

From: Gary Holahan
To: Brian Sheron; Samuel Collins
Date: 11/29/02 12:37PM
Subject: Strategic Plan measure related to "Significant Precursors"

NR

type of 1E-03
Release

Brian,
Sam,

I learned from RES on Wednesday, that an on-going ASP analysis is likely to show that one of the measures in the Nuclear Reactor Safety part of the Strategic Plan will not be met.

The ASP analysis of the Point Beach AFW problems (potential common cause failure of the AFW recirc-lines) is likely to result in a CCDP of greater than 1 E-03 (perhaps as high as 4 E-03). Apparently the licensee agreed with the Region 3 phase 2 analysis which showed a "red" result. In my opinion, the Davis Besse RCS degradation is very unlikely to exceed the 1 E-03 CCDP threshold, making the Point Beach AFW problem the most risk significant precursor of the year.

Since both Point Beach units were involved, the ASP program would normally count this situation as two "significant precursor". Two "significant precursor", would exceed the Strategic Plan performance measure. The Strategic Plan measure of interest is: "no more than one event per year identified as a significant precursor of a nuclear accident". Significant precursor is defined in the notes as 1 E-03 probability of leading to a reactor accident (what we would call a 1 E-03 conditional core damage probability (CCDP)).

The Strategic Plan also states (NUREG 1614, Vol 2, Part 2, End Notes) that "Specific values of the metrics were, in general, set after consideration of past performance. Failure to meet a metric will generally prompt a re-evaluation of the involved programs and activities. However, some failures to meet some metrics may be due solely to randomness in the timing of events and not due to a change in underlying level of safety. In such cases, no changes to programs or activities would be warranted."

At some point we will have to address: the ASP numbers (is the CCDP really greater than 1 E-03); whether Point Beach should count as one or two "significant precursor"; and whether this is a "random" or programmatic situation. For now, I believe that we need to address the technical issue (i.e. the potential for common cause failures in the AFW at a level substantially higher than we previously believed) promptly and directly to assure ourselves that the AFW problem found at Point Beach does not exist at other plants.

To accomplish this, I am directing the Plant Systems Branch, with the assistance of the Probabilistic Safety Assessment Branch, to develop a plan to re-evaluate the susceptibility of all PWR AFW systems to common cause failures. This will be done by: 1) reviewing relevant requirements and licensee responses (TMI Action Plan item II E 1.1, IPE's, current PRA's); and 2) by contacting the PWR owners groups; and if necessary, considering generic communications. If the planning activity indicates that a formal "Action Plan" is appropriate, than one will be developed.

Plant Systems Branch will contact the Operating Reactor Improvements Branch to assure that the effort is well coordinated and consistent with the event follow-up processes.

If the technical study confirms that other AFW systems are not susceptible to common cause failures, then the results can be used to limit the need for a "re-evaluation of involved programs and activities". If additional problems are identified, then the technical study can be used to focus any additional followup.

Gary

~~XXXXXXXXXX~~
11/29

CC: David Matthews; Gareth Parry; John Hannon; Michael Cheek; Michael Johnson;
Patrick Baranowsky; Scott Newberry; Sunil Weerakkody; Suzanne Black; William Beckner