

December 12, 2007

MEMORANDUM TO: Deborah A. Jackson, Chief
Technical Support Branch
Special Projects and Technical
Support Directorate
Division of Fuel Cycle Safety
and Safeguards
Office of Nuclear Material Safety
and Safeguards

FROM: Blake A. Purnell, **/RA/**
Technical Support Branch
Special Projects and Technical
Support Directorate, FCSS

SUBJECT: MINUTES FROM NOVEMBER 29, 2007, PUBLIC MEETING WITH THE
NUCLEAR ENERGY INSTITUTE TO DISCUSS 10 CFR PART 70,
APPENDIX A REPORTING GUIDANCE

On November 29, 2007, the U.S. Nuclear Regulatory Commission (NRC) held a public meeting with the Nuclear Energy Institute (NEI) and other stakeholders to discuss 10 CFR Part 70, Appendix A - Reporting Guidance. Working group members from the NRC as well as industry discussed the following draft documents:

- "Summary of 10 CFR Part 70 Appendix A Reporting Issues," authored by Christopher Tripp and revised by industry to include their comments; and
- "Part 70, Appendix A, Reportable Safety Events – Rationale for Reporting Period," authored by Amy Snyder.

In addition, the definition of when an event is discovered was discussed. The working group agreed to continue to review Ms. Snyder's draft document in preparation for the next meeting. In addition, working group members agreed to review the NRC and industry prepared documents to date and consider combining them into a finished product for the group.

The next meeting is scheduled for Thursday, January 10, 2008. The meeting notice is forthcoming.

Enclosures:

1. List of Meeting Attendees
2. Summary of 10 CFR Part 70 Appendix A
3. Part 70, Appendix A

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(301) 492-3212

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DISTRIBUTION:

SPTSD r/f C. Tripp, FCSS A. Snyder, FCSS A. Gooden, RII

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List of Meeting Attendees:

10 CFR Part 70 Appendix A

November 29, 2007
12noon - 1:30pm

NAME	ORGANIZATION
Alphonsa Gooden	US NRC
Deborah Jackson	US NRC
Blake Purnell	US NRC
Amy Snyder	US NRC
Christopher Tripp	US NRC
Robert Link	AREVA
Calvin Manning	AREVA
Scott Murray	Global Nuclear Fuel
Felix Killar	Nuclear Energy Institute

DRAFT

Summary of 10 CFR 70 Appendix A Reporting Issues

A number of issues concerning the interpretation of the reporting requirements of 10 CFR Part 70, Appendix A, have been raised by recent fuel facility events, many of which have cut across various aspects of “unanalyzed conditions.” The purpose of the attached list is to focus on those that have been proven to be more straightforward. Each of the numbered issues is therefore described in terms of a position that has been stated by one or more licensees in justifying why an event or condition was not reportable to the NRC under Appendix A, and a position that the NRC considers to be a correct interpretation of the reporting requirements of Appendix A (see the table below). Our goal is this workshop is to gain a common understanding of how the reporting requirements are to be applied to commonly-occurring situations at the fuel facilities.

Event reporting is an important part of the regulatory framework, because it provides the NRC with real-time information about unfolding conditions at its regulated facilities, allows it to inform other licensees of potentially safety-significant concerns at other fuel facilities, and contributes to performance-based regulation through monitoring and trending of performance. Unanalyzed conditions, in particular, are very safety significant because historically it has been conditions and scenarios that have not been considered or controlled (or considered credible) that have led to accidents. The NRC therefore is especially interested in knowing what conditions that have not been previously considered might have safety significant impacts on its regulated facilities.

