



UNITED STATES  
NUCLEAR REGULATORY COMMISSION

WASHINGTON, D.C. 20555-0001

November 24, 1999

MEMORANDUM TO: Gary M. Holahan, Director  
Division of Systems Safety & Analysis  
Office of Nuclear Reactor Regulation

Hubert J. Miller, Regional Administrator  
Region I

Luis A. Reyes, Regional Administrator  
Region II

James E. Dyer, Regional Administrator  
Region III

Ellis W. Merschoff, Regional Administrator  
Region IV

FROM: Samuel J. Collins, Director  
Office of Nuclear Reactor Regulation

SUBJECT: *Brian Sheron* DELEGATION OF AUTHORITY FOR ALL POWER REACTOR NOEDS  
PROCESSED DURING THE Y2K TRANSITION

As part of the agency's contingency planning for handling the Year 2000 (Y2K) computer problem, augmented staff has been assigned to the NRC Operations Center and to the regional Incident Response Centers (IRCs). Mr. Holahan has been assigned as the reactor safety team director. Regional administrators have indicated their intent to either be present at their IRC or to be available to their regional IRC teams.

In accordance with the NRC Enforcement Policy, "Interim Enforcement Policy Regarding Enforcement Discretion for Nuclear Power Plants During the Year 2000 Transition," and its implementing procedures, the director of the reactor safety team and the regional administrators are hereby delegated the authority to grant and deny power reactor NOEDs that are requested by any nuclear power plant licensees, regardless of which region the plant is located, during the Y2K transition (that is, the period December 31, 1999, through January 3, 2000). They may re-delegate this authority, either in writing or by telephone, to an SES-level manager in their organizations.

Authority for granting and denying power reactor NOEDs after January 3, 2000, is delegated as specifically identified in NRC Inspection Manual Part 9900, "Technical Guidance-Operations-Notices of Enforcement Discretion."

cc: Frank Miraglia  
Roy Zimmerman  
Brian Sheron  
Frank Congel  
Joseph Giitter

## STAFFING PLAN

### Minimum Staffing for Headquarters Operations Center Power Reactor NOED Team

1. One team manager (SES). Responsible for coordinating and managing the team members and facilitating the decision process. This person may have delegated or re-delegated authority from the Director, NRR, to verbally grant or deny the NOED request.
2. Three senior project managers knowledgeable in the NOED process, TS requirements, and plant safety systems. These members will be responsible for obtaining necessary information from the licensee and resident inspectors, and will assist the NOED team in its evaluation and approval or denial of the NOED.
3. One senior TS specialist to provide understanding and interpretation of TS requirements.
4. Three or four technical branch section chiefs or senior reviewers representing Reactor Systems, Electrical, Instrumentation and Controls, Plant Systems and Probability Risk Assessment branches to develop safety assessments as input to NOED decisions.

### Sample Regional Incident Response Center Power Reactor NOED Team Staffing\*

(Note: Actual staffing levels and personnel selections for the regions will be determined by the respective regional administrators.)

1. One team manager (regional administrator or designated SES manager) to serve the same function as the Headquarters' team manager. This person will have delegated or re-delegated authority from the Director, NRR, to verbally grant or deny the NOED request.
2. One Projects branch chief to serve the same function as the Headquarters senior PMs.
3. A license examiner or senior resident inspector (SRI) to serve the same function as the Headquarters senior TS specialist. (A member of the regional staff qualified as an operations inspector is acceptable.)
4. A senior reactor analyst, if available.
5. Sufficient DRS branch chiefs and/or technical staff available to represent the same disciplines and serving the same functions as the Headquarters section chiefs.

\*NOTE: Region IV will be staffed in accordance with Section 400 of the implementing procedures.

