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Trapp

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Good afternoon, my name is Jim Trapp and I'm one of the Senior Reactor Analysts in Region I. I am going to briefly discuss the risk significance evaluation performed to determine the risk associated with these inspection findings. The risk assessment was performed in accordance with the revised oversight program inspection manual chapter 0609. The IMC provides three phases or levels of risk assessments that increase in sophistication. The phase I screen is performed to determine if additional analysis of the finding is necessary, phase II utilizes pre-established sequences from the IPE to quantify risk. Phase III evaluations are performed using best available risk information to more accurately characterize the risk of findings. All three phases of the SDP were performed for these findings.

The SDP determines the potential risk associated with existing conditions. It is not limited to evaluating only the actual consequences. For example, if all the EDGs are found inoperable for a significant duration, yet offsite power is not lost during the period that the EDGs are inoperable, the actual consequences are negligible. However, the change is core damage frequency delta-CDF and overall risk of this condition would be significant. In the case of the IP2 SG findings, poor quality SG tube inspections in 1997 would increase the likelihood of a SGTR which is a significant event and therefore, these findings would be risk significant. SGTRs events are significant, because by their very nature, this type of accident degrades both the RCS and containment fission product boundaries. Therefore, will increase both the probability of core damage and release of radiation to the public.

The NRC's Phase I /II SDP evaluation determined that these findings were potentially highly risk significant. Therefore, a Phase III evaluation was performed by the PRA branch of NRR. The key assumptions in the phase III analysis are 1.) that the initiating event frequency for a SGTF is 1/year (assumption is based on the as-left condition of the SG tubes in 1997 and the actual SGT failure history); 2.) ½ SG tube failures will result in SGTRs (assumption is based on Surry and Doel (Belgium) SGTF events); 3.) delta-CDF is ~ delta-LERF (assumption is based on the observation made by the NRC in NUREG-1560 that most SGTR core damage events result from a stuck open secondary steam relief valve which allows a direct fission product flow path from the core to the environment).

In addition to spontaneous SGTFs, the phase III evaluation also included a review of other initiators which could induce a SGTF. These are events that

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increase the pressure differential across a cracked SGT which could induce the tube to rupture. The accident initiators considered were secondary side system faults, ATWS, and severe accidents.	

Slide 11 IMC 0609 establishes 4 risk thresholds for risk significance for both delta-CDF and delta-LERF. The findings are assigned a color based on risk significance with Green being the least risk significant and Red being the most risk significant. The risk threshold for a red finding is delta-CDF of > 1E-4 or a delta-LERF > 1E-5. Each decade reduction in Delta-CDF or LERF will result in a color reduction. The results of the NRC's phase 3 risk assessment are documented in Attachment 2 of IR 2000-007. The delta-CDF and delta-LERF were determined to be ~ 1E-4. This would be indicative of a high risk significant or RED finding. This concludes my comments regarding the NRCs risk determination for these findings. Thank You!	