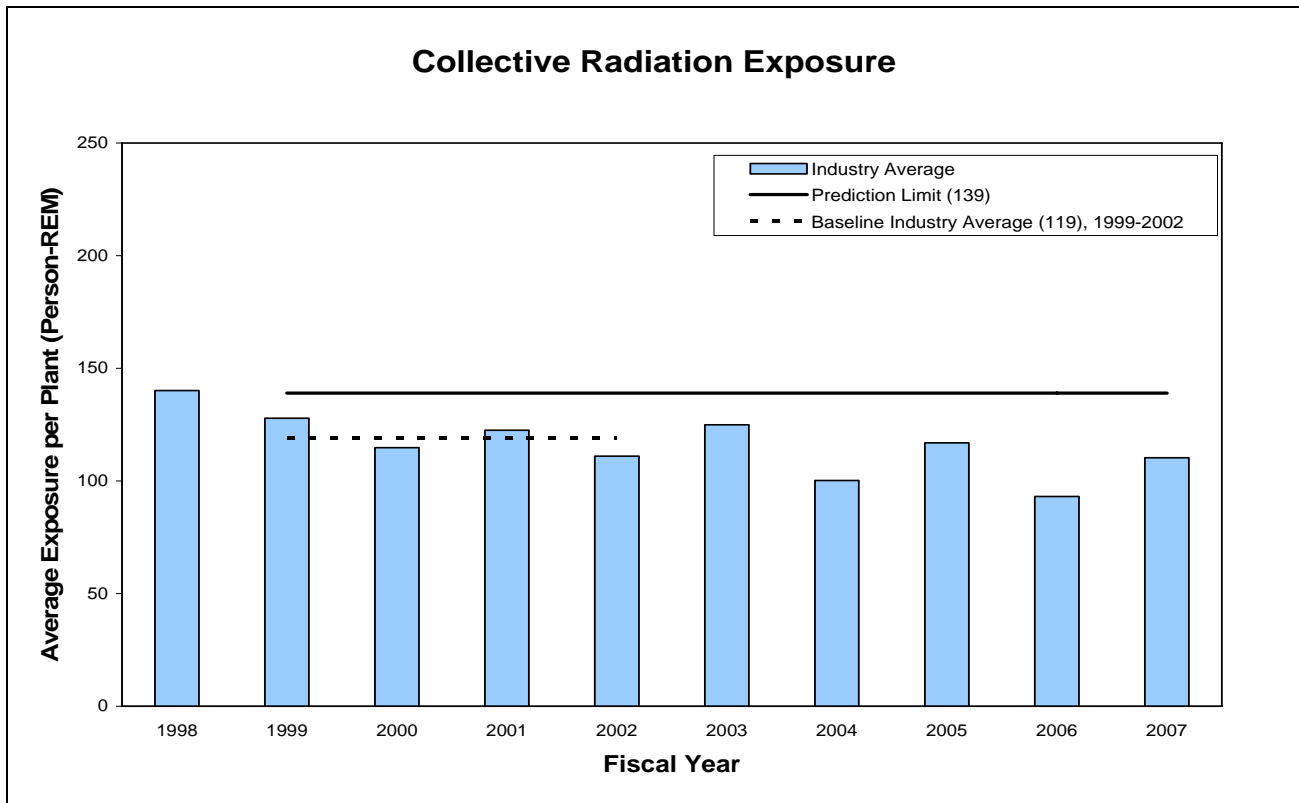
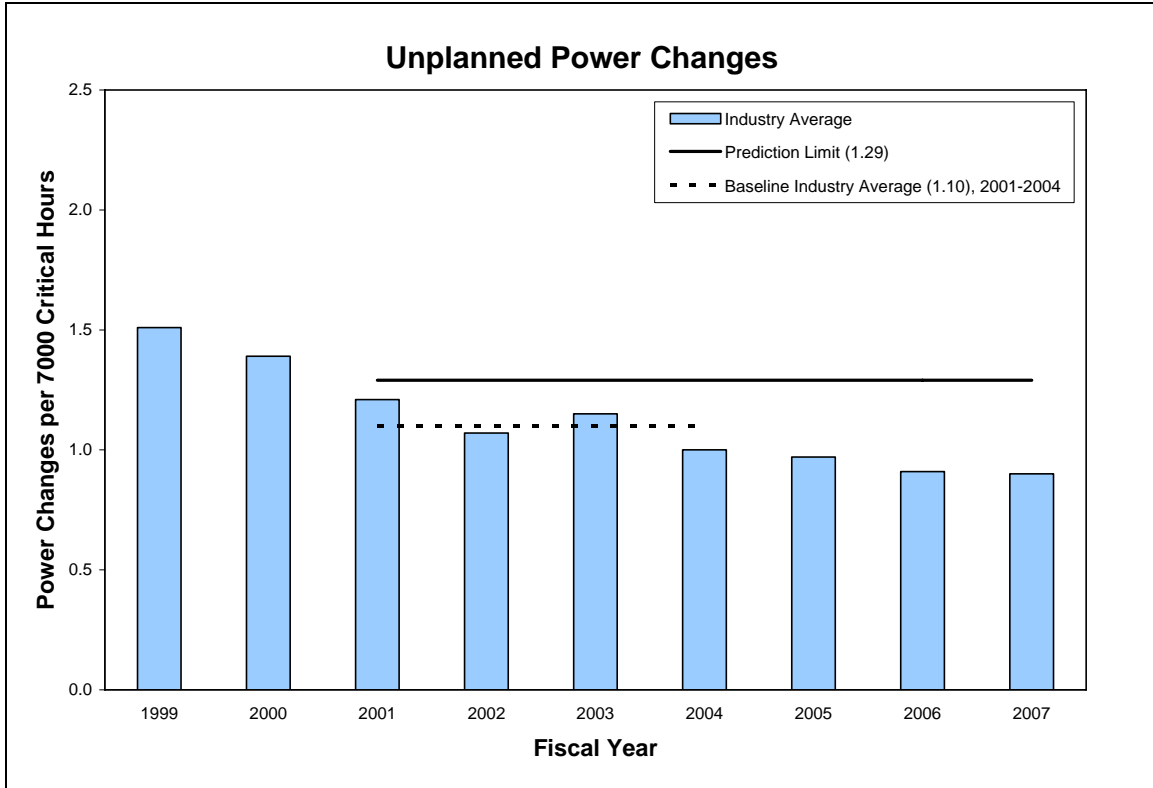**Figure 7 Collective radiation exposure**

