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PROPOSED RULE PR50

45FR65424 you'll see why

PUBLIC COMMENT
ADVANCE NOTICE OF PROPOSED RULEMAKING
DOMESTIC LICENSING OF
PRODUCTION AND UTILIZATION FACILITIES
Consideration of Degraded or
Melted Cores in Safety
Regulation

Acknowledged by card 1/12/82

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L-41, Pt. 50

Before commenting on the specific questions raised by the NRC I will make a few general comments. A fundamental procedure of the "design basis accident" approach to safety has not been addressed in this document. The NRC staff and the licensee determine which accident scenarios are too remote to consider, and the accident at TMI#2 was one of these scenarios. The accident occured nontheless.

The NRC staff has constantly sided with the licensee and against the intervener's in licensing procedures. They have not taken a neutral position. As long as this situtation is allowed to exist unsafe plants will continue to be built and legitimate concerns of the local populace will be ignored. One method of alleviating this problem is to use recent staff members whose minds will be more open on issues than the minds of those staff who worked on TMI#2.

Another method is to have more public input into what accident scenarios should be considered and what design safety features are implemented. A board of community representatives could give input on the specfic problems faced by the nuclear plant sited in their community. Specific recommendations of design features, evacuation plans, and costs need to be included in their considerations. To work this citizen panel must not be filled with lackeys of the licensee and NRC staff who have decided the plant is unable to be improved. We can only try.

Two other general points also need to be included. First is the need for extensive operator training and the realization that training was and still is inadequate. The matter of operator training and competency testig needs to be overseen by a public review board and not just the utility. The second point is that nonsafety-grade equipment may play a role in an accident scenario (Indian Point #2 Oct. 1980). These possible accidents must be tested for and mitigated against.

SPECIFIC CONSIDERATIONS

1.) Design improvements are usually of two types. One is making the reactor fail-safe. In this design improvement the reactor automatically shuts itself down. The second type is to compensate for operational error by the workers. The idea of this type improvement is to make it impossible for the people running the reactor to skrew up.

No matter what improvements are made, all possible contingencies that would cause an accident scenario cannot be covered. Likewise the potential degree of operator skrew up cannot be measured.

I do not understand what is ment by the term substantially used in this point. "...can these risks be mitigated substantially and the risk of severe health dangers there by reduced substantially..." Please define this term so I may make comment. For now I would have to say the safest way to avoid a meltdown is to not put any more nuclear plants in operation and to shut down those already on line.

2.) The public has no knowledge of what damage occured to the TMI#2 reactor yet. Unless the NRC has information not yet released to the public on the damage to TMI#2 reactor the question is speculation. When the severity of the damage to the TMI#2 is known I will comment.

3.) Yes, core melt accidents should be specifically evaluated in safety analysis reviews. Core-melt accidents are now recognized as a reality by the NRC. For this reason, more consideration of core-melt accidents should be given in assessing safety, siting, engineered safety features, and emergency response plans.

Core-melt accidents should also be considered by NRC in two other areas. The first area is the impact and cost of cleanup from an accident including the specific ability of a utility to afford to pay for the cleanup of a Class 9 accident. The second area which needs consideration is the psychological impact of the accident on the surrounding population.

4.) I do not understand at all what you are talking about. Do you want specfic design features? Do you want specfic safety procedures? Are you talking here about the safety analysis reports only or about what will occur in reality? To repeat myself: if you do not want accidents to occur, do not build nuclear power plants.

5.) Are you asking here, 'at what point have we made the reactor safe enough'? If so, I suggest that reactor safety analysis's should be done with the underlying assumption that each nuclear reactor is a breech of containment waiting to occur and that breech is only a matter of time. Would you please define the term "probabilistic risk assessment".

6.) Controlled venting sounds like a good mitigative design feature. Please issue more information (perhaps a NUREG report with a public comment period) so I may comment fully.

7.) Yes definetly. I do not, at this time, have enough information to comment on the best method. Please send me more on both combustion and controlled burning methods under consideration.

8.) Using nitrogen or some other noble gas in the containment atmosphere

is a good idea.

9.) Once again I need more information before I can comment. You ask a specfic question without giving specfic background information. I suggest a seperate NUREG and comment period on the systems proposed.

10.) Gasous vent filters should definetly be used. Other systems need to be individually investigated.

11.) Not as alternatives to degraded cooling design improvements.. The specfic steps mentioned should be considered supplemental only in non-accident conditions. They should be equally considered for accident situtation training.

12.) Please provide detail of the systems you propose to receive informed public comment. I need more specfic details.

14.) What does NRC mean by realistic and conservative methods? I recommend any system that will insure the public that they will not be exposed to a breech of containment no matter what the costs.

15.) Explain what you mean by "proabilistic analysis" and "quantitative risk analysis" and I will comment.

16.) I do not consider the comparisons appropiate. First the risks of nuclear power are arrived at by misleading and erroneous callculations. Second the comparision distorts the picture by pulling the public's

attention away from specfic and fundamental safety questions which apply only to nuclear power.

Any safety improvment which would protect the public from a breech of containment should be implemented. Compared with the measured and unmeasured costs of a major accident, the cost of the design improvments are small. The cost (full long and short term costs) of an accident should be considered.

17.) All aspects

18.) Not build any more plants.

Sincerly yours,

Joseph H. White