Barber, Scott

From: Bellamy, Ronald
Sent: Sunday, November 22, 2009 9:51 PM
To: Spindler, David
Cc: Brand, Javier; Barber, Scott
Subject: RE: TMI Airborne Contamination

Scott, this is ok with me but you have the latest, so if you are fine with it send it

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From: Spindler, David
Sent: Sunday, November 22, 2009 8:09 PM
To: Bellamy, Ronald
Cc: Brand, Javier; Barber, Scott
Subject: TMI Airborne Contamination

Ron,

I've summarized this event into our branch format. This is supposed to go through the chain of command up to Sam Collins. If you think this is ok, I can forward it.

Dave

B | 31

Note: This is INTERNAL Preliminary Background Information. Status will be updated in the morning.

As of 1930 on November 22, 2009.

Updates in Bold

ISSUE SUMMARY

Three Mile Island airborne contamination results in workers being contaminated and requiring decontamination.

BACKGROUND

At about 1600 Saturday Nov 21, TMI experienced alarms inside the containment due to high airborne contamination levels. TMI is shutdown and replacing their steam generators. The containment was evacuated of approximately 175 workers. **144 workers were processed through a whole body counter with 19 of these workers > 10mrem (16 were between 10 and 20 mrem, 2 were between 20 and 30 mrem , and 1 was between 30 and 40 mrem). Work had been stopped inside containment. Radiation protection has surveyed the containment and surface contamination from the event has been identified. Currently, the only work allowed in containment is encapsulating the "A" Steam Generator and decontamination activities associated with the steam generator replacement. The licensee is performing a root cause evaluation for this event.**

Cutting was being performed to support removal of the "B" steam generator along with some welding. The "A SG, although cut and off its pedastel, remains fully inside the containment, although there is a cut of the containment to support SG movement which had a plastic covering. **The inside side of the plastic tarp was contaminated and is currently in the process of being replaced.** Surveys for contamination at the containment cut and just outside the cut have shown no levels of contamination.

A call through the HOO was held (**~ 2130 11/21**) to understand our next steps (licensee outage manager provided us an update). Diane Screnci is available to respond to media calls, Nancy McNamara has reached out to Pennsylvania, and the HOO is making contact with DHS, indicating no need for a federal reaction. There has been media interest and calls from other federal agencies. **Next steps include Ron Nimitz assessing possible specialist support onsite. Dave Spindler will assist Javier Brand in regulatory oversight for the week.**

LICENSEE ACTIONS

1. Restrict work activities in containment until an apparent cause has been determined.
2. The licensee will ensure that the containment be maintained at a negative pressure with respect to atmosphere. **Currently the Exhaust fans are on and the Supply fans are off and the containment is being maintained in a negative pressure.**
3. **The licensee is in the process of replacing the plastic tarp over the maintenance opening.**
4. **Encapsulate the "A" steam generator contamination from the airborne contamination.**
5. **Perform a root cause to understand what actually occurred.**
    a. **Currently there are 4 suspected scenarios, 1. A wet vacuum cleaner caused the release 2. Failure of a separate HEPA filter in containment 3. Welding activities on the "B" Steam Generator cold leg drain 4.**

Changes in ventilation caused contamination to be stirred and become airborne

6. Perform follow-up dose measurements on the 19 contaminated individuals.

NRC'S ACTIONS

1. Region I PAO (Diane Screnci), DRS Branch Chief (John White) and a Senior Health Physicist (Ron Nimitz) visit the site and perform a press briefing. Completed
2. Senior Health Physicist to monitor licensee performance on site.
3. Resident Inspectors to monitor licensee remaining outage activities.
4. Review licensee root cause evaluation
5. Continue public outreach activities and to inform news media as necessary

OBSERVATIONS

1. The licensee is performing minimal work in the containment until the event is fully understood.
2. The licensee still does not understand what actually caused the airborne and is continuing to evaluate. This is key before allowing most work to resume in containment.