

DESCRIPTION OF REQUIREMENTS
UNDER 10 CFR 100.21 and 10 CFR 100.23

Section 100.21, "Non-seismic siting criteria," set forth the criteria that applicants must demonstrate in the license application for operating commercial power reactors.

- (a) Requires that the site must have an exclusion area and a low population zone.
- (b) Requires that the population center distance must be one and one-third times the distance from the reactor to the outer boundary of the low population zone.
- (c) Requires site atmospheric dispersion characteristics must be evaluated as set forth in 10 CFR Part 50.34(a)(1) to include radiological effluent release limits and radiological doses.
- (d) Requires that the physical characteristics of the site must be evaluated and site parameters established.
- (e) Requires that transportation routes, and industrial and military facilities establish site parameters that must be evaluated.
- (f) Requires adequate security plans and measures that can be developed.
- (g) Requires that Impediments to emergency plans must be identified.
- (h) Requires sites to be located away from very densely populated centers.

Section 100.23, "Geologic and seismic siting criteria," set forth the principle geologic and seismic considerations that guide the Commission in its evaluation of the suitability of a proposed site and the adequacy of the design bases established in consideration of the geologic and seismic characteristics of the site.

- (a) Requires paragraphs (c) and (d) be applied to applicants for an early site permit or combined license pursuant to Part 52.
- (b) Requires that paragraph (c) be within the scope of section 50.10.
- (c) Requires the applicant for early site permit or combined license under part 52 to provide an adequate evaluation of geological, seismological, and engineering characteristics of a site and its environs to support the evaluation.
- (d) Requires the geologic and seismic siting factors considered for design must include a determination of the Site-specific ground motion response spectrum for the site, the potential for surface tectonic and nontectonic deformations, the design bases for seismically induced floods and water waves, and other design conditions as stated in paragraph (d)(4).