

**NATIONAL SCIENCE FOUNDATION****National Science Board; Sunshine Act Meetings; Notice**

The National Science Board's Task Force on Unsolicited Mid-Scale Research (MS), pursuant to NSF regulations (45 CFR part 614), the National Science Foundation Act, as amended (42 U.S.C. 1862n-5), and the Government in the Sunshine Act (5 U.S.C. 552b), hereby gives notice in regard to the scheduling of a meeting held by teleconference for the transaction of National Science Board business and other matters specified, as follows:

**DATE AND TIME:** January 26, 2011, 12:30 p.m.–1:45 p.m. ET.

**SUBJECT MATTER:** Summary of internal NSF discussion, proposed revision to the MS Task Force charge, plans for the future external discussion groups and workshop, and additional data gathering activities and plans (data mining, possible survey, and Web site).

**STATUS:** Open.

**LOCATION:** This meeting will be held by teleconference at the National Science Board Office, National Science Foundation, 4201 Wilson Blvd., Arlington, VA 22230. A room will be available for the public to listen-in to this meeting held by teleconference. All visitors must contact the Board Office at least 24 hours prior to the meeting held by teleconference to arrange for a visitor's badge and to obtain the room number. Call 703-292-7000 or send an e-mail message to [nationalsciencebrd@nsf.gov](mailto:nationalsciencebrd@nsf.gov) with your name and organizational affiliation to request the room number and your badge, which will be ready for pick-up at the visitor's desk the day of the meeting. All visitors must report to the NSF visitor desk located in the lobby at the 9th and N. Stuart Streets entrance to receive your visitor's badge on the day of the teleconference.

**UPDATES & POINT OF CONTACT:** Please refer to the National Science Board Web site <http://www.nsf.gov/nsb> for additional information and schedule updates (time, place, subject matter or status of meeting) may be found at <http://www.nsf.gov/nsb/notices/>. Point of contact for this meeting is: Matthew B. Wilson, Ph.D., National Science Board Office, 4201 Wilson Blvd., Arlington, VA 22230. Telephone: (703) 292-7000.

**Daniel A. Lauretano,**

*Counsel to the National Science Board.*

[FR Doc. 2011-958 Filed 1-13-11; 11:15 am]

**BILLING CODE 7555-01-P**

**NATIONAL TRANSPORTATION SAFETY BOARD****Notice of Availability of the FY2010 Inventory of Service Contracts for the National Transportation Safety Board (NTSB)**

**SUMMARY:** In accordance with Section 743 of Division C of the FY2010 Consolidated Appropriations Act, Public Law 111-175, the NTSB announces the availability of the FY2010 inventory of service contracts.

**ADDRESSES:** The inventory is available electronically on the following Web site: <http://www.nts.gov/Info/contractinventory.html>.

**FOR FURTHER INFORMATION CONTACT:** For further information, please contact: Christopher Blumberg, Chief, Acquisition and Lease Management Division, NTSB; 202-314-6102; [christopher.blumberg@ntsb.gov](mailto:christopher.blumberg@ntsb.gov).

**SUPPLEMENTARY INFORMATION:** Section 743 of Division C of the FY2010 Consolidated Appropriations Act, Public Law 111-117, requires civilian agencies to prepare an annual inventory of their service contracts. The inventory includes all service contract actions over \$25,000 that were awarded in FY2010. The inventory was prepared in accordance with guidance provided by the Office of Federal Procurement Policy (OFPP) and may be downloaded in electronic form (.pdf) from the Web site at the following location <http://www.nts.gov/Info/contractinventory.html>.

Dated: Tuesday, January 11, 2011.

**Candi R. Bing,**

*Federal Register Liaison Officer.*

[FR Doc. 2011-845 Filed 1-14-11; 8:45 am]

**BILLING CODE P**

**NUCLEAR REGULATORY COMMISSION**

**[NRC-2011-0013]**

**Proposed Generic Communications; Draft NRC Regulatory Issue Summary 2011-XX; Adequacy of Station Electric Distribution System Voltages**

**AGENCY:** Nuclear Regulatory Commission.

**ACTION:** Notice of opportunity for public comment.

**SUMMARY:** The U.S. Nuclear Regulatory Commission (NRC or the Commission) is issuing this Regulatory Issue Summary (RIS) to clarify the NRC staff's technical position on existing regulatory requirements and voltage studies

necessary for Degraded Voltage Relay (second level undervoltage protection) setting bases and Transmission Network/Offsite/Onsite station electric power system design bases. This RIS does not transmit any new requirements or staff positions. No specific action or written response is required.

