



UNITED STATES  
NUCLEAR REGULATORY COMMISSION  
WASHINGTON, D.C. 20555-0001

January 29, 1997

MEMORANDUM TO: Carl J. Paperiello, Director  
Office of Nuclear Material Safety  
and Safeguards

Frank J. Miraglia, Acting Director  
Office of Nuclear Reactor Regulation

Richard L. Bangart, Director  
Office of State Programs

Hubert J. Miller, Regional Administrator, RI

Luis A. Reyes, Regional Administrator, RII

A. B. Beach, Regional Administrator, RIII

Leonard J. Callan, Regional Administrator, RIV

FROM: Denwood F. Ross, Acting Director  
Office for Analysis and Evaluation  
of Operational Data

SUBJECT: FINAL ABNORMAL OCCURRENCE POLICY STATEMENT AND  
IMPLEMENTATION OF THE COMMISSION'S DIRECTION

In a Staff Requirements Memorandum (SRM) dated November 7, 1996, on SECY-96-193, the Commission approved publication in the Federal Register of the final abnormal occurrence (AO) criteria. The final AO policy statement (Attachment 1) was published in the Federal Register on December 19, 1996, and will be used for the FY 97 AO report to Congress. The criteria will be available on the network, and the AO coordinators will be informed how to access them.

In addition, in the SRM on SECY-96-193, the Commission stated that "The staff should file incident information on potential AOs in the public document rooms (PDRs) as soon as possible....In following this direction, the staff should place already-existing documents on these incidents in the PDRs and identify the incident as a potential AO."

To implement this direction and after discussion with representatives from your staff, a copy of the memorandum and the attached potential AO write-up(s) that your staff forwards to AEOD, as directed in the draft Management Directive 8.1, "Abnormal Occurrence Reporting Procedure," should be sent to PDRs. The memorandum, in addition to distribution to PDRs, should include a statement that the NRC staff has identified the event as a potential AO and if it meets the AO criteria it will be included in the AO report to Congress. This procedure should be implemented as soon as possible. For consistency, the statement in the memorandum should be phrased as follows:

"The Nuclear Regulatory Commission (NRC) staff has identified the attached event as a potential abnormal occurrence (AO), and it may be included in the AO report that the NRC prepares annually to inform Congress of events reported by NRC and Agreement State licensees which the Commission has determined are significant to public health and safety."

Since the memoranda and attached potential AO writeup(s) will be placed in the PDRs, it is important that the memoranda and writeups have appropriate management review in your organizations before they are issued.

AEOD will revise the draft MD 8.1 to include this new AO process function. AEOD will also continue to track all potential AOs and will coordinate with other offices and the regions to determine which events will be included in the annual AO report to Congress. Harriet Karagiannis of my staff is the contact for any questions on this subject at (301)415-6377.

Attachment: As stated

cc: J. Carter, NRR  
P. Holahan, NMSS  
M. Sitek, NMSS  
P. Larkins, OSP  
J. M. Johansen, RI  
S. J. Vias, RII  
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R. J. Strasma, RIII  
A. S. Dauginas, RIII  
C. A. Hackney, RIV  
F. R. Huey, RIV

*Certificates Offered*

Although there is the potential for three levels of knowledge and skills, there will be only two types of certificates: a basic certificate will encompass either the core alone (if there are no concentrations) or the core plus one concentration level, and a specialty certificate will cover the specialty level of knowledge and skills. A voluntary partnership could establish basic certificates for up to six concentrations.

The voluntary partnership will establish the standards for the basic certificate(s), which will then be endorsed by the NSSB if it meets the criteria described below. Outside groups (which might include trade associations, accredited educational institutions and training providers, and recognized third-party assessment groups) will recommend the standards for specialty certificates. These groups will present standards for prospective specialty certificates to the voluntary partnerships for review and endorsement, in the same manner that the voluntary partnerships will present standards for basic certificates to the NSSB for review and endorsement.

In their review of prospective specialty certificates, the voluntary partnerships will use the same criteria that the NSSB will use to review the work of the voluntary partnerships themselves (these criteria are described below). The voluntary partnerships also will ensure that the standards for prospective specialty certificates build directly on the standards for the basic certificate(s). Specialty certificates could cover overlapping—or even identical—jobs or functions. By allowing competition among those who develop standards at the detailed specialty level, the skill standards system can adapt to changes in technology, work organization, and customer preferences.

•The Board will require each voluntary partnership to develop a plan to meet the needs of experienced workers. The plan will include in its skill standards system an opportunity to acquire and demonstrate through assessment the skill and knowledge required for the basic certificate.

Voluntary partnerships may begin the analytical process of developing standards at the broad core level(s), or by reviewing the narrower specialties if these already exist in the sector. However, the NSSB will only endorse the work of voluntary partnerships that submit basic certificates to the Board before the voluntary partnership endorses specialty certificates.

*Criteria for the Skill Standards*

In order to qualify for Board endorsement, the skill standards system recommended by the voluntary partnerships (or the outside groups in the case of the specialties) will have to meet the following criteria (in addition to other criteria specified in the National Skill Standards Act):

- Follow a common nomenclature identified by the Board;
- Describe in clear terms the critical work functions specific to the core, concentrations, and specialties;
- Describe the academic, employability, and occupational knowledge and skills necessary to perform the critical work functions for the core, concentrations, and specialties;
- Adhere to statutory requirements and Board policy on assessment;
- Be consistent with civil rights law;
- Meet or exceed the highest applicable standards used in the United States, including registered apprenticeship standards;
- Be benchmarked to the best international standards;
- Be forward looking; and
- Include a plan for the updating and continuous improvement of standards and certificates.

These criteria will pertain to all three levels of standards, as well as the two types of certificates. However, as noted earlier, the voluntary partnerships—not the NSSB—would review the specialty certificates for adherence to the NSSB's policies.

Some of these criteria are required by the National Skill Standards Act, including consistency with civil rights law; meeting or exceeding the highest applicable U.S. standards; and procedures to periodically revise and update the system.

Signed at Washington, DC, this 13th day of December, 1996.

**Eddie West,**

*Executive Director, National Skill Standards Board*

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**NUCLEAR REGULATORY COMMISSION****Abnormal Occurrence Reports: Implementation of Section 208 Energy Reorganization Act of 1974; Final Policy Statement**

**AGENCY:** Nuclear Regulatory Commission.

**ACTION:** Final policy statement

**SUMMARY:** This final policy statement presents the revised criteria the

Commission will use in submitting the annual abnormal occurrence (AO) reports to Congress and the public in a timely manner as stated in Section 208 of the Energy Reorganization Act of 1974, as amended. The AO policy statement has been revised to provide more specific criteria for determining those incidents and events that the Commission considers significant from the standpoint of public health and safety for reporting to Congress, and to make the AO policy consistent with recent changes to NRC regulations. The revised AO criteria contain more discrete reporting thresholds making them easier to use and ensuring more consistent application of the intended AO reporting policy set forth by the Commission.

**EFFECTIVE DATE:** December 19, 1996.

**ADDRESSES:** The proposed policy statement published in the **Federal Register** (January 9, 1996; 61 FR 661), and the comments received may be examined at the NRC Public Document Room, 2120 L Street, NW. (Lower Level), Washington, DC.

**FOR FURTHER INFORMATION CONTACT:** Harriet Karagiannis, Office for Analysis and Evaluation of Operational Data, U.S. Nuclear Regulatory Commission, Washington, DC 20555, telephone: (301) 415-6377, internet: hxxk@nrc.gov.

**SUPPLEMENTARY INFORMATION:**

- I. Background
- II. Summary of Public Comments and NRC's Response
- III. Summary of Agreement State Comments and NRC's Response
- IV. The Commission Policy

**I. Background**

Section 208 of the Energy Reorganization Act of 1974 (Pub. L. 93-438, 42 U.S.C. 5848), as amended, required the Commission to submit to Congress each quarter a report listing for that period any AOs at or associated with any facility which is licensed or otherwise regulated pursuant to the Atomic Energy Act of 1954, as amended, or pursuant to this Act. In a letter to the Senate Subcommittee on Oversight of Government Management, dated October 1, 1993, the NRC recommended to Congress a change in the AO report publication frequency from quarterly to yearly. As a result, Senate 790, "Reports Elimination Act," Public Law 104-66, was signed by President Clinton on December 21, 1995, changing the AO report to a yearly publication.

For the purposes of Section 208 of the Energy Reorganization Act of 1974, as amended, an AO is an unscheduled incident or event which the Commission has determined to be

significant from the standpoint of public health and safety. Each such report shall contain:

- (1) The date and place of each occurrence;
- (2) The nature and probable consequence of each occurrence;
- (3) The cause or causes of each; and
- (4) Any action taken to prevent recurrence.

The Commission also shall provide as wide dissemination to the public of the information specified in clauses (1) and (2) of this section as reasonably possible within 15 days of its receiving information of each AO and shall provide as wide dissemination to the public as reasonably possible the information specified in clauses (3) and (4) as soon as such information becomes available.

In July 1975, in the exercise of the authority conferred upon the Commission by Congress to determine which unscheduled incidents or events are significant from the standpoint of public health and safety and are reportable to Congress as AOs, the Commission developed interim criteria for evaluating licensee incidents or events. On the basis of these interim criteria and as required by Section 208 of the Energy Reorganization Act of 1974, as amended, the Commission began issuing quarterly reports to Congress on AOs. These reports, "Report to Congress on Abnormal Occurrences," have been issued in NUREG 75/090 and NUREG-0090-1 through 5 for the period from January 1975 through September 1976. On the basis of its experience in the preparation and issuance of AO reports, the Commission issued a general statement of policy that described the manner in which it would, as part of the routine conduct of its business, carry out its responsibilities under Section 208 of the Energy Reorganization Act of 1974, as amended, for identifying AOs and making the requisite information concerning each occurrence available to Congress and the public in a timely manner. This general statement of policy was published in the **Federal Register** on February 24, 1977 (42 FR 10950) and provided criteria and examples of types of events that the Commission would use in determining whether a particular event is reportable to Congress as an AO. The Commission has since refined this statement of

policy on a number of occasions to reflect changes in regulation and policy. On the basis of these criteria, and as required by Section 208 of the Energy Reorganization Act of 1974, as amended, the Commission has issued quarterly reports to Congress on AOs since March 1977. These reports, "Report to Congress on Abnormal Occurrences," have been issued in NUREG-0090-6 through 10 and NUREG-0090, Volumes 1 through 18.