Stated Licensee Position	Proposed NRC Position	Industry Comments
<p>1. An event is not reportable as an unanalyzed condition if it is bounded by a similar accident sequence already in the ISA.</p>	<p>In principle, similar sequences may be grouped together in the ISA, but criteria on what constitutes a bounding sequence are needed. All credible sequences should be considered in performing the ISA. Thus determining whether the event that occurred is bounded by a sequence already evaluated in the ISA should be straightforward and clear (and should take significantly less than 24 hours).</p> <p>The sequence involved in the event is <u>not</u> bounded by an accident sequence already in the ISA if:</p> <ul style="list-style-type: none"> • Its consequence* (mitigated and unmitigated) is greater than that of the sequence of the ISA • Its likelihood* is higher than that of the sequence in the ISA. • Any initiating events, initial conditions, or IROFS in the ISA are inapplicable to the sequence involved in the event, e.g.,: <ul style="list-style-type: none"> - credited items in the ISA are not present where the event occurred - credited items in the ISA are similar to items where the event occurred, but those items do not have management measures applied (were not previously identified as IROFS) - physical conditions in the two sequences are 	<p>In principle, industry agrees with the stated NRC position. Many facilities attempt to bound accident sequences without listing each specific accident sequence.</p> <p>However, we need to use very careful wording in this paragraph and in the bulleted items. As written, it could be construed that any initiating event that was not considered trips this criterion.</p> <p>With regard to the words “should take significantly less than 24 hours”, things are sometimes not as straightforward as they seem. Industry agrees that they should generally be able to be accomplished within 24 hours.</p> <p>With regard to the likelihood being higher than that of the sequence in the ISA, Industry believes that the accident sequence is bounded if the likelihood is less but the performance requirements are still met.</p> <p>With regard to the terms “initiating events” and “initial conditions”, industry believes there are differences between these terms as well as how they are handled in reporting space.</p> <p>It is unfortunate that NUREG-1520 on pages 3-14 and 3-15 leads NRC Staff to believe that Licensees are required to identify “all credible accident sequences that could exceed the performance criteria.” Licensees certainly attempt to meet this goal. However, it is</p>

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	<p>sufficiently different that credited items in the ISA would not adequately perform their safety function where the event occurred.</p> <p>(Note that to be applicable; it is <u>not</u> necessary that all items be from the same accident sequence. However, the set of all such items must be sufficient to meet the performance requirements in the sequence that occurred.)</p> <p>*Consequences and likelihood are defined/determined in the context of the licensee's ISA methodology.</p>	<p>not attainable.</p> <p>NRC's NUREG-1513, "Integrated Safety Analysis Guidance Document," liberally references the book "Guidelines for Hazard Evaluation Procedures by the AIChE. In section 1.5 of this book, the authors caution users and practitioners that "It is impossible for the hazard analyst to identify and assess the significance of all possible things that can go wrong – even for a very limited, well defined set of circumstances."</p> <p>Industry believes an accident sequence is bounded if the credited items, whether or not they are formally declared as IROFS, had the same management measures applied to them had they been formally declared as IROFS.</p> <p>See industry matrix item (b)(1) for recommended changes.</p>
<p>2. An event is never reportable if it does not result in an actual acute chemical or radiological dose exceeding the performance requirements of 10 CFR 70.61.</p>	<p>An event that does not result in actual chemical or radiological consequences* is not reportable under Appendix A(a)(1)-(a)(3) or (b)(3). However, events without actual consequences may be reportable under the remaining portions of Appendix A. Some of these events include cases in which the performance requirements were not met, even though the actual consequence did not occur (e.g., an intermediate consequence event becomes less than "unlikely" or a high consequence event less than</p>	<p>Industry agrees with the NRC Position relative to chemical exposure. An event that does not result in actual chemical or radiological consequences* is not reportable under Appendix A(a)(1)-(a)(3) or (b)(3).</p> <p>However, industry struggles with the use of "could have lead to..." type of statements in the regulation.</p> <p>Additionally, Industry recognizes that some events without actual consequences</p>

