

Tentative Disposition of Previously Identified Issues

At the June 8th & 9th 2010 public meeting (ML101720219), 45 NRC identified and four industry identified issues were discussed. Additional information on those items discussed at the public meeting can be found in the public meeting notice (ML101241083). After the meeting, seven areas (consisting of nine NRC identified items) were discussed internally by the NRC staff. These seven areas were considered to be of higher significance. All four NEI items were included as part of the seven areas discussed.

As a result of the internal discussions, a potentially new item was identified in which there may be incomplete or inconsistent guidance with regards to reporting of Technical Specification compliance issues under "Operations or Conditions Prohibited by Technical Specifications." This potentially new item was briefly discussed with NEI on July 19th 2010 (ML102170301).

Below is a list of the seven areas considered by the NRC staff. The remainder of the items, which may include the above potentially new identified item, will be addressed in a NUREG-1022, Revision 3 draft that will be available at a later time for public comment. In its disposition of the seven areas, the NRC staff gave consideration to the 10 CFR 50.72 and 50.73 rule itself, the associated statements of consideration, and other available guidance in that hierarchal order. All discussions with and documents submitted by the Nuclear Energy Institute (NEI) were considered as well. Attachment 1 of this public meeting notice contains a list of all meetings with and documents submitted by NEI.

- Regarding Limiting Conditions for Operation (LCOs), is it acceptable to add shutdown Completion Times to restorative Completion Times when determining if "Operations or Conditions Prohibited by Technical Specifications" existed?
 - Listed as Item 3 in the June 8th and 9th 2010 public meeting summary.
 - The rule itself [10 CFR 50.73(a)(2)(i)(B)] does not specifically discuss Completion Times.
 - Passages found in the statements of consideration for the final rule (65 FR 63780 and 48 FR 33855) did not offer definitive information. A passage found in the 1983 rule proposal (47 FR 19546) offered more definitive information, however the rule proposal does differ in scope from the final rule.
 - Example 1 in Section 3.2.2 of NUREG-1022, Revision 2 (ML003762595) considers shutdown Completion Times in addition to restorative Completion Times when determining if "Operations or Conditions Prohibited by Technical Specifications" existed.
 - Given the above, the NRC is considering revising the LCO Discussion portion of the NUREG-1022 guidance on "Operations or Conditions Prohibited by Technical Specifications" to reflect Example 1 of that section (i.e. adding shutdown Completion Times to restorative Completion Times is acceptable when determining if "Operations or Conditions Prohibited by Technical Specifications" existed).

- Determining when LCO 3.0.3 entry results in reportability as an “Operations or Conditions Prohibited by Technical Specifications”
 - Listed as Item 8 in the June 8th and 9th 2010 public meeting summary. Also an item identified by NEI.
 - Neither the rule itself [10 CFR 50.73(a)(2)(i)(B)] or its associated statements of consideration specifically discuss LCO 3.0.3 entry with regards to “Operations or Conditions Prohibited by Technical Specifications.”
 - Section 3.2.2 of NUREG-1022, Revision 2 (ML003762595) contains specific guidance in the Discussion section titled “Entry into STS 3.0.3.” Background information for this guidance can be found in a summary report of the 469th meeting of the Advisory Committee on Reactor Safeguards (ACRS) (ML081830534) on page 142 of 421 and in Question 2.4 of NUREG-1022, Revision 0, Supplement 1 (ML101550097).
 - Regarding LCO 3.0.3 entry, NEI/Industry is proposing that an “Operation or Condition Prohibited by Technical Specifications” would exist if any of the shutdown times listed in LCO 3.0.3 were exceeded. Further details can be found in NEI Documents E-mailed on July 2nd 2010 (ML101930338) and the Summary of July 19th 2010 Teleconference Meeting With NEI to Discuss NUREG-1022, Revision 2 (ML102170301).
 - Given the above, and the discussion contained in the previous area on shutdown Completion Times, the NRC is considering revising the “Entry into STS 3.0.3” Discussion of the NUREG-1022 guidance on “Operations or Conditions Prohibited by Technical Specifications” to reflect the following:
 - An “Operation or Condition Prohibited by Technical Specifications” would exist if any of the shutdown times listed in LCO 3.0.3 (i.e. Mode 3, 4, 5 for WOG STS) were exceeded, even if the condition was not discovered until after the allowable time had elapsed and the condition was rectified immediately upon discovery.
 - For a given LCO Condition, if shutdown Required Actions and Completion Times are listed (i.e. be in hot shutdown in X hours and cold shutdown in Y hours, etc), shutdown times associated with LCO 3.0.3 should not be considered (i.e. only consider LCO Action Table shutdown Completion Time added to restorative Completion Time when determining if “Operations or Conditions Prohibited by Technical Specifications” existed). If LCO 3.0.3 entry is explicitly called out as a Required Action for a given Condition, or for cases in which the Condition is not listed in the Action Table, shutdown times associated with LCO 3.0.3 may be added to any associated restorative Completion Times found in the Action Table when determining if “Operations or Conditions Prohibited by Technical Specifications” existed.

