REGULATORY ANALYSIS

Draft Regulatory Guide DG-1247

Statement of the Problem

This is a new regulatory guide that provides information about design basis hurricane windspeeds and design-basis hurricane missiles. Prior to the publication of Regulatory Guide (RG) 1.76, the staff considered the maximum design-basis tornado windspeed as the upper bound for nuclear power plant design-basis. Since design-basis tornado windspeeds decreased as a result of the updated RG 1.76, design-basis tornado windspeeds may not bound design-basis hurricane windspeeds in all areas of the United States. The proposed new RG addresses maximum probable hurricane windspeed and hurricane-generated missiles for those regions.

Objective

The objective of this regulatory action is to issue a new regulatory guide providing design-basis hurricane windspeeds and hurricane missiles.

Alternative Approaches

The Nuclear Regulatory Commission (NRC) staff considered the following alternative approaches:

Do not issue a new regulatory guide.

Issue a new regulatory guide (based upon draft regulatory guide (DG) - 1247).

<u>Alternative 1: Do Not Issue a New Regulatory Guide</u>

Under this alternative, the NRC would not issue a new regulatory guide to provide design-basis hurricane windspeeds and hurricane missiles. If the NRC does not take action, there will be no changes in the cost or benefit to the public, applicants, or the NRC. This alternative is considered the baseline or "no action" alternative. The impact of this alternative is that applicants will lose the benefit of the staff's perspectives and guidance on acceptable solutions to protect new nuclear power plants from hurricane-related meteorological events. If the new regulatory guide is not issued, new plants designed to Revision 1 to RG 1.76 criteria may not be adequately designed to prevent undue risk to the health and safety of the public if the design-basis tornado windspeeds and tornado missiles do not bound the design-basis hurricane windspeeds and hurricane missiles proposed in DG-1247.

<u>Alternative 2: Issue a New Regulatory Guide (based upon DG-5020)</u>

Under this alternative, the NRC will issue a new regulatory guide (based upon DG-1247) to provide new plant applicants with guidance that the staff considers acceptable for use in selecting the design-basis hurricane windspeeds and hurricane-generated missiles that a new nuclear power plant should be designed to withstand to prevent undue risk to the health and safety of the public. The impact

to NRC will be the costs associated with preparing and issuing the new guide. The impact to the public will be the voluntary costs associated with reviewing and providing comments to NRC during the public comment period.