Unplanned Power Changes

Figure 8 Unplanned power changes per 7000 critical hours

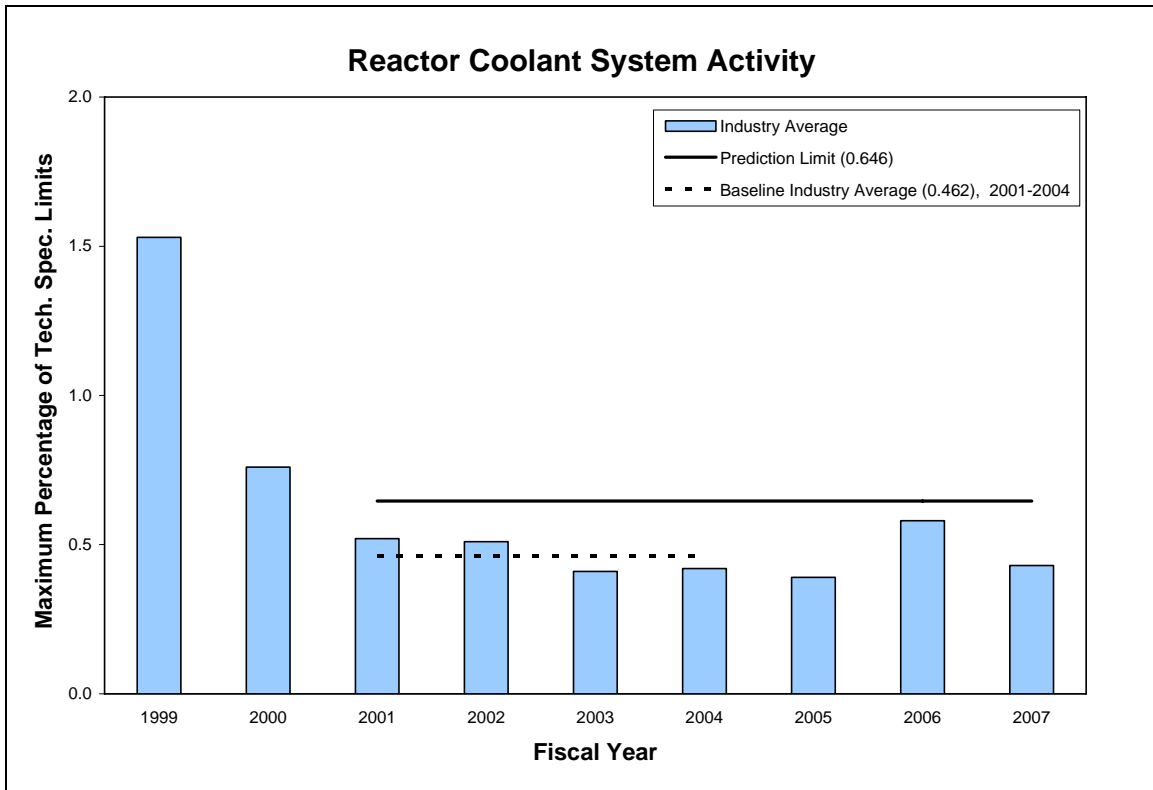**Reactor Coolant System Activity**

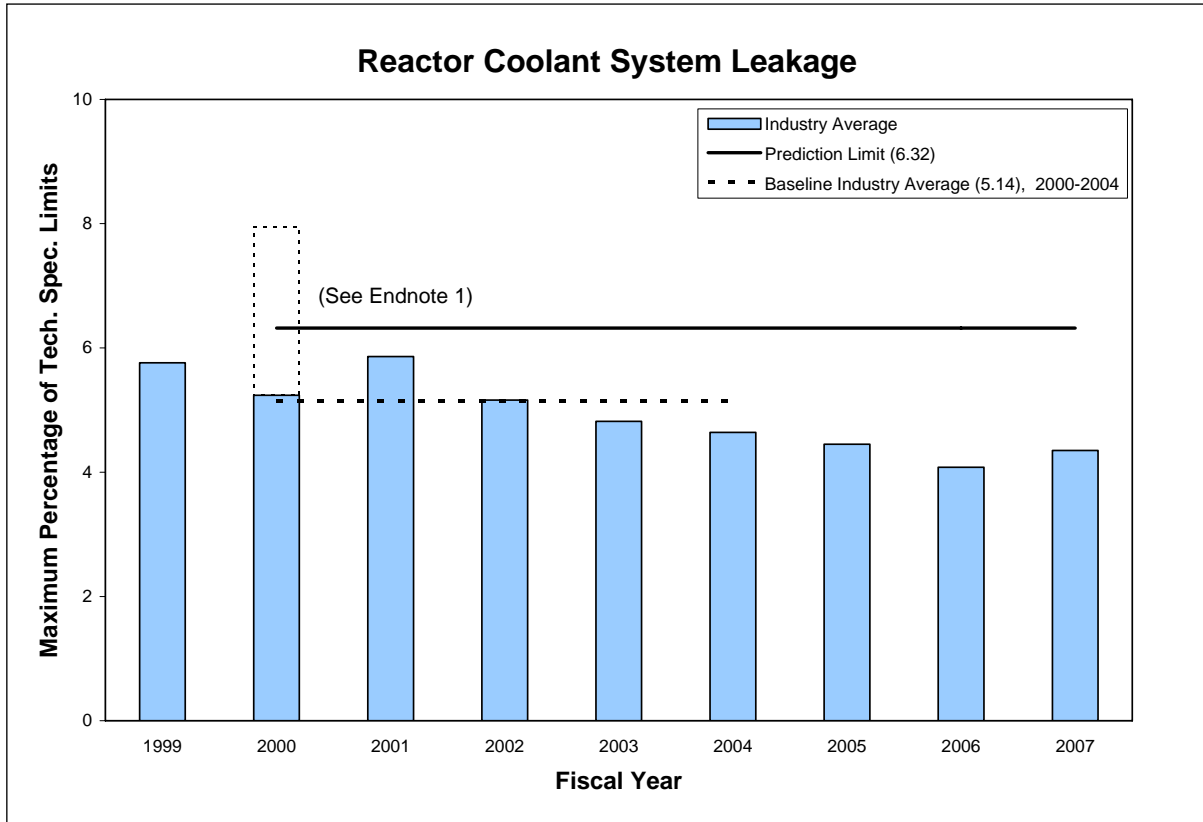**Figure 9 Reactor coolant system activity**

