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U.S. Nuclear Regulatory Commission  
ATTN: Mr. David L. Meyer, Chief  
Regulatory Publications Branch  
Division of Freedom of Information  
and Publication Services  
Office of Administration  
Washington, D.C. 20555

Dear Sir:

DRAFT NUREG 1022, REVISION 1

This letter is to provide comments as requested by NRC in the October 7, 1991, Federal Register (50598) which announced the availability for public comment of Draft NUREG-1022 Revision 1, "Event Reporting Systems (10 CFR 50.72 and 50.73): Clarification of NRC Systems and Guidelines for Reporting."

On January 1, 1984, NRC rulemaking on 10 CFR 50.73 Licensee Event Reports (LERs) became effective. In 1989, the NRC staff conducted a survey among 13 nuclear power utilities regarding the impact of the NRC on utilities. Partially in response to concerns raised by the nuclear industry in the survey, four regional workshops were conducted which focused on event reporting. Through the survey and the workshops, the industry expressed its concerns regarding reporting which, it believed, while not specifically required by the language of the rule was, in fact, being requested by the staff. Industry also initiated efforts to reduce such unnecessary reporting through the Boiling Water Reactor Owners Group. As a result of these events, the staff "determined that additional clarification was needed to further improve the usefulness, quality, and threshold of reporting," and accordingly, published draft NUREG 1022, Revision 1. The language of the rule was not changed. The staff's stated intention was that the new guidance provide "clarifications [that] do not change the scope or intent of the reporting requirements."

The draft NUREG does not provide the additional clarifications sought by the nuclear industry. Conversely, it broadens the scope of reporting beyond the language and the intent of the rule. TVA views the guidance in this draft NUREG as clearly deviating from the interpretations and guidelines which have been previously established through interfaces with resident inspectors, NRC inspection teams, regional personnel, and

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previously published NRC guidance. The proposed guidance clearly lowers the threshold of reportability. An example of this lower threshold is illustrated by Section 3.2.4(3) of the draft NUREG, which indicates that deviations from engineering design basis are to be reported. In contrast, the Statements of Consideration for the final rule, as published in 1983, stated that "the LER will be a detailed narrative description of potentially significant safety events." It now appears that this litmus test of "potentially significant safety events" is no longer being applied. Also, contrary to the direction of NUREG 1022, the use of "Engineering Design Bases" as defined in NUREG 1397 is not appropriate for determining reportability under 10 CFR 50.72 and 50.73. Since NUREG 1397 itself states "the 10 CFR 50.2 definition of design bases is used in determining immediate notification requirements under 10 CFR 50.72 and licensee event report requirements under 10 CFR 50.73. These regulations require the licensee to report any event or condition that results in a nuclear power plant being outside its design bases." TVA does not believe that this type of change can be characterized as a clarification of requirements, but rather, that it is a direct change in the threshold of reportability. Another area involving the lowering of thresholds exists in the contrasting language in Supplement 1 of the NUREG versus Revision 1. Supplement 1, Question 2.9, of the original NUREG states that organizational changes not approved by Technical Specifications do not require LERs. In contrast, Revision 1 states, "If a change in the plant's organizational structure is made that has not yet been approved as a technical specification change, an LER is required." The examples cited above, which are characteristic of examples throughout the draft NUREG, demonstrate the fact that this new guidance clearly lowers the threshold for reportability.

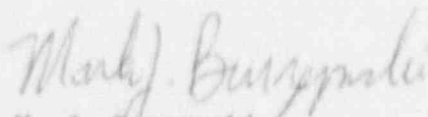
The stated goal of the Commission in the original rule "was to assure that the scope of the rule would not increase the overall level of effort above that currently required to comply with existing LER requirements." The basis of this concern was the impact the rule might have on the licensee's resources. The implementation of the guidance on LERs as suggested in the draft of NUREG 1022, Revision 1, will result in an increase in the number of LERs submitted by this licensee, perhaps by orders of magnitude. This will have a significant impact on the resources required to generate those reports. NRC should also consider the potential impact that such an increase would have on the NRC's and the public's perception of nuclear plant safety. Another consideration is that the overwhelming quantity of reports generated and submitted could tend to dilute the quality of the review by licensees and NRC alike. This potential side effect has the tendency to obscure the true significant safety events in a cloud of insignificant reports.