Based on its experience in the preparation and issuance of AO reports, the Commission has decided that its responsibilities under Section 208 of the Energy Reorganization Act of 1974, as amended, can be carried out more appropriately if the existing AO criteria are revised to reflect changes in the Commission's policy and changes to the regulations.

The NRC staff proposed to the Commission the final revision of the AO criteria in 1995. The Commission approved publication in the **Federal Register** of the AO criteria (January 9, 1996, 61 FR 661), for a 90-day public comment period. The NRC staff evaluated public comments and developed the final AO policy statement. The Commission is issuing this final general statement of policy that describes the manner in which the Commission will, as part of the routine conduct of its business, carry out its responsibilities under Section 208 of the Energy Reorganization Act of 1974, as amended, for identifying AOs and making the requisite information concerning each occurrence available to Congress and the public in a timely manner. Included in this policy statement are criteria that the Commission will use in determining whether a particular event is a reportable AO within the meaning of Section 208 of the Energy Reorganization Act of 1974, as amended. It is expected that as additional experience is gained, changes in the criteria may be required.

#### Abnormal Occurrence Reporting

The general statement of policy has been developed to comply with the legislative intent of Section 208 of the Energy Reorganization Act of 1974, as amended, to keep Congress and the public informed of unscheduled incidents or events which the Commission considers significant from the standpoint of public health and safety. The policy reflects a range of health and safety concerns and is applicable to incidents and events involving a single occupational worker as well as those having an overall impact on the general public.

The policy statement contains criteria that include the reporting thresholds for determining those incidents and events that are reportable by NRC for the purposes of Section 208 of the Energy Reorganization Act of 1974, as amended. The Commission has established the reporting thresholds at a level that will ensure that all events that should be considered for reporting to Congress will be identified. At the same time, the thresholds are generally above the normal level of reporting to NRC to exclude those events that involve some variance from regulatory limits, but are not significant from the standpoint of public health and safety.

#### Licensee Reports

This final general statement of policy will not change the reporting requirements imposed on NRC licensees by Commission regulations, license conditions, or technical specifications (TS). NRC licensees will continue to submit required reports on a wide spectrum of events, including events such as instrument malfunctions and deviations from normal operating procedures that are not significant from the standpoint of the public health and safety, but do provide data useful to the Commission in monitoring operating trends of licensed facilities and in comparing the actual performance of these facilities with the potential performance for which the facilities were designed and/or licensed. Information pertaining to all events reported to the NRC will continue to be made available and placed in the public document rooms for public perusal. In addition, the NRC publishes annual reports on events (NUREG-1272 series). Information can also be obtained by writing to the U.S. Nuclear Regulatory Commission, Public Document Room, 2120 L Street, NW, (Lower Level) Washington, DC 20555-0001. In addition, the Commission will continue to issue news announcements on events that seem to be newsworthy whether or not they are reported as AOs.

#### II. Summary of Public Comments and the NRC's Response

The NRC decided to revise the AO criteria to reflect changes in NRC regulations and policy. Before arriving to the revised AO criteria, the NRC staff evaluated several AO approaches and consulted with experts in the reactor and nuclear material areas, including the Advisory Committee on the Medical Uses of Isotopes (ACMUI), and held workshops with Agreement States to obtain their comments. This effort was to ensure that only events that have the potential for significant health and

\* Copies of NUREGS may be purchased from the Superintendent of Documents, U.S. Government Printing Office, (P.O. BOX 37082), Washington, DC 20402-9328. Copies are also available from the National Technical Information Service, 5285 Port Royal Road, Springfield, VA 22161. A copy is available for inspection and/or copying for a fee in the NRC Public Document Room, 2120 L Street, NW (Lower Level), Washington, DC, 20007.



safety consequences are reported to Congress. After an evaluation several of the early written comments provided by the States were incorporated in SECY-94-275, "Revised Abnormal Occurrence Criteria" that provided the Commission a draft of the revised AO criteria as requested in an SRM of May 19, 1994. A **Federal Register** Notice (FRN) (January 9, 1996; 61 FR 661) on "Abnormal Occurrence Reports: Implementation of Section 208 Energy Reorganization Act of 1974; Proposed Policy Statement" was published for a 90-day public comment period, that included the proposed AO criteria. No additional comments were received from Agreement States or ACMUI on the proposed AO policy statement as published in the FRN.

The NRC received five letters of comment on the revised AO policy statement published in the FRN from the following organizations: Virginia Power; the Clean Water Fund of North Carolina; the American College of Nuclear Physicians, California Chapter; the Government Relations Office of the American College of Nuclear Physicians/Society of Nuclear Medicine; and the Nuclear Energy Institute. These comments may be examined at the U.S. Nuclear Regulatory Commission, Public Document Room, 2120 L Street, NW, (Lower Level) Washington, DC 20555-0001. Each letter contained more than one comment, and these comments are categorized into three groups: (1) modify and/or discontinue the AO reporting process; (2) revise the dose threshold for reporting AO events to Congress on unintended exposures to an adult and a minor or an embryo/fetus; and (3) reevaluate the AO criteria applicable to medical licensees. Public comments on the proposed policy statement and NRC's response are presented below followed by a section on the summary of Agreement State comments and NRC's response.

#### *A. Modify and/or Discontinue the AO Reporting Process*

**Comment:** Because people who receive the quarterly AO reports do not even read them, and the few that do believe the reports have little true value, the NRC should request legislation to discontinue the AO reporting process.

**Response:** The value of the AO report to Congress was recently examined in the legislation reducing the publication frequency of the report from quarterly to annually as recommended by the NRC in a letter of October 1, 1993, to the Senate Subcommittee on Oversight of Government Management. As a result, Senate 790, "Reports Elimination and Sunset Act," Public Law 104-66, was

signed by the President on December 21, 1995, changing the AO report to a yearly publication. Because the report was not eliminated in the "Federal Reports Elimination and Sunset Act," the NRC concludes that the AO report remains valuable to Congress.

**Comment:** Discontinue the appendix of the AO report on "Other Events of Interest" because (a) there is no legal justification for the development of this appendix; (b) the NRC does not have a fair mechanism for ascertaining public perception; and (c) events may be perceived as AOs and give the appearance of safety significance when no such finding was assigned to them.

**Response:** Based on NRC's experience, some events have attracted wide Congressional and public interest. Examples are events that resulted in petitions to the Commission by public interest groups, events that may have resulted in power reductions or shutdowns for safety-related reasons, and events involving widespread media coverage. Some of these events have also resulted in significant regulatory effort, such as an NRC Incident Investigation Team response. Although these events are not required by law to be listed in AO reports, the Commission, as a matter of discretionary policy, directed the NRC staff to include them to keep Congress and the public fully informed.

The NRC has not developed specific criteria for the appendix of the AO report on "Other Events of Interest." This allows discretion on the part of the NRC in the selection of the events to ensure exclusion of unimportant events. To avoid confusion, the "Other Events of Interest" listing will have a full description of the basis for inclusion of each event in the report and a clear indication that these events are not AOs.

#### *B. Revise the Dose Threshold for Reporting AO Events to Congress on Unintended Exposures to an Adult and a Minor or an Embryo/Fetus*

**Comment:** a. Because the revised unintended AO dose threshold values for the whole body and any individual organ or tissue except the lens of the eye are generally consistent with the "Planned special exposures" (PSEs) of 10 CFR Part 20 (five times the annual regulatory limits), for consistency the dose threshold for the lens of the eye should be revised to 750 millisievert (mSv) (75 rem), instead of the proposed AO threshold of 500 mSv (50 rem).

b. 10 CFR 20.1201(a)(1)(ii) specifies the annual occupational limit for the sum of deep-dose equivalent and the committed-dose equivalent to any individual organ or tissue except the

lens of the eye. Thus, the bone marrow and the gonads should be in the category of any individual organ or tissue except the lens of the eye, to be consistent with 10 CFR Part 20, using the revised AO dose threshold for other organs of 2500 mSv (250 rem).

**Response:** The NRC did not intend to be consistent with the dose thresholds as listed in 10 CFR Part 20, "Planned special exposures," which impose doses five times the annual regulatory limits during the individual's lifetime. Based on NRC's experience, unlike a PSE, an AO unintended exposure event is based on radiation consequences from that single event and not the radiation consequences over the individual's lifetime. The NRC agrees, however, that the AO dose threshold to the lens of the eye, the bone marrow, and the gonads should be increased. To be consistent with the AO threshold used for medical misadministrations, the threshold to the lens of the eye is raised to 1 Sv (100 rem) instead of the proposed 500 mSv (50 rem). The 1 Sv (100 rem) dose threshold is still below the dose for known deterministic effects in the lens of the eye such as cataracts. [NCRP Commentary No. 7]

Also, the dose threshold for the bone marrow and gonads will be revised to 1 Sv (100 rem) instead of the 2500 mSv (250 rem) recommended in the comment. The revised dose is still at the threshold for temporary bone marrow depression but below the dose threshold for permanent sterility from a single dose to the gonads or serious consequences due to bone marrow depression. For AO purposes, the bone marrow and the gonads are separated from the rest of the organs (unlike 10 CFR Part 20), due to the deterministic effects to these organs at the revised AO dose thresholds.

**Comment:** The annual total effective dose equivalent (TEDE) for AO reporting for members of the public should be reduced to less than 4.50 mSv (0.450 rem) instead of the proposed TEDE of 250 mSv (25 rem).