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	<p>“highly unlikely”).</p> <p>Certain provisions of Appendix A (e.g., (a)(4), (a)(5), (b)(a)) require that potential as well as the actual consequences be considered. This evaluation must be based only on the applicable credited preventive or mitigative IROFS; credit must not be taken for fortuitous conditions that are not specifically controlled</p> <p>In addition, other reporting requirements (e.g., Part 20) may still apply.</p> <p>(*For this purpose, radiological consequences include criticality, regardless of whether it resulted in a dose to individuals.)</p>	<p>may be reportable under the remaining portions of Appendix A.</p> <p>See recommended revisions to (a) (3) and (b) (3) in the industry matrix.</p>
<p>3. In characterizing the safety-significance of events, only the actual as-found conditions (e.g., quantity/inventory of material, configuration) need to be considered.</p>	<p>Determinations of safety significance in event reporting must be based on analyzed rather than as-found conditions.</p> <p>Safety significance must be evaluated based on established and documented safety controls (e.g., preventive or mitigative IROFS, defense-in-depth features); credit must not be taken for fortuitous conditions that are not specifically controlled, or new limits introduced after the fact (see Information Notice 2007-13).</p> <p>Defense-in-depth features used for this purpose should be clearly identified as such (e.g., as defense-in-depth controls that are not IROFS) in the event report, and they must have management measures applied commensurate with the amount of risk reduction ascribed to them.</p>	<p>Industry is in general agreement with the NRC Position.</p> <p>However, in some instances the use of the term “fortuitous circumstances” can be very problematic. For example, suppose that a licensee finds a small flange leak where a few drops of a hazardous material has dripped to the floor or a drip pan. If the inventory in the equipment that is connected to the leaking flange is sufficiently large that enough material is present that it could, under the right circumstances, produce high or intermediate consequences the NRC position seems to indicate that this condition is reportable.</p> <p>One could always argue that the small leak was a fortuitous condition, i.e., the entire</p>

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		<p>inventory could have leaked. The circumstances and conditions required for the small leak to become a large enough leak to cause consequences of concern need to be part of the Reportability evaluation.</p>
<p>4. An event is not reportable as an unanalyzed (or as an improperly analyzed) condition if it is analyzed within 24-hours.</p>	<p>A condition that is unanalyzed at the time of discovery must be reported within 24 hours, regardless of how long it takes to perform the needed analysis afterwards.</p>	<p>While the industry agrees that by performing the analysis within 24 hours does not make the finding non reportable, Industry has significant comments on the definition of “discovery.”</p> <p>To “discover” or to “determine” that you have a condition that does not meet the performance criteria may take more than 24 hours. For example, when an employee notices and questions a plant condition and reports it to management, there are times that significant reanalysis may be required to determine whether or not a plant condition was incorrectly analyzed. Under these circumstances a reanalysis may be required and such a determination frequently takes more than 24-hours. When such a reanalysis is required, the time that a determination an analysis was inadequate is made, is really the time of “discovery.”</p> <p>Industry agrees that due diligence on making the determination is needed and delaying making a report by “slow determination” is inappropriate.</p> <p>See comment on item (a) of</p>

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<p>5. An event is not reportable as an unanalyzed condition if, upon evaluating the as-found condition, the licensee subsequently determines that as-found conditions were "safe."</p>	<p>A condition that is unanalyzed (and was required to be analyzed) at the time is discovery must be reported within 24 hours, regardless of whether it is subsequently found to be "safe." Determination that an event was analyzed requires both that there is an analysis in place and that sufficient controls were established prior to, and were in effect at the time of, the event. Determination that a process is "safe" means that the performance requirements were met, based on established preventive or mitigative IROFS.</p> <p>Determination of whether the event was analyzed (and was appropriately controlled with IROFS) should be able to be made in significantly less than 24 hours; however, if this cannot be met within this time period, the event must be reported.</p> <p>Licensees are encouraged to be conservative in making decisions of reportability, in order to ensure compliance with the specified time periods established in Appendix A or 10 CFR Part 70. Event reports may be corrected and/or supplemented in accordance with 10 CFR 70.74(a)(4) as appropriate.</p>	<p>the industry Matrix.</p> <p>In principle, industry agrees with the stated NRC position.</p> <p>However, if an event is unanalyzed, etc. and the performance requirements are still met, the event is not reportable.</p> <p>With regard to the words "should be able to be made in significantly less than 24 hours", things are sometimes not as straightforward as they seem. Industry agrees that they should generally be able to be accomplished within 24 hours.</p> <p>Industry understands that the NRC expects a bit of conservatism in reporting and attempts to be appropriately conservative. However, the NRC needs to note that reporting conditions to the NRC has a direct financial impact on some licensees and needlessly conservative reporting may have a significant adverse impact.</p>
<p>6. The 1-hour or 24-hour time period for reportability starts upon the licensee's determination that the event is reportable.</p>	<p>The time period begins at the time of discovery by a cognizant and responsible individual (or as specified in the license application). The 24-hour time period, in particular, is intended</p>	<p>See item 4 above regarding "discovery".</p> <p>The 1 hour reporting requirements are most difficult. Industry believes that</p>