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TVA recommends that after the staff studies the comments it receives, it consider withdrawing the NUREG, or alternatively, solicit additional industry input to the draft NUREG by conducting more workshops to gain a more thorough understanding of the industry's perspective and the potential impact on the industry before revising the draft NUREG for final publication. TVA endorses NUMARC's comments on this NUREG and additionally, provides detailed comments included as an enclosure to this letter.

Sincerely,



M. J. Barzynski  
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Enclosure

cc (Enclosure):

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ENCLOSURE

NUREG-1022 Rev. 1

EVENT REPORTING SYSTEMS  
10 CFR 50.72 and 50.73

DRAFT REPORT FOR COMMENT

NUREG-1022

TVA COMMENTS

1. The purpose of this revision to NUREG-1022 is to ensure events are reported as required by improving 10 CFR 50.72 and 50.73 reporting guidelines and to consolidate these guidelines into a single reference document. This document updates and supersedes NUREG-1022 and its Supplements 1 and 2. . . . When differences exist, this document takes precedence. [Page 3]

10 CFR 50.109 defines a backfit as "the imposition of a regulatory Staff position interpreting the Commission rules that is either new or different from a previously applicable Staff position." In view of the fact that the Staff acknowledges that NUREG-1022, Rev. 1 modifies previous Staff positions, the Staff should prepare a regulatory analysis in accordance with the provisions of 10 CFR 50.109.

2. A plant design review showed that numerous modifications had been made to conduit supports for safety equipment. The plant procedure required verification of adequate hanger capacity by reviewing the original calculations but did not require updating the original calculations for each modification. As a result, each modification added loads to the original calculations without regard to previous modifications. The review showed that one or more hangers were overloaded.

The Staff should clarify that by "identified" it means completion of the reportability evaluation for the first hanger that is determined to exceed the reportability threshold. The Staff should also clarify that this example is intended to illustrate initiation of the reportability clock and not illustrate reportability of hanger deficiencies. To clarify this point, TVA suggests adding the following in front of the sentence highlighted in bold letters: "The licensee concluded that these hangers placed the plant in

Discovery occurs when the first hanger is identified that exceeds the threshold of reportability under any of the criteria noted above. The ENS notification is to include what is known at that time. The following LER may include similar overloaded hangers that are found during the 30-day period.  
[Page 16-17]

3. Licensee personnel removed a hose attached to a chlorine bottle from a sewage treatment facility adjacent to the plant site. A chlorine release occurred because the bottle valve was not fully closed. Several of the plant's administrative buildings were evacuated and three individuals were taken to an area hospital for chlorine gas inhalation. The licensee declared an Unusual Event within 15 minutes and made an ENS notification within 27 minutes of the release.

This report provided human interest information that would be useful to the NRC public affairs officer if contacted by local or national news media. An LER is required under 50.73(a)(2)(x). [Page 25]

an unanalyzed condition that significantly compromised plant safety and that the condition was verifiable per 50.72(b)(1)(ii) and 50.73(a)(2)(ii)."

TVA firmly disagrees that the "would be useful" test can be justified as a requirement under 50.73(a)(2)(x) or any other existing reporting requirements. Such a test is too broad and subject to a wide range of interpretations. TVA submits that the NRC resident inspector can provide the NRC public affairs officer with timely information on matters that relate primarily with public relations concerns.

In the Statements of Consideration to the 10 CFR 50.73 final rule (48FR33850), the Commission stated that "Of particular concern to the Commission was the impact that the proposed rule would have on the resources used by licensees to prepare LERs. The Commission's goal was to assure that the scope of the rule would not increase the overall level of effort above that currently required to comply with the existing LER

requirements." Furthermore, the Commission stated that the rule identifies the types of reactor events and problems that are believed to be significant and useful to the NEC in its effort to identify and resolve threats to public safety." TVA considers that requiring reporting of human interest information conflicts with both of these Commission objectives.

Additionally, 10 CFR 50.73(a)(2)(x) requires reporting of "[a]ny event that posed an actual threat to the safety of the nuclear power plant or significantly hampered site personnel in the performance of duties necessary for the safe operation of the nuclear power plant . . ." This example does not meet any of these criteria since safety-related duties are not performed in administration buildings and therefore evacuation of such buildings could obviously not hamper performance of duties necessary for safe operation of the plant.