**DATES:** Comment period expires 30 days after publication. Comments submitted after this date will be considered if it is practical to do so, but assurance of consideration cannot be given except for comments received on or before this date.

**ADDRESSES:** You may submit comments by any one of the following methods. Please include Docket ID NRC-2011-0013 in the subject line of your comments. Comments submitted in writing or in electronic form will be posted on the NRC Web site and on the Federal Rulemaking Web site [Regulations.gov](http://www.regulations.gov). Because your comments will not be edited to remove any identifying or contact information, the NRC cautions you against including any information in your submission that you do not want to be publicly disclosed.

The NRC requests that any party soliciting or aggregating comments received from other persons for submission to the NRC inform those persons that the NRC will not edit their comments to remove any identifying or contact information, and therefore, they should not include any information in their comments that they do not want publicly disclosed.

*Federal rulemaking Web site:* Go to <http://www.regulations.gov> and search for documents filed under Docket ID NRC-2011-0013. Address questions about NRC dockets to Carol Gallagher, telephone: 301-492-3668, e-mail: [Carol.Gallagher@nrc.gov](mailto:Carol.Gallagher@nrc.gov).

*Mail comments to:* Cindy Bladey, Chief, Rules, Announcements and Directives Branch (RADB), Division of Administrative Services, Office of Administration, Mail Stop: TWB-05-B01M, U.S. Nuclear Regulatory Commission, Washington, DC 20555-0001, or by fax to RADB at 301-492-3446.

**FOR FURTHER INFORMATION CONTACT:** Kenn A. Miller, Office of Nuclear Reactor Regulation, Division of Engineer, U.S. Nuclear Regulatory Commission, Washington, DC 20555-0001, telephone: 301-415-3152, e-mail: [kenneth.miller2@nrc.gov](mailto:kenneth.miller2@nrc.gov).

**SUPPLEMENTARY INFORMATION:**

## NRC Regulatory Issue Summary 2011–XX: Adequacy of Station Electric Distribution System Voltages

### Addressees

All holders of, or applicants for, a power reactor operating license or construction permit under Title 10 of the Code of Federal Regulations (10 CFR) Part 50, “Domestic Licensing of Production and Utilization Facilities,” except those who have permanently ceased operations and have certified that fuel has been permanently removed from the reactor vessel.

All holders of, and applicants of design centers and combined operating licenses under 10 CFR Part 52, “Licenses, Certificate and Approvals for Nuclear Power Plants.”

### Intent

The U.S. Nuclear Regulatory Commission (NRC or the Commission) is issuing this Regulatory Issue Summary (RIS) to clarify the NRC staff’s technical position on existing regulatory requirements and voltage studies necessary for Degraded Voltage Relay (second level undervoltage protection) setting bases and Transmission Network/Offsite/Onsite station electric power system design bases. This RIS does not transmit any new requirements or staff positions. No specific action or written response is required.

### Background

The events at Millstone and Arkansas Nuclear One (ANO) that led to the NRC staff’s position requiring degraded voltage protection for nuclear power plant Class 1E (or safety related) electrical safety buses and expectations for voltage calculations for the plant offsite/onsite electric power system interface, are discussed below as a reminder of past operating experience.

#### Millstone Unit 2

Electrical grid events at the Millstone Station, in July of 1976, have shown that when the Class 1E buses are supplied by the offsite power system, sustained degraded voltage conditions on the grid can cause adverse effects on the operation of Class 1E loads. These degraded voltage conditions will not be detected by the Loss-of-Voltage Relays (LVRs) which are designed to detect loss of power to the bus from the offsite circuit. The LVR’s low voltage dropout setting is generally in the range of 0.7 per unit voltage or less, with a time delay of about 2 seconds.

As a result of further evaluation of the Millstone events, it was also determined that improper voltage protection logic can also cause adverse effects on the

Class 1E systems and equipment, such as spurious load shedding of Class 1E loads from the standby diesel generators and spurious separation of Class 1E systems from offsite power due to normal motor starting transients. See ADAMS Accession No. ML093521388 for more information regarding this event.