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	<p>to allow licensees sufficient time to make the determination of reportability. One-hour reportable events are significant operational events that should not require much in the way of evaluation (e.g., an event involving the loss of all controls, such that a release or criticality accident is possible). The occurrence of such an event should be readily apparent, and should already have been analyzed in the ISA (otherwise it would be an unanalyzed event, which is reportable within 24 hours.)</p> <p>If, however, reportability cannot be determined within the relevant time period, the event must be reported.</p> <p>Licensees are encouraged to be conservative in making decisions of reportability, in order to ensure compliance with the specified time periods established in Appendix A of 10 CFR Part 70. Event reports may be corrected and/or supplemented in accordance with 10 CFR 70.74(a)(4) as appropriate.</p> <p>A trained fissile material operator or supervisor would constitute a cognizant and responsible individual," whereas non-fissile material workers would not (consistent with Section 2.5 of NUREG-1022).</p>	<p>in most cases the licensee should be allowed some tolerance to make these decisions.</p> <p>Additionally, the 1 hour reporting requirements should be modified to only include those things where it is instantly obvious that it is immediately reportable.</p> <p>For example if you have a criticality, a major explosion or a major fire – those are fairly obvious.</p> <p>Industry is also concerned that in many instances, the items that trip the current 1-hour reporting criteria are not safety significant. To require NRC notification within one hour for these conditions is inconsistent with the severity of items covered by other NRC regulations that require 1–hour reports.</p> <p>For example, exposure situations and other conditions that require some evaluation by trained personnel are difficult at best to complete within one hour. Provided that evaluation proceeds according to documented procedures and without delay there should be a grace period added to the 1 hour reporting requirement.</p> <p>Industry agrees that due diligence on making the determination is needed and delaying making a report by “slow determination” is inappropriate.</p> <p>However, doing certain things in an hour when a few hours are necessary is not being</p>

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		<p>conservative – it is being foolish.</p> <p>Additionally, Industry does not agree that a trained fissile material operator constitutes a “cognizant and responsible individual.” The regulations and safety systems are far too complex. Industry pays significant expenses to hire trained and knowledgeable people to perform and manage these critical tasks. They should be the ones making the decisions and the reports.</p> <p>See comment on item (a) of the industry Matrix.</p>
<p>7. An event is not reportable if there were no IROFS associated with the event; Appendix A is thus not applicable.</p>	<p>Situations in which IROFS should have been identified, but were not, are reportable (e.g., no identified IROFS are available and reliable to perform their intended functions ((a)(4)), or no IROFS are identified because the event was not analyzed ((b)(1))).</p>	<p>Industry understands the NRC’s statement. However, the Licensee’s statement is also correct for a specific set of circumstances. When there is a lack of a potential to exceed the performance criteria, no IROFS are required and Appendix A is not applicable.</p>
<p>8. The discovery of an unanalyzed accident sequence is only reportable as an unanalyzed condition if associated with an actual event in the facility.</p>	<p>An unanalyzed accident sequence is reportable if the system in question operated for some time period with licensed material and without necessary controls, so that the performance requirements were not met, and that the facility was in a state of unacceptable risk. (Whether necessary controls were in place may involve determination of whether this sequence was bounded by another sequence already in the ISA.) If the licensee has to take specific actions in order to restore compliance (e.g., establishing additional controls), then this means that the performance requirements were</p>	<p>A key to the NRC position is that the performance criteria have not been met. Industry agrees that the condition is reportable if the licensee operated for a period of time outside the risk range described in the performance criteria. However, if the condition meets the acceptable risk described in the performance criteria and the issue is simply lack of documentation of an explicit analysis, this does not make the condition reportable.</p> <p>The licensee may need to update safety documentation, which may also include the</p>