4. If a change in the plant's organizational structure is made that has not yet been approved as a TS change, an LER is required. [Page 28]

This staff position is diametrically opposed to a previous staff position. NUREG-1022, Supplement No. 1, Question 2.9 discusses Technical Specifications (TS) administrative requirements. Specifically, the Staff stated that "if the [TS] requirement is only administrative and does not affect plant operation, then an LER is not required; for example, a change in the plant's organizational structure that has not been approved as a Technical Specification." The concerns identified in comment 3. above are also applicable here.

5. A licensee failed to implement radiation protection controls required by the TS. Such failure resulted in, or had a high potential for, personnel exposures in excess of NRC prescribed limits. An LER is required under the requirements of §20.493 and this §50.73 criterion; one report should cite both requirements. [Page 38]

First, this example is too general to effectively assist licensees in their reportability determination. It does not provide concrete and specific information regarding the alleged failure to implement radiation control requirements, thus leaving the reader to conjecture what the problem could be. Second, 10 CFR 20.403 requires the reporting of "events" and not failure to implement administrative requirements. Finally, 10 CFR 20.403 requires a 24 hour ENS notification, not a 10 CFR 50.73 LER. The procedures of 10 CFR 50.73 should be followed to report over exposures and excessive levels and/or concentrations as required by 10 CFR 20.405.

6. When evaluating the reportability of conditions that appear to be outside the design basis of the plant, "engineering design basis" as defined in NUREG-1397 . . . should be used. The term "engineering design basis" is defined in NUREG-1397 to include "the entire set of design constraints that are implemented [for structures, systems, or components], including

- those that are part of the current licensing bases and form the bases for the [NRC's] safety judgments, and
- those that are implemented to achieve certain economics of operation, maintenance, procurement, installation, or construction."

This section of Draft NUREG-1022, Revision 1 appears to imply that any deviation from the areas listed (e.g., licensing commitments) should be reported, regardless of its safety significance. The examples listed to illustrate this new Staff position support this assessment. Such an interpretation constitutes the most significant departure from established regulatory thresholds and has the potential for creating an explosive growth in the number of LERs submitted to NRC.

The design constraints listed may provide meaningful insights to the individual evaluating the condition. However, it should be made clear that exceeding any one of the constraints is not reportable unless a safety assessment reveals that there exists a significant degradation in plant safety.

NUREG-1397 defines current licensing basis to be "the NRC requirements imposed on the plant that are currently in effect . . . The licensing bases are contained in NRC regulations, plant technical specifications, orders, license conditions, exemptions, [NRC Staff safety evaluations], and licensee commitments contained in the final safety analysis report, and other docketed licensing correspondence including responses to bulletins and generic letters." [Pages 44-45]

7. . . . the plant is operating outside existing required operating or emergency procedures for safety-related equipment [Minor valve misalignments, such as a local instrument root valve, are not reportable. Significant valve misalignments are reportable.] [Page 45]

8. Plant in Unanalyzed Conditions

. Reportable Events or Conditions - spills that create conditions that could affect component operability, qualification, or design life because of

- a) the extent and depth of water that floods or wets components not designed to be submerged or wetted and that restricts personnel access for safety-related functions

The use of the words "minor" and "significant" must be bounded by the safety significance of the conditions. Their use, without additional clarification, can result in a wide range of interpretations.

The "could affect" test constitutes a change from a previous staff position. NUREG-1022, Supplement No 1, Question 4.1 discusses a situation where a licensee "became aware that [their] plant could have potentially been in an unanalyzed condition. But [they] never operated in that condition and [they] prevented such operation by administrative procedures." The Staff agreed that such an "event is not reportable if the plant was never in an unanalyzed condition."

TVA considers that the key factor is whether the condition actually affected operability.



- b) higher-than-analyzed temperatures and humidity when the water is hot, which degrades components and can result in failures
- c) radiation levels above the area design basis that degrade components. [Page 47]

qualification or design life as demonstrated through an engineering analysis. The "could affect" test is the "hypothetical" space rather than in the "actual" space.

