

HEALTH PHYSICS IN FUSION REACTOR DESIGN - THE APPLICATION OF
CANDU EXPERIENCE WITH TRITIUM

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Experience in the control of tritium exposures to workers and the public gained thorough the design and operation of Ontario Hydro's nuclear stations has been applied to design studies on emerging fusion reactor concepts. Application of dose management principles in the development of occupational dose and public exposure targets for fusion devices will be discussed. Ontario Hydro performance in occupational tritium exposure control will be examined, and the role of protective clothing, tritium monitoring and internal dosimetry highlighted. Environmental monitoring programs and accumulated data will be summarized. Particular attention will be paid to application of CANDU tritium exposure-risk management experience to fusion facilities. Priorities and progress in health physics related research and development sponsored by the Canadian Fusion Fuels Technology Project, which builds on the extensive CANDU information base will be reported.