**Response:** According to the National Council on Radiation Protection and Measurements, the estimated average effective dose equivalent rate to a person in the United States from natural radiation and man-made sources is approximately 360 mrem per year.<sup>2</sup> This dose value is about the same as the commenter's suggested dose threshold for reporting AOs involving members of the public to Congress. Reporting to

<sup>2</sup> Ionizing Radiation Exposure of the Population of the United States, NCRP Report No. 93, National Council on Radiation Protection and Measurements, September 1987.

Congress each exposure of a member of the public due to NRC-licensed activities at the level of the average dose received annually from natural and man-made sources of radiation in the United States is inappropriate. The NRC selected the revised AO dose on the basis of the potential for radiation adverse health effects to an individual, independent of the individual's status as a radiation worker in an occupational environment or as a member of the public. This threshold is below the level of dose for which the potential for morbidity is considered significant for individuals with an increased organ and tissue sensitivity to radiation.

*Comment:* The annual TEDE to any minor or embryo/fetus should be reduced to less than 3.50 mSv (0.350 rem) instead of the proposed TEDE of 50 mSv (5 rem).

*Response:* The NRC understands the sensitivity of an unintended exposure to a minor or an embryo/fetus and recognizes that the radiation health effects are age dependent because organs and tissues in minors, fetuses, and embryos are more radiosensitive than a typical adult. Therefore, a dose threshold of 50 mSv (5 rem) was established for any minor or embryo/fetus, which is lower than the adult AO threshold of 250 mSv (25 rem).

In addition, the commenter's suggested threshold of 3.50 mSv (0.350 rem) is at or below the average dose that a person (including minors) in the United States receives annually from natural radiation and man-made sources as stated in the response to an earlier comment. The threshold established by NRC is below the minimum threshold doses for permanent deterministic effects in selective organs for a minor or an embryo/fetus.

*Comment:* The criteria related to a nursing child, fetus, or embryo as a result of an exposure to a nursing mother or pregnant woman should be deleted from the criteria until the proposed rule addressing these exposures is resolved through the advice of the Advisory Committee on Medical Uses of Isotopes (ACMUI) and a separate public comment period.

*Response:* The NRC recognizes the lack of a specific regulation to address exposures as a result of an unintended administration of radioactive material to a patient that is pregnant or nursing. Based on NRC's experience, some of these events have the potential for significant health and safety consequences to a minor or an embryo/fetus and should be reported to Congress.

### *C. Reevaluate the AO Criteria Applicable to Medical Licensees*

*Comment:* The proposed medical AO criteria are worse than the current criteria because they will continue to inappropriately designate non-significant events as AOs.

*Response:* The revised medical AO criteria should result in fewer AOs than have been reported previously to Congress. These revisions were made in response to NRC staff recognition of the previous low dose thresholds that resulted in reporting events that did not have significant radiation consequences. In addition, the new criteria also respond to previous public criticism and to changes in other NRC regulations relating to radiation protection.

*Comment:* The AO criteria applicable to medical licensees should be excluded from the AO policy statement because the NRC does not have sufficient competence in medicine and pharmacy to determine public safety significance of medical events.

*Response:* Because the NRC regulates byproduct material including the medical use of this material, criteria for medical events have been developed and must be included in the AO policy statement to comply with Section 208 of the Energy Reorganization Act of 1974, as amended. The revised criteria are based on widely accepted standards for radiation protection and were reviewed by the ACMUI. Therefore, the NRC believes that events exceeding the criteria are sufficiently important to inform Congress and the public.

*Comment:* Congress may obtain information on significant medical events from the FDA instead of the NRC.

*Response:* Section 208 of the Energy Reorganization Act of 1974, as amended, requires reporting to Congress licensee events that the NRC determines to be significant from the standpoint of public health and safety. An enactment of law would be necessary to change this requirement and appoint another agency such as the FDA to undertake the AO responsibility.

*Comment:* ACMUI should review the medical AO criteria.

*Response:* The revised criteria were presented to ACMUI and comments received were incorporated before publishing them in the **Federal Register** (January 9, 1996; 61 FR 661). Only minor changes have been made to the criteria since ACMUI's review.

*Comment:* Add a third condition to the medical AO criteria to read: "and (c) is a radiation exposure that has resulted in unintended permanent functional damage to an organ or a physiological system as determined by a physician" to

eliminate reporting events to Congress that do not have any medical significance.

*Response:* The NRC believes that the dose thresholds of the revised criteria have sufficient margin included to limit the reporting of insignificant events. In addition, the NRC considers it important to report events that have the potential to result in adverse public health and safety. The inclusion of the recommended criterion would preclude reporting of these events. Therefore, the NRC does not intend to include the proposed language.

*Comment:* Insignificant medical events have been included in the past AO reports to Congress.

*Response:* The NRC understands the commenters' concerns with the implementation of the medical AO policy before the revision. Because of the low dose thresholds established in the previous criteria, medical events that have not had the potential to result in significant radiation consequences to patients were determined to be AOs and were reported to Congress. As a result, the Commission is revising the AO criteria dose thresholds for medical events to exclude insignificant events.

### **III. Summary of Agreement State Comments and NRC's Response**

Seven Agreement States submitted comments to the NRC before development of the Commission paper, SECY-94-275, "Revised Abnormal Occurrence Criteria." These States were Arkansas, Georgia, Kentucky, New York, Texas, Tennessee, and Washington. After evaluating the comments, several were incorporated in the Commission paper. A summary of the Agreement State comments applicable to the AO criteria listed in the proposed policy statement as published in the **Federal Register** and NRC's response are presented below:

#### *A. Modify, Reevaluate and/or Discontinue Items of the AO Reporting Process*

*Comment:* Four States commented on the specific guidelines of a prior revision of the proposed appendix of the AO report on "Other Events of Interest" or wanted "Other Events of Interest" deleted.

*Response:* it should be noted that the section on "Other Events of Interest" contained in this final AO policy statement has been revised since the time that Agreement States provided comments, and therefore comments on the specific guidelines of the section do not apply. In reference to the elimination of "Other Events of Interest," see NRC's response to the

second public comment under Category A.

*Comment:* One State suggested that the AO criteria should apply to exposures from non-Atomic Energy Act (AEA) material.

*Response:* Section 208 of the Energy Reorganization Act of 1974, as amended, provides that the Commission shall submit to Congress each year a report listing for that period any AOs at or associated with any facility which is licensed or otherwise regulated pursuant to the Atomic Energy Act of 1954, as amended, or pursuant to this Act. Therefore, the AO criteria will not apply to events involving the use of non-AEA material since this material is not regulated by the NRC.

*Comment:* One State commented that the AO policy statement imposes additional requirements on licensees.

*Response:* The AO policy statement will not change the reporting requirements imposed on NRC licensees by Commission regulations, license conditions, or technical specifications. The NRC licensees will continue to submit required event reports. The AO criteria will only be used by the NRC during internal review and evaluation for reporting significant events to Congress.

*Comment:* One State commented that criterion I.A.3 is arbitrary.

*Response:* The NRC disagrees. Because individual sensitivity to radiation varies, the basis of criterion I.A.3 is to capture those events that have resulted in unintended, permanent functional damage to an organ or a physiological system at thresholds below those listed in the AO criteria. However, the NRC believes that there will be very few of these events. In most cases permanent organ and physiological damage will occur only at doses above the proposed AO thresholds.

*Comment:* One State commented that criterion I.D.3 is arbitrary.

*Response:* The NRC disagrees. Based on NRC's experience, certain reported events, although they did not result in significant radiation consequences, had the potential for adverse impacts on public health and safety because of a serious failure of the licensee's radiation protection program and lack of management control and oversight and should be reported to Congress.

*Comment:* Two States commented that "wrong patient" should be considered in the misadministration AO criteria instead of the general AO criteria applicable to all licensees.

*Response:* In the SRM of May 19, 1994, on SECY-93-259, the NRC staff was directed by the Commission to

establish a single-dose threshold value to identify doses to an occupational worker, a member of the public, and a wrong individual (wrong patient),<sup>3</sup> which are significant from a health and safety standpoint. The basis was that, for the purpose of reporting to Congress, the potential for physical harm to an individual resulting from the unintended exposure is the same whether the exposure was received in an occupational setting, as a patient who was not intended to receive a prescribed dose, or as a member of the public.

*Comment:* Three States suggested providing credentials for a "physician" as listed in criterion I.A.3.

*Response:* For general purposes the term "physician" is defined in 10 CFR Part 35.2, where "Physician means a medical doctor or doctor of osteopathy licensed by a State or Territory of the United States, the District of Columbia, or the Commonwealth of Puerto Rico to prescribe drugs in the practice of medicine."

Although the NRC regulations do not specify the detailed credentials of a "physician" for incident evaluation purposes, the NRC staff has developed an NRC Inspection Manual Chapter (IMC 1360) "Use of Physicians and Scientific Consultants in the Medical Consultant Program" that provides guidance on the use of NRC consultants in case of an incident. In addition, the NRC staff has developed NRC Management Directive 8.10, "NRC Medical Event Assessment Program" to ensure timely and comprehensive review of medical events. IMC 1360 and Management Directive 8.10 are available in the NRC public document room, 2120 L Street, NW. (Lower Level), Washington, DC 20555-0001.

#### *B. Be Consistent With the Regulations and Reconsider the Criterion for a Minor, or an Embryo/Fetus*

*Comment:* One State commented that the AO criteria should be consistent with 10 CFR Part 20.

*Response:* To the extent practical, the NRC has been consistent with 10 CFR Part 20, and at the same time has established thresholds to include only events that have the potential to result in deterministic effects due to unintended exposures.

*Comment:* Two States expressed concern about developing an AO dose threshold for events regarding a minor, or an embryo/fetus since the NRC has

not yet developed a regulation establishing a dose threshold for reporting these events to the NRC.

*Response:* See response to fourth public comment under Category B.