As a result of these Millstone events, the NRC required all licensees to implement degraded voltage protection under Generic Action (Multi-plant Action B–23) to ensure automatic protection of safety buses and loads. Since degradation of the offsite power system can lead to or cause the failure of redundant Class 1E safety related electrical equipment, the NRC required licensees to install degraded voltage protection schemes (second level of voltage protection (Degraded Voltage Relays (DVRs)) for the onsite power system) as described in NRC Letters dated June 2 & 3, 1977, “Statement of Staff Positions Relative to Emergency Power Systems for Operating Reactors,” which were sent to all licensees of all operating nuclear power plants. As an example, see the NRC letter dated June 2, 1977, ADAMS Accession No. ML100610489, sent to the licensee for Peach Bottom Atomic Power Station. These DVRs were to satisfy the following criteria:

(a) The selection of voltage and time delay setpoints shall be determined from an analysis of the operating voltage requirements of the safety related loads at all onsite system distribution levels;

(b) The voltage protection shall include coincidence logic to preclude spurious trips of the offsite power source;

(c) The time delay selected shall be based on the following conditions:

(1) The allowable time delay, including margin shall not exceed the maximum time delay that is assumed in the FSAR accident analyses;

(2) The time delay shall override the effect of expected short duration grid disturbances, preserving availability of the offsite power source(s); and

(3) The allowable time duration of a degraded voltage condition at all distribution system levels shall not result in failure of safety related systems or components;

(d) The voltage monitors (or DVRs as defined above) shall automatically initiate the disconnection of offsite power sources whenever the voltage and time delay limits have been exceeded; and

(e) The voltage monitors (DVRs) shall be designed to satisfy the requirements of IEEE Standard 279–1971, “Criteria for

Protection Systems for Nuclear Power Generating Stations”; and

(f) The Technical Specifications shall include limiting conditions for operation, surveillance requirements, trip setpoints with minimum and maximum limits, and allowable values for second-level voltage protection DVRs.

The NRC outlined the purpose of the degraded voltage relays to protect Class 1E safety related buses from sustained degraded voltage conditions on the offsite power system under accident and non-accident conditions in Branch Technical Position (BTP) of the Standard Review Plan (SRP/NUREG–0800), PSB–1, Revision 0, “Adequacy of Station Electric Distribution System Voltages,” dated July 1981 (ADAMS Accession No. ML052350520), and in the current BTP 8–6 of the SRP, Revision 3, “Adequacy of Station Electric Distribution System Voltages,” dated March 2007, (ADAMS Accession No. ML070710478).

#### Arkansas Nuclear One

Another degraded voltage event, in September of 1978, at Arkansas Nuclear One (ANO) station demonstrated that degraded voltage conditions could exist on the Class 1E buses even with normal grid voltages, due to deficiencies in equipment between the grid and the Class 1E buses or by the starting transients experienced during certain accident events not originally considered in the sizing of these circuits. Information Notice No. 79–04, “Degradation of Engineered Safety Features,” (ADAMS Accession No. ML0311801180) provides additional information regarding this event.

The NRC staff issued Generic Letter 79–36, August 8, 1979, “Adequacy of Station Electric Distribution Systems voltages” (ADAMS Legacy No. 7908230155), expanding its generic review of the adequacy of electric power systems for operating nuclear power plants. Specifically, the NRC required all licensees to review the electric power systems at each of their nuclear power plants to determine analytically if, assuming all onsite sources of AC power are not available, the offsite power system and the onsite distribution system is of sufficient capacity and capability to automatically start as well as operate all required safety related loads.

