

N257. U.S. Nuclear Power Plant Performance Improves Again in 1992

The U.S. Nuclear Power industry turned in another good performance in 1992, according to data collected by the industry's Institute of Nuclear Power Operations (INPO). The INPO data measures the performance of commercial nuclear units in seven areas, and US nuclear units on average performed better in six of them.

In 1992 they:

- Had a higher "unit capability factor." Unit capability factor measures the percentage of maximum electricity generation a plant is capable of supplying, limited only by factors within the control of plant management.
- Had fewer unplanned automatic scrams.
- Had a lower "unplanned capability loss factor." This measure is the percentage of maximum energy generation that a plant is unable to supply because of unplanned energy losses such as shutdowns or load reductions.
- Improved thermal efficiency, as the number of British Thermal Units (BTU) required to produce a kWh of electricity dropped to 10,193 from 10,220 in 1991.
- Improved safety performance significantly, as the industrial safety accident rate dropped to 0.77 per 200,000 person-hours worked, from 0.97 the previous year.
- Reduced the volume of low-level solid radioactive waste. The U.S. industry performance, however, dipped slightly in one category--collective radiation exposure, which increased in 1992. Collective radiation exposure for BWRs jumped to a median value of 368 person-rem per unit the year before. For PWRs, the increase was less but the trend was nevertheless up, the INPO data show.

Taken from "INPO Performance Improves Again in 1992," Nuclear Engineering International, June 1993, p. 12..