#### **IV. The Commission Policy—General Statement of Policy on Implementation of Section 208 of the Energy Reorganization Act of 1974, as Amended**

1. *Applicability.* Implementation of Section 208 of the Energy Reorganization Act of 1974, as amended, Abnormal Occurrence Reports, involves the conduct of Commission business and does not impose requirements on licensees. Reports will cover certain unscheduled incidents or events related to the manufacture, construction, or operation of a facility or conduct of an activity subject to the requirements of Parts 20, 30 through 36, 39, 40, 50, 61, 70, 71, or 72 of Chapter I, Title 10, Code of Federal Regulations (10 CFR).

Through an exchange of information, Agreement States provide information to the NRC on incidents and events involving applicable nuclear materials that have occurred in their States. Those events reported by Agreement States that reach the threshold for reporting as an AO are also published in the "Report to Congress on Abnormal Occurrences."

2. *Definition of terms.* As used in this policy statement:

(a) An "abnormal occurrence" means an unscheduled incident or event at a facility or associated with an activity that is licensed or otherwise regulated, pursuant to the Atomic Energy Act of 1954, as amended, or the Energy Reorganization Act of 1974, as amended, that the Commission determines to be significant from the standpoint of public health and safety; and

(b) an "unintended radiation exposure" includes any occupational exposure, exposure to the general public, or exposure as a result of a medical misadministration (as defined in § 35.2) involving the wrong individual that exceeds the reporting values established in the regulations.

All other reported medical misadministrations will be considered for reporting as an AO under the criteria for medical licensees. In addition, unintended radiation exposures include any exposure to a nursing child, fetus, or embryo as a result of an exposure (other than an occupational exposure to an undeclared pregnant woman) to a nursing mother or pregnant woman above specified values.

3. *Abnormal occurrence general statement of policy.* The Commission

<sup>3</sup> In the Federal Register notice dated September 20, 1995 (60 FR 48623), 10 CFR Parts 20 and 35, Medical Administration of Radiation and Radioactive Material, the term "Wrong patient" was replaced by the term "Wrong individual."



will apply the following policy in determining whether an incident or event at a facility or involving an activity that is licensed or otherwise regulated by the Commission is an AO within the purview of Section 208 of the Energy Reorganization Act of 1974, as amended.

An incident or event will be considered an AO if it involves a major reduction in the degree of protection of the public health or safety. This type of incident or event would have a moderate or more severe impact on the public health or safety and could include, but need not be limited to the following:

(1) Moderate exposure to, or release of, radioactive material licensed by or otherwise regulated by the Commission;

(2) Major degradation of essential safety-related equipment; or

(3) Major deficiencies in design, construction, use of, or management controls for licensed facilities or material.

Criteria by type of event used to determine which incidents or events will be considered for reporting as AOs are set out in appendix A of this policy statement.

#### 4. Commission dissemination of potential AO and AO information.

(a) The Commission will provide as wide a dissemination of information to the public as reasonably possible. Information on potential AOs (events that may meet the AO criteria) will be sent to the NRC Public Document Room and all local public document rooms as soon as possible after the staff determines that the incident is a potential AO. A *Federal Register* notice will be issued on each AO report with copies distributed to the NRC Public Document Room and all local public document rooms. When additional information is anticipated, the notice will state that the information can be obtained at the NRC Public Document Room and in all local public document rooms.

(b) Each year, the Commission will submit a report to Congress listing for that period any AOs at or associated with any facility or activity which is licensed or otherwise regulated pursuant to the Atomic Energy Act of 1954, as amended, or the Energy Reorganization Act of 1974, as amended. This report will contain the date, place, nature, and probable consequence of each AO, the cause or causes of each AO, and any action taken to prevent recurrence.

#### Appendix A—Abnormal Occurrence Criteria

Criteria by types of events used to determine which incidents or events

will be considered for reporting as AOs are as follows:

##### 1. For All Licensees

##### A. Human Exposure to Radiation From Licensed Material

1. Any unintended radiation exposure to an adult (any individual 18 years of age or older) resulting in an annual total effective dose equivalent (TEDE) of 250 millisievert (mSv) (25 rem) or more; or an annual sum of the deep dose equivalent (external dose) and committed dose equivalent (intake of radioactive material) to any individual organ or tissue other than the lens of the eye, bone marrow and the gonads, of 2500 mSv (250 rem) or more; or an annual dose equivalent to the lens of the eye, of 1 Sv (100 rem) or more; or an annual sum of the deep dose equivalent and committed dose equivalent to the bone marrow, and the gonads, of 1 Sv (100 rem) or more; or an annual shallow-dose equivalent to the skin or extremities of 2500 mSv (250 rem) or more.

2. Any unintended radiation exposure to any minor (an individual less than 18 years of age) resulting in an annual TEDE of 50 mSv (5 rem) or more, or to an embryo/fetus resulting in a dose equivalent of 50 mSv (5 rem) or more.

3. Any radiation exposure that has resulted in unintended permanent functional damage to an organ or a physiological system as determined by a physician.

##### B. Discharge or Dispersal of Radioactive Material From Its Intended Place of Confinement

1. The release of radioactive material to an unrestricted area in concentrations which, if averaged over a period of 24 hours, exceed 5000 times the values specified in Table 2 of appendix B to 10 CFR Part 20, unless the licensee has demonstrated compliance with § 20.1301 using § 20.1302 (b) (i) or 20.1302 (b) (2) (ii).

2. Radiation levels in excess of the design values for a package, or the loss of confinement of radioactive material resulting in one or more of the following: (a) A radiation dose rate of 10 mSv (1 rem) per hour or more at 1 meter (3.28 feet) from the accessible external surface of a package containing radioactive material; (b) a radiation dose rate of 50 mSv (5 rem) per hour or more on the accessible external surface of a package containing radioactive material and that meet the requirements for "exclusive use" as defined in 10 CFR 71.47; or (c) release of radioactive material from a package in amounts

greater than the regulatory limits in 10 CFR 71.51(a)(2).

##### C. Theft, Diversion, or Loss of Licensed Material, or Sabotage or Security Breach<sup>4</sup>

1. Any lost, stolen, or abandoned sources that exceed 0.01 times the  $A_1$  values, as listed in 10 CFR Part 71, appendix A, Table A-1, for special form (sealed/nondispersible) sources, or the smaller of the  $A_2$  or 0.01 times the  $A_1$  values, as listed in Table A-1, for normal form (unsealed/dispersible) sources or for sources for which the form is not known. Excluded from reporting under this criterion are those events involving sources that are lost, stolen, or abandoned under the following conditions: sources abandoned in accordance with the requirements of 10 CFR 39.77(c); sealed sources contained in labeled, rugged source housings; recovered sources with sufficient indication that doses in excess of the reporting thresholds specified in AO criteria I.A.1 and I.A.2 did not occur during the time the source was missing; and unrecoverable sources lost under such conditions that doses in excess of the reporting thresholds specified in AO criteria I.A.1 and I.A.2 were not known to have occurred.

2. A substantiated case of actual or attempted theft or diversion of licensed material or sabotage of a facility.

3. Any substantiated loss of special nuclear material or any substantiated inventory discrepancy that is judged to be significant relative to normally expected performance, and that is judged to be caused by theft or diversion or by substantial breakdown of the accountability system.

4. Any substantial breakdown of physical security or material control (i.e., access control containment or accountability systems) that significantly weakened the protection against theft, diversion, or sabotage.

##### D. Other Events (i.e., Those concerning Design, Analysis, Construction, Testing, Operation, Use, or Disposal of Licensed Facilities or Regulated Materials)

1. An accidental criticality [10 CFR 70.52(a)].

2. A major deficiency in design, construction, control, or operation

<sup>4</sup>Information pertaining to certain incidents may be either classified or under consideration for classification because of national security implications. Classified information will be withheld when formally reporting these incidents in accordance with Section 208 of the Energy Reorganization Act of 1974, as amended. Any classified details regarding these incidents would be available to the Congress, upon request, under appropriate security arrangements.



having significant safety implications requiring immediate remedial action.

3. A serious deficiency in management or procedural controls in major areas.

4. Series of events (where individual events are not of major importance), recurring incidents, and incidents with implications for similar facilities (generic incidents) that create a major safety concern.

## II. For Commercial Nuclear Power Plant Licensees

### A. Malfunction of Facility, Structures, or Equipment

1. Exceeding a safety limit of license technical specification (TS) [§ 50.36(c)].

2. Serious degradation of fuel integrity, primary coolant pressure boundary, or primary containment boundary.

3. Loss of plant capability to perform essential safety functions so that a release of radioactive materials, which could result in exceeding the dose limits of 10 CFR Part 100 or 5 times the dose limits of 10 CFR Part 50, appendix A, General Design Criterion (GDC) 19, could occur from a postulated transient or accident (e.g., loss of emergency core cooling system, loss of control rod system).

### B. Design or Safety Analysis Deficiency, Personnel Error, or Procedural or Administrative Inadequacy

1. Discovery of a major condition not specifically considered in the safety analysis report (SAR) or TS that requires immediate remedial action.

2. Personnel error or procedural deficiencies that result in loss of plant capability to perform essential safety functions so that a release of radioactive materials, which could result in exceeding the dose limits of 10 CFR Part 100 or 5 times the dose limits of 10 CFR Part 50, appendix A, GDC 19, could occur from a postulated transient or accident (e.g., loss of emergency core cooling system, loss of control rod system).

## III. For Fuel Cycle Licensees

1. A required plant shutdown as a result of violating a license condition or other safety limit.

2. A major condition not specifically considered in the license that requires immediate remedial action.

3. An event that seriously compromises the ability of a confinement system to perform its designated function.

## IV. For Medical Licensees

A medical misadministration that:

(a) Results in a dose that is (1) equal to or greater than 1 gray (Gy) (100 rads) to a major portion of the bone marrow, to the lens of the eye, or to the gonads, or (2) equal to or greater than 10 Gy (1000 rads) to any other organ; and

(b) Represents either (1) a dose or dosage that is at least 50 percent greater than that prescribed in a written directive or (2) a prescribed dose or dosage that (i) is the wrong radiopharmaceutical,<sup>5</sup> or (ii) is delivered by the wrong route of administration, or (iii) is delivered to the wrong treatment site, or (iv) is delivered by the wrong treatment mode, or (v) is from a leaking source(s).