- The discussion only pertains to “Operations or Condition Prohibited by Technical Specifications”. LCO 3.0.3 entry may still result in other reportable conditions under 10 CFR 50.72 and 50.73.
- Is there a difference in reporting requirements for ECCS actuations vs. ECCS discharges under “System Actuations”?
 - Listed as Item 20 in the June 8th and 9th 2010 public meeting summary.
 - The rule itself [10 CFR 50.72(b)(2)(iv)(A) and 50.72(b)(3)(iv)(A)] uses the distinct terms of ECCS discharge and actuation.
 - Passages found in the statements of consideration for the final rule (48 FR 39043) discuss the differences between ECCS actuation and discharge. However, the statements of consideration do discuss specific events that are reportable as an ECCS discharge even if such discharge does not occur (i.e. due to failure of some ECCS component or due to operator intervention.)
 - Section 3.2.6 of NUREG-1022, Revision 1 (ML070530420) contains discussions on ECCS discharges that reflect the statements of consideration; however these discussions are omitted from Revision 2. It is unclear if this omission was in error or deliberate.
 - Given the above, the NRC is considering revising the Discussion portion of the NUREG-1022 guidance on “System Actuation” to reflect the differences in reportability of ECCS discharge and actuation under 50.72(b)(2)(iv)(A) and 50.72(b)(3)(iv)(A). The clarification would be based on passages found in 48 FR 39043 and Section 3.2.6 of NUREG-1022, Revision 1.
- What systems are within scope for reporting under “Events or Conditions that could have Prevented Fulfillment of a Safety Function?”
 - Listed as Items 22, 26, and 27 in the June 8th and 9th 2010 public meeting summary. Also an item identified by NEI.
 - The rule itself [10 CFR 50.72(b)(3)(v), 50.72(b)(3)(vi), 50.73(a)(2)(v), and 50.73(a)(2)(vi)] is not specific as to whether or not systems within scope include only those that mitigate design basis accidents per Chapter 6 and 15 of the FSAR (or equivalent). Part of the confusion has revolved around the term “needed” that is found in the rule.
 - Passages found in the statements of consideration for the final rule (48 FR 39044 and 48 FR 33854) discuss that the rule is based on the assumption that safety-related systems and structures are intended to mitigate the consequences of an accident.
 - Various revisions of NUREG-1022 guidance appear to offer inconsistent approaches. The following are excerpts of pertinent NUREG-1022 guidance:

- The Discussion portion of Section 3.2.2 of NUREG-1022, Revision 2 (ML003762595) contains information that indicates systems not designed to mitigate design basis accidents may be within scope.
 - Example 2 of Section 3.2.2 of NUREG-1022, Revision 2, indicates that only systems designed to mitigate design basis accidents are within scope. Example 2 reflects discussions found in Task Interface Agreement (TIA) 99-030 (ML010740339) and Regulatory Issue Summary (RIS) 2001-14.
 - The Discussion portion and Example 2 of Section 3.3.3 of NUREG-1022, Revision 1 (ML070530420) contains information that indicates systems not designed to mitigate design basis accidents may be within scope.
 - Questions 7.4 and 7.14 in NUREG-1022, Revision 0, Supplement 1 (ML101550097) contain information that indicates systems not designed to mitigate design basis accidents may be within scope.
 - An example on page C-7 of NUREG-1022, Revision 0 (ML101550096) indicates only systems designed to mitigate design basis accidents are within scope.
- Given the apparent inconsistencies in the current revision of NUREG-1022, the inconsistencies among the various revisions of NUREG-1022, and the passages found in the statements of consideration, the NRC is considering revising the Discussion portion of the NUREG guidance on “Events or Conditions that could have Prevented Fulfillment of a Safety Function” to reflect that systems within scope include only those systems used to mitigate the consequences of an accident as discussed in Chapters 6 and 15 of the FSAR (or equivalent chapters) and are identified as events of moderate frequency, infrequent incidents, or limiting faults as discussed in Regulatory Guide 1.70 (ML011340116) (or equivalent classifications of the three types of events). The American Nuclear Society (ANS) categorizes these events as Condition II, III and IV type events.
- Are Technical Specification (TS) inoperabilities of a system reportable as an “Event or Condition that could have Prevented Fulfillment of a Safety Function?”
 - Listed as Item 24 in the June 8th and 9th 2010 public meeting summary. Also consisted of two items identified by NEI (use of reasonable expectation and operator actions).
 - The rule itself [10 CFR 50.72(b)(3)(v), 50.72(b)(3)(vi), 50.73(a)(2)(v), and 50.73(a)(2)(vi)] uses the terms “could have prevented the fulfillment of the safety function” and “failures need not be reported... if redundant equipment in the same system was operable and available to perform the required safety function.” Although the rule itself uses the word “operable,” there were discussions among NRC staff as to whether or not the term refers to TS

