



UNITED STATES  
NUCLEAR REGULATORY COMMISSION

REGION IV  
611 RYAN PLAZA DRIVE, SUITE 400  
ARLINGTON, TEXAS 76011-8064

DEC 8 1993

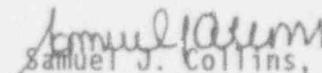
Docket: 50-285  
License: DPR-40

Omaha Public Power District  
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Nuclear Operations  
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P.O. Box 399, Hwy. 75 - North of Fort Calhoun  
Fort Calhoun, Nebraska 68023-0399

SUBJECT: TASK INTERFACE AGREEMENT: INTERPRETATION OF REPORTING  
REQUIREMENTS - 93TIA006 (TAC NO. M86339)

The purpose of this letter is to provide for your information a copy of the guidance recently issued by the Office of Nuclear Reactor Regulation in their Memorandum of November 2, 1993, to Region IV (see enclosed). This guidance was provided in response to a Region IV request for interpretation of reporting requirements related to multiple failures of safety-related components that are identified during the performance of surveillance testing.

We plan to implement this guidance during our future inspections at your facility. Should you have questions regarding this matter, please contact Tom Westerman of my staff at 817-860-8145.

  
Samuel J. Collins, Director  
Division of Reactor Safety

Enclosure: (as noted)

cc w/enclosure:  
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PDR

bcc to DMB (IE01) - DRS and DRP  
bcc to DMB (IE06) - Radiological Protection Reports  
bcc to DMB (IE35) - Emergency Preparedness Reports  
bcc distrib. by RIV:

J. L. Milhoan

DRSS-FIPS

MIS System

Section Chief (DRP/TSS)

Pete Erickson, NRR Project Manager (MS: 11-B-20)

E. Adensan, NMSS 4 E4

W. Reckley, NRR 13 H15

Resident Inspector

Lisa Shea, RM/ALF, MS: MNBB 4503

RIV File

RIV:C:ES <i>AK</i>	DD:DRS	D:DRP	D:DRS	
TFWesterman	ATHowell	ABBeach	SJCollins	
<i>12/24/93</i>	<i>1 / 93</i>	<i>1 / 93</i>	<i>1 / 93</i>	

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bcc to DMB (IE01) - DRS and DRP  
bcc to DMB (IE06) - Radiological Protection Reports  
bcc to DMB (IE35) - Emergency Preparedness Reports  
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12/2/93	/ /93	/ /93	/ /93	



UNITED STATES  
NUCLEAR REGULATORY COMMISSION

WASHINGTON, D.C. 20555-0001

November 2, 1993

MEMORANDUM FOR: Samuel J. Collins, Director  
Division of Reactor Safety  
Region IV

FROM: Elinor G. Adensam, Assistant Director  
for Regions IV and V  
Division of Reactor Projects III/IV/V  
Office of Nuclear Reactor Regulation

SUBJECT: TASK INTERFACE AGREEMENT: INTERPRETATION OF REPORTING  
REQUIREMENTS - 93TIA006 (TAC NO. M86339)

In response to your request dated April 13, 1993, we have reviewed the available guidance associated with the reporting requirements related to multiple failures of safety-related components that are identified during the performance of surveillance procedures. The specific examples cited in your questions regarded the outage surveillances related to primary or secondary safety relief valves and the discovery that the as-found setpoints were outside the allowable technical specification setpoint tolerances. Please note that the Public Document Room (PDR) has been included on the distribution for this response.

Licensees were stated to have presented interpretations of the reporting rules (10 CFR 50.72/50.73) and the related guidance provided in NUREG-1022, which supported the conclusion that the discovery of safety valve setpoint drift was not reportable. Specifically, question 2.3 of NUREG-1022, Supplement 1, had been used to argue that the condition was not reportable, because the condition could be assumed to have occurred at the time of discovery. Another argument presented by licensees was stated to involve analyses or evaluations which determined that the degraded setpoints did not result in the plant operating outside its design basis, and therefore supported a conclusion that the condition was not reportable.

A review of 50.72 and 50.73 identifies several reporting criteria which might be relevant to the discovery of safety valves outside the setpoint tolerances given in the Technical Specifications. These criteria and a discussion of their applicability is provided in Enclosure 1.

The assessment can be summarized as follows:

- The use of question 2.3 of NUREG-1022, Supplement 1, is not appropriate to justify a decision to not report many conditions found during refueling outage surveillances. Other guidance in Supplement 1 is clear that if conditions are discovered during an outage, but are believed to have existed during operation, they are reportable so long as an applicable threshold for reporting is reached.

