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Mr. K. V. Seyfrit, Director
Office of Inspection & Enforcement
U. S. Nuclear Regulatory Comm.
Region IV
611 Ryan Plaza Drive, Suite 1000
Arlington, Texas 76011

Subject: Arkansas Nuclear One - Units 1 & 2
Docket Nos. 50-313 & 50-368
License Nos. DPR-51 & NPF-6
IE Information Notice No. 80-06
(File: 1510.1, 2-1510.1)

Gentlemen:

Certain questions were generated by the Arkansas Nuclear One Nuclear Regulatory Commission Resident Inspector and Nuclear Regulatory Commission Region IV I&E Headquarters regarding Arkansas Power & Light Company's implementation procedures for reporting those incidents listed in and as required by Nuclear Regulatory Commission I&E Information Notice No. 80-06, "Notification of Incidents".

This letter is intended to clarify our position on the interpretation of 10-CFR-50.72, items (1), (3), (6), (7), (8), (9) and (10) as set forth in ANO Standing Order No. 46. The following is a discussion of those specific notification criteria and the AP&L interpretation in question.

A. 10-CFR-50.72 item:

- (1) Any event requiring initiation of the licensee's emergency plan or any section of that plan.

ANO Standing Order No. 46 item:

- (1) Any event requiring initiation of any section of the ANO Emergency Plan which requires staffing the Technical Support Center.

The additional clarification statement "...which requires staffing the Technical Support Center." was added to exclude specifically local evacuation events and small fires extinguished by the Fire Brigade.

Local evacuation is required when locally high airborne situations may occur, such as during equipment dismantlement for maintenance, certain sampling operations, certain equipment venting operations and ventilation maldistributions. The local evacuation procedures for such events are described in the ANO Emergency Plan; and, since 10-CFR-50.72 states "...or any section of that plan." being initiated requires reporting, and since 10-CFR-50.72 attempts to establish controls of reporting of issues important to safety, it was not felt such local evacuations were meant to be included as reportable.

In the event certain equipment failures or accidents resulted in measurable off-site release, thus becoming a possible "significant" event, the Technical Support Center would be activated; and thus such events would become reportable under ANO Standing Order No. 46, item 1 and possibly also under item 8.

Neither could AP&L find that such events as small fires outside controlled access, not endangering plant safety equipment and easily extinguished by the Fire Brigade, have "significance" relative to plant safety. Only when the Emergency Fire Team (and hence the Technical Support Center) is activated would such fires be considered as "significant".

Please note that 10-CFR-50.72 states in part:

"K. 50.72 Notification of significant events.

(a) Each licensee of a nuclear power reactor licensed under K 50.21 or K 20.22 shall notify the NRC Operations Center as soon as possible and in all cases within one hour by telephone of the occurrence of any of the following significant events and shall identify that event as being reported pursuant to this section:"

AP&L, therefore, concluded that only events significant relative to safety are to be included in developing specific reporting criteria.

B. 10-CFR-50.72 item:

(3) Any event that results in the nuclear power plant not being in a controlled or expected condition while operating or shut down.

ANO Standing Order No. 46 item:

(3) Any event that results in the plant not being in a controlled or expected condition while operating or shut down, i.e. situations not addressed by plant procedures, or situations where no means exists to monitor or control any major NSS parameter.

It is our opinion that the intent of item (3) is to include significant events not reportable under items (1), (5), (6), or (7). Such events may include loss of neutron flux indication, loss of DHR system, loss of service water, excessive cooldown rates or boron dilution events when shutdown or loss of instrument power while critical (and not resulting in a plant trip), major steam leaks (such as turbine bypass valve or secondary relief valve failures), loss of RCS pressure control due to pressurizer heater failures, loss of secondary pressure control due to turbine EHC failures, etc.

C. 10-CFR-50.72 item:

- (6) Personnel error or procedural inadequacy which, during operations, anticipated operational occurrences, or accident conditions, prevents or could prevent, by itself, the fulfillment of the safety function of those structures, systems, and components important to safety that are needed to (i) shut down the reactor safely and maintain it in a safe shutdown condition, or (ii) remove residual heat following reactor shutdown, or (iii) limit the release of radioactive material to acceptable levels or reduce the potential for such release.

ANO Standing Order No. 46 item:

- (6) Personnel error or procedural inadequacy which, during normal operations, anticipated operational occurrences, or accident conditions, prevents or could prevent, by itself, the fulfillment of the safety function of those structures, systems, and components important to safety that are needed to (i) shut down the reactor safely and maintain it in a safe shutdown condition, or (ii) remove residual heat following reactor shutdown, or (iii) limit the release of radioactive material to acceptable levels or reduce the potential for such release. Such errors as a procedural error which isolates the BWST or RWT from both ECCS trains, or discovery during power operation that all HPI pump discharge valves are closed, or finding both personnel hatch doors open at power are examples of situations falling into this category.

The verbage in item (6) above is almost a direct quote of the 14-day reporting criteria of the Standard Technical Specifications (see ANO-2 Technical Specifications 6.9.1.8.e and 6.9.1.8.f). Implicit in our interpretation is the requirement that a function must be threatened or lost which, in redundant systems, would be a loss of both trains. LCO's allow continued operation within specified time periods provided safety functions remain operable (i.e. the redundant trains). Such losses of equipment which cause entry into a Technical Specification "Action" statement, but allowable by the Technical Specifications, should not be cause for any report beyond the required 30-day report (L.E.R.).