### V. Guidelines for "Other Events of Interest"

The Commission may determine that events other than AOs may be of interest to Congress and the public and be included in an appendix to the AO report as "Other Events of Interest." Guidelines for events to be included in the AO report for this purpose are items that may possibly be perceived by the public to be of health or safety significance. Such items would not involve a major reduction in the level of protection provided for public health or safety; therefore, they would not be reported as abnormal occurrences. An example is an event where upon final evaluation by an NRC Incident Investigation Team, or an Agreement State equivalent response, a determination is made that the event does not meet the criteria for an abnormal occurrence.

Dated at Rockville, Maryland, this 13th day of December, 1996.

For the Nuclear Regulatory Commission,

John C. Hoyle,

Secretary of the Commission.

(FR Doc. 96-32210 Filed 12-18-96; 8:45 am)

BILLING CODE 7590-01-P

[Docket No. 50-146]

### GPU Nuclear Corporation and Saxton Nuclear Experimental Corporation, (Saxton Nuclear Experimental Facility); Notice of Receipt and Availability for Comment of Post Shutdown Decommissioning Activities Report and Notice of Public Meeting

The Nuclear Regulatory Commission (NRC) is in receipt of and is making available for public inspection and comment the Post-Shutdown

<sup>5</sup> The wrong radiopharmaceutical as used in the AO criterion for medical misadministrations refers to any radiopharmaceutical other than the one listed in the written directive or in the clinical procedures manual.

Decommissioning Activities Report (PSDAR) for the Saxton Nuclear Experimental Corporation (SNEC) Facility (SNEF) located near the Borough of Saxton, in Liberty Township, Bedford County, Pennsylvania. A public meeting on the SNEF PSDAR will be held in the Saxton Fire Hall located at 8th and North Street, Saxton, Pennsylvania 16678 on January 28, 1997, at 7:00 p.m.

Reactor operations at SNEF were terminated in May 1972. The reactor is defueled, with reactor fuel removed from the site, and the reactor cooling system is drained. SNEC submitted the SNEF Decommissioning Plan (DP) dated February 16, 1996, to the NRC in accordance with NRC regulations in effect at that time. The licensee submitted the SNEF Decommissioning Environmental Report on April 17, 1996. On July 18 and November 8, 1996, the licensee submitted additional information on the DP and environmental report in response to a request for additional information from the staff. When proposed amendments to the NRC's decommissioning regulations were published in the *Federal Register* on July 29, 1996 (61 FR 39278), the licensee requested that the review of the DP and related documents be suspended. When the amended regulations became effective on August 28, 1996, the submitted DP, as supplemented, became the SNEF PSDAR pursuant to 10 CFR 50.82 as amended. By letter dated September 30, 1996, the licensee discussed the effect of the amended regulations on its plans for decommissioning the SNEF.

The public meeting, required by 10 CFR 50.82(a)(4)(ii), as amended, is informational and will include a presentation by the NRC staff on the decommissioning regulatory process. The licensee will give a presentation on planned decommissioning activities. A question and answer period will follow the presentations. Because of restrictions in the license for the SNEF, a license amendment is also needed before decommissioning activities can begin. This amendment to the SNEF license will be the subject of a separate notice for public comment pursuant to 10 CFR 50.91.

The SNEF PSDAR is available for public inspection at the SNEF local public document room, located at the Saxton Community Library, Front Street, Saxton, Pennsylvania 16678, and at the Commission Public Document Room, 2120 L Street, N.W., Washington, D.C. 20037. The SNEF PSDAR is filed as the SNEF DP dated February 16, 1996, the SNEF Decommissioning Environmental Report dated April 17,

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Dated at Rockville, Maryland, this 13th day of December, 1996.

For the Nuclear Regulatory Commission,

John C. Hoyle,

Secretary of the Commission.

[FR Doc. 96-32210 Filed 12-18-96; 8:45 am]

BILLING CODE: 7590-01-P

[Docket No. 50-146]

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U. S. NUCLEAR REGULATORY COMMISSION  
NRC MANUAL  
TRANSMITTAL NOTICE

CHAPTER NRC-0212 ABNORMAL OCCURRENCE REPORTING PROCEDURE

SUPERSEDED:

	Number	Date
Chapter	_____	_____
Page	_____	_____
	_____	_____
	_____	_____
Appendix	_____	_____

TRANSMITTED:

	Number	Date
TN	0200-39	9/9/87
Chapter	_____	_____
Page	_____	_____
	_____	_____
	_____	_____
Appendix	_____	_____

REMARKS:

Please make the following pen-and-ink changes to this chapter:

1. Paragraph -033.d (4) - substitute "Office of Administration and Resources Management" for "Offices of Administration".
2. Paragraph -034 - substitute "Directors of the Offices of Nuclear Reactor Regulation (NRR), Nuclear Material Safety and Safeguards (NMSS), Nuclear Regulatory Research (RES), and Special Projects (SP), and Regional Administrators:" for present title line.
3. Paragraph -035 - substitute "Office of General Counsel" for "Executive Legal Director".
4. Paragraph -036 - substitute "The Director, State, Local, and Indian Tribe Programs" for "The Director, Office of State Programs".
5. Paragraphs -037 and -038 - delete "Office of" in both title lines.
6. Paragraph -054.e - substitute "U. S. Government Printing Office and the National Technical Information Service" for "NRC/GPO Sales Program".



U. S. NUCLEAR REGULATORY COMMISSION  
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CHAPTER NRC-0212 ABNORMAL OCCURRENCE REPORTING PROCEDURE

SUPERSEDED:

	Number	Date
Chapter	NRC-0212	2/28/78
Page		
Appendix		

TRANSMITTED:

	Number	Date
TN	0200-34	
Chapter	NRC-0212	7/18/84
Page		
Appendix	NRC-0212	7/18/84

REMARKS:

This issuance is revised to:

1. reflect changes in organization and responsibilities within the NRC since the chapter was first published.
2. add an appendix, which provides guidance for the selection of events and the processing procedures for abnormal occurrence reports and other related items.

# U.S. NUCLEAR REGULATORY COMMISSION

## NRC MANUAL

Volume: 0000 General Administration  
Part: 0200 Administrative Procedures and Services

AEOD

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### CHAPTER 0212 ABNORMAL OCCURRENCE REPORTING PROCEDURE

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#### 0212-01 COVERAGE

This chapter and its appendix define the system for staff coordination of the Abnormal Occurrence (AO) reporting process. This includes the procedures for identifying, evaluating, and processing the reports of events that are considered potential AOs and Other Related Items as defined herein. This chapter does not affect Commission rules and regulations or other requirements applicable to NRC licensees which are given in the Code of Federal Regulations, Technical Specifications, and/or license provisions. In addition, this chapter does not affect the Commission's agreements with Agreement States, as authorized by Section 274 of the Atomic Energy Act of 1954, as amended.

#### 0212-02 OBJECTIVES

021 To provide effective communication of policies, objectives, responsibilities, authorities, requirements, guidance, and information pertaining to the reporting of AOs and Other Related Items.

022 To assure that the reporting process is properly coordinated and consistent with provisions of Section 208, Energy Reorganization Act of 1974, as amended, and with decisions of the Commission and the Executive Director for Operations.

#### 0212-03 RESPONSIBILITIES AND AUTHORITIES

##### 031 The Commission:

- a. makes final determinations of AOs.
- b. grants final approval of the quarterly AO reports to Congress.

##### 032 The Executive Director for Operations (EDO):

- a. reviews staff recommendations of AOs and Other Related Items. Resolves staff disagreements, if any, and forwards recommendations to the Commission for final determination.
- b. assures that arrangements are made for any required informal or formal Commission briefings.

Approved: July 18, 1984

- c. assures that Commission comments on staff recommendations are resolved.

033 The Director, Office for Analysis and Evaluation of Operational Data (AEOD):

- a. implements provisions of this chapter. Establishes internal procedures to assure expeditious processing of reportable items.
- b. assigns a coordinator and an alternate to represent AEOD on matters pertaining to AO and Other Related Items reporting.
- c. proposes and coordinates changes with the staff and Commission, as necessary, to the reporting procedures, criteria, and guidelines for selection of events for reporting to the Commission and Congress.
- d. coordinates with the staff and Commission events proposed by AEOD and other Offices for reporting as AOs and Other Related Items. Assures that all reportable items receive a security review.
  - (1) prepares and coordinates a Commission paper and a Federal Register notice (FRN) for individual reports of potential AOs and the quarterly report to Congress.
  - (2) resolves staff comments and disagreements. If an impasse is encountered, submits supporting documentation and an AEOD recommendation to the EDO for resolution.
  - (3) coordinates with SECY, EDO, and the appropriate Offices for any briefings of the Commissioners.
  - (4) resolves Commission comments and revises reports as necessary. Transmits final FRNs to SECY, via EDO, for signature and publication. Arranges for the publication and distribution of the quarterly reports in conjunction with the Offices of Administration and Congressional Affairs.
  - (5) maintains a file of supporting documentation for each event and quarterly report submitted to the Commission.

034 Directors of the Offices of Inspection and Enforcement (IE), Nuclear Reactor Regulation (NRR), Nuclear Material Safety and Safeguards (NMSS), and Nuclear Regulatory Research (RES); and Regional Administrators:

- a. implement provisions of this chapter. Establish internal procedures for expeditious identification, review, and processing of potential AOs and Other Related Items.
- b. assign a coordinator and an alternate to represent the Office for matters pertaining to AOs and Other Related Items. Identify these individuals to AEOD.