#### 9. Reportable Events or Conditions

- . The licensee had inadequate lighting to perform the remote shutdown procedure in accordance with Appendix R to 10 CFR Part 50. Operators needed to carry portable lights with them to perform this procedure. This event is reportable because fixed emergency lighting was not available which is outside the design basis given in the plant fire protection plan and the requirements of Appendix R to 10 CFR Part 50. [Page 49]

This example illustrates the concern discussed in comment 6. above. While this example identifies a nonconformance condition, the Staff acknowledges that the condition is not safety significant. That is, the Staff acknowledges that the operators, through the use of portable lights, were able to execute the steps in the remote shutdown procedure and meet the design basis: the ability to remotely shutdown the reactor. Accordingly, the licensee was not outside its design basis.

## 10. Reportable Events or Conditions

The licensee discovered that combustible loads in several areas of the plant exceeded the limits in the fire hazards analysis. [Page 50]

This example implies that the discovery of any combustible loads that exceed the limits in the fire hazards analysis is reportable. A licensee may have developed very conservative fire hazards analyses. Upon discovery of such new loads, a licensee may be able to demonstrate, through an engineering analysis, that the new loads would not affect the ability to safely shutdown the reactor. In such a case, the licensee would not be outside its design basis and the condition would not be reportable.

11. The licensee discovered that there was a safety factor of 3 for the recirculation piping, although the FSAR provided a safety factor of 5 for bangers. The licensee concluded that the piping was operable until the next available outage, at which time there will be a drywell entry to restore the FSAR safety factor. The situation is reportable as a condition outside the design basis because the FSAR safety factor was not met. [Page 50]

See comment 8.

12. When significant preventive actions are taken, such as entering severe weather response procedures or having an extra shift on site, or evacuating buildings for personnel protection during a storm or tornado, or if there are serious concerns, then the situation is reportable under 50.72. [Page 53]

TVA disagrees that the reporting threshold of 50.72 is the taking of significant preventive actions. In the Statements of Consideration for the final rule, the NRC states that this criterion only includes those events which significantly hampered the ability of site personnel in performance of duties necessary for safe operation. (See 48 FR 39041) Entering severe

weather response procedures, evacuating buildings for personnel protection and the like do not constitute actions which significantly hampered personnel in the performance of duties necessary for safe operation of the plant.

In addition, in this example the NRC again uses the term "significant." Please see comment 7. with respect to the use of this term.

13. If a snowstorm, hurricane, or similar event could significantly hamper or is expected to significantly hamper personnel in the conduct of their activities, the event is reportable. [Page 53]

The Staff proposes to introduce the "could" test to the interpretation. 10 CFR 50.73(2)(ii) simply states that licensees should report any "natural phenomenon or other external condition that posed an actual threat . . . or significantly hampered site personnel in the performance of duties . . ." The Statements of Consideration clarify that the rule only "requires [reporting of] those events . . . where there is an actual threat to the plant . . ." TVA considers that the introduction of the word "could" obscures rather than clarifies the interpretation. TVA considers that the existing language in the rule and NUREG-1022 and its supplements is adequate to provide consistent reporting.

14. A "threat" is a potential or imminent source of peril. The known physical phenomenon or condition that may cause the peril does not have to exist at the site for the actual threat to exist. An actual threat generates

TVA considers that the Staff's conclusion is incorrect and is a disincentive for conservative management actions as the Statements of Consideration state, "the licensee is to decide if a phenomenon or condition actually threatened the

an actual response. If the plant staff takes action to deal with the situation, an actual threat exists. [Page 53]

plant." Although engineering judgment could indicate that a "threat" does not exist, management may take preventive actions (e.g., send nonessential staff home in case of snow) in order to minimize complications should a "threat" materialize. Although that action is an "actual response," TVA does not consider the condition reportable. TVA recommends deleting the paragraph entirely.

Furthermore, in the Statements of Consideration for the final rule, the NRC discusses precautionary evacuations, and notes that precautionary evacuations that subsequent evaluation determines were not required are not reportable. (See 48 FR 33856) In the context of this example, precautionary evacuations are an "actual response."

