

Regulatory Guide Number: 1.167, Revision 0

Title: Restart of a Nuclear Power Plant Shut Down by a Seismic Event

Office/Division/Branch: RES/DE/SGSEB

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SUBJECT: Basis for Withdrawal

(1) What regulation(s) did the Regulatory Guide support?

Regulatory Guide 1.167 was published in 1997 to provide guidance on meeting requirements in Title 10 of the *Code of Federal Regulations* (10 CFR) 50.54 “Conditions of licenses,” 10 CFR 50, Appendix S “Earthquake Engineering Criteria for Nuclear Power Plants,” and 10 CFR 100, Appendix A, “Seismic and Geologic Siting Criteria for Nuclear Power Plants.” These criteria require a nuclear power plant to shutdown when the operating basis earthquake has been exceeded and that the licensee demonstrate to the Commission that no functional damage has occurred to features necessary for continued operation without undue risk to the health and safety of the public and the licensing basis is maintained.

(2) What was the purpose of the Regulatory Guide?

Regulatory Guide 1.167 provided guidance to power reactor licensees on how a licensee can demonstrate to the Commission that the plant can restart following an earthquake and continue to operate without undue risk.

(3) How was the Regulatory Guide used in regulatory activities, particularly licensing reviews and inspections?

Because the guide deals with restart of a nuclear power plant following exceedance of the safe shutdown earthquake (SSE), it provided guidance for the inspections required to restart the North Anna nuclear power plant following the Mineral Virginia earthquake of 2011 in which the plant experienced an earthquake beyond the licensing basis.

(4) Is the Regulatory Guide referenced in other documents? What are the “ripple effects” on these documents if it is withdrawn?

No ripple effects are anticipated by withdrawal of Regulatory Guide 1.167 because an update of the guidance found within the guide was incorporated into Revision 1 of Regulatory Guide 1.166, “Pre-Earthquake Planning, Shutdown, and Restart of a Nuclear Power Plant Following an Earthquake.” The update of that guide was done concurrently with the withdrawal of Regulatory Guide 1.167.

- (5) **Why is the Regulatory Guide no longer needed? What is the rationale for withdrawing this Regulatory Guide instead of revising it? What is the basis for believing that no guidance similar to that in the Regulatory Guide will be needed in the future?**

The guide is no longer needed because the guidance was incorporated into Revision 1 of Regulatory Guide 1.166, "Pre-Earthquake Planning, Shutdown, and Restart of a Nuclear Power Plant Following an Earthquake." The merger of the two guides into an update of Regulatory Guide 1.166 incorporated lessons learned following the shutdown and restart of nuclear power plants in response to earthquake ground motion and post-earthquake evaluations since issuance of the two Regulatory Guides in 1997. The reason for incorporating it into Regulatory Guide 1.166 is because the two guides were similar in nature and contained overlapping guidance. Both guides referenced and endorsed the same industry guidelines, which more recent industry guidance had superseded.

- (6) **What guidance is available once the Regulatory Guide is withdrawn?**

Regulatory Guide 1.166, Revision 1, contains the guidance acceptable to NRC staff for performing inspections and tests of equipment and structures to restart a nuclear power plant that is shutdown by an earthquake.

- (7) **Do other agencies rely upon the Regulatory Guide, e.g., the Agreement States, National Aeronautical and Space Administration, Department of Energy?**

The staff is unaware of any other agency that uses or relies on the guidance included in Regulatory Guide 1.167.