operability or plain English language use. As a result, greater emphasis was placed on determining if the statements of consideration and current guidance discuss if the TS inoperability of a system constituted a loss of a safety function.

- The following passages in the statements of consideration discuss operability and reportability:
 - In 65 FR 63774, a comment is received that questions why the inoperability of a single train system needs to be reported. The NRC response affirms that inoperabilities are reportable. The passage states “Comment F (Eliminate reporting of high pressure coolant injection (HPCI) inoperability): As indicated in the 1983 Statements of Considerations for 10 CFR 50.72 and 50.73, failure or inoperability of a single train system, such as the HPCI system in BWRs, is considered to constitute an ‘event or condition that alone could have prevented the fulfillment of the safety function’.” “Response: As indicated in the 1983 Statements of Considerations for 10 CFR 50.72 and 50.73, the purpose of this reporting criterion is to capture failure, inoperability, etc. on the basis of a structure or system...” “Also, in its assessment of plant performance, the NRC uses a performance indicator that includes failure or inoperability of single train systems such as HPCI. Thus, elimination of the requirement to report such events would be contrary to one of the objectives of the rulemaking – to maintain consistency with the NRC’s actions to improve integrated plant performance.”
 - In 64 FR 36296, a comment is received regarding the term “licensing basis.” The NRC response references a generic communication on TS operability and discusses its use in determining whether or not systems are capable of performing its safety function. The passage states “Comment 34: Some comments indicated that the licensing basis should be defined. Response: No changes are proposed. The term ‘licensing basis’ is not explicitly used in the event reporting rules or the draft reporting guidelines. It can come into play, via Generic Letter (GL) 91-18, ‘Information to Licensees Regarding two NRC Inspection Manual Sections on Resolution of Degraded and Nonconforming Conditions and on Operability,’ in determining what the ‘specified safety function’ of a system is. This relates to whether an event is reportable as an event or condition that could have prevented the fulfillment of the safety function of structures or systems * * * and/or an operation or condition prohibited by the plant’s technical specification (TS). However, any unsettled details regarding exactly which commitments are included in the licensing basis (for example because of differences between the definitions in GL 91-18 and 10 CFR 54.3) are not of a nature that would change the determination of whether or not a system is capable of performing its specified safety functions (i.e., operable).” 64 FR 36296 is for the proposed rule; however, nothing is noted in the final statements of consideration that would render the above discussion obsolete.