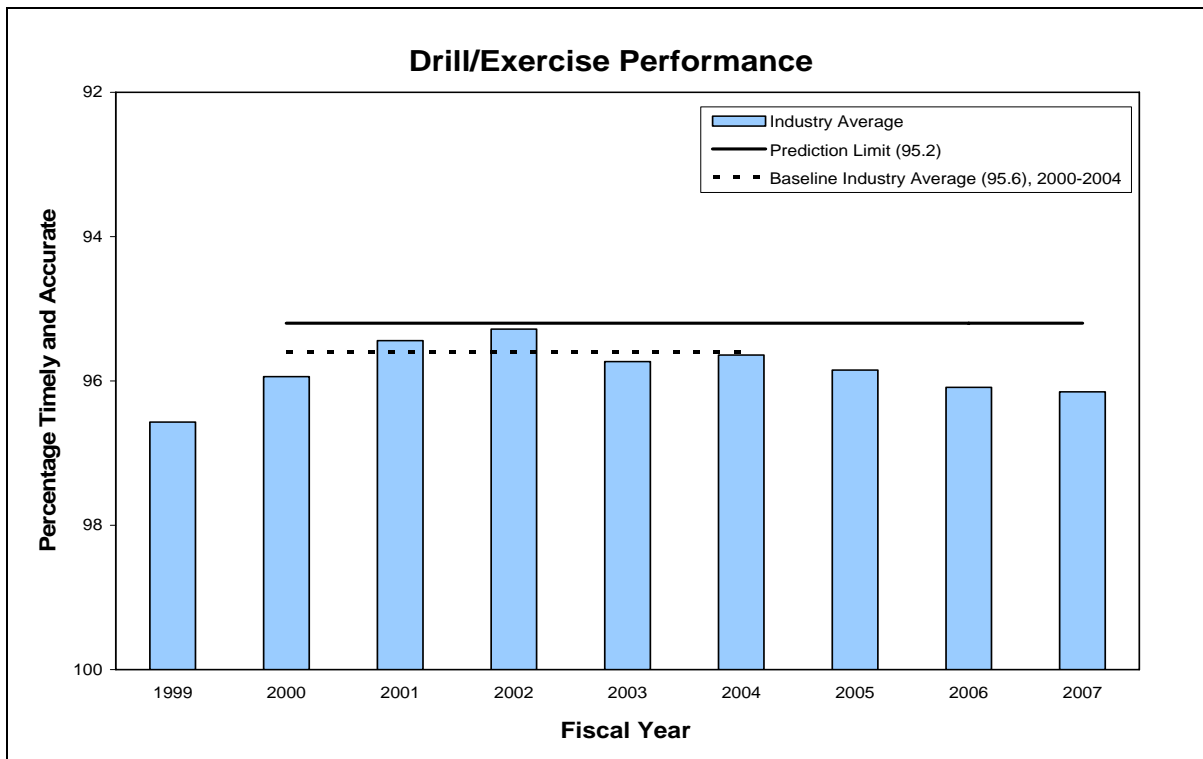**Figure 10 Reactor coolant system leakage**

