“Use of ISOE Radiological Work Management Book at Cook to Achieve Significant Source Term Reduction and Top INPO Performance Rating”
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This is a report on a case of significant source term reduction and improved performance at the Cook Nuclear Power Plant by the practical use of the ISOE Work Management Book.

The Cook Nuclear Power Plant prepared and implemented an ALARA Five-Year Plan between 2002 and 2008, and it made a great leap from the lowest INPO performance of level 4 to the top-class performance of level 1 in three years. The five-year plan of Diabro Canyon is based on that of Cook, which has been adopted as a model even in foreign countries, such as Russia and Japan. The key factors to the ALARA Plan of the Cook Nuclear Power Plant were reported in this presentation.

The ALARA Plan of the Cook Nuclear Power Plant includes:

1. Reactor Heads Replacement –ISOE French experience report used for planning
2. Use of Speciality Resin (PRC-01) for source term control based on ISOE ALARA Symposium papers from Summer Plant
3. Removal of RTD Bypass Lines for dose reduction in lower containments

The results of ISOE activities shown in brackets have contributed to these measures for source term reduction. Moreover, the ISOE Work Management Book was put to practical use as an important handbook in the processes from planning to implementation of these measures, and the selection of items for improvement, time schedule, planning, training, implementation and feedback were made. As a result, the Cook Nuclear Power Plant achieved significant source term reduction in a short period, leading to a remarkable progress in performance.