- The following passages in NUREG-1022 guidance discuss operability and reportability:
 - Section 3.2.7 of NUREG-1022, Revision 2 (ML003762595) contains specific guidance in the Discussion section that states “Whenever an event or condition exists where the system could have been prevented from fulfilling its safety function because of one or more reasons for equipment inoperability or unavailability, it is reportable under these criteria. This would include cases where one train is disabled and a second train fails a surveillance test.” This guidance was first introduced in Section 3.3.3 of NUREG-1022, Revision 1 (ML070530420). The background information for this change can be found in 66 FR 18177 which states “The staffs previous guidance in NUREG-1022 at page C-42 provides an example of a two train overpressure mitigation system (OMS) failing to operate. The reasons for this system failing to operate were that one train was out of service for calibration (preventing its operation) and equipment failure occurred in the other train (preventing its operation) when the system was called upon. The staff guidance presented at the end of the discussion of the event stated: ‘The event is reportable because the OMS failed to perform its intended function [50.73(a)(2)(v)].’ ...Based on the rules, the staff has concluded that the relevant paragraph on page 92 of draft NUREG- 1022, Rev. 1, should be revised to read as follows: Multiple equipment inoperability or unavailability. Whenever an event or condition exists where the system could have been prevented from fulfilling its safety function because of one or more reasons for equipment inoperability or unavailability, it is reportable under these criteria. This is consistent with the guidance provided in the preambles to the final rules for both 10 CFR 50.72(b)(2)(iii) and 50.73(a)(2)(v) as discussed above. This is also consistent with the previous staff guidance provided in NUREG-1022 as discussed above.”
 - Example 1 in Section 3.2.7 of NUREG-1022, Revision 2 states “When the licensee was preparing to run a surveillance test, a high-pressure coolant injection (HPCI) flow controller was found inoperable; therefore, the licensee declared the HPCI system inoperable. The plant entered a technical specification requiring that the automatic depressurization, low-pressure coolant injection, core spray, and isolation condenser systems remain operable during the 7-day LCO or the plant had to be shut down. The licensee made an ENS notification within 28 minutes and a followup call after the amplifier on the HPCI flow transmitter was fixed and the HPCI returned to operability. As discussed above, the loss of a single train safety system such as BWR HPCI is reportable.” This guidance first appears in Revision 1 of NUREG-1022.
 - Example 4 in Section 3.2.7 of NUREG-1022, Revision 2 states “During refueling, one emergency diesel generator (EDG) in a two train system was out of service for maintenance. The second EDG was declared inoperable when it failed its surveillance test. An ENS notification is required and an LER is required. As addressed in the Discussion section above, loss of either the onsite power system or the offsite

power system is reportable under this criterion.” This guidance first appears in Revision 1 of NUREG-1022.

- An example on page C-5 of NUREG-1022, Revision 0 (ML101550096) is titled “RHR Inoperable,” and states “When the circuit breaker for the motor operated inlet isolation valve was closed the valve immediately shut. A ‘shut’ control signal was being transmitted to the valve operator controller as a result of Channel B wide range pressure instrumentation maintenance action. When motive power was provided to the motor by closing its power supply breaker it functioned to shut the valve. System low flow alarms occurred in the Control Room and an operator was dispatched to open the valve by hand. Flow was subsequently restored and the system was declared operable. Redundant trains of the Residual Heat Removal (RHR) System are supplied through a common inlet line from loop 3. The inlet line contains two essential motor operated isolation valves in series. Shutting either valve renders the RHR trains inoperable. Therefore, both trains of the RHR were declared inoperable when the inlet isolation valve was inadvertently closed. Comment: The event is reportable because failure of a single valve caused the RHR system to be inoperable [50.73(a)(2)(v)].”
- The following documents were also reviewed to see if any insights could be provided on possible links between TS operability, loss of safety function, and reportability:
 - NRC inspection manual, Part 9900 guidance, “Operability Determinations & Functionality Assessments for Resolution of Degraded or Nonconforming Conditions Adverse to Quality or Safety” (ML073531346) contains the following passages that discuss the relationship between operability, safety function, and Surveillance Requirements:
 - “The Standard Technical Specifications (NUREGs 1430-1434) define ‘operable/operability’ as follows: A system, subsystem, train, component, or device shall be OPERABLE or have OPERABILITY when it is capable of performing its specified safety functions...” This definition of operability was similar to the one in existence at the time 10 CFR 50.72 and 50.73 were created (ML102590431).
 - “In order to be considered operable, an SSC must be capable of performing the safety functions specified by its design, within the required range of design physical conditions, initiation times, and mission times. In addition, TS operability considerations require that an SSC meet all surveillance requirements (as specified in Surveillance Requirement (SR) Applicability SR 3.0.1). An SSC that does not meet an SR must be declared inoperable.”
 - “Specified Function/Specified Safety Function: The specified function(s) of the system, subsystem, train, component or device (hereafter referred to as system) is that specified safety

function(s) in the CLB for the facility. In addition to providing the specified safety function, a system is expected to perform as designed, tested and maintained. When system capability is degraded to a point where it cannot perform with reasonable expectation or reliability, the system should be judged inoperable, even if at this instantaneous point in time the system could provide the specified safety function.”