#### Recent Inspection Findings

Despite lessons learned from past events, and the generic communications on degraded voltage protection and adequate station voltages, NRC inspectors have identified incorrect

implementation of degraded voltage protection schemes by the licensees at various plants during inspections. Specifically, the existing degraded voltage setpoints at some plants were not adequate to protect the safety related components during degraded voltage conditions for accident and non-accident conditions. In some cases the voltage conditions were too low to power the safety related equipment but high enough to prevent transferring of safety loads to the standby power source. In addition, the time delays provided for the degraded voltage protection relays were not consistent with the accident analysis assumptions for those plants. Although the licensees' analyses were site specific, the NRC staff is concerned that other licensees might not have adequately implemented the staff positions and guidance issued previously to address the adequacy of station electrical distribution system voltages. Examples of inspection findings recently identified by the inspectors include the following:

#### *DC Cook Units 1 and 2*

During the safety system design and performance capability biennial baseline inspection (NRC Inspection Report No. 50-315/03-07(DRS); 50-316/03-07(DRS) (ADAMS Accession No. ML032260201) at the D.C. Cook Nuclear Power Plant in July of 2003, NRC inspectors identified that the degraded voltage protection scheme was bypassed whenever the 4160V buses were not being supplied through the reserve auxiliary transformers (RATs). This resulted in a lack of automatic degraded voltage protection during normal operation and for the first 30 seconds of an accident when engineered safety feature (ESF) loads were being sequenced onto the safety buses. This condition did not meet the staff position described in BTP PSB-1 and the electrical scheme is contrary to the design criteria for degraded voltage protection stated in an NRC letter to the licensee (a version of a letter sent to all licensees) dated June 3, 1977. This issue was reviewed by the NRR technical staff under Task Interface Agreement, TIA 2004-02 (ADAMS Accession No. ML042460579), and the staff concluded that the degraded voltage protection design at D.C. Cook was inadequate and as such should be modified to include degraded voltage protection during normal operation as well. Because the NRC staff had approved D.C. Cook's degraded voltage protection design in 1980, the staff's 2005 determination that the design was inadequate constituted a change in position and was subject to a backfit analysis. By letter dated

November 9, 2005 (ADAMS Accession No. ML050680057), the NRC imposed a facility-specific compliance backfit on D.C. Cook Nuclear Plant, Units 1 and 2 to bring the facility into compliance with its license, the rules and orders of the Commission, and the licensee's written commitments. The licensee implemented a plant modification to the degraded voltage relaying circuit to make it functional during normal operation (See ADAMS Accession No. ML060530405) addressing the backfit issue.

#### *Fermi Unit 2*

In May of 2008, NRC inspectors determined that the time delay settings of the degraded voltage relays for both divisions I and II of the Class 1E electrical distribution system were inadequate. The time delays could impact the emergency core cooling system (ECCS) injection timing requirements of the licensee's Title 10 of the *Code of Federal Regulations* (10 CFR) 50.46 loss-of-coolant accident (LOCA) analysis during a degraded voltage condition. The licensee's degraded voltage protection scheme could result in the voltage being too low to adequately power the ECCS equipment but high enough to prevent the emergency diesel generators (EDGs) from connecting to the safety related buses in a timely manner. This issue was reviewed by the NRR technical staff under TIA 2007-03 (ADAMS Accession No. ML080420435). The staff determined that the current degraded voltage protection scheme was inadequate, in that, the time delay relay settings for the degraded voltage relays for both divisions could impact the emergency core cooling system injection timing requirements. Additionally, for a short period of time under degraded voltage conditions, voltage could be too low for the proper operation of safety related motors but high enough to prevent emergency diesel generator start. Because the NRC staff had approved Fermi's degraded voltage protection design in 1981, the staff's 2008 determination that the design was inadequate constituted a change in position and was subject to a backfit analysis. The staff determined that the provisions of 10 CFR 50.109(a)(4), were applicable, and that a modification was necessary to bring the facility into compliance with the rules and orders of the Commission. See NRC Inspection Report 05000341/2008008 (ADAMS Accession No. ML081720585) for additional details. The NRC approved the plant modification in License Amendment No. 183 (ADAMS Accession No. ML102770382).