D. 10-CFR-50.72 item:

- (7) Any event resulting in manual or automatic actuation of Engineered Safety Features, including the Reactor Protection System.

ANO Standing Order No. 46 item:

- (7) Any event resulting in manual or automatic actuation of Engineered Safety Features, including the Reactor Protection System if the reactor trip results in E.S. actuation, or is caused by system conditions which result in E.S. actuation.

The ANO Standing Order No. 46 item (7) language was provided to differentiate between a requirement to report a unit trip or safeguards actuation, and a requirement to report a significant event which resulted in a unit trip and/or safeguards actuation. 10-CFR-50.72 item (7) concerns reporting events which result in manual or auto-actuation of protective systems, and thus does not require reporting non-significant plant trips if no significant event occurred causing (or was caused by) such trips or actuations. Such events as spurious plant trips during startup, manual trips for testing, or trips from low power resulting from non-safety component failure or human error, which does not require either manual or auto safeguards actuation following such a trip are not considered significant events by AP&L, and as such require no NRC notification.

E. 10-CFR-50.72 item:

- (8) Any accidental, unplanned, or uncontrolled radioactive release. (Normal or expected releases from maintenance or other operational activities are not included.)

ANO Standing Order No. 46 item:

- (8) Any accidental, unplanned, or uncontrolled radioactive release (normal or expected releases from maintenance or other operational activities are not included) which results in violation of Appendix B limits for off-site dose.

For units with continuous release paths, such as reactor auxiliary building ventilation exhaust and spent fuel area exhausts which operate continuously, reporting "any" release under item (8) above is grossly impracticable and realistically impossible. Stack activities vary significantly, depending on maintenance work in progress, particular waste transfer operations in progress, or RCS sampling operations. Stack activities are continuously monitored and routinely sampled to assure compliance with 10-CFR-20 limits and to meet state and NRC reporting requirements. In certain cases, small leaks may well be masked in terms of stack activity by other, more significant, work activities generating gas, such as sampling or equipment maintenance. Such small leaks are routinely noted and

corrective action is initiated thru routine local area surveying and air monitoring. But, if the "any" accidental or unplanned release criteria were imposed, all such small insignificant leaks would be reportable. Again, we feel reporting criteria should be based on significant events.

The real point becomes what is "significant" relative to stack activities. 10-CFR-20 values for concentrations of radionuclides in unrestricted areas were, hopefully, established at points of significance relative to individual exposures. The vast majority of the general populations exposure from facility operation is the cumulative effect of all releases, and ANO's operating license is conditioned to account for and consider such cumulative exposures, and to hold such cumulative exposures to the lowest practical values.

Single events, as addressed in item (8), are not significant relative to cumulative exposure unless instantaneous values of radionuclides concentrations approach the limits of 10-CFR-20. Since no criteria has been promulgated by the NRC, beyond 10-CFR-20 or those operating restrictions contained in Appendix B of ANO Technical Specifications, relating what instantaneous values of stack activities are "significant", the values of 10-CFR-20 were applied.

F. 10-CFR-50.72 item:

- (9) Any fatality or serious injury occurring on the site and requiring transport to an offsite medical facility for treatment.

ANO Standing Order No. 46 item:

- (9) Any fatality occurring on the site from other than natural causes, or serious injury occurring on the site and requiring transport to an offsite medical facility for treatment, and subsequent hospitalization of the injured.

We have interpreted "serious" as "requiring hospitalization" in lieu of any other definition. Events have occurred which required plant personnel to be sent offsite to a nearby clinic for injury assessment and treatment. In the majority of cases, injuries sustained were minor and received only first aid treatment at the clinic, and these employees returned to work after examination. Without such qualification of the term "serious", such minor injuries may be interpreted as being reportable.

Deaths from natural causes were exempted from our reporting criteria because, taken in context, the 10-CFR-50.72 criteria (9) above applies only to a range of injuries from something just greater than minor to fatalities resulting from injuries. If the intent of the criteria were to have all fatalities (even from natural causes) reported, then the wording would have included "...or serious injury or illness...", and serious illness would have also been reportable.

G. 10-CFR-50.72 item:

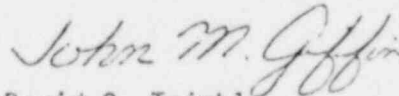
- (10) Any serious personnel radioactive contamination requiring extensive onsite decontamination or outside assistance.

ANO Standing Order No. 46 item:

- (10) Any serious personnel radioactive contamination requiring extensive onsite decontamination or outside assistance and which results in limiting the individual from access to radiation and contamination areas.

We have interpreted "serious" contamination in lieu of any other definition as "contamination which, through absorption, inhalation, or other ingestion, results in greater than or equal to a body-burden of radionuclides for the exposed individual". Therefore, any event which results in any individual receiving a body-burden of radionuclides, or a fractional part of a body-burden of radionuclides which, when the radiation exposure from that fractional part is summed with the individual's whole-body external dose, causes action to be taken to limit further exposure of that individual by restricting access to radiation areas, shall be reportable.

Very truly yours,



David C. Trimble
Manager, Licensing

DCT:BAE:skm