

## Regulatory Guide Periodic Review

**Regulatory Guide Number:** 1.106, Revision 2

**Title:** Thermal Overload Protection for Electric Motors on Motor Operated Valves

**Office/division/branch:** RES/DE/ICEEB

**Technical Lead:** Kenneth A. Miller

**Staff Action Decided:** Reviewed with no issues identified

**1. What are the known technical or regulatory issues with the current version of the Regulatory Guide (RG)?**

Revision 2 of RG 1.106, "Thermal Overload Protection for Electric Motors on Motor Operated Valves," dated February 2012, describes a method acceptable to NRC staff for complying with regulations in regard to the application of thermal overload protection devices that are integral with the motor starter for electric motors on motor-operated valves. This RG endorses sections of IEEE Standard 603-2009, "Criteria for Safety Systems for Nuclear Power Generating Stations," and IEEE Standard 741-2007, "Protection of Class 1E Power Systems and Equipment in Nuclear Power Generating Stations," both of which are the current industry versions available. There are no known technical or regulatory issues.

**2. What is the impact on internal and external stakeholders of not updating the RG for the known issues, in terms of anticipated numbers of licensing and inspection activities over the next several years?**

Use of the current revision of RG 1.106 will have no known impact on internal or external stakeholders at this time.

**3. What is an estimate of the level of effort needed to address identified issues in terms of full-time equivalent (FTE) and contractor resources?**

The NRC staff will continue to monitor NERC standards and, when IEEE Stds. 603 or 741 are revised, the NRC staff will evaluate the revised standards to determine if a revision of RG 1.106 is necessary. In general, updating RG 1.106 is estimated to require approximately 80 - 120 hours of internal staff effort.

**4. Based on the answers to the questions above, what is the staff action for this guide (Reviewed with no issues identified, Reviewed with issues identified for future consideration, Revise, or Withdraw)?**

Reviewed with no issues identified.

**5. Provide a conceptual plan and timeframe to address the issues identified during the review.**

No issues were identified during this review.

**NOTE: This review was conducted in April 2017 and reflects the staff's plans as of that date. These plans are tentative and are subject to change.**