



## Project Summary:

# NRC Regulatory Guide Updates

### Location:

Oak Ridge Associated Universities  
(Oak Ridge, TN)

### Government Agency:

U.S. Nuclear Regulatory Commission

### Project Timetable:

September 2007 to  
January 2009

Oak Ridge Associated Universities (ORAU) provided technical assistance to the U.S. Nuclear Regulatory Commission (NRC) with revisions to regulatory guides included in phase three of the NRC's Regulatory Guide Update Program.

The NRC's rationale for updating the regulatory guides included to acknowledge the resurgence of nuclear power; to provide the scientific community with guidance in the reduction of occupational exposures; and to strengthen the development of scientific, technically defensible regulatory guides. Many NRC regulatory guides were originally written to provide needed guidance to licensees during the "early days" of nuclear power. However, several decades have passed and power plant licensees have attained significant operational and training experience.

Specific tasks assigned to ORAU included the preparation of a technical approach specific to the update of the following NRC Division 8 regulatory guides:

- Regulatory Guide 8.10, "*Operating Philosophy for Maintaining Occupational Radiation Exposures As Low As Is Reasonably Achievable*"
- Regulatory Guide 8.19, "*Occupational Radiation Dose Assessment In Light-Water Reactor Power Plants Design Stage Man-Rem Estimates*"
- Regulatory Guide 8.27, "*Radiation Protection Training For Personnel At Light-Water Cooled Nuclear Power Plants*"

The development of each technical approach was based on several information sources, including meetings with NRC staff, technical information gained during the annual ISOE/EPRI ALARA Symposium and ORAU's management involvement in the NRC's Radiation Exposure Information and Reporting System (REIRS), and occupational radiation protection experience at light water reactors. Each technical approach was then used as a basis by NRC staff in the preparation of each updated regulatory guide.

Partnerships for Innovation



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Oak Ridge Associated Universities (ORAU) is a university consortium leveraging the scientific strength of major research institutions to advance science and education by partnering with national laboratories, government agencies, and private industry. ORAU manages the Oak Ridge Institute for Science and Education for the U.S. Department of Energy.