15. A licensee had been provided detailed hydrological information from the U.S. Corps of Engineers indicating a flood would occur that would overflow portions of the plant and put the plant into an emergency class. The licensee had known this for a few days before the flood, but did not make an ENS notification... Delaying an ENS notification for days until the flood waters touch the plant boundary or to the end of a time limit does not meet 50.72(b)(1)(iii)... The licensee is required to submit an LER within 30 days of the actual flood. [Page 55]

The Staff should clarify that the clock starts when there is degree of certainty that the flood would occur. Prior to this point in time, there may be an indication that other conditions favor flooding; however, such conditions not always result in a real threat of flood.

16. Fires, toxic gas releases, and radioactive releases are not the only reportable threats or hindrances to safe operation of the plant. They were included in the criteria as examples only and were not meant to be an exclusive list of reportable threats. Additional typical examples of conditions reportable under these criteria are listed below. [The examples provided included in-plant (radioactive) spills or floods, smoke from failed electrical equipment, high levels of carbon monoxide or dioxide in rooms, and discharge of carbon dioxide or halon systems.] [Page 64]

These examples in and of themselves do not provide sufficient information to demonstrate that they posed an actual threat or significantly hampered site personnel in the performance of safety-related duties. Furthermore, most of these examples do not meet the criteria for reportability. (See comments 3. and 8.)

Therefore, if NRC wishes to use these as examples of reportable events or conditions, additional information must be provided to clearly indicate that they posed an actual threat, etc. Otherwise, these examples should be deleted.

17. Internal Threat to Plant Safety

• Broad Scope

The scope of the regulation is broad, covering more than just safety systems. The regulation refers to "the safety of the nuclear power plant" and "safe operation of the nuclear power plant," which covers not only many systems in the reactor building, but also most of those systems in the turbine or auxiliary building. . . . Significant hampering of site personnel in the secondary plant areas is also reportable, because it often increases the reactor transients initiated by secondary system anomalies. [Page 65]

TVA considers that the Staff's extrapolation of the language of the rule to justify reporting of activities in non-safety systems is a new interpretation that, if the Staff wishes to pursue further, should be handled through rulemaking.

TVA considers that the only transients initiated by secondary system anomalies are those that meet reportability thresholds (e.g., trip the reactor).

Furthermore, in the Statement of Consideration for the final rule, the NRC states: "the scope of the rule has been narrowed so that the hazard must hamper the ability of site personnel to perform safety-related activities affecting plant safety." (See 48 FR 33856)

18. The phrase "significantly hampers site personnel" ranges from hindering or interfering with (i.e., causing additional or unusual time-consuming precautionary measures, such as radiation work permits, protective or anticontamination clothing, cool suits, bunker gear, and self-contained breathing apparatus in areas not normally so encumbered) to, and including, prohibiting or preventing automatic or manual actions. [Page 65]
19. Toxic gas releases may result in temporary evacuations of personnel. Evacuation of even a single room or a significant portion of a large area as a result of a gas release is reportable because of the potential of the gas to spread. [Page 68]

TVA disagrees that the Staff's examples can be construed as significantly hampering site personnel. A nuclear power plant is an industrial facility. Personnel are trained to deal with changing conditions. To conclude that unanticipated use of equipment such as protective clothing or self-contained breathing apparatus constitutes evidence of hindering plant activities ignores the realities of an industrial complex. Such an interpretation will require reporting of conditions that have no bearing on plant safety.

TVA disagrees that evacuation of a single room or a larger area is reportable. In the Statements of Consideration for the 50.73 final rule, the NRC states that "[i]n-plant releases must be reported if they require evacuation of rooms or buildings containing safety-related equipment," and "[p]re-automated evacuations ... that subsequent evaluation determines were not required need not be reported." (See 48 FR 33856) Furthermore, in the Statements of Consideration for the 50.72 final rule, the NRC states: "[i]n fact, of these commenters stated that the reporting of in-plant releases of radioactivity that require evacuation of individual rooms was inconsistent with the general thrust of the rule to require reporting of significant events. They noted that minor spills, small gaseous waste releases, or the disturbance of contaminated particulate matter (e.g., dust) may all require the temporary evacuation of individual rooms until the airborne concentrations decrease of until respiratory protection devices

20. Significant in-plant spills in excess of 55 gallons or floods have been under reported by licensees in some instances. These events are of interest to the NRC because of the potential for equipment damage, significant hampering of site personnel in the performance of duties, implications for environmental qualification, intersystem loss-of-coolant accidents (LOCAs), precursors to more serious events, or the potential for fuel becoming uncovered. [Page 69]