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November 2, 1993

- A licensee may determine that a condition such as safety valve setpoint drift, does not constitute operation outside the design basis of the plant, and therefore not report such events in accordance with those criteria in 50.72 and 50.73. However, as discussed below, the condition may be reportable as a result of other criteria.
- 50.73(a)(2)(vii) is deemed the most relevant criterion for the reporting of primary or secondary safety valves found to be outside the acceptable setpoint tolerance. This is due to the fact that this criterion is based on the train or channel level and does not require the loss of a safety function but only the inoperability of multiple channels of a safety system. Some latitude might be given in light of the number of secondary safety valves; but, for most instances of setpoint drift, this criterion would result in the conditions being reportable.
- Note that we currently expect to include guidance along these lines in the forthcoming Revision 1 to NUREG-1022; if so, that specific guidance should be consulted in the future in determining reportability.

*Elinor G. Adensam*

Elinor G. Adensam, Assistant Director  
for Regions IV and V  
Division of Reactor Projects III/IV/V  
Office of Nuclear Reactor Regulation

Enclosure:  
Criteria

cc w/enclosure:  
W. Hodges, Region I  
A. Gibson, Region II  
G. Grant, Region III  
K. Perkins, Region V

ENCLOSURE

ASSESSMENT OF VARIOUS REPORTING REQUIREMENTS FOR APPLICABILITY TO  
PRIMARY OR SECONDARY SAFETY VALVES FOUND OUTSIDE TECHNICAL SPECIFICATION  
ACCEPTABLE SETPOINT TOLERANCE BAND

50.72(b)(1)(ii) Any event or condition during operation that results in the  
50.73(a)(2)(ii) condition of the nuclear power plant, including its  
principal safety barriers, being seriously degraded; or  
results in the nuclear power plant being:

- (A) In an unanalyzed condition that significantly  
compromises plant safety;
- (B) In a condition that is outside the design basis of  
the plant; or
- (C) In a condition not covered by the plant's operating  
and emergency procedures.

Discussion: The applicability of these criteria is determined by an  
evaluation of the situation by the licensee. Upon  
determining that the setpoints were outside the allowable  
range of the technical specifications, the licensee would be  
expected to follow the required actions of the technical  
specifications and assess the plant condition in regards to  
equipment operability and required corrective actions.  
Guidance related to the evaluation of degraded and  
nonconforming conditions is provided by Generic Letter  
91-18. As stated in the second draft of NUREG-1022,  
Revision 1, it is expected that licensees may use  
engineering judgement and experience in determining whether  
a condition meets these reporting criteria. The ability of  
a licensee to justify that a given condition is neither  
unanalyzed nor outside the design basis is dependent on the  
as-found condition of the equipment and the degree of  
analyses performed.

50.72(b)(2)(i) Any event, found while the reactor is shut down, that, had  
it been found while the reactor was in operation, would have  
resulted in the nuclear power plant, including its principal  
safety barriers, being seriously degraded or being in an  
unanalyzed condition that significantly compromises plant  
safety.

Discussion: The arguments are very similar to those above and again can  
support either a reportable or non-reportable conclusion  
based on the licensee's assessment of the significance of  
the condition. However, this criterion was intended to  
capture potential problems which might be discovered only  
during refueling outage surveillances. Question 7.10 in  
NUREG-1022, Supplement 1, is considered relevant guidance in  
regard to the reportability of equipment found to be  
inoperable during outage surveillances.



Question 2.3 of NUREG-1022, Supplement 1, and the second draft of NUREG-1022, Revision 1, state that failures should be assumed to occur at the time of discovery unless there is firm evidence to believe otherwise. It seems appropriate to classify setpoint drift as a mechanism which would occur some time (usually indeterminable) during the period between calibration and subsequent surveillance unless some factor, such as an extended outage or testing conditions, could be identified as a likely cause. If testing conditions or other causes are identified such that reporting is deemed unnecessary, the licensee would still be expected, under other programs and regulatory requirements, to evaluate the adequacy of the surveillance program to ensure that the activity is ensuring the operability of the safety valves or other components. A voluntary report may still be useful as a means of distributing the information related to the problem and its cause to the industry. Please note that although question 2.3 may be deemed an insufficient reason to determine safety valve drift is not reportable, the licensee may determine that the significance (see above) of the condition does not satisfy the reporting threshold.