- “Reasonable Expectation: The discovery of a degraded or nonconforming condition may call the operability of one or more SSCs into question. A subsequent determination of operability should be based on the licensee’s ‘reasonable expectation,’ from the evidence collected, that the SSCs are operable and that the operability determination will support that expectation. Reasonable expectation does not mean absolute assurance that the SSCs are operable. The SSCs may be considered operable when there is evidence that the possibility of failure of an SSC has increased, but not to the point of eroding confidence in the reasonable expectation that the SSC remains operable. The supporting basis for the reasonable expectation of SSC operability should provide a high degree of confidence that the SSCs remain operable. It should be noted that the standard of ‘reasonable expectation’ is a high standard, and that there is no such thing as an indeterminate state of operability; an SSC is either operable or inoperable.”
- “Operability Declaration: An operability declaration is a decision by a senior licensed operator on the operating shift crew that there is a reasonable expectation that an SSC can perform its specified safety function.”
- 10 CFR 50.36 discusses that LCOs are the minimum requirements for safe operation of a facility and that Surveillance Requirements are included in order to assure that LCOs are met (i.e. operable). The following passages are found:
 - 10 CFR 50.36(c)(2)(ii) states Technical specifications will include “Limiting conditions for operation. Limiting conditions for operation are the lowest functional capability or performance levels of equipment required for safe operation of the facility.”
 - 10 CFR 50.36(c)(3) states Technical specifications will include “Surveillance requirements. Surveillance requirements are requirements relating to test, calibration, or inspection to assure that the necessary quality of systems and components is maintained, that facility operation will be within safety limits, and that the limiting conditions for operation will be met.”
- Prior to 10 CFR 50.72 & 50.73, requirements for event reporting were contained in a licensee’s TS. Regulatory Guide 1.16, “Reporting of Operating Information – Appendix A Technical Specification,”

(ML003739954) contains guidance on what to include in the TS and offers some insight into the development of the current reporting requirements for “Events or Conditions that could have Prevented Fulfillment of a Safety Function.”

- Section C.2.a covers reportable occurrences that require prompt notification with written follow-up. Paragraphs 5 and 6 of that section deal with loss of systems. One example refers to system operability.

Paragraph (5) of that Section C.2.a states “Failure or malfunction of one or more components which prevents or could prevent, by itself, the fulfillment of the functional requirements of system(s) used to cope with accidents analyzed in the SAR. The following are examples:

(a) Clogged fuel line(s) resulting in failure to supply fuel to the emergency generators.

(b) Multiple instrument drift resulting in loss of protective function.

(c) HPCI failure to start or failure to continue running once initiated.”

Paragraph (6) of Section C.2.a states “Personnel error or procedural inadequacy which prevents or could prevent, by itself, the fulfillment of the functional requirements of systems required to cope with accidents analyzed in the SAR. The following are examples:

(a) Failure to restore a safety system to operability following test or maintenance.

(b) Improper procedure leading to incorrect valve lineup which resulted in closure of one manual valve in each of two redundant safety injection subsystems and would have prevented injection on demand.

- There is also a Note which states “For items 2.a(5) and 2.a(6) reduced redundancy that does not result in loss of system function need not be reported under this section but may be reportable under items 2.b(2) and 2.b(3) below.” Section C.2.b covers reportable occurrences that require written reports within 30 days. Paragraphs 2 and 3 of that section deal with a loss of system redundancy. Four examples refer to either system operability or surveillance requirements.

Paragraph (2) of Section C.2.b states “Conditions leading to operation in a degraded mode permitted by a limiting condition

for operation, or plant shutdown required by a limiting condition for operation. The following are examples:

- (a) Core spray pump breaker tripped after 20 minutes during test. Trip unit was found to be defective, declared inoperable, and repaired.
- (b) Safety injection pump failed to start following system initiation. Required surveillance on redundant components was successfully completed.
- (c) One of the two centrifugal charging pumps became inoperable because of a faulty bearing. Redundant pump operability was confirmed.

Paragraph (3) of Section C.2.b states “Observed inadequacies in the implementation of administrative or procedural controls which threaten to cause reduction of degree of redundancy provided in reactor protection systems or engineered safety feature systems. The following are examples:

- (a) One of the three diesel generators tripped from high temperature because cooling water valves were lined up incorrectly.
- (b) Isolation valve for a low-pressure trip switch was found closed with system pressure locked in. Trip of switch would not occur at low pressure. Improper return to operation following maintenance was the cause.
- (c) Failure to perform surveillance tests at the required frequency.