- The leaking system is a safety system and potentially involves an intersystem LOCA.
- The intent is to have significant spills and floods reported.
- The leaking fluid is radioactive and contaminates a significant area, contaminates several individuals, or significantly contaminates one individual.
- The leaking fluid is not radioactive, but is in a vital area, and potentially affects vital equipment.

are utilized. They noted that these events are fairly common and should not be reportable unless the required evacuation affects the entire facility or a major part of it. The Commission agrees." (See 48 FR 39041)

The "are of interest" test is not stipulated in the regulations. While at times licensees voluntarily report these events due to the specifics of the event, the Staff requesting that every spill be reported is not warranted. The only spills that should be reported are those the licensee deem have a significant impact on plant safety.

- Electrical equipment was wetted down, such as from the containment spray headers.
- Flooding hampers operations personnel in performance of their duties (e.g., flooding in excess of sump pump capability, a depth of several inches on the floor, contamination requiring new access control measures, or electrical hazards).

21. A fire occurred in the three electrical 480-V, 240-V, and 120-V power trays in a boiling-water reactor BWR drywell while the plant was defueled. The aluminum conduits over the upper cable trays were melted. Welding and electrical activities were in progress in the vicinity at the time of the fire and electrical arcing was noticed in the trays. The components affected were the drywell and floor drain pumps, recirculation loop valves, nuclear instrumentation, and drywell blowers and dampers. Except for the cables, no equipment appeared damaged.

An EMS notification is required because the fire occurred in a vital area and affected safety-related equipment in several systems.

The licensee is required to submit an LER under §50.73(a)(2)(x) and §50.73(a)(2)(vii).  
[Page 71]

TVA disagrees with the Staff's rationale as indicated in the Statement of Considerations, "the scope [of the rule was] narrowed so that the hazard must hamper the ability of site personnel to perform safety-related activities affecting plant safety." The Commission further states that the event (evacuation) must "[significantly hamper] the ability of operators to perform necessary safety function." While a fire in a vital area or affecting safety-related components may trigger other reporting requirements, fires in themselves are not automatically reportable under this section.



22. A fire occurred when a 4160-V to 480-V transformer exploded in the turbine building. The fire was extinguished by the fire brigade using carbon-dioxide extinguishers within 9 minutes. There were no injuries or other plant damage.

An ENS notification is required because a fire of this nature and duration would typically involve hampering of personnel by smoke and heat, include a control room ventilation isolation, evacuation of the turbine building, summoning the fire brigade and fire department, and perhaps a secondary side initiated transient. An LER is required. [Page 71]

23. The licensee is required to submit an LER because the evacuation of the turbine building was not a precautionary measure, operators were hampered in the performance of their duties, and individuals received measurable uptakes of radioactive materials. [Page 73]

24. Section 50.72 of 10 CFR requires that ATWS mitigation systems function as a backup for RPS and that they initiate specific ESF system operation, as needed, while minimizing inadvertent scrams or challenges to other safety systems. Therefore, ATWS actuations should be reported under these criteria. [Page 84]

See comment 21. above.

See comment 21. above.

This is a new Staff position. 10 CFR 50.73 does not address actuation of ATWS mitigation systems.

25. Reportability of Events - Examples of reportable events under 50.73(a)(2)(iv)

Example 1 - Control Room Ventilation System (CRVS) Isolation

While the CRVS was in service with no testing or maintenance in progress, a voltage transient caused spiking of a radiation monitor resulting in isolation of the CRVS, as designed.

This event is reportable under this criterion because neither exception (1) nor (2) above apply. An ENS notification and an LER are required. [Page 87]

Example 2 - Reactor Water Cleanup (RWCU) Isolation

The RWCU isolation valves closed in response to high water temperature, as designed. Even though the RWCU system was designed with high water temperature as a non-protective (non-ESF) process parameter to prevent damage to the resin beds from high temperature, this event is reportable as an ESF actuation. [Page 87]

IVA disagrees with the Staff. Both of these examples illustrate invalid actuations. That is, neither actuations were initiated by the measurement of an actual physical system parameter that was within the established setpoint band of the sensor that provides the signal to the protection system's logic.

