

DS09
Add: G. Sege

DOCKETED USNRC
RULES & PROCEDURES BR
OFFICE



'87 NOV 25 A7:37

John C. Brons
Executive Vice Pres
Nuclear Generation

November 19, 1987

JPN-87-058

IPN-87-054

September 2, 1987
52 FR 33304

(9)

U. S. Nuclear Regulatory Commission
Washington, D. C. 20555
Attn: Chief, Rules and Procedures Branch
Division of Rules and Records
Office of Administration

Subject: James A. FitzPatrick Nuclear Power Plant
Docket No. 50-333
Indian Point 3 Nuclear Power Plant
Docket No. 50-286
Comments on Draft NUREG-1251 - Implications of the
Accident at Chernobyl for Safety Regulation of
Commercial Nuclear Power Plants in the United States

Reference: Notice of Availability of Draft NUREG-1251, Federal
Register, September 2, 1987 (52 FR 33304).

Dear Sir:

The Power Authority has reviewed Draft NUREG-1251, "Implications of the Accident at Chernobyl for Safety Regulation of Commercial Nuclear Power Plants in the United States," which was published for comment in August 1987. The Authority's detailed comments are provided in the attachment to this letter.

The Authority agrees with the NRC Staff's conclusion that the design of domestic light water reactors preclude an accident like the one at Chernobyl. The Authority also agrees with the Staff's reconfirmation of the Commission's finding on severe accidents; namely, that existing plants provide no undue risk to the health and safety of the public and that no immediate regulatory action is required to address severe accident risk. These Staff findings are the basis for the Authority's comments in the attachment that the scope of severe accident studies should not be expanded at this time. The technical evaluation of NUREG-1150, "Reactor Risk Reference Document," should be completed before undertaking the review of even less probable events accidents.

Although the Authority substantially agrees with the conclusions on NUREG-1251, we strongly disagree with its recommendations concerning personnel qualifications issues. The NUREG recommends the consideration of requirements for a high-level onsite nuclear safety

8712040155 871119
PDR NUREG 05000286
1251 - C PDR

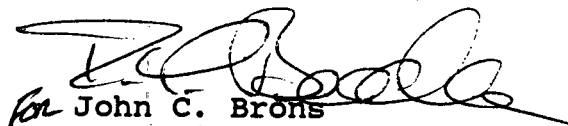
10/16/87 Se. A 12/1/87

manager and degrees for senior reactor operators. The Authority is opposed to both of these because of the possibility that they will reduce safety rather than improve it. The safety manager concept could result in a decreased emphasis on individual responsibility for safety. The requirement for a degree for senior operators would not increase operating and management expertise on shift since these cannot be acquired in a degree program. Instead, the degree requirement may impede the career advancement of highly qualified and experienced individuals and thus negatively affect safety.

The NUREG also concluded that emergency planning in the areas of emergency planning zone size, medical services and ingestion pathway measures are adequate. Based on the Authority's extensive involvement in emergency planning, we strongly agree with this conclusion.

Should you or your staff have any questions regarding the Authority's comments, please contact Mr. J. A. Gray, Jr. of my staff.

Very truly yours,


for John C. Brons
Executive Vice President
Nuclear Generation

cc: Office of the Resident Inspector
U. S. Nuclear Regulatory Commission
P. O. Box 136
Lycoming, New York 13093

U. S. Nuclear Regulatory Commission
Region I
631 Park Avenue
King of Prussia, PA 19406

Mr. Harvey Abelson
Project Directorate I-1
Division of Reactor Projects - I/II
U. S. Nuclear Regulatory Commission
7920 Norfolk Avenue
Bethesda, Maryland 20014

Resident Inspector's Office
Indian Point Unit 3
U. S. Nuclear Regulatory Commission
P. O. Box 377
Buchanan, New York 10511

Joseph D. Neighbors, Sr. Project Manager
Division of Reactor Projects I/II
U. S. Nuclear Regulatory Commission
7920 Norfolk Avenue
Bethesda, Maryland 20014

ATTACHMENT 1 TO JPN-87-058

The Power Authority's detailed comments on NUREG-1251 are provided below by, arranged by subject. The chapter and section numbers referred to in the comments correspond to those used in the NUREG.

