

**Los Alamos National Laboratory Self-Assessment of Older Safety Analysis Reports
(LA-UR-00-158)**

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As part of its commitment to the Department of Energy (DOE) in the University of California contract to manage the site, Los Alamos National Laboratory performed a self-assessment of the quality of its older Authorization Basis (AB) documents [Safety Analysis Reports (SARs), Bases for Interim Operations (BIOs), etc.]. Because time would not allow for all facilities to be examined, of the 19 nuclear facilities at the site, the 10 facilities with the oldest documents were examined.

The AB documents were compared with the current DOE orders and standards. The method used to evaluate the documents included such things as (1) the acceptance criteria for AB document content and quality, (2) a walkdowns of the facility, and (3) interviews with facility and Laboratory personnel. The methodology for the self-assessment is presented in detail in the paper.

The team to perform the assessment included individuals from inside and outside the Laboratory with the relevant combination of experience and expertise to perform the assessment. The team was chosen to be independent of the documents examined. The team was allowed to comment critically on the document and the process used to generate it but also was allowed to provide a path forward for improving the product in the future.

In general, the results indicated that the older the SAR, the more likely it was to not meet current DOE orders and standards. The quality of SARs was improving with time, but only recently have SARs begun to meet current DOE expectations. Many generalizations can be drawn from the data, including the most common problems seen with older SARs. These data are presented in the paper and discussed.

The self-assessment also included an analysis of the causes for many of the SAR deficiencies. These causes are general and can be related to many DOE sites. These causes will be discussed at length, and the improvements to the SAR process, which they generated, will be discussed as well.