50.72(b)(2)(iii) Any event or condition that alone could have prevented the  
50.73(a)(2)(v) fulfillment of a safety function of structures or systems  
that are needed to:

- (A) Shut down the reactor and maintain it in a safe shutdown condition,
- (B) Remove residual heat,
- (C) Control the release of radioactive material, or
- (D) Mitigate the consequences of an accident.

Discussion: The second draft of NUREG-1022, Revision 1, provides safety valve drift as an example of a common mode problem which may be reportable under this criterion. The example was added to the case described in Information Notice 85-27 which dealt with multiple inoperable control rods. Although certain occurrences of multiple safety valve drift problems should be determined to be reportable under this criterion, it should not be assumed that all cases of one or more safety valves exceeding the technical specification tolerance band need be reportable in accordance with this criterion. As in the previously discussed reporting criteria, the licensee's engineering judgement should determine if the condition could have prevented the fulfillment of a safety function. Candidates for reporting include those cases in which the setpoints of multiple safety valves could have resulted in exceeding the associated system's design pressure. If experience or engineering judgement can reasonably estimate the maximum



drift which might occur and determine that the safety function would be maintained, the licensee can determine that the condition is not reportable.

Although discussed in the various drafts and revisions of NUREG-1022, it warrants repeating that the primary motivation behind evaluating plant conditions such as safety valve drift should be to ensure safety and only secondarily to determine reportability. If engineering assessments identify a problem and determine that plant equipment was not and reasonably could not be rendered inoperable by a phenomenon such as setpoint drift, the licensee can then also justify a determination that the condition is not reportable. Voluntary reports are appreciated if the licensee feels the information might be helpful to others. The staff should, as always, be cautious in recommending that a licensee make a "voluntary" report.

- 50.73(a)(2)(vi) Events covered in paragraph (a)(2)(v) of this section may include one or more procedural errors, equipment failures, and/or discovery of design, analysis, fabrication, construction, and/or procedural inadequacies. However, individual component failures need not be reported pursuant to this paragraph if redundant equipment in the same system was operable and available to perform the required safety function.

Discussion: (See above)

- 50.73(a)(2)(vii) Any event where a single cause or condition caused at least one independent train or channel to become inoperable in multiple systems or two independent trains or channels to become inoperable in a single system designed to:

- (A) Shut down the reactor and maintain it in a safe shutdown condition,
- (B) Remove residual heat,
- (C) Control the release of radioactive material, or
- (D) Mitigate the consequences of an accident.

Discussion: This criterion may be the most relevant to the specific example of safety valves found outside the technical specification tolerance band. As stated in the second draft of NUREG-1022, Revision 1, the reporting threshold for this part of 10 CFR 50.73 is lower than for other parts since it is at the train or channel level rather than the system and function levels. Valves found outside the technical specification setpoint tolerance band can reasonably be considered to have been inoperable during operation unless a licensee determines that testing is not representative of conditions during operation (see item 50.72(b)(2)(i)). This

criterion was developed with general consideration given to the normal two train design level of redundancy. Given that most plants can satisfy pressure relief requirements with several main steam safety valves unavailable, a rigid interpretation of this criterion regarding the secondary safety valves (i.e., any case with more than one safety valve outside the tolerance band) may be overly conservative. However, the licensees are considered to have the weakest argument if they determine that this criterion is not applicable, and therefore the condition is not reportable, when finding multiple safety valves outside the acceptable range.

50.73(a)(2)(i.B) Any operation or condition prohibited by the plant's technical specifications.

Discussion: Available guidance regarding operability and technical specification requirements generally have licensees enter the allowed outage time and associated action statements upon discovery of equipment inoperability unless a definite time of inoperability can be established. Technical specifications are considered satisfied provided the allowed outage time and associated action statements are satisfied. Therefore, provided that licensees restore compliance prior to returning to power operation, reporting of safety valve drift in accordance with this criterion would not be necessary. However, it is expected that upon identification of a problem such as safety valve setpoint drift, licensees should take actions to prevent recurrence or pursue a change in the technical specification requirements (such as increasing the acceptable tolerance range of the setpoints). If a licensee determines, through industry experience, information from a vendor, or self assessments, that a component may be inoperable during operation, appropriate actions should be taken in accordance with the technical specifications (reduce power or shutdown). This reporting criterion may be applicable if a licensee fails to satisfy the required action or can determine that a limiting condition of operation had not been satisfied for longer than the allowed outage time following a specific cause for a component becoming inoperable.