- In early 2004, the NRC staff identified what they believed to be a significant discrepancy between the total number of “Events or Conditions that could have Prevented Fulfillment of a Safety Function” (i.e. Safety System Functional Failures, SSFFs) being reported by the nuclear industry over the period 1999 through 2003, and the number believed to have occurred. NEI conducted a study and submitted its findings to the NRC. The study was titled “NEI Safety System Functional Failure Reconciliation Project” (ML043410335). Pertinent passages in the document that discuss operability, surveillance requirements, and reportability:
 - “10 CFR50.73(a)(2)(i)(B) requires reporting of conditions prohibited by the Technical Specifications. If this condition also involves the inability of the system to perform its safety function (e.g., both trains inoperable), even if for a short period of time, then the event is also reportable under 10 CFR50.73(a)(2)(v) (and 10 CFR50.72(b)(3)(v) [8-hour ENS notification]).”

- “NUREG-1022, Supplement 2, provides explicit guidance that such issues must be evaluated and reported. NUREG-1022, Rev 2, Section 3.2.7, states in part: ‘... Whenever an event or condition exists where the system could have been prevented from fulfilling its safety function because of one or more reasons for equipment inoperability or unavailability, it is reportable under these criteria. This would include cases where one train is disabled and a second train fails a surveillance test...’”
 - “A significant number of the Category L, W, and Z LERs involved instances where a single train was not capable of performing its intended safety function. While licensees are required to consider the opposite train, and report under 10 CFR50.73(a)(2)(v) if both trains are inoperable, licensees frequently do not discuss the status of the opposite train in the LER. This situation can directly affect the SSFF performance indicator reporting.”
 - “Preliminary feedback from the NRC was that INEEL may have assumed, when the inoperability existed for a long period of time, that the opposite train may have been out of service. Without being able to contact the licensee for additional information on the status of the opposite train, the as-submitted LER was inadequate to make a final determination. (We should also note that several instances existed when the licensee did, in fact, take the opposite train out for surveillance purposes, because it did not at the time realize that the first train was inoperable. These situations were category X, apparently missed SSFF.)”
- Given the above, the guidance in Section 3.2.7 of NUREG-1022, Revision 2, which states “Whenever an event or condition exists where the system could have been prevented from fulfilling its safety function because of one or more reasons for equipment inoperability or unavailability, it is reportable under these criteria. This would include cases where one train is disabled and a second train fails a surveillance test,” as well as Examples 1 and 4 of that section, appear to be consistent with the rule and its associated statements of consideration. The passages referenced in the statements of consideration also appear to be consistent with the wording in the rule. As a result, the NRC is considering either leaving the mentioned NUREG-1022 guidance as is, or clarifying it to reiterate that TS inoperabilites of a system that is considered to be within scope is reportable as an “Event or Condition that could have Prevented Fulfillment of a Safety Function.” During meetings with NEI/Industry, NEI/Industry mentioned cases in which the TS Surveillance Requirement acceptance criteria may be more conservative than the FSAR. As a result, the NRC is also considering revising the NUREG-1022 guidance to state “Whenever an event or condition exists where the system could have been prevented from fulfilling its safety function because of one or more reasons for equipment inoperability or unavailability, it is reportable under these criteria. This would include cases where one train is disabled and a second train fails a surveillance test, except in cases in which the surveillance acceptance criteria

is more conservative than the FSAR at the time of the event." Both options are currently under evaluation by the NRC.

- When do Emergency Response Data System (ERDS), Emergency Notification System (ENS), or Health Physics Network (HPN) losses result in reports under "Loss of Emergency Preparedness Capabilities"?

- Listed as Item 37 in the June 8th and 9th 2010 public meeting summary.
- The rule itself [10 CFR 50.72(b)(3)(xiii)] states a major loss of offsite communications capability is reportable. As examples, the rule does not specifically mention ERDS or HPN by name, but lists ENS.
- The statement of consideration (48 FR 39043) states "Paragraph 50.72(b)(1)(vi) encompassing events previously classified as Unusual Events, covers those events that would impair a licensee's ability to deal with an accident or emergency. Notifying the NRC of these events may permit the NRC to take some compensating measures and to more completely assess the consequences of such a loss should it occur during an accident or emergency.