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	not met.	<p>ISA Summary, to make a more complete or comprehensive safety analysis document, but that does not rise to a reportable condition or event.</p> <p>(See recommended revisions to (b) (1) and associated comments in the industry matrix.</p>
<p>9. Interpretation of 10 CFR Part 70, Appendix A(a)(5)</p> <p><i>Loss of controls such that only on item relied on for safety, as documented in the Integrated Safety analysis summary, remains available and reliable to prevent a nuclear criticality accident, and has been in this state for greater than eight hours.</i></p> <p>Does this apply only to IROFS that are required to be continuously available?</p> <p>Does this apply only to IROFS that have been failed more than eight hours at the time of discovery? Or IROFS whose failure exceeds eight hours subsequent to discovery?</p> <p>What is the time of outage cannot be determined?</p>		<p>Industry believes that this reporting criterion is in need of revision. It is interesting that this particular reporting requirement does not include any reference to meeting the performance requirements.</p> <p>In addition, the criterion does not consider the fact that sufficient mass to be of concern may not even be present. NRC Bulletin 91-01, Supplement 1 established a 4 hour reporting requirement for conditions where double contingency had not been maintained and where more than a safe mass (45% of a minimum critical mass) was present. It also permitted a 24 hour report if control was established within 24 hours.</p> <p>With regard to relative significance, this reporting criterion does not seem to compare to the other two (2) NCS-related events under 1-hour reports (i.e., inadvertent nuclear criticality and loss of all controls to prevent a nuclear criticality accident). The reporting requirements formerly established by NRC Bulletin 91-01 supplement 1 seem to be more appropriate and Industry believes that this</p>

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		reporting criterion should be revised to be more similar to it. In addition to the above recommendation, See the recommended revisions to (a) (5) in the industry matrix.

Part 70, Appendix A, Reportable Safety Events – Rationale for Reporting Period

The Part 70 Working Group on Appendix A, Reportable Safety Events (the Working Group) agreed that timely reporting of Part 70, Appendix A reportable events to the U.S. Nuclear Regulatory Commission (NRC) is important. However, the Working Group had discussions about whether there was a need to change the required initial reporting times for some of the events specified in Appendix A.

Some reasons that were discussed that support a re-examination of reporting requirements for fuel cycle facilities were as follows:

- (1) Situations or events can occur at fuel cycle facilities where detailed, final or validated information is not immediately available or attainable by the reporting deadline. Such situations or events are those where a relevant analysis, assessment, measurement or investigation has not been completed or dynamic situations which have not yet attained or maintained a requisite level of stability and predictability. It often can be difficult for facilities to complete their evaluations in a short amount of time to determine whether an actual safety event that must be reported to the NRC has occurred.
- (2) Appendix A can be problematic for facilities because (a)2, (a)3, and (a)5 are difficult for facilities, in general, to quickly access.
- (3) Industry had some misgivings about reporting events and then retracting them when they completed their analyses because it may lead to an erosion of public confidence in the facilities ability to control or determine what events should be reported to the NRC in a timely manner.

