



# Decommissioning of Nuclear Power Reactors

The American Nuclear Society (ANS) recognizes that decommissioning nuclear facilities at the end of their operational lives can be, and has been, performed safely while protecting the environment. The alternatives of prompt decommissioning or maintaining the facility in a safe storage condition while radioactive material decays can be, and have been, performed safely. ANS believes that the selection of the decommissioning alternative should be site-specific and should take into account facility and site characteristics, financial considerations, and even future site needs for power and land availability, among other factors.

The rules for decommissioning a nuclear power plant are set out in several Nuclear Regulatory Commission (NRC) regulations (10 CFR, Part 20 Subpart E, and Parts 50.75, 50.82, 51.53, and 51.95). There are established (NRC) regulations and regulatory guidance for terminating a nuclear reactor's license when decommissioning is complete (NUREG-1700, NUREG-1757). However, clear guidance has not been fully developed for the time period between cessation of operation and completion of decommissioning. ANS supports the NRC's establishment of a consistent regulatory pathway for transition from rules applicable to an operating facility to those appropriate for a permanently shut down facility, rather than the current process of obtaining exemptions from operating plant regulatory requirements on a case-by-case basis.

As an example, emergency planning requirements should be commensurate with the nature of the risk during the decommissioning period. Offsite emergency planning requirements, which apply to operating plants, are different than onsite emergency planning requirements for decommissioning facilities. After the fuel has been removed from the reactor and sufficient time has elapsed, the consequences of postulated accidents are not large enough to merit formal offsite emergency preparedness plan requirements. Onsite emergency planning actions, including those for industrial safety, are still appropriate during decommissioning.

Further, the option for reactor restart should be allowed after permanent shutdown if economics or the other factors change after shutdown but before decommissioning operations commence. Any reactor restart would necessarily be contingent upon a thorough regulatory review that finds the facility in good physical condition for operations and acceptance by the NRC that the reactor meets safety requirements.