Examples of events that this criterion is intended to cover are those in which any of the following are not available:

1. Safety parameter display system (SPDS).
 2. Emergency Response Facilities (ERF's).
 3. Emergency communications facilities and equipment including the Emergency Notification system (ENS).
 4. Public prompt Notification System including sirens."
- Section 3.2.13 of NUREG-1022, Revision 2, appears to offer inconsistent / confusing guidance with regards to reporting losses.
 - During the June 8th and 9th public meeting, NEI/Industry recommended that reports not be required for a loss of ENS and HPN if a backup communication was available. NEI/Industry recommended that reports not be required for planned outages of ERDS if the outage is less than 8 hours. NEI/Industry recommended that reports not be required for losses due to NRC related actions and equipment problems.
 - Given the inconsistent / confusing guidance in Section 3.2.13 of NUREG-1022, Revision 2, as well as feedback from NEI/Industry, the NRC is considering revising Section 3.2.13, as well as portions of Section 3.1.1. A draft mark-up of the revision can be found as Attachments 3 and 4 of this public meeting announcement.

- Are Historical Events That Are Not On-going At the Time of Discovery Reportable Under 10 CFR 50.72?

- Listed as Item 45 in the June 8th and 9th 2010 public meeting summary.

- The Rule itself [50.72(a)(1)(ii)] states reports are required for non-emergency events specified in paragraph (b) that occurred within three years of the date of discovery. 50.72(b)(1), (2), and (3) all state to report within one, four, and eight hours respectively, of the occurrence.
- The following passages are found in the statements of consideration:
 - In 64 FR 36294, which is the proposal for the rule, there is a public comment that proposes to eliminate historical reporting of “Degraded or Unanalyzed Conditions” under 10 CFR 50.72. The NRC responds that historical reporting of “Degraded or Unanalyzed Conditions” under 10 CFR 50.72 will be retained and provides the justification as well. The passage states “Comment 18: Several comments recommended deleting 10 CFR 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.’ The comments indicated that because the plant would be shutdown, there is no need for immediate NRC action. Response: The requirement for telephone reporting would not be entirely eliminated because, if a principal safety barrier is significantly degraded or a condition that significantly affects plant safety exists; the event may be significant enough that the NRC would need to initiate actions [such as contacting the plant to better understand the event and/or initiating a special inspection or investigation] within about a day even if the plant is shutdown. However, in the proposed rule this specific criterion would be combined with 10 CFR 50.72(b)(1)(ii), “Any event or condition during plant operation that results in the condition of the nuclear power plant, including its principal safety barriers, being seriously degraded or * * *”
 - In 64 FR 36298, which is the proposal for the rule, there is a discussion that historical reporting of “Degraded or Unanalyzed Conditions” under 10 CFR 50.72 will be retained but greater time is allowed to make the report. The proposal states “Unanalyzed condition that significantly compromises plant safety [sections 50.72(b)(1)(ii)(A) and (b)(2)(i), and section 50.73(a)(2)(ii)(A); replaced by new section 50.72(b)(2)(ii)(B), and section 50.73(a)(2)(ii)(B)]. Currently, 10 CFR 50.72(b)(1)(ii)(A) and (b)(2)(i) provide the following distinction: a qualifying event or condition during operation is initially reportable in one hour; a condition discovered while shutdown that would have qualified if it had it been discovered during operation is initially reportable in four hours. The new 10 CFR 50.72(b)(2)(ii)(B) would eliminate the distinction because there would no longer be separate 1-hour and 4-hour categories of nonemergency reports for this reporting criterion. There would only be 8-hour non-emergency reports for this criterion.”
 - In 65 FR 63779, which is the final rule, there is a discussion on reporting historical events under 10 CFR 50.72. The passage states “General requirements and reportable events [section **50.72(a)(1)** and

section 50.73(a)(1)]. The term 'if it occurred within 3 years of the date of discovery' is added to eliminate reporting for conditions that have not existed during the three years before discovery. Such a historical event has less significance, and assessing reportability for earlier times can consume considerable resources. For example, assume that a procedure is found to be unclear and, as a result, a question is raised as to whether the plant was ever operated in a prohibited condition. If operation in the prohibited condition is likely, the answer would be reasonably apparent based on the knowledge and experience of the plant's operators and/or a review of operating records for the past three years. The effort required to review all records older than three years in order to rule out the possibility is not warranted."