- c. provide information regarding potential AOs and Other Related Items to AEOD within five and 15 working days, respectively, after sufficient information has been obtained. (See a recent copy of NUREG-0090 and its associated Commission paper for format and examples.) For each such event:

- (1) prepare a writeup and forward it to AEOD for processing. The forwarding letter should state the specific criteria, example, and/or guideline used to select the event for reporting. The text of the writeup should describe the circumstances leading up to the event, the event itself (including, if applicable, a description of the components and systems involved, and their functions), actual or probable consequences (safety issue), the immediate actions taken to mitigate the event, and the actions (immediate and long term) taken to prevent recurrence. NRC response should be described, e.g., activation of Operations Center, inspections, independent studies made, meetings, orders or license modifications, enforcement actions, etc.

The cognizant office may request AEOD guidance or assistance, as resources permit, in preparing draft writeups of reportable items. However, in order for AEOD to assist, the cognizant office must provide all pertinent documents (i.e., copies of orders, letters to and from the NRC, inspection and enforcement reports, minutes of meetings, safety evaluation reports, enforcement letters, etc.) pertaining to the event.

- (2) provide information and assistance to AEOD during evaluation (including any Commission briefings) of the subject events.
- (3) provide updating material as the information becomes known.

- d. respond to AEOD's requests for review of proposed reportable items.

For concurrences and editorial comments, telephonic or facsimile responses from the Office or Regional coordinator to the AEOD coordinator are acceptable. For nonconcurrence of a possible AO, the response must be by formal reply, signed by the Office Director or Regional Administrator. Detailed reasons for the nonconcurrence must be provided.

- e. respond to AEOD's quarterly requests for a listing and assessment of any significant items which appear reportable as potential AOs or Other Related Items. The assessment (in summary form) should include the significance of each item and reasons why it appears reportable. Typical significant items are:

- (1) the identification of a generic safety concern.
- (2) activation of Operations Center due to significant events reported by licensees in accordance with the Immediate Notification requirements.



- (3) significant enforcement actions, i.e., Severity I and II items; civil penalties; orders to cease and desist; license suspension, modification, or revocation for safety reasons; show cause orders.
  - (4) orders or license modifications in response to significant security or safeguards incidents.
- f. assure that the cognizant Offices are informed of items which may be potential AOs. For example:
- (1) each Headquarters Office should inform the cognizant Regional Offices of any event, which may be a potential AO, first reported by a licensee to the Headquarters Office, or of any generic issue identified by the Headquarters Office staff. The cognizant Regional Offices can then, if necessary, investigate, gather information, and evaluate the event or issue.
  - (2) each Regional Office should keep the cognizant Headquarters Office informed of any event or issue which may be a potential AO.

035 The Executive Legal Director:

- a. assigns a coordinator and an alternate to represent the Office for matters pertaining to the reporting process. Identifies these individuals to AEOD.
- b. provides comments and concurrence to AEOD on incidents proposed for AO reporting and on the quarterly reports to Congress.

036 The Director, Office of State Programs:

- a. assigns a coordinator and an alternate to represent the Office for matters pertaining to the reporting process. Identifies these individuals to AEOD.
- b. assures that cognizant Regional personnel are informed of events reported by Agreement State licensees directly to the Headquarters Office or of any generic issues identified by the Headquarters Office staff. Similarly, cognizant Regional personnel should assure that Headquarters Office personnel are kept informed of events reported by Agreement State licensees directly to the Regional Offices, or any generic issues identified.
- c. notifies AEOD within five working days of notification by an Agreement State of a proposed AO
- d. establishes internal procedures to assure expeditious processing of potential AO writeups submitted by the Agreement States. Reviews Agreement State writeups of AOs to assure they are in proper format, complete, up to date, understandable, and that the specific AO criterion or example used is clearly stated.

- e. provides to AEOD any updating and/or closeout information on previously reported AOs in Agreement States as it becomes available.

037 The Director, Office of Public Affairs:

- a. assigns a coordinator and an alternate to represent the Office for matters pertaining to the reporting process. Identifies these individuals to AEOD.
- b. notifies AEOD of events which are receiving widespread public (more than local) interest for possible consideration as Other Events of Interest.

038 The Director, Office of Congressional Affairs:

- a. assigns a coordinator and an alternate to represent the Office for matters pertaining to the reporting process. Identifies these individuals to AEOD.
- b. notifies AEOD of events which are receiving widespread Congressional interest for possible consideration as Other Events of Interest.
- c. notifies AEOD when the quarterly reports have been delivered to Congress. AEOD will then release the report for general distribution.

0212-04 DEFINITIONS

041 Abnormal Occurrence. An AO, as defined in Section 208 of the Energy Reorganization Act of 1974, as amended, is an unscheduled incident or event which the Commission determines is significant from the standpoint of public health or safety. The criteria for such determinations are given in Part I of Appendix 0212 to this Chapter. For medical misadministrations, the AO criteria and their examples are supplemented by the specific guidelines given in Part II of Appendix 0212 to this chapter.

042 Potential Abnormal Occurrence. Any event which appears to meet the criteria or guidelines for AO reporting.

043 Other Related Items. Other Related Items are those things that are not AOs but are discussed in the AO quarterly report or in the Commission Paper that forwards the AO quarterly report to the Commission for review and approval. Other Related Items include Other Events of Interest, Other Events Considered for Abnormal Occurrence Reporting, and Updating Material. Other Related Items also include any changes proposed to this chapter or its appendix.

044 Other Events of Interest. Any event which, though determined by the NRC not to be of public health significance, may be perceived as such by the public. Guidelines for selection and processing procedures for these events are given in Part III of Appendix 0212 to this chapter.

045 Other Events Considered for Abnormal Occurrence Reporting. Any event which is considered as a potential AO, but which was subsequently judged not to meet the criteria for abnormal occurrence reporting. Guidelines for selection and processing procedures for these events are given in Part IV of Appendix 0212 to this chapter.

046 Updating Material. Any new, significant information which becomes known in regard to previously reported AOs. Guidelines for processing updating material are given in Part V of Appendix 0212 to this chapter.

## 0212-05 BASIC REQUIREMENTS

051 Applicability. This chapter applies to and shall be followed by NRC Headquarters Offices and Regional Offices.

052 Appendix. The criteria and guidelines for selection of events for possible AO reporting, and the selection and processing of Other Related Items, are contained in Appendix 0212 to this chapter.

### 053 Federal Register Notices.

- a. Information concerning AOs at NRC licensees is publicly disseminated through the Federal Register, with copies sent to the NRC Public Document Room and to the local public document rooms. Generally there is a Federal Register notice issued which contains the details of each AO and, where additional information is anticipated, the notice indicates that this information can be obtained at the Public Document Room.
- b. Required minimum information for the Federal Register notice is date, place, nature and probable consequences of the event. Subsequent information (e.g., cause and actions taken to prevent recurrence, any significant updating information) will be promulgated either by updating summaries deposited in the public document rooms or through the quarterly reports to Congress, or both.
- c. AOs at NRC licensees are to be reported to the public by issuing the Federal Register notice generally within 15 days after Commission approval of the AOs.
- d. A Federal Register notice is also issued upon publication and delivery to Congress of each quarterly AO report. The notice lists the AOs included in the report and describes the availability of the report.

### 054 Reporting Requirements.

- a. Any individual, NRC Office, other government agency, licensee, or member of the public may propose an event to any NRC organizational unit for evaluation as a potential AO. Any such event, together with the reasons why it does or does not appear to meet the AO criteria, should then be submitted to AEOD for evaluation and processing.

- b. Any individual, NRC Office, other government agency, licensee, or member of the public may recommend (to AEOD) changes in the AO reporting program, evaluation and determination procedures, or method of dissemination to the public or Congress.
- c. In order to report AOs to the public in a timely manner, Office responses to AEOD's requests for review and comment of AOs should be submitted within five and 10 working days from the date of the AEOD requests, for individual AOs and for the quarterly AO reports, respectively.
- d. A goal for the issuance of the quarterly AO report to Congress is 120 days after the end of each calendar quarter. The quarterly reports are issued in the NUREG-0090 series.
- e. After delivery of the quarterly reports to Congress, copies are sent to the NRC Public Document Room and to the appropriate local public document rooms. Copies are also released for regular distribution and for purchase from the NRC/GPO Sales Program.

055 References.

- a. Section 208 of the Energy Reorganization Act of 1974 (Public Law 93-438, 42 U.S.C. 5848) states that the Commission shall submit to the Congress each quarter a report listing for that period any abnormal occurrences at or associated with any facility which is licensed or otherwise regulated by the NRC. For the purposes of Section 208, an abnormal occurrence is an unscheduled incident or event which the Commission determines is significant from the standpoint of public health or safety. Nothing in the preceding sentence shall limit the authority of a court to review the determination of the Commission. Each such report shall contain:
  - (1) the date and place of each occurrence;
  - (2) the nature and probable consequence of each occurrence;
  - (3) the cause or causes of each; and
  - (4) any action taken to prevent reoccurrence;the Commission shall also provide as wide dissemination to the public of the information specified in items (1) and (2) above as reasonably possible within fifteen days of its receiving information of each abnormal occurrence and shall provide as wide dissemination to the public as reasonably possible of the information specified in items (3) and (4) above as soon as such information becomes available to it.
- b. The present AO criteria were submitted to the Commission on September 10, 1976, by SECY-76-471 and approved by a memorandum from S.J. Chilk to L.V. Gossick dated December 2, 1976. Subsequently, these criteria were included in an NRC Policy Statement, implementing Section 208, which was published in the Federal Register (42 FR 10950) on February 24, 1977.