This led to further related discussion regarding the when the 1-hour or 24-hour time period for reportability begins? NRC tried to clarify with its draft rationale (item 6 in the Chris Tripp Table). However, the following comments resulted from the discussion:

- (1) The definition of an event or condition should be clarified
- (2) What constitutes a failure of a performance criterion?
- (3) What does “discovery” mean?
- (4) Who is considered a “qualified” or “cognizant” person to discover an event or determine that a situation should be evaluated?

The Working Group decided to research past rulemakings and other documents, such as regulatory guides (i.e., NUREG-1022) to determine if there are insights regarding time requirements for reporting specific types of events to the NRC. The Working Group believes that this may assist them in developing a common understanding of Appendix A event reporting requirements.

The following pages contain a summary of the documents that were reviewed and any associated information related to event time reporting rationale. The summary is grouped in two categories: (1) those documents that contain time reporting rationale and (2) those that contain very little or none.

No Reporting Time Duration Rationale

- (1) ML9920000030, RIN 3150-AF22 (pp. 31-32) for the June 2, 1999 Proposed rule - I believe Appendix A is identical to the current rule.
- (2) ML9918800110, SECY-98-185, July 30, 1998 (pp. 26-30, 55-57) for the draft proposed rule (not issued for public comment)
- (3) Part 70, Appendix A.
- (4) Statement of Consideration for Part 70, Federal Register, September 18, 2000 (Volume 65, Number 181, pages 56211 through 56231).

From these documents it is clear that Appendix A expands upon Bulletin 91-01 (see document (3) below) by including non-criticality events and updates the Bulletin to incorporate the ISA methodology. The 91-01 supplement indicates what has to be reported in the two reporting time frames - immediate (4-hour) and 24-hour - which was based upon licensees' commitments in response to Bulletin 91-01.

The first document also states that 1-hour reports are intended for high-consequence events that have occurred or that are more likely to occur due to loss of controls. 24-hour events are for intermediate-consequence events or other events that may be of concern to the NRC.

Reporting Time Duration Rationale PART 50

- (1) 10 CFR 50 RIN 3150-AF98, Reporting Requirements for Nuclear Power Reactors – Advance Notice of Proposed Rulemaking, Federal Register: July 23, 1998 (Volume 63, Number 141) (Proposed Rules) (pages 39522-39526).
- (2) Part 50 Final Rule on Reporting Requirements for Nuclear Power Reactors- issued October 25, 2000 (65 FR 63769).
- (3) Bulletin 91-01 and Bulletin 91-01, Supplement 1 for reporting the loss of criticality controls (attached)

Regarding Part 50 event reporting, staff recognized that there was a need to revise the current rules to (1) correct weaknesses, including elimination of reporting on events of little or no safety significance, (2) better align the rules with the NRC's current needs, including the move toward risk-informed regulation, and (3) clarify the definition of conditions outside the design basis of the plant that require reporting. A rulemaking plan to address these areas was prepared.

The NRC amended its regulations on notification and reporting requirements for operating nuclear power plants. The changes retained reporting for significant events that the agency needs to review in its efforts to identify and resolve safety issues. However, the changes reduced or eliminated the unnecessary reporting burden associated with events of little or no safety significance. Overall, these changes help the NRC and its licensees to better focus their efforts on the most safety significant issues.

The amendments revise the requirements (10 CFR 50.72 and 50.73) to reduce the reporting burden associated with events of little risk significance. They also extend the reporting times consistent with the need for prompt NRC action.

The following insights may be of particular interest to the Working Group because they could be applied to other regulations: For those events requiring immediate NRC action, such as emergency declarations, reports to the NRC are required within one hour. For those events where there may be a need for the NRC to take a reasonably prompt action or respond to heightened public concern, such as events that involve the health and safety of the public or onsite personnel for which a news release is planned or notification to another government agency has been or will be made, reports to the NRC are required within four hours. In the case of events where there may be a need for NRC action within a day, such as initiating a special inspection, reports will be required within eight hours. An example of such an event would be an event or condition that could keep a system from fulfilling its safety function.