## EXAMPLES OF POSSIBLE POWER REACTOR NOED SCENARIOS

### Example 1: EDG Inoperability

#### THE EVENT

On December 31, 1999, the plant is operating at normal power level. At 8:00 p.m., due to an unanticipated condition, Train A EDG is rendered inoperable. The NRC is immediately notified by the licensee to provide a "heads-up" due to the impending Y2K transition. TSs require verification within 24 hours that there is no common-cause failure. Otherwise, TSs require surveillance on Train B EDG by starting the EDG.

At 9:30 p.m., the licensee notifies NRC that a potential for a common-cause failure has not been eliminated, and that the Train B EDG surveillance test is now being conducted. At 10:30 p.m., the licensee notifies NRC that during the TS surveillance testing the Train B EDG failed to start. With both EDGs inoperable, TSs require restoration of one EDG to operable status within 2 hours or begin shutdown of the plant. The licensee expects to restore one EDG to operable status within the 2-hour allowed outage time (AOT), that is, by 12:30 a.m. on January 1, 2000. At this time, all offsite circuits are available and the grid is stable.

At 11:30 p.m., the licensee notifies NRC that it was notified by the load dispatcher that, although the grid is currently stable, there is some concern that, because of unanticipated Y2K problems affecting utilities in an earlier time zone, the grid could be adversely affected after midnight, and that operation of the nuclear unit would provide added margin to ensure that grid stability is maintained. At this point, the licensee had also concluded that an additional 2 hours will be needed to complete repairs on one EDG.

The licensee has a 5-megawatt station blackout (SBO) gas turbine that is operable based on a surveillance test completed 3 days ago. The licensee stated that one of the inoperable diesels can be manually started if required, and that equipment operators have been stationed at critical plant locations to ensure that EDG and/or SBO power can be provided. No other equipment is inoperable.

#### NOED CRITERIA

- (a) complying with the license conditions would require a plant shutdown: Yes.
- (b) continued plant operation is needed to help maintain a reliable and stable grid: Not at this time, but possible grid problems are anticipated. The licensee provided additional information which the NRC determined was sufficient to satisfy this criterion.
- (c) any decrease in safety as a result of continued plant operation is small: Licensee has stated that the decrease in safety is small due to the manual EDG start capability, the strategic placement of equipment operators, and the capability of the SBO turbine.

#### DECISION

NRC reviewed the licensee's information and agreed with the analysis. Therefore, the NOED was granted.

### Example 2: Main Steam Isolation Valve (MSIV) Inoperability

## EXAMPLES OF POSSIBLE POWER REACTOR NOED SCENARIOS

### Example 1: EDG Inoperability

#### THE EVENT

On December 31, 1999, the plant is operating at normal power level. At 8:00 p.m., due to an unanticipated condition, Train A EDG is rendered inoperable. The NRC is immediately notified by the licensee to provide a "heads-up" due to the impending Y2K transition. TSs require verification within 24 hours that there is no common-cause failure. Otherwise, TSs require surveillance on Train B EDG by starting the EDG.

At 9:30 p.m., the licensee notifies NRC that a potential for a common-cause failure has not been eliminated, and that the Train B EDG surveillance test is now being conducted. At 10:30 p.m., the licensee notifies NRC that during the TS surveillance testing the Train B EDG failed to start. With both EDGs inoperable, TSs require restoration of one EDG to operable status within 2 hours or begin shutdown of the plant. The licensee expects to restore one EDG to operable status within the 2-hour allowed outage time (AOT), that is, by 12:30 a.m. on January 1, 2000. At this time, all offsite circuits are available and the grid is stable.

At 11:30 p.m., the licensee notifies NRC that it was notified by the load dispatcher that, although the grid is currently stable, there is some concern that, because of unanticipated Y2K problems affecting utilities in an earlier time zone, the grid could be adversely affected after midnight, and that operation of the nuclear unit would provide added margin to ensure that grid stability is maintained. At this point, the licensee had also concluded that an additional 2 hours will be needed to complete repairs on one EDG.

The licensee has a 5-megawatt station blackout (SBO) gas turbine that is operable based on a surveillance test completed 3 days ago. The licensee stated that one of the inoperable diesels can be manually started if required, and that equipment operators have been stationed at critical plant locations to ensure that EDG and/or SBO power can be provided. No other equipment is inoperable.