#### *Peach Bottom Atomic Power Station Units 2 and 3*

Exelon did not use the safety related degraded grid relay trip setpoint specified in the Technical Specifications (TS) as a design input in calculations to ensure adequate voltage was available to all safety related components required to respond to a design basis loss-of-coolant accident (LOCA). Instead, Exelon used the results from a Voltage Regulation Study to establish the voltage level for system operability. The study credited the use of non safety related equipment (load tap changers) to raise the voltage level. This allowed higher voltages to be used in the design calculations for components than would be allowed by the TS setpoint. The NRR technical staff reviewed the issue in TIA 2009-07 (ADAMS Accession No. ML102710178). The staff concluded that the licensee must demonstrate that the existing degraded voltage trip setpoints, including allowable values and time delays shown in the licensee's TS Table 3.3.8.1, are adequate to protect and provide the required minimum voltage to all safety related equipment. Since the load tap changers are not safety related and are subject to operational limitations and credible failures, they cannot be relied on to establish degraded voltage relay setpoints and time delay input for design basis calculations. For additional details, see NRC Inspection Report 05000277/2010004 and 05000278/2010004 (ADAMS Accession No. ML103140643). The licensee subsequently issued Licensee Event Report (LER) 2-10-04 (ADAMS Accession No. ML103280505) based on the determination that certain plant equipment could be degraded as a result of lower voltages that may exist during a postulated design basis loss-of-coolant event coupled with certain degraded voltage conditions.

#### *Palo Verde Nuclear Generating Station Units 1, 2, and 3*

In July of 2009, an NRC inspection team questioned the calculations that demonstrate adequate voltage to safety related loads during worst case loading conditions and the adequacy of a time delay of 35 seconds for transfer of safety buses to the onsite power supplies should an actual degraded voltage condition occur. The licensee's calculation assumed a voltage above the degraded bus setpoint to demonstrate adequate voltage at the terminals of the safety related loads rather than the degraded voltage dropout setpoint value. The licensee maintains that a degraded voltage condition concurrent

with a design basis accident is not credible. See NRC Inspection Report 05000528; -529; and -530/2009008, ADAMS Accession No. ML093240524 regarding the inspection finding. The NRR technical staff reviewed the issue in TIA 2010-05 (ADAMS Accession No. ML102800340). The staff concluded that the licensee's calculation must demonstrate that the trip setpoint adequately protects the Class 1E equipment powered by the safety related bus from a potentially damaging degraded voltage condition, and the time delay to transfer from a degraded offsite source to the standby power source to support the emergency core cooling equipment operation must be consistent with accident analysis time assumptions, as required by BTP PSB-1 (NUREG 0800).

### Discussion

Because the NRC continues to identify inspection findings associated with degraded voltage, the NRC is providing clarifying information on two issues related to the need for two sets of calculations for the design of the electric power systems of a nuclear power plant and its interface with the transmission network as defined in 10 CFR Part 50, General Design Criteria 17. The two issues are (1) Degraded Voltage Relaying Design Calculations, and (2) Offsite/Onsite Design Interface Calculations. The Degraded Voltage Relaying Design Calculations establish the necessary settings of the DVRs to ensure that required safety related components are provided adequate voltage based on the design of the Class 1E distribution system in the plant and its most limiting operating configuration. The Offsite/Onsite Design Interface Calculations specify the voltage operating parameters of the plant electrical distribution system based on the transmission system (Offsite) operating parameters. This interface calculation establishes operating voltage bands for all plant electrical buses, which ensures that all plant components and systems (Class 1E and Non Safety Related) have proper voltage for starting and running in all operational configurations (expected operational and accident conditions). Therefore, based on normal grid operation, the degraded voltage relays will not operate, maintaining the offsite power supply to the plant electrical distribution system.

#### 1. Degraded Voltage Relaying Design Calculations

Proper design of a degraded voltage relaying scheme is needed to ensure that safety related systems are supplied with adequate voltages. The purpose of the

NRC developed Branch Technical Position (BTP) PSB-1 (revised later to become BTP 8-6), is to protect Class 1E safety related buses and components from sustained degraded voltage conditions on the offsite power system coincident with an accident as well as during non-accident conditions. The Class 1E buses should separate from the offsite power system within a few seconds if an accident occurs coincident with sustained degraded voltage conditions. During normal plant operation, the Class 1E safety related buses should automatically separate from the power supply within a short interval (typically less than 60 seconds) if sustained degraded voltage conditions are detected. The time delay chosen should be optimized to ensure that permanently connected Class 1E loads are not damaged under sustained degraded voltage conditions (such as sustained degraded voltage just above the LVR voltage setting for the duration of the DVR time delay setting). The staff considers degraded voltage conditions coincident with a postulated design basis accident to be a credible event. DVRs should be set to protect the safety related equipment from sustained degraded voltage conditions.

