

Dennig, Robert

From: Dennig, Robert *NRK*
Sent: Tuesday, October 23, 2012 8:47 AM
To: Collins, Timothy
Cc: Bettle, Jerome; Karipineni, Nageswara; Ruland, William; Ghosh, Tina; Fretz, Robert; Reckley, William
Subject: RE: Fukushima release paths

Tracking:	Recipient	Read
	Collins, Timothy	Read: 10/23/2012 9:33 AM
	Bettle, Jerome	Read: 10/23/2012 11:49 AM
	Karipineni, Nageswara	Read: 10/23/2012 9:02 AM
	Ruland, William	Read: 10/23/2012 8:56 AM
	Ghosh, Tina	Read: 10/23/2012 12:47 PM
	Fretz, Robert	
	Reckley, William	Read: 10/23/2012 8:58 AM

Thanks....will do.

One of the CPIP documents, can't recall if it's the Mark I or Mark II NUREG/CR, says that one of the negatives of a hardened vent without a filter is that *the release will not be attenuated by the reactor building*. I posit that one can argue that this is exactly what happened at Fukushima, that instead of "self relieving" into the RB and staying onsite, the releases bypassed the RB via the hardened vent, and contaminated the countryside. One could argue that venting after core damage was the cause of the major releases to the environment; and that this was the wrong thing to do after core damage if the vent is not filtered. Society would have benefited from not venting....!

From: Collins, Timothy *TCM*
Sent: Tuesday, October 23, 2012 8:30 AM
To: Dennig, Robert
Subject: RE: Fukushima release paths

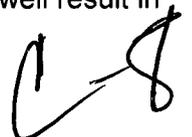
Bob,

You should run this past Tina Gosh as well to confirm that your assumptions on the impact of stack release versus ground level are consistent with MACCS assumptions/models.

TimC

From: Dennig, Robert
Sent: Tuesday, October 23, 2012 8:18 AM
To: Ghosh, Tina; Fuller, Edward; Basu, Sudhamay
Cc: Karipineni, Nageswara; Bettle, Jerome; Collins, Timothy; Fretz, Robert; Norton, Charles; Schaperow, Jason; Parillo, John; Hart, Michelle; Harvey, Brad; Titus, Brett
Subject: Fukushima release paths

Attached is a miscellany of e-mails I've sent on the subject of adding a section to the SECY that discusses the venting at Fukushima 1, 2, and 3, and trying to determine what portion of the releases went through the wet well. My latest thinking is that all or most of the measured environmental release offsite was scrubbed, because the offsite releases would have to come from the plant stack (elevated) and any and all releases through the plant stack went through the wet well. Releases to the dry well bypassing the wet well result in



ground level releases attenuated by the reactor building, and do not contribute appreciably to the offsite air measurements or ground contamination.

I would greatly appreciate your analyses and that of your contractors. Thanks.

Bob Dennig, Branch Chief
NRR/DSS/SCVB
301-415-1156