High-level Onsite Nuclear Safety Manager

Section 1.6.3 states that there is no single individual onsite who is responsible for nuclear safety and nothing else; and, that safety is everyone's responsibility, concurrent with their other duties. The NRC Staff recommends the study of the benefits of having a high-level, onsite nuclear-safety manager, who has no other responsibilities or duties. The NUREG does not describe the duties of this individual or how the position would fit into the onsite organization.

The Authority considers the fact that safety is considered everyone's responsibility to be a strong point in the commercial nuclear power industry. The Authority believes that there is no substitute for an attitude that requires each individual to be cognizant of, and responsible for, the safety of all of his activities. The establishment of a new position responsible for nuclear safety, and only nuclear safety, presents a very real risk of diluting the existing attitude toward safety. This possibility is recognized in the NUREG itself.

The Authority cannot foresee how the safety manager's responsibilities can be separated from those of the utility's onsite senior manager who is responsible for operating the plant. The Authority also cannot see the wisdom of trying to divide this authority. Separating the responsibility for safety from the responsibility for generating power suggests that there is a conflict between the two. The Authority does not believe that this is the case or should be the case. The Authority believes that safety and power generation go hand-in-hand.

Nuclear Safety Evaluations Performed in Accordance with 10 CFR 50.59

Sections 1.1.1, 1.2, 1.2.1 and 1.2.2 discuss the adequacy of administrative controls to assure that modifications to the plant, changes to procedures, and tests and experiments are carried out safely. These sections make frequent reference to 10 CFR 50.59 which requires that a safety review of changes be conducted prior to their implementation. 10 CFR 50.59 provides criteria for the following: evaluating whether the change may be implemented without affecting the safety of the plant; documenting the evaluation; and, determining whether NRC approval is required prior to implementing the change. The NUREG states that in general, utility activities governed by 10 CFR 50.59 are carried out satisfactorily but that some recent 10 CFR 50.59 evaluations have been inconsistent in depth and the quality of documentation. In addition, there have been recent violations of the regulation which have resulted in enforcement penalties.

The Authority agrees that the safety evaluation process is basically sound but that it can be improved. The NUREG cites work under way by the Atomic Industrial Forum and the Nuclear Safety Analysis Center to develop criteria and guidelines for utilities to use in performing 10 CFR 50.59 reviews. The Authority strongly endorses this effort which is now being conducted under the auspices of the Nuclear Utility Management and Resources Council (NUMARC). This effort will help to standardize 10 CFR 50.59 reviews by doing the following: clarifying the criteria for reviews; clarifying the requirements for NRC review and approval prior to implementation; and, establishing guidelines for the documentation of the reviews. The Authority sees no need to revise 10 CFR 50.59. Instead, the guidelines should be reviewed by the NRC Staff and, if the guidelines are acceptable, they should be incorporated into an I & E Manual Chapter.

Technical Specifications Improvement Program

Sections 1.1.2, 1.4.2 and 1.4.4 refer to the Technical Specification Improvement Program (TSIP). Priority should be given to the effort to review technical specifications to assure that they have the following attributes: they are clearly written; their content is limited to safety related requirements; and, they are closely related to the reactor operator's job. The Authority strongly endorses this effort and is fully participating in industry activities in this area. The Authority has previously commented on the NRC Interim Policy Statement on Technical Specification Improvements for Nuclear Power Plants and supported the adoption of a final policy statement (Reference 1).

Technical Specification Surveillance Requirements

Section 1.2.4 identifies the need to evaluate NRC testing requirements as contained in the technical specification surveillance requirements. The Authority agrees that this evaluation needs to be done in order to assure that the positive and negative impacts on safety have been correctly evaluated and reflected in the specifications. The Authority considers the TSIP to be the appropriate vehicle for accomplishing this evaluation. The Authority requests that the NRC take whatever steps are necessary to expedite completion of the TSIP, including the priority allocation of NRC resources to complete the program.

