3443. WORK MANAGEMENT IN THE NUCLEAR POWER INDUSTRY

The impact of work management actions on occupational exposure is a subject which has been greatly discussed, and there are many examples of case studies showing various aspects of the application of work management approaches to reducing worker doses. For example, the OECD Nuclear Energy Agency held a workshop on the subject of work management in February 1992, and produced a workshop proceedings document discussing the case studies presented. In spite of this large body of case studies, however, there is currently no generic guidance as to how to quantify the impact of ALARA measures.

In a practical sense, given the competitive electricity production market place, all expenditures at nuclear power plants must be “justified” to gain the approval of plant operational management. Thus to justify the implementation of a work management technique to reduce worker’s occupational exposures, radiation protection personnel must also demonstrate that the technique will save time or money or both.

To assist in this process, an NEA Expert Group prepared a report on the subject which can be used, in effect, as a “Handbook of Good Practices”. In each of seven areas, this “Handbook” cites specific case studies which illustrate the techniques used to quantify the impacts of work management actions in that particular area. Generic guidance as to how to approach the quantification of impacts in each area is also provided. The areas addressed are: 1) Regulatory Issues, 2) Work Management Policy, 3) Worker Involvement, 4) Work Selection, Planning and Scheduling, 5) Work Preparation, 6) Work Implementation, and 7) Assessment and Feedback. This “how to” report is intended to be of practical use to radiation protection personnel at nuclear power plants. Some of the quantification techniques discussed are also applicable to other portions of the fuel cycle.