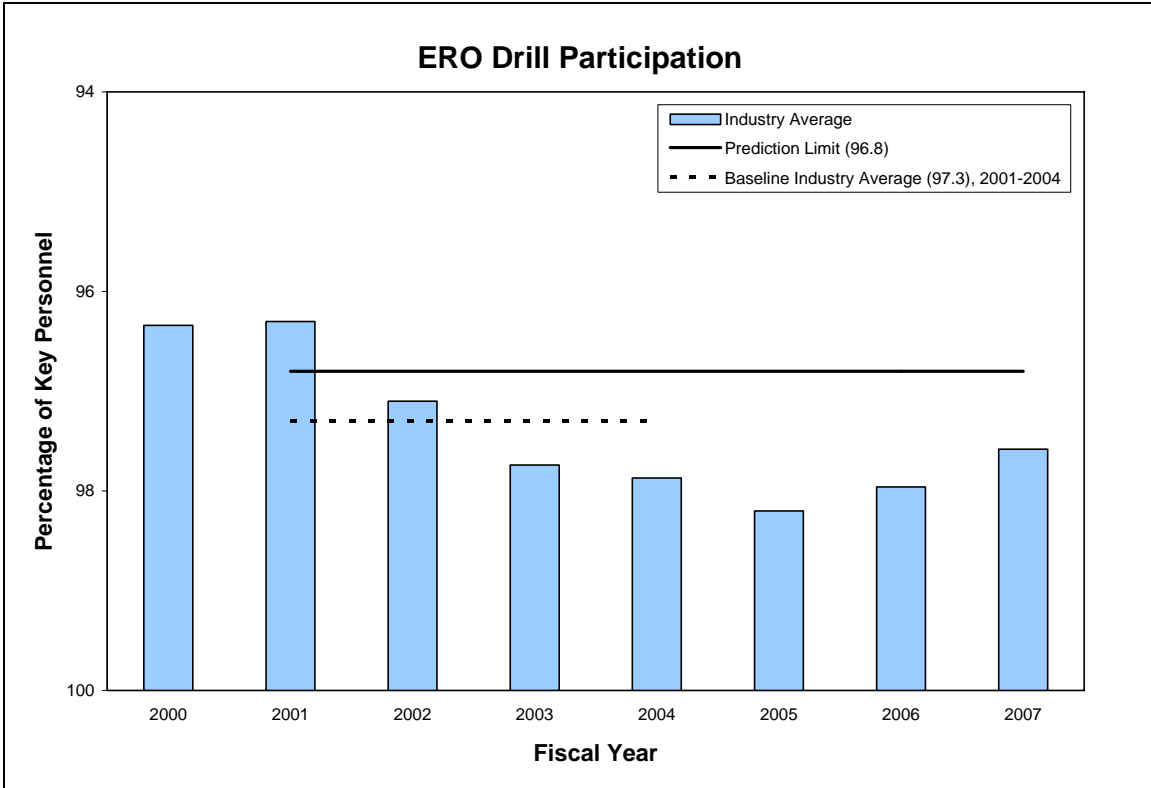**Figure 11 Drill/exercise performance**

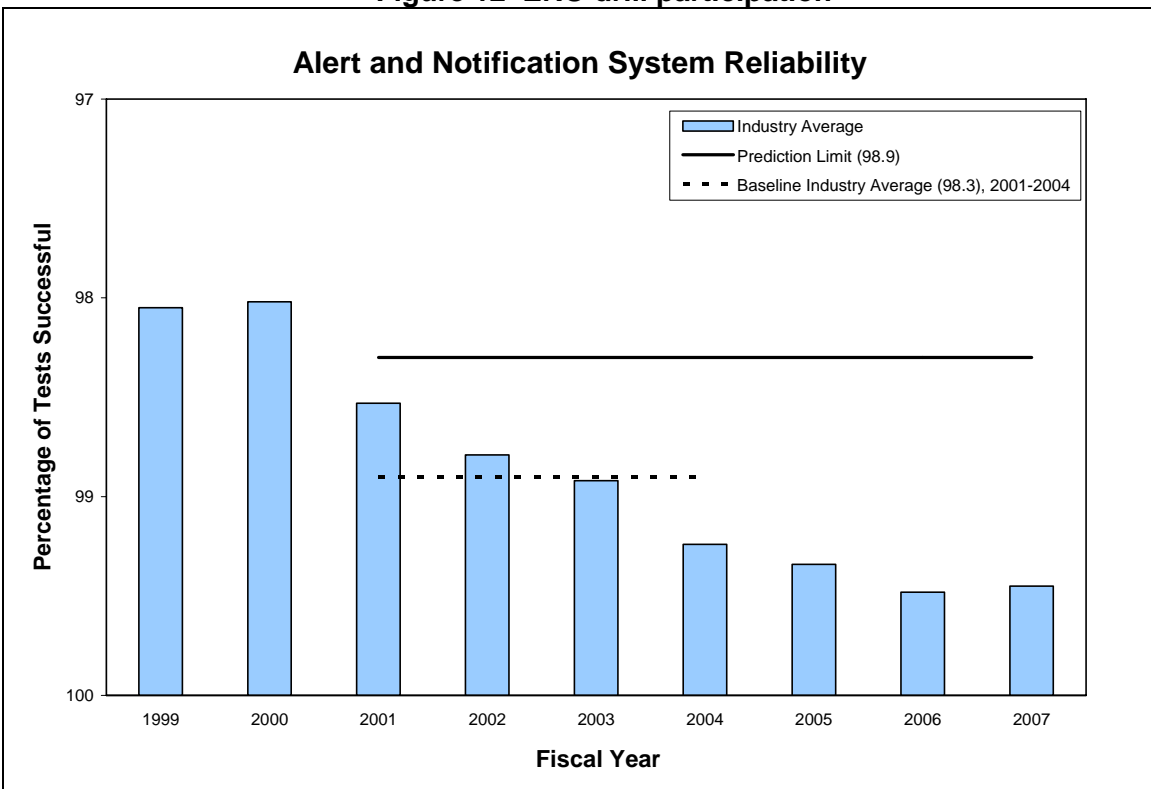**Figure 12 ERO drill participation**

Figure 13 Alert and notification system reliability

NOTE 1: The 2003 blackout event in the safety system actuations graph (Figure 2) and the 2000 Indian Point 2 steam generator tube rupture event in the reactor coolant system leakage graph (Figure 10) were not included in the short-term data for the purpose of determining prediction limits. They were excluded from the development of the prediction limit models because they are considered outlier events that overly influenced the statistical analysis of the industrywide data. Removing these events resulted in less restrictive prediction limits.