In the first example, the radiation monitor was not initiated by the measurement of an actual physical parameter, it is designed to measure radiation. In the second example, the Staff acknowledges that high water temperature is a non-ESF parameter. Such isolations do not involve ESF logic.

Furthermore, the second example constitutes a change in previous Staff position. On December 17, 1990, NRC issued TVA (BPN) a Notice of Violation for failure to report a Refuel Zone ventilation systems isolation. TVA denied the violation. IVA argued that the event was not reported as an unplanned ESF actuation because an actuation logic was not actuated during the event. The Refuel Zone Ventilation System fans and isolation dampers are dual function components: (1) the refuel zone ventilation fans are shutdown and the dampers closed to isolate secondary containment upon receipt of a PCIS isolation signal, and (2) they are utilized for pressure control of the ventilation zones. (Continued on page 16)

In this event, the refuel zone isolation was initiated by the spurious actuation of the refuel zone static pressure switch. This switch is designed to protect the Reactor Building zones from excessive positive or negative pressures. Further, this switch is non-safety related and is not required to perform a safe shutdown function.

On February 28, 1991, NRC issued a letter agreeing with TVA's denial and withdrawing this violation. In fact, in the letter the Staff noted that "this [was] based upon discussions with the Office of Analysis and Evaluation of Operations Data (AEOD). AEOD will issue a supplement to MUREG-1022 clarifying the reportability requirements."

26. If a hypothetical event requiring performance of a system's safety function, involving the identified problem, is postulated and it is determined that the safety function of the system or structure will fail, it is reportable under these criteria. [Page 90]

Reporting of hypothetical events is contrary to previous Staff guidance. As discussed in comment 8. above, MUREG-1022, Supplement 1, Question 4.1 states that such conditions are not reportable. To be reportable, the plant must have operated in the condition being postulated.

27. While operating at 15-percent power, the licensee found that two containment instrument isolation valves required to be in an open position were closed. Closure of these valves isolated a drywell high-pressure switch associated with ECCS and RPS initiation. Further investigation revealed that the isolation valve to pressure instrumentation that bypasses certain RPS scrams at low pressure also was closed.

The instrument penetrations at which the valves are located were used for drywell pressure monitoring during the integrated leak rate test (ILRT). When the temporary ILRT instrumentation was removed, the penetration instrument isolation valves were inadvertently left in the closed position. As a result, the instruments that provide inputs to certain ECCS and RPS circuits were isolated.

The event is reportable because one operator's actions caused independent trains in more than one system to become inoperable (i.e., the operator erroneously operated two components in more than one train of more than one safety system). [Page 101]

From the information provided it is not clear nor is it obvious what caused the valves to be mispositioned. If it was a single operator's action, then this fact should be clearly stated and included in the narrative. Otherwise, this event is not reportable and should be deleted from the document.

28. The licensee reported that the reactor building vent sample system had failed with the reactor operating at full power. Laboratory personnel found a blown fuse for the pump. The fuse was replaced and the pump failed to start. Another fuse was inserted and the backup pump was switched on but also failed to start. The common cause of the pumps not operating was swelled carbon vanes, probably caused by moisture. The same pumps failed previously and the same type of pumps used for monitoring another radiological effluent pathway failed on another occasion for the same reason.

The event is reportable because a single condition caused failures in multiple independent trains of a system that is required to control the release of radioactive material. [Page 102]

IVA disagrees that this example is reportable per 50.73(a)(2)(vii)(C). First, in this example the NRC clearly states that the purpose of this system is to monitor radioactive releases (e.g., "reactor building vent sample system," and "for monitoring another radiological effluent pathway"), which contain the release of radioactivity. Therefore, this system does not meet the criteria for reporting under 10 CFR 50.73(a)(2)(vii)(C), since the system is not required to control the release of radioactive material.

Second, in this example the NRC is using multiple events to determine that this condition is reportable. This multiple event scenario is contrary to the regulation, which clearly states: "[a]ny event where a single cause or condition caused at least one independent train or channel to become inoperable . . ."

Furthermore, in this example the NRC does not establish that at least one independent train or channel in multiple systems became inoperable, or that two independent trains or channels in a single system became inoperable. Therefore, this example should be deleted.