- c. Staff guidelines for selection of medical misadministrations as potential AOs were submitted to the Commission for approval by SECY-84-60 on February 3, 1984 and approved by a memorandum from J.C. Hoyle to W.J. Dircks dated June 4, 1984.
- d. The Commission requirement that the memorandum submitting the draft quarterly AO reports to the Commission document a representative sample of Other Events Considered for Abnormal Occurrence Reporting is contained in the previously referenced memorandum from S.J. Chilk to L.V. Gossick dated December 2, 1976.
- e. The Commission requirement that consideration be given to the inclusion in the quarterly AO reports of Other Events of Interest is contained in the previously referenced memorandum from S.J. Chilk to L.V. Gossick dated December 2, 1976. Guidelines for the selection of such events were submitted to the Commission for information by SECY 78-460A on December 1, 1978.
- f. The Commission requirement that Agreement States screen events and voluntarily report to NRC those occurrences that meet the criteria established as a threshold for reporting under Section 208 is contained in a memorandum from S.J. Chilk to L.V. Gossick dated February 22, 1977. If the NRC agrees that the Agreement State events meet the AO criteria, they are to be included in the quarterly AO reports to Congress.

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## PART I

## ABNORMAL OCCURRENCE CRITERIA

## A. GENERAL CRITERIA

An Abnormal Occurrence (AO) is an event involving a major reduction in the degree of protection of the public health or safety. Such an event would involve a moderate or more severe impact on the public health or safety and could include but need not be limited to:

1. Moderate exposure to, or release of, radioactive material licensed by or otherwise regulated by the Commission;
2. Major degradation of essential safety-related equipment; or
3. Major deficiencies in design, construction, use of, or management controls for licensed facilities or material.

## B. EXAMPLES OF EVENT TYPES

Examples of the types of events that are evaluated in detail using these criteria are:

1. For All Licensees

- a. Exposure of the whole body of any individual to 25 rems or more of radiation; exposure of the skin of the whole body of any individual to 150 rems or more of radiation; or exposure of the feet, ankles, hands or forearms of any individual to 375 rems or more of radiation (10 CFR § 20.403(a)(1)), or equivalent exposures from internal sources.
- b. An exposure to an individual in an unrestricted area such that the whole body dose received exceeds 0.5 rem in one calendar year (10 CFR § 20.105(a)).
- c. The release of radioactive material to an unrestricted area in concentrations which, if averaged over a period of 24 hours, exceed 500 times the regulatory limit of Appendix B, Table II, 10 CFR Part 20 (10 CFR § 20.403(b)).
- d. Radiation or contamination levels in excess of design values on packages, or loss of confinement of radioactive material such as (1) a radiation dose rate of 1,000 mrem per hour three feet from the surface of a package containing the radioactive material, or (2) release of radioactive material from a package in amounts greater than the regulatory limit (10 CFR § 71.36(a)).

- e. Any loss of licensed material in such quantities and under such circumstances that substantial hazard may result to persons in unrestricted areas.
- f. A substantiated case of actual or attempted theft or diversion of licensed material or sabotage of a facility.
- g. Any substantiated loss of special nuclear material or any substantiated inventory discrepancy which is judged to be significant relative to normally expected performance and which is judged to be caused by theft or diversion or by substantial breakdown of the accountability system.
- h. Any substantial breakdown of physical security or material control (i.e., access control, containment, or accountability systems) that significantly weakened the protection against theft, diversion or sabotage.
- i. An accidental criticality (10 CFR § 70.52(a)).
- j. A major deficiency in design, construction, or operation having safety implications requiring immediate remedial action.
- k. Serious deficiency in management or procedural controls in major areas.
- l. Series of events (where individual events are not of major importance), recurring incidents, and incidents with implications for similar facilities (generic incidents) which create major safety concern.

2. For Commercial Nuclear Power Plants

- a. Exceeding a safety limit of license Technical Specifications (10 CFR § 50.36(c)).
- b. Major degradation of fuel integrity, primary coolant pressure boundary, or primary containment boundary.
- c. Loss of plant capability to perform essential safety functions such that a potential release of radioactivity in excess of 10 CFR Part 100 guidelines could result from a postulated transient or accident (e.g., loss of emergency core cooling system, loss of control rod system).
- d. Discovery of a major condition not specifically considered in the Safety Analysis Report (SAR) or Technical Specifications that requires immediate remedial action.
- e. Personnel error or procedural deficiencies which result in loss of plant capability to perform essential safety functions such that a potential release of radioactivity in excess of 10 CFR



Part 100 guidelines could result from a postulated transient or accident (e.g., loss of emergency core cooling system, loss of control rod system).

3. For Fuel Cycle Licensees

a. For Reprocessing Facilities

- (1) A safety limit of license Technical Specifications is exceeded and a plant shutdown is required (10 CFR § 50.36(c)).
- (2) A major condition not specifically considered in the Safety Analysis Report or Technical Specifications that requires immediate remedial action.

b. For All Fuel Licensees

An event which seriously compromised the ability of a confinement system to perform its designated function.

## PART II

STAFF GUIDANCE FOR SELECTION OF MEDICAL MISADMINISTRATION  
EVENTS FOR ABNORMAL OCCURRENCE REPORTING

## A. INTRODUCTION

The existing NRC policy statement for determination of abnormal occurrences (AOs), as published in the Federal Register on February 24 1977 (43 FR 10950), was developed before the requirements (10 CFR § 35.41-35.45) for licensees to report medical misadministrations to the NRC became effective. Few of the examples in the policy statement for AO reporting are applicable to medical misadministration events. Therefore, for the latter events, a set of Guidelines has been developed which augment the policy statement examples. These Guidelines are delineated below.

## B. PROCEDURES

The staff should select medical misadministration events as potential AOs using both the NRC policy statement for AOs, and the Guidelines below. The cognizant Regional or Headquarters office should prepare an AO writeup and forward it (together with the specific policy statement and/or Guideline example which is applicable) to AEOD for review and staff coordination. Subsequently, AEOD will forward those events that appear to meet the AO reporting threshold to the Commission for approval as AOs. The Commission paper will inform the Commission which specific policy statement and/or Guideline example is applicable. If a report is based only on a Guideline example, the writeup will state that the event is being reported under the general criterion for AO determinations (i.e., an event involving a major reduction in the degree of protection of public health or safety).

## C. SPECIFIC GUIDELINES

Table 1 shows types of events which typically qualify for possible reporting as AOs; these supplement the examples (e.g., serious deficiency in management or procedural controls in major areas) described in the NRC policy statement for AOs. The first column describes various types of medical misadministrations. Items 1 through 5 are based on misadministrations reportable per 10 CFR § 35.41, while items 6 and 7 refer to recurring and generic medical misadministrations, respectively. The second and third columns of Table 1 show the AO reporting threshold for each type of event described, for diagnostic and therapeutic exposures, respectively. A conservative approach should be used (i.e., even events considered to be marginal should be proposed to AEOD for reporting). "Adverse health effects" is defined in Paragraph E below.

In Table 1, "adverse health effects" has a special meaning consistent with "adverse health effects worse than expected." The former refers to events in which a person, or a specific part of the body, receives radiation when no radiation was supposed to have been given to that person or that specific part of the body. The latter refers to events in which a person, or a specific part of the body, is scheduled to receive radiation, but the actual radiation received is greater than scheduled and causes observable health effects worse than would have been expected for the ranges of radiation normally associated with the particular diagnostic or therapeutic procedure. Therefore, the former is a special case of the latter, in which the "expected" health effect is zero. Of course, the actual doses received would also have to exceed the limits described in 10 CFR § 35.41, since otherwise the events need not be reported by the licensee to the NRC.

The health effects on a patient may be described in the licensee's report, which would facilitate use of these Guidelines. Occasionally, additional information may need to be requested from the licensee. At times, a recommendation for reporting an AO may involve reviewing the NRC's medical consultant's report, if the NRC has requested a medical consultant to review the event. Established medical literature can also be used in determining an adequate basis for reporting.

#### D. GENERAL GUIDANCE

1. Reports are to be consistent with the provisions of the Privacy Act and the Freedom of Information Act.
2. Drug defects, adverse drug reactions, or other problems outside the purview of the NRC will not generally be included.
3. In some cases, a collection of events may be presented in a report as a summary of specific data. For example, for similar events (such as recurring events or a series of events), the date and place, nature and probable consequences, cause or causes, may be presented in a table of data; the corrective actions to prevent recurrence could then be presented collectively in more detail.

#### E. ADVERSE HEALTH EFFECTS

Adverse health effects are acute symptoms directly related to various levels of radiation such as death; vomiting; erythema; diarrhea; fatigue; epilation; reduction in lymphocytes, platelets, and/or total white blood count; lesions and/or other tissue breakdown or damage. Whether or not the problems can be controlled, alleviated, or halted by further medical treatment is not germane for the purposes of defining an AO.

Even for prescribed amounts of radiation, some adverse health effects may occur or may be expected to occur. When a person or a part of the body receives radiation exceeding the limits normally prescribed for that diagnostic or therapeutic procedure, and the event is reportable by the licensee under 10 CFR § 35.41, only the adverse health effects which

ABNORMAL OCCURRENCE REPORTING PROCEDURE

exceed those expected by the limits of the diagnostic or therapeutic procedure are considered for AO reporting. However, as described previously, when a person or a part of a body receives radiation (but none was prescribed for that person or part of body), any observable adverse health effects form a basis for AO reporting. The licensee's followup and/or NRC's medical consultant's report, and established medical literature, will generally provide the basis for necessary judgments.

Many prescribed procedures involving radiopharmaceuticals or sealed sources, even though targeted primarily for a particular part of the body, will also subject other parts of the body to radiation exposure. The latter parts of the body must also be considered when applying the Specific Guidelines.



