

## MODERATE SUSCEPTIBILITY PLANTS

2 areas to address - top of vessel head and penetrations

### Top of Vessel Head

Can a 100% bare metal inspection be performed? If not, why not?

If 100% bare metal can not be performed or is not being performed, has leakage history been reviewed?

Have all leaks been recorded?

In areas where there have been leaks, were the spills cleaned up upon discovery and the area inspected? Could the boric acid have traveled to the insulation? If so, is the insulation permeable or are there gaps/rips in the insulation (discuss basis)? If so, what actions are planned to assess the condition of the head (e.g., removal of insulation, boroscope, UT thickness measurements from bottom of head, etc.).

### Vessel head penetrations

Susceptibility ranking is based on development of circumferential flaws. The Davis-Besse "event" could be attributable to a through-wall flaw regardless of orientation (axial or circumferential).

What inspections are planned for the nozzle and the weld?

If ultrasonic or eddy current testing, discuss the scope of the inspections?

All nozzles for full length (bottom to top of head)?

Inspections of weld?

If visual exam, is it a qualified visual or an effective visual?

Given that visual exams will only indicate if sufficient deposits have reached the top of the head and will not indicate if a nozzle has a deep (e.g., 97% through-wall) defect, have you considered this in your evaluation? The degradation rate at Davis-Besse has not been determined.

## LOW SUSCEPTIBILITY PLANTS

2 areas to address - top of vessel head and penetrations

### Top of Vessel Head

If 100% bare metal inspection has not been performed, can it be performed? Is insulation readily removable? In not, why not?

If 100% bare metal can not be performed or is not being performed, has leakage history been reviewed?

Have all leaks been recorded?

In areas where there have been leaks, were the spills cleaned up upon discovery and the area inspected? Could the boric acid have traveled to the insulation? If so, is the insulation permeable or are there gaps/rips in the insulation (discuss basis)? If so, what actions are planned to assess the condition of the head (e.g., removal of insulation, boroscope, UT thickness measurements from bottom of head, etc.).

### Vessel head penetrations

Susceptibility ranking is based on development of circumferential flaws. The Davis-Besse "event" could be attributable to a through-wall flaw regardless of orientation (axial or circumferential). Have you considered this in your inspection plans?