#### NOED CRITERIA

- (a) complying with the license conditions would require a plant shutdown: Yes.
- (b) continued plant operation is needed to help maintain a reliable and stable grid: Not at this time, but possible grid problems are anticipated. The licensee provided additional information which the NRC determined was sufficient to satisfy this criterion.
- (c) any decrease in safety as a result of continued plant operation is small: Licensee has stated that the decrease in safety is small due to the manual EDG start capability, the strategic placement of equipment operators, and the capability of the SBO turbine.

#### DECISION

NRC reviewed the licensee's information and agreed with the analysis. Therefore, the NOED was granted.

### Example 2: Main Steam Isolation Valve (MSIV) Inoperability

## THE EVENT

On December 31, 1999, a BWR plant is operating at 80 percent power level. At approximately 9:00 p.m., due to leaking nitrogen, the licensee declares one MSIV inoperable, and immediately notifies NRC of the issue. The backup motive force for MSIV closure is provided by a hydraulic source with Class 1E power. TSs require restoring the MSIV to operable status within 8 hours or initiate a plant shutdown. At 11:00 p.m., the licensee determines that restoration of the nitrogen supply will be completed within 10 hours from the declaration. The licensee requests a NOED to extend the AOT to 10 hours instead of 8 hours.

The licensee stated that both EDGs are operable. In addition, there are no historical problems with the MSIVs at this site. The 2.5-megawatt SBO diesel is operable based on a surveillance test completed 14 days ago, and can provide power to the backup MSIV control system. No other equipment is inoperable. Plant staff has been significantly augmented due to the Y2K transition, and is stationed throughout the plant in critical locations to ensure rapid response to requests. The licensee was notified at 10:30 p.m. by the load dispatcher that the grid is currently stable, and that there are no anticipated Y2K concerns.

## NOED CRITERIA

- (a) complying with the license conditions would require a plant shutdown: Yes.
- (b) continued plant operation is needed to help maintain a reliable and stable grid: Not at this time, and no grid problems are anticipated.
- (c) any decrease in safety as a result of continued plant operation is small: Licensee has stated that due to the short (2 hour) extension of the AOT, the robust backup power and actuation capability, and the augmented staff, the level of safety is maintained.

## DECISION

NRC staff and management have reviewed the licensee's information, and agree with the analysis. However, this request does not conform to the Y2K NOED criteria due to a negative response to item (b). After further consideration, the licensee modifies the request to a "regular NOED." On this basis, the NOED is granted.

### Example 3: Offsite AC Power Partial Loss

#### THE EVENT

On December 29, 1999, a west coast plant is operating at 80 percent power. At 2:00 a.m. (all times are Pacific time), one required offsite circuit became inoperable due to the failure of a switchyard component. TSs require restoring the offsite circuit within 72 hours. The AOT expires at 2:00 a.m. on January 1, 2000. After evaluating the situation and due to the pending Y2K transition, the licensee notifies NRC at 8:00 a.m. on December 29 that restoration should be completed within the AOT.

At 6:00 p.m. on December 31, the licensee determines that it will not be able to complete the required action by 2:00 a.m. on January 1 because a replacement part, which previously passed all pre-installation tests, failed during post-maintenance testing. The licensee promptly gives the NRC a "heads-up" phone call, and then at 9:30 p.m. on December 31, after diagnosing the failure, requests a NOED to extend the AOT from 72 hours to 96 hours to complete the required action. During this call, the licensee stated that, at 9:15 p.m. on December 31, the load dispatcher told the licensee that, although the grid is currently stable, there is some concern that, because of unanticipated Y2K problems affecting utilities in the eastern time zone, the grid could be adversely affected after midnight, and that operation of the nuclear unit would provide added margin to ensure that grid stability is maintained.