Table 1  
AO Reporting Thresholds for  
Medical Misadministration Events

<u>Event Type</u>	<u>Diagnostic Exposure</u>	<u>Therapeutic Exposure</u>
(1) Administering a radiopharmaceutical or radiation from a sealed source other than the one intended. See 10 CFR § 35.41.(a).	If the improper administration results in any part of the body receiving unscheduled radiation, an AO report should be proposed if:	If the improper administration results in any part of the body receiving unscheduled radiation, an AO report should be proposed for any such event.
	(a) the actual dose to the wrong body part is greater than five times the upper limit of the normal range of exposures prescribed for diagnostic procedures involving that body part, <u>or</u>	If the parts of the body receiving radiation improperly would have received radiation anyway, had the proper administration been used, an AO report should be proposed if:
	(b) there are clinical indications of <u>any</u> adverse health effects to the wrong body part.	(a) the actual dose is greater than 1.5 times that intended to the above described body parts, <u>or</u> ,
	If the parts of the body receiving radiation improperly would have received radiation anyway, had the proper administration been used, an AO report should be proposed if:	(b) the actual dose is less than 0.5 times that intended to the above described body parts, <u>or</u> ,
		(c) the above described body parts show signs of adverse health effects greater than expected had the proper administration been used, <u>or</u>
	(a) the actual dose is greater than five times that intended to the above described body parts, <u>or</u> ,	(d) the event (regardless of any health effects) affects two or more patients at the same facility.

Table 1 (Continued)

<u>Event Type</u>	<u>AO Reporting Threshold</u>	
	<u>Diagnostic Exposure</u>	<u>Therapeutic Exposure</u>
	(b) the above described body parts show signs of adverse health effects greater than expected had the proper administration been used.	
(2) Administering a radiopharmaceutical or radiation to the wrong patient. See 10 CFR § 35.41(b).	An AO report should be proposed if: (a) the actual dose to the wrong patient exceeds five times the prescribed dose for the intended patient, <u>or</u> (b) the event results in <u>any</u> adverse health effects.	An AO report should be proposed for any such event.
(3) Administering a radiopharmaceutical or radiation by a route of administration other than that intended by the prescribing physician. See 10 CFR § 35.41(c)	Same guidelines as for Event Type 1.	Same guidelines as for Event Type 1.
(4) Administering a diagnostic dose of a radiopharmaceutical differing from the prescribed dose by more than 50 percent. See 10 CFR § 35.41(d).	An AO report should be proposed if: (a) the actual dose is greater than five times the prescribed dose, <u>or</u> , (b) the event results in adverse health effects worse than expected for	Not applicable.

Table 1 (Continued)

<u>Event Type</u>	<u>AO Reporting Threshold</u>	
	<u>Diagnostic Exposure</u>	<u>Therapeutic Exposure</u>
	the normal range of exposures prescribed for the diagnostic procedure.	
(5) Administering a therapeutic dose of a radiopharmaceutical differing from the prescribed dose by more than 10 percent; or administering a therapeutic radiation dose from a sealed source such that errors in the source calibration, time of exposure, and treatment geometry result in a calculated total treatment dose differing from the final prescribed total treatment dose by more than 10 percent. See 10 CFR § 35.41(e) and (f).	Not applicable.	An AO report should be proposed if: <ul style="list-style-type: none"> <li>(a) the actual dose is greater than 1.5 times the prescribed dose, <u>or</u>,</li> <li>(b) the actual dose is less than 0.5 times the prescribed dose, <u>or</u></li> <li>(c) the event results in adverse health effects worse than would be expected for the normal range of exposures prescribed for the therapeutic procedure, <u>or</u>,</li> <li>(d) the event (regardless of any health effects) affects two or more patients at the same facility.</li> </ul>
(6) Recurring or series of events (regardless of the number of patients or facilities involved).	For either diagnostic or therapeutic exposures, an AO report should be proposed for recurring events or a series of events (where each individual misadministration is not of major importance) which create a significant public health or safety concern.	
(7) Generic events.	For either diagnostic or therapeutic exposures, an AO report should be proposed for misadministrations with generic implications which create a significant public health or safety concern.	

## PART III

GUIDELINES FOR SELECTION AND PROCESSING PROCEDURES  
FOR OTHER EVENTS OF INTEREST

## A. GUIDELINES FOR SELECTION

These events will be chosen for recommendation to the Commission based upon one or more of the following guidelines.

1. Non-routine events which have attracted wide (more than local) public interest (e.g., events resulting in petitions to the Commission by public interest groups, generic events which have resulted in power reductions or shutdowns for safety-related reasons, or widespread media coverage). Widespread media coverage generally means that the event has been disseminated by a national news service.
2. Non-routine events which have attracted considerable Congressional interest.
3. Inventory differences which exceed the AO reporting threshold when first reported by the licensee, but which are reduced to an acceptable level by a subsequent inventory. (If they cannot be so reduced, they are candidates for AO reporting.)
4. Events at nuclear power plants under construction and with no fuel on site, which would have qualified as an AO if the facility had an operating license.
5. Non-routine events of the following types, or events of equivalent importance, which are either considerably more extensive than expected or the result of an unexpected cause, but which are below the AO reporting threshold:
  - a. Exposures (either plant personnel or public),
  - b. Radioactive releases (e.g., contamination of individuals, widespread contamination within the site boundaries, releases to unrestricted areas),
  - c. Failures of systems designed to contain radioactive material (e.g., fuel cladding, primary coolant boundary, containment boundary, glove boxes, dams),
  - d. Failures of systems designed to control the radioactive process and/or to mitigate accident consequences,
  - e. Design or operational problems requiring considerable corrective actions and/or shutdown time,



- f. Shipping problems, or
- g. Safeguards problems.

B. PROCESSING PROCEDURES

1. Those events which appear to meet these guidelines for reporting should be written up by the cognizant office in a narrative format. The information should include pertinent details of the event, including the date and place, nature and probable consequences, causes, licensee and NRC actions. Also, the reasons why it is not an AO should be clearly stated. See a recent copy of NUREG-0090 for format. This writeup should be forwarded to AEOD, as soon as it is completed, rather than waiting until the end of the quarter. This should help to decrease the time required to prepare, process and submit the quarterly reports to the Commission for approval.

As discussed in Paragraph 034 of Chapter 0212, the cognizant office may request AEOD guidance or assistance, as resources permit, in preparing event writeups provided all related documentation regarding the event is supplied to AEOD.

2. AEOD will review and edit the writeup and request assistance as necessary from other offices to assure accuracy and timeliness of the writeup. The event will be proposed to the Commission for inclusion in the next quarterly AO report to Congress.

## PART IV

GUIDELINES FOR SELECTION AND PROCESSING PROCEDURES FOR  
OTHER EVENTS CONSIDERED FOR ABNORMAL OCCURRENCE REPORTING

## A. GUIDELINES FOR SELECTION

By definition, these are events which were considered as AOs but rejected after further reviews. (If rejected as AOs, they should then be evaluated for possible reporting as Other Events of Interest). Such events would include:

1. Any event reviewed in detail and seriously considered by one or more of the staff offices for AO applicability, but eventually rejected by that office or offices.
2. Any event determined by one or more staff offices to meet the AO criteria and forwarded to AEOD for processing, but eventually rejected after staff considerations.

These items are included as an enclosure to the Commission papers forwarding the draft quarterly AO reports to the Commission for approval; the items are not included in the AO reports, unless stipulated otherwise by the Commission.

## B. PROCESSING PROCEDURES

1. Those events or items which appear to meet these guidelines for reporting should be written up by the cognizant office in a format similar to that for Other Events of Interest items. The information should include pertinent details of the event, including the date and place, nature and probable consequences, causes, licensee and NRC actions.

Also, the reasons why it is not considered an AO or Other Events of Interest item should be clearly stated either at the end of the text or in a transmittal memo. This writeup should be forwarded to AEOD as early as possible during the calendar quarter and no later than 15 days after the end of the calendar quarter in which the event occurred, provided sufficient information is available.

As discussed in Paragraph 034 of Chapter 0212, the cognizant office may request AEOD guidance or assistance, as resources permit, in preparing event writeups provided all related documentation regarding the event is supplied to AEOD.

2. AEOD will review and edit the writeup and request assistance as necessary from other offices to assure accuracy and timeliness of the writeup. The event will be considered for inclusion in the

Commission paper forwarding the next quarterly AO report for approval.

## PART V

## GUIDELINES FOR PROCESSING OF UPDATING MATERIAL

## A. DISCUSSION

Updating material to previously reported AOs is required for the following.

1. Federal Register Notices. As described in Paragraph 053 of Chapter 0212, the minimum information to be reported in the Federal Register notice is the date, place, nature and probable consequences of the event. Subsequent information (cause and actions taken to prevent recurrence, and any significant updating information) will be promulgated either by updating summaries deposited in the public document rooms or through the quarterly reports to Congress, or both.
2. Quarterly Reports to Congress. In addition to the updating information described above, the quarterly reports should include any significant updating material for previously reported AOs. In the quarterly reports, the text for each new and updated AO should state whether or not the incident is considered closed for purposes of the report. In succeeding quarterly reports, efforts should be made to keep each open item current.

## B. CLOSE OUT OF ABNORMAL OCCURRENCES

Close out of AOs is generally appropriate under one or more of the following conditions.

1. The affected licensees have taken satisfactory corrective actions.
2. A civil penalty has been paid, or otherwise resolved.
3. A revoked or suspended license has either been reinstated or the licensee decides not to contest the action.
4. An item, such as a generic item, becomes an unresolved safety issue and will be reported upon periodically to Congress accordingly.
5. A safety analysis report or other long-term evaluation is complete and appropriate implementing actions have been made.
6. No new significant information can reasonably be expected.



## C. REOPENING OF CLOSED ITEMS

AOs that have been previously reported closed in the quarterly reports should be reopened if significant new information becomes available. Similarly, previously reported Other Events of Interest items can be updated if significant new information becomes available.

## D. PROCESSING PROCEDURES

Each cognizant office should provide AEOD with any known significant updating material, (1) as soon as the information is available for AOs reported by Federal Register notice as described in Paragraph A.1 above and, (2) in the cognizant office's response to AEOD's memorandum issued near the end of each calendar quarter requesting staff assistance for the preparation of that quarterly report to Congress.

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