29. Section 3.3.7, which provides "clarification" of the reporting requirements of 50.72(b)(2)(vi). [Page 108]

Overall, NRC needs to clarify the meaning of the phrase "for which a news release is planned." TVA considers that "is planned" is vague terminology. In NUREG-1022, Supplement 1, a question is asked regarding issuance of press releases (see Question 5.3 on page 35). NRC, in answering this question, states that a report should be made within 4 hours of a decision to issue a press release (emphasis added). Therefore, the NRC should provide clarification which specifically states that "is planned" means that appropriate levels of plant management have decided to issue a news release.

30. When events require the NRC to respond because of media, public, or other government agency attention, they are reportable under this criteria ... [Page 108]

TVA disagrees that these types of events are reportable, since they do not meet the criteria for reportability under this regulation (i.e., "related to the health and safety of the public," or "[events] for which a news release is planned"). Furthermore, stating that events become reportable if they attract media attention is unreasonable since many events are misunderstood by the media, are blown out of proportion or taken out of context, or receive media attention simply because they occurred at a nuclear power plant. Requirements such as these would require licensees to monitor all forms of media, regardless of their proximity to the licensee, for any event involving their facility or facilities.

In addition, as previously discussed in comment 3. above, the NRC resident inspector can provide the necessary information.

31. Licensees generally do not have to report media and government interactions unless they are related to, or perceived by the public to be related to, the radiological health and safety of the public, onsite personnel, or protection of the environment. [Page 109]
32. When a press release or government notification is not required by plant procedures, the ENS notification clock starts at the time of the decision to plan the press release or make the government notification. [Page 109]
33. Planned or low-level radiation releases are not specifically reportable under this criterion. However, if a release receives media attention, the release can no longer be considered routine and the situation is reportable under this criterion. [Page 110]
- TVA considers that the "perceived by the public to be related to [public health and safety]" test is not sufficient to make this condition reportable. In today's society, many members of the public perceive any unusual event that occurs at a nuclear power plant, and even some normal events, as "related to the health and safety of the public." Therefore, TVA suggests that this example be reworded to read as follows:  
"Licensees generally do not have to report media and government interactions unless, in the licensee's judgement, they are related to, or will be perceived by the public ..."
- As discussed in comments 29 and 31. above, this example should be clarified to note that the ENS notification clock starts at the time of the decision by appropriate levels of plant management to make the government notification or to issue a press release.
- In this example the NRC has concluded that the event is reportable because it has received media attention. As previously discussed in comment 31. above, many events are misunderstood by members of the media, or receive media attention because they occurred at a nuclear power plant. TVA considers that for these types of events, the NRC resident inspector can provide the NRC with timely information, as necessary.

34. Thirteen persons were evacuated from a building and were found to have been contaminated by low levels of noble gas. The primary auxiliary building ventilation system had been out of service for maintenance for several hours while noble gas leaked from the letdown gas treatment system and accumulated inside the building. The ventilation system was returned to service and there were no offsite airborne radiation releases. The licensee notified the appropriate State agency and the NRC resident inspector of the personnel contamination.

An ENS notification is required within 4 hours under this criterion because of the notification of the State agency of the inadvertent radiological contamination of plant personnel. This and many other events reportable under this criterion also are reportable under more limiting reporting criteria. In this case, an ENS notification is required within 1 hour under §50.72(b)(1)(vi) and an LER is required under both §50.73(a)(2)(x) and §50.73(a)(2)(v).  
[Pages 112 and 113]

Furthermore, TVA firmly disagrees that this event is reportable under 50.72(b)(2)(vi) since it is not related to the health and safety of the public or onsite personnel, or protection of the environment; does not involve issuance of a press release; and did not require notification of another government agency. Therefore, this example should be deleted.

This event could be construed by the reader to imply that any and every contamination event is reportable to "another government agency," and therefore becomes reportable to NRC under this criteria. If the staff wishes to use this as an example of a reportable event, then it must clearly specify why notification of the state agency was required. In addition, TVA firmly disagrees that this event is reportable as an LER since it clearly does not meet the criteria in 50.73(a)(2)(x) or 50.73(a)(2)(v) as a reportable event. TVA considers that if the staff wishes to use these types of examples as examples of reportable events, then the basis for concluding the event is reportable under specific criteria must be provided. In this case the staff merely stated that the event is reportable under certain criteria without any basis for this conclusion.