#### DVR Setting Design Calculations

Licensee voltage calculations should provide the basis for their DVR settings, ensuring safety related equipment is supplied with adequate operating voltage (typically a minimum of 0.9 per unit voltage at the terminals of the safety related equipment per equipment manufacturers requirements), based on bounding conditions for the most limiting safety related load (in terms of voltage) in the plant. These voltage calculations should model the plant safety related electrical distribution system such that the limiting voltage at the bus monitored by the DVR can be calculated in terms of the voltage at the terminals of the most limiting safety related component in the plant. These models would allow calculation of voltages at terminals or contacts of all safety related equipment with the voltage at the DVR monitored bus at the DVR dropout setting, providing the necessary design basis for the DVR voltage settings. In this manner, the DVR ensures adequate operational (starting and running) voltage to all safety related equipment, independent of voltage controlling equipment external to the plant safety related electrical distribution system. For the purposes of this calculation, no credit should be taken for voltage controlling equipment external to the Class 1E distribution system such as automatic

load tap changers and capacitor banks. Voltage-time settings for DVRs should be selected so as to avoid spurious separation of safety buses from the offsite power system during unit startup, normal operation and shutdown. These DVRs should disconnect the Class 1E buses from any power source other than the emergency diesel generators (onsite sources) if the degraded voltage condition exists for a time interval that could prevent the Class 1E safety related loads from achieving their safety function. The DVRs should also protect the Class 1E safety related loads from prolonged operation below sustained degraded voltage which could result in equipment damage.

The licensees should demonstrate that the existing DVR settings including allowable values and time delays are adequate to protect and provide the required minimum voltage to all safety related equipment. The time-delay(s) chosen for DVRs during accident conditions should meet the accident analyses assumptions and allow for proper starting of all Class 1E safety related equipment. Also, the time delay chosen for DVRs during non-accident condition must not cause any degradation of the safety related components, including actuation of their protective devices.

#### 2. Offsite/Onsite Design Interface Calculations

The offsite power source is the preferred source of power to safely shut down the plant during design basis accidents, abnormal operational occurrence, and reactor trips. The licensee's voltage calculations should provide the basis for proper operation of the plant safety related electrical distribution system, when supplied from the offsite circuit (from the transmission network). These calculations should demonstrate that the voltage requirements (both starting and operational voltages) of all plant safety related systems and components are satisfied based on operation of the transmission system and the plant onsite electric power system during all operating configurations of transmission network and plant systems. In this way, all safety related systems and components will function as designed with proper starting and running voltages during all plant conditions and the DVRs will not actuate (separating the transmission network supply). Following are guidelines for voltage drop calculations derived from Generic Letter 79-36, which have been supplemented to add clarifying

information. They do not represent new NRC staff positions.

#### Guidelines for Voltage Drop Calculations

(a) The plant voltage analysis, while supplied from the transmission network, should be based on the operating voltage range of the transmission network connection. This transmission owner/operator supplied voltage range should address all transmission network and plant system operating configurations and should also include voltage drop due to the bounding worst case transmission system contingency (transmission system contingencies include trip of the nuclear power unit).

(b) Separate analyses should be performed assuming the power source to the safety buses is (1) the unit auxiliary transformer; (2) the startup transformer; and (3) other available connections (e.g., from all available connections) to the offsite network one by one assuming the need for electric power is initiated by (1) an anticipated transient such as a unit trip (e.g., anticipated operational occurrence), or (2) an accident, whichever presents the bounding load demand on the power source.

(c) For multi-unit stations, a separate analysis should be performed for each unit assuming (1) an accident in the unit being analyzed and simultaneous shutdown of all other units at the station; or (2) an anticipated transient (anticipated operational occurrence) in the unit being analyzed (e.g., unit trip) and simultaneous shutdown of all other units at that station, whichever presents the largest load situation.

(d) All actions the electric power system is designed to automatically initiate should be assumed to occur as designed (e.g., automatic bulk or sequential loading or automatic transfers of bulk loads from one transformer to another and automatic starts of components). All non safety related plant auxiliary loads should be included, as applicable, in the plant loading studies.

(e) Manual load shedding should not be assumed.