Written licensee event reports will be due within 60 days after discovery of a reportable event or condition. The message to our stakeholders should be very clear: The NRC is not relaxing reporting requirements for those events where there may be a need for immediate action by the NRC.

Experience has indicated that there is some difficulty in interpreting event reporting requirements and definitions and some inconsistency in reporting thresholds. A 1990 survey on the impacts of NRC regulation and subsequent event reporting workshops also indicated a need for improved reporting guidelines. NUREG-1022, Revision 1, "Event Reporting Guidelines, 10 CFR 50.72 and 50.73," was prepared to respond to that need. Primarily, the staff edited and combined the information contained in NUREG-1022 and its Supplements 1 and 2, the Statements of Considerations for 10 CFR 50.72 and 50.73, and other published reporting guidance, such as that contained in generic letters, bulletins, and information notices. Clarifications and additions were made as needed. A draft of Revision 1 of NUREG-1022 was published for comment in 1991, the issues raised were discussed at public meetings in 1992 and 1993, and a second draft was published for comment in 1994.

Revision 1 was published in final form on January 28, 1998. The purpose of this revision is to help ensure that events are reported as required by improving the guidance, including clarification and consolidation of applicable existing guidance into a single reference document. On February 6, 1998, a *Federal Register* notice was published to announce the availability of the report and summarize the responses to public comments on the draft (63 FR 6327).

10 CFR 72.75, 10 CFR 73.71, and APPENDIX G to Part 73

The NRC promulgated amendments to its event reporting requirements in 10 CFR 72.75, 10 CFR 73.71, and Appendix G to Part 73 to: make conforming changes, where appropriate, to align them with the current reporting requirements of a 10 CFR Part 50 final rule issued October 25, 2000 (65 FR 63769); base revised reporting requirements on importance to risk, so the reporting times will be consistent with the time that information is needed for prompt NRC action; and eliminate the unnecessary reporting burden associated with reporting events of little or no safety significance, and to improve NRC efficiency and effectiveness, while maintaining public confidence through the timely communication of information on recently occurring, or ongoing, events.

The amendments were specific to its event notification regulations in 10 CFR Part 72 that apply

to Independent Spent Fuel Storage Installations (ISFSIs) and Monitored Retrievable Storage (MRS) facilities to more closely align them with those of reactor facilities. The proposed rule also contained proposed amendments to the safeguards event notification requirements that apply to facilities subject to 10 CFR Part 73, such as reactor facilities, fuel cycle facilities, ISFSIs, an MRS, licensees who possess or transport special nuclear material or spent fuel, a geological repository operations area, and the gaseous diffusion plants.

The time extension is based on simplicity for reporting; importance to risk; and, the required reporting time consistent with the need for prompt NRC action. Furthermore, staff concluded that the increased time for follow-up reporting will allow for: (1) the completion of the required root cause analyses and engineering evaluations, and full identification of corrective actions after event discovery; (2) preparation of more complete and accurate event reports; and (3) fewer event report revisions and supplemental reports thus reducing unnecessary licensee burden. Additionally, some new burdens have been added. These new burdens are necessary to permit NRC to promptly respond to degrading conditions at licensee facilities during an ongoing event.

They are consistent with existing event notification reporting requirements for power reactors, currently contained in Part 50. And third, the staff believes that overall the rule will increase public confidence in NRC actions by ensuring that the NRC can promptly and effectively respond to events or conditions at licensees' facilities including inquiries from the public, media, and other stakeholders. The rule might, however, raise a concern with some of the public from the standpoint that some notifications will be delayed and others eliminated. The public may also be concerned over the additional 30 days to file a written follow-up report. However, it is important to note that changing the time limit from 30 to 60 days does not imply that licensees should take longer to develop and implement corrective actions. The NRC expects licensees to take corrective actions on a time scale commensurate with the safety significance of the issue.”