Licensed Operator Regualification

Section 1.5.2 of NUREG-1251 briefly describes the NRC's program for the regualification of licensed operators and states that it has resulted in improvements in operator knowledge and performance. The Authority believes that the impact of this program as implemented by the Staff is more negative than positive. The Authority agrees with the recent NRC decision to suspend this program due to its negative impact on safety (see the NRC letter to All Power Reactor Licensees dated September 18, 1987).

Degree Requirement for Senior Reactor Operators

Section 1.5.2 also refers to the NRC's proposed rule which would require senior reactor operators to have a bachelors degree in engineering or science. The Authority is strongly opposed to this requirement and has commented on this proposed rule at length (Reference 2). Those comments pointed out that the degree would not increase the operating and accident management expertise on shift since this is gained only by utility provided training and actual operating experience. In addition, the degree requirement will have a negative impact on shift crews because it presents a formidable stumbling block on the career path of many highly qualified individuals.

Severe Accident Policy

The NRC's severe accident policy and the Industry Degraded Core Rulemaking Program (IDCOR) are discussed in Section 1.7.2. The NUREG restates the Commission conclusion that the existing plants present "no undue risk to the public" and that there is no need for immediate regulatory action as a result of the severe accident risk presented by the plants. The Authority agrees with the NRC's conclusion. The NRC published NUREG-1150, "Reactor Risk Reference Document," in February 1987. The Authority has done extensive research in this area and has provided detailed evaluations of, and comments on, the NUREG (Reference 3).

Nuclear Design

The NUREG stated (Chapter 2) that the NRC Staff found that the nuclear design of domestic reactors preclude a Chernobyl-type superprompt critical reactivity excursion. The Authority agrees with this Staff conclusion.

However, the NUREG goes on to discuss design basis reactivity insertion events which have already been evaluated for domestic reactors. The discussion recommends expansion of these accident sequences to include multiple diverse failures or errors which have an extremely low probability of failure. The NUREG concludes that "conceivable reactivity accidents are not likely to lead to a Chernobyl-type event."

It then goes on to recommend probability studies of these very low probability events. The Authority believes that the ongoing efforts to evaluate severe accidents are adequate and that it is unnecessary to continue to expand the events to be evaluated until the current work is complete, has been subjected to a thorough technical review, and has been accepted by the technical community. Rather than begin new studies, both the NRC and the nuclear industry should concentrate their efforts on completing the review of NUREG-1150 and related work.

Containment

Chapter 3 focuses on the containment as a barrier to the release of fission products during an accident. The Staff again references the conclusion of the Severe Accident Policy Statement that existing plants pose no undue risk to the public. The Staff also refers to recent studies that show that domestic containments can withstand pressures as high as 2 to 3 times the design pressure. The Authority agrees with these positive findings, however this chapter should be expanded to include a description of the Chernobyl "containment vessel" since it is so much different than those in the United States. This would make the NRC conclusion concerning containments more understandable to readers who are not familiar with evaluations of domestic containments.

Emergency Planning

NUREG-1251 reviewed the following four areas of emergency planning in light of the Chernobyl accident: emergency planning zone size; medical services; ingestion pathway measures; and decontamination and relocation. The NRC Staff concluded that emergency planning in the first three categories is adequate and that Soviet data on the last should be reviewed as it becomes available. The Authority concurs with the Staff's conclusions in these areas.

References

1. NYPA letter, John C. Brons to the NRC, dated March 27, 1987 (JPN-87-016/IPN-87-018), transmitting Authority comments on the NRC Interim Policy Statement on Technical Specification Improvements for Nuclear Power Plants
2. NYPA letter, John C. Brons to the Secretary of the Commission, dated September 24, 1986 (JPN-86-43), transmitting Authority comments on the Advance Notice of Proposed Rulemaking for Degree Requirement for Senior Operators at Nuclear Power Plants.
3. NYPA letter, John C. Brons to the NRC, dated September 28, 1987 (JPN-87-051/IPN-87-045), transmitting Authority comments on Draft NUREG-1150 - "Reactor Risk Reference Document."