(f) For each event analyzed, the maximum load necessitated by the event and the mode of operation of the unit at the time of the event should be assumed in addition to all loads caused by expected automatic actions and manual actions permitted by administrative procedures.

(g) The voltage analysis should include documentation for each condition analyzed, of the voltage at the input and output of each transformer

and at each intermediate bus between the connection of the offsite circuit and the terminals of each safety related load.

(h) The calculated voltages at the terminals of each safety related load should be compared with the required voltage range for normal operation and starting of that load calculated in Item (a) above. Any identified inadequacies of calculated voltage should require immediate remedial action.

(i) For each case evaluated, the calculated voltages on each safety bus should demonstrate adequate voltage at the component level without separation from the offsite circuit due to DVR actuation.

(j) To provide assurance that actions taken to assure adequate voltage levels for safety related loads do not result in excessive voltages, assuming the maximum expected value of voltage at the connection to the offsite circuit, a determination should be made of the maximum voltage expected at the terminals of all safety related equipment and their starting circuits (if applicable). If this voltage exceeds the maximum voltage rating of any safety related equipment, immediate remedial action should be taken.

(k) Analysis documentation should include a statement of the assumptions for each case analyzed.

#### Backfit Discussion

The NRC has evaluated this RIS against the criteria of Title 10 of the Code of Federal Regulations (10 CFR) Section 50.109, 10 CFR Part 50 Appendix A General Design Criteria 17, NRC Letter dated June 2, 1977 "Statement of Staff Positions Relative to Emergency Power Systems for Operating Reactors," Branch Technical Position BTP-1 and later BTP 8-6 (both of NUREG 0800) and Generic Letter 79-36 and determined that it does not represent a backfit. Specifically, NRC Staff technical positions outlined in this RIS are consistent with the aforementioned regulations and generic communications, while providing more detailed discussion concerning the necessary voltage calculations supporting DVR settings based only on voltage requirements of Class 1E components and the Class 1E distribution system design. Under section 50.109, a backfit can be defined as a proposed action that is a modification of the procedures required to operate a facility and may result from the imposition of a regulatory staff position that is either new or different from a previously applicable staff position.

#### Federal Register Notification

To be done after the public comment period.

#### Congressional Review Act

This RIS is not a rule as designated by the Congressional Review Act (5 U.S.C. 801-886) and therefore, is not subject to the Act.

#### Paperwork Reduction Act Statement

This RIS does not contain any information collections and, therefore, is not subject to the requirements of the Paperwork Reduction Act of 1995 (44 U.S.C. 3501 *et seq.*).

#### Contact

Kenn A. Miller, Office of Nuclear Reactor Regulation, Division of Engineering, U.S. Nuclear Regulatory Commission, Washington, DC 20555-0001, telephone: 301-415-3152, e-mail: [kenneth.miller2@nrc.gov](mailto:kenneth.miller2@nrc.gov).

#### End of Draft Regulatory Issue Summary

Documents may be examined, and/or copied for a fee, at the NRC's Public Document Room at One White Flint North, 11555 Rockville Pike (first floor), Rockville, Maryland. Publicly available records will be accessible electronically from the Agencywide Documents Access and Management System (ADAMS) Public Electronic Reading Room on the Internet at the NRC Web site, <http://www.nrc.gov/NRC/ADAMS/index.html>. If you do not have access to ADAMS or if you have problems in accessing the documents in ADAMS, contact the NRC Public Document Room (PDR) reference staff at 1-800-397-4209 or 301-415-4737 or by e-mail to [pdr@nrc.gov](mailto:pdr@nrc.gov).

Dated at Rockville, Maryland this 11th day of January 2011.

For the Nuclear Regulatory Commission.

#### Roy Mathew,

Acting Chief, Division of Engineering, Office of Nuclear Reactor Regulation.

[FR Doc. 2011-888 Filed 1-14-11; 8:45 am]

BILLING CODE 7590-01-P

#### NUCLEAR REGULATORY COMMISSION

[NRC-2011-0006]

#### Sunshine Act Notice

**AGENCY HOLDING THE MEETINGS:** Nuclear Regulatory Commission.

**DATE:** Weeks of January 17, 24, 31; February 7, 14, 21, 2011.

**PLACE:** Commissioners' Conference Room, 11555 Rockville Pike, Rockville, Maryland.