NRC OFFICE OF STATE AND TRIBAL PROGRAMS

March 22, 2004, Event Reporting Self-Assessment, Final Report

This document states that operating experience is an essential element in the regulatory process for ensuring that licensed activities are conducted safely. Reporting operating incidents and events helps to identify deficiencies in the safe use of AEA radioactive material and to ensure that corrective actions are taken to prevent recurrence. A 1993 General Accounting Office (GAO) report identified the compilation and presentation of national materials data as an area for improvement and recommended that NRC take appropriate action to ensure that the information on radiation events is reported completely and accurately. Further, reliable information should be available to NRC, the Congress, and the States to identify patterns and trends and determine appropriate changes for the programs.

Event information is reported to Congress annually and used to demonstrate that the Agency and the States are meeting the safety and security goals and the corresponding strategic outcomes in the NRC's strategic plan. NRC conducts reviews of all operating experience reports, from both NRC licensees and Agreement States, to identify safety concerns early, and to further evaluate individual safety concerns for any generic safety issues (GSIs) that could apply to a broader class of licensees. Prompt reporting of event information, including 30 day report information, and updates to events, helps the staff identify or detect possible safety concerns as early as possible. An event or condition could, by itself appear insignificant, but

when compared with national information, could become a generic concern. In-depth analysis of event report data may result in the identification of actions that could lead to improvements in the effectiveness of NRC and Agreement State regulatory programs. Event analysis may also result in the issuance of information notices warning of possible safety concerns and assessment of the need for regulatory changes or revisions. Feedback is provided to Agreement State regulators, the industry, and the public. NRC publishes a quarterly report that presents information on the results of statistical analysis of event data and any significant or generic issues or concerns. The Nuclear Material Events (NMED) Database Quarterly Report is available in electronic form at the NMED Internet Website: <https://nmed.inl.gov>. NRC's Office of Nuclear Material Safety and Safeguards (NMSS) publishes a nuclear material newsletter, NMSS Licensee Newsletter, NUREG/BR-0117, that includes information on safety concerns identified during that quarter.

This document provides insights to why NRC needs certain information reported in a specific period of time, but for the most part the focus is retrospective.

CONCLUSION:

It appears that Part 70, Appendix A reporting requirements are consistent with those of Part 50, Part 72, Part 73, and the Nuclear Material Events Database; however there is limited guidance for fuel cycle facilities as to what specific types of events fall into each of the four time reporting categories:

- (1) 1 hour (emergency declaration); (Note: For fuel facilities in terms of the type of events considered as emergencies requiring reportability within one hour of discovery, guidance is found in Appendix A to Reg. Guide 3.67)
- (2) Within 4 hours (for those events where there may be need for the NRC to take a reasonably prompt action or respond to heightened public concern, such as events that involve the health and safety of the public or onsite personnel for which a news release is planned or notification to another government agency has or will be made;
- (3) 8 hours (those cases of events where there may be a need for NRC action within a day, such as initiation of special inspection)
- (4) Within 24 hours

Also, Part 70, Appendix A requires Licensee to provide a follow-on report within 30-days for events that require 24 hour reports. This is not consistent with the 60- day follow-on reports under the other Parts of the regulations discussed above. Reactor facilities have resident inspectors, but not all fuel cycle facilities have resident inspectors. However, NRC can send inspectors to a site any time during the follow-up.

RECOMMENDATION:

Certain reports are needed promptly because they involve events where there may be a need for the NRC to respond to heightened public concern or to take action. Initial reporting times for other reports may be extended, consistent with the time when the reports are needed for NRC action. The goal is to have the requirements as risk-informed, consistent with NRC policy to develop risk-informed regulations. A regulatory guide, similar to NUREG-1022 for Reactors, may need to be developed for Part 70 event reporting to clarify what types of events need to be reported to the NRC.

The staff should re-evaluate current Part 70 Appendix A regulations to identify areas where event reporting requirements can be risk-informed and/or simplified. For example, the time limit for reporting could be adjusted based on the safety significance of the event and the need for NRC's immediate action. Furthermore, the threshold of what needs to be reported could be examined, as well.