The licensee stated that both EDGs and the 1.2-megawatt SBO diesel are operable based on recent surveillance tests. No other plant equipment is inoperable. Extra auxiliary and reactor operators are on site in anticipation of the Y2K transition.

#### NOED CRITERIA

- (a) complying with the license conditions would require a plant shutdown: Yes:
- (b) continued plant operation is needed to help maintain a reliable and stable grid: Not at this time, but possible grid problems are anticipated. The licensee provided additional information which the NRC determined was sufficient to satisfy this criterion.
- (c) any decrease in safety as a result of continued plant operation is small: Licensee has stated that the decrease in safety is small due to the capability of the EDGs and the SBO diesel, and the small requested increase in the AOT from 72 hours to 85 hours.

#### DECISION

NRC staff and management have reviewed the licensee's information, and agree with the analysis. Therefore, the NOED is granted.

#### Example 4: Loss of Vital DC Power

##### THE EVENT

On December 31, 1999, at 11:00 p.m., a Class 1E Train A DC system ground alarm is received. The licensee declares the DC bus inoperable. TSs require restoring the DC system within 2 hours or be in Mode 3 within 6 hours. The DC ground fault clearing procedure calls for de-energizing each circuit one at a time and would cause one train of safety system inoperability. The licensee promptly notifies NRC of the problem and, at 11:30 p.m., after preparing a recovery plan, requests a NOED for extending the AOT from 2 hours to 8 hours.

The licensee stated that the location of the ground has not been determined yet, and that the plant has experienced several other ground faults in different systems during the past 3 months and all have been repaired within 8 hours. Both EDGs and the 0.6-megawatt SBO diesel are operable. The load dispatcher just notified the licensee that the grid was stable and no problems were anticipated due to the significant margin.

##### NOED CRITERIA

- (a) complying with the license conditions would require a plant shutdown: Yes.
- (b) continued plant operation is needed to help maintain a reliable and stable grid: No. However, the licensee, in anticipation of the Y2K transition, wants to be in a position to support the grid.
- (c) any decrease in safety as a result of continued plant operation is small: Licensee has stated that the decrease in safety is small due to the capability of the EDGs and the SBO diesel, the current staffing level at the plant, and their experience with several similar problems in recent months.

##### INITIAL DECISION

NRC staff and management have reviewed the licensee's information. Because there are no current or anticipated grid issues, a Y2K NOED cannot be granted. In addition, because there is a decrease in safety, a "regular NOED" may not be appropriate. Therefore, the NOED is denied.

##### SUBSEQUENT EVENT AND FINAL DECISION

At 12:10 a.m., the licensee is notified by the load dispatcher that several fossil units have tripped. Although the grid is stable, margin has been significantly decreased and the dispatcher has requested the unit to stay at power if possible. The licensee immediately calls NRC and states that the unit is still operating. The licensee is trying to complete the repair within the AOT, but still anticipates requiring the additional 6 hours previously requested. They are asking the NRC to reconsider their previous request. NRC evaluates the new information and agrees with the licensee that the conditions for a Y2K NOED are met. Therefore, this followup request for a NOED is granted.

LIST OF RECENTLY ISSUED  
 NRC REGULATORY ISSUE SUMMARIES

Regulatory Issue Summary No.	Subject	Date of Issuance	Issued to
99-04	Reminder to Licensees of Their Responsibilities Under Environmental Statues	11/10/99	All holders of OLs for nuclear power reactors
99-03	Resolution of Generic Issue 145 Actions to -Reduce Common-Cause Failures	10/13/99	All holders of OLs for nuclear power reactors, except for those licensees who have permanently ceased operations and have certified that fuel has been permanently removed from the reactor vessel
99-02	Relaxation of Technical Specification Requirements for PORC Review of Fire Protection Program Changes	10/13/99	All holders of OLs for nuclear power reactors, except for those licensees who have permanently ceased operations and have certified that fuel has been permanently removed from the reactor vessel
99-01	Revision To The Generic Communications Program	10/4/99	All NRC licensees