- 65 FR 63780 discusses historical reporting of "Degraded or Unanalyzed Conditions" and is similar to the passage found in the rule proposal. The passage states "Unanalyzed condition that significantly degrades plant safety [sections 50.72(b)(1)(ii)(A) and (b)(2)(i), replaced by new section 50.72(b)(3)(ii)(B); and section 50.73(a)(2)(ii){A}, renumbered to 50.73(a)(2)(ii)(B)]. Previously, 10 CFR 50.72(b)(1)(ii)(A) and (b)(2)(i) provided the following distinction. During operation, an unanalyzed condition that significantly compromised plant safety was reportable within 1 hour. An event discovered while shut down that had it been discovered during operation would have resulted in an unanalyzed condition that significantly compromised plant safety was reportable within 4 hours. The new 10 CFR 50.72(b)(2)(ii)(B) eliminates this distinction because there are no longer separate 1-hour and 4-hour categories of non-emergency reports for this reporting criterion. There are only 8-hour nonemergency reports for this criterion."
- There is a discussion in the final rule in 65 FR 63783 that differentiates and excludes historical reporting of "Events or Conditions that could have Prevented Fulfillment of a Safety Function." The passage states "The term 'at the time of discovery' is added to section 50.72(b)(3)(v) to eliminate telephone notification for a condition that no longer exists or no longer has an effect on required safety functions. For example, it might be discovered that at some time in the past both trains of a two train system were incapable of performing their safety function, but the condition was subsequently corrected and no longer exists. In another example, while the plant is shutdown, it might be discovered that during a previous period of operation a system was incapable of performing its safety function, but the system is not currently required to be operable. These events are considered significant, and an LER is required, but there is no need for telephone notification."
- The following guidance is also found in NUREG-1022, Revision 2:
 - Table 2, "Changes in Reporting Requirements" captures the discussion found in the statements of consideration for "Degraded or Unanalyzed Conditions." Table 2 states "Previous Requirements: One-hour report. § 50.72(b)(1)(ii) Any event or condition during operation that results in the 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.

Amended Requirements: Eight-hour report. § 50.72(b)(3)(ii) Any event or condition that results in: (A) The condition of the nuclear power plant, including its principal safety barriers, being seriously degraded; or (B) The nuclear power plant being in an unanalyzed condition that significantly degrades plant safety.

Previous Requirements: § 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.

Amended Requirements: Eight-hour report. Refer to § 50.72(b)(3)(ii) above, which captures these events **regardless** of whether or not they are found while the reactor is shutdown.”

- Section 3.1.1, “Immediate Notifications,” discusses historical reporting of emergency declarations under 10 CFR 50.72 and states “Occasionally, a licensee discovers that a condition existed which met the emergency plan criteria but no emergency was declared and the basis for the emergency class no longer exists at the time of this discovery. This may be due to a rapidly concluded event or an oversight in the emergency classification made during the event or it may be determined during a post event review. Frequently, in cases of this nature, which were **discovered after the fact**, licensees have declared the emergency class, immediately terminated the emergency class and then made the appropriate notifications. However, the NRC staff does not consider actual declaration of the emergency class to be necessary in these circumstances; **an ENS notification** (or an ENS update if the event was previously reported but mis-classified) within one hour of the discovery of the undeclared (or mis-classified) event **provides an acceptable alternative.**”
- In a brief to the ACRS in 2000 regarding the 10 CFR 50.72 and 50.73 rule changes (ML003682560), there is a slide (page 327 of 349) on Reporting of Historical Problems. The slide states:

“In the proposed rule we recommended using a three year cutoff for two specific types of events.

Public comment recommended:

Expanding the idea to other types of events.
Reducing the cutoff to two years

The draft final rule:

Expands the idea to all reports under 50.72 and 50.73.

Uses a cutoff time of three years to better support performance indicators.”

Although not stated in the slides, the two specific events in the proposed rule are “Any operation or condition prohibited by the plant's Technical Specifications,” if the condition has not existed within three years of the date of discovery, and “Any event or condition that alone could have prevented the fulfillment of the safety function of structures or systems that are needed to: (A) Shut down the reactor * * *; (B) remove residual heat; (C) Control the release of radioactive material; or (D) Mitigate the consequences of an accident,” if the condition has not existed within three years of the date of discovery.

- Given the above, the NRC is considering clarifying NUREG-1022 to reflect that, with the exception of “Events or Conditions that could have Prevented Fulfillment of a Safety Function”, 10 CFR 50.72 notifications are required for any event that occurred within three years of the date of discovery, even if the event was not on-going at the time of discovery.