

March 13, 2003

NOTE TO: File

FROM: Daniel Frumkin, Plant Systems Branch, NRR/**RA**

SUBJECT: FIRE PROTECTION SDP REVISION TASK GROUP CONFERENCE CALL
FEBRUARY 27, 2003
TEAM D: FIRE BARRIER

TEAM MEMBERS: Daniel Frumkin, NRC - Team Lead
Harold Lefkowitz - Duke Energy
Vern Patton - First Energy

On February 27, 2003, a conference call was held to discuss incorporating fire barrier degradation levels into the proposed fire protection significant determination process (SDP). I prepared a note to file (ADAMS Accession No. ML0306401261) that documented our discussion.

Following that conference call, Harold received comments and incorporated the comments into a revised table. The table was provided to the Team Lead who gathered comments from Vern and incorporated such comments into the table. The revised table is included as Attachment 1 to this note.

Attachment: As Stated

CONTACT: Daniel Frumkin, NRR/DSSA/SPLB
415-2280

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DISTRIBUTION: ADAMS SPLB R/F DFrumkin EWeiss

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OFFICE	SPLB:DSSA:NRR		SC:SPLB:DSSA			
NAME	DFrumkin:bw		EWeiss			
DATE	03/13/03		03/13/03	03/ /03		03/ /03

OFFICIAL RECORD COPY

ATTACHMENT 1

TYPE	LEVEL 1 GREEN	LEVEL 2 WHITE	LEVEL 3 YELLOW	LEVEL 4 RED
	Failure of Barrier is Unlikely. Barrier is considered Undegraded	Failure of Barrier is Possible	Failure of Barrier is Likely	Equivalent to No Barrier Installed
I	<ul style="list-style-type: none"> Less than 10% of req'd seal depth missing Barriers/components not in preventative maintenance program Seal materials not listed in program Greater than 12 inches of material Poor quality foam cell structure (falls within Dow Corning's #6 category) over <25% of the surface area Through cracks smaller than 1/8" in seal material that are less than 50% of the seal depth 1/8" thru barrier gaps or cracks 	<ul style="list-style-type: none"> 10 to 25% of seal req'd depth is missing Poor quality foam cell structure (falls within Dow Corning's #6 category) of approximately >25% of the surface area No tested or evaluated configuration between 9 and 11 inches depth. 	<ul style="list-style-type: none"> Greater than 3/8" cracks in seal material extend to opposite face No tested or evaluated configuration between 6 and 9 inches 	<ul style="list-style-type: none"> No tested or evaluated seal configuration and less than 6 inches of foam > 50% required barrier depth removed or never installed Through crack or equivalent diameter greater 1"
II	<ul style="list-style-type: none"> < 10% depth of barrier material removed or never installed Through crack or equivalent diameter less than 1/8" Compression of material 	<ul style="list-style-type: none"> 10% to 25% design depth of barrier material removed or never installed over 6 in area Through crack or equivalent diameter greater 1/2" Large metallic cross section support or large cross section cables entering wrap without 2-6" of wrap 	<ul style="list-style-type: none"> 25% to 50% design barrier material depth over area of 6 sq. in. Material removed or never installed Through crack or equivalent diameter of greater than 2 sq in. Large metallic cross section support or large cross section cables entering wrap with less than 2" of wrap 	<ul style="list-style-type: none"> No tested or evaluated barrier configuration > 50% required barrier depth removed or never installed Through crack or equivalent diameter greater 1".
III	<ul style="list-style-type: none"> Severe tears, loose bands, open bands, outer boot missing Missing boot both sides 	<ul style="list-style-type: none"> Support missing 	<ul style="list-style-type: none"> 2-3" of seal 	<ul style="list-style-type: none"> No ceramic fiber
IV	<ul style="list-style-type: none"> Surface cracks < 1/16" with no noticeable depth penetration Through cracks smaller than 1/8" in barrier that are not more than 50% of the required barrier thickness 1/16" thru barrier gaps or cracks 	<ul style="list-style-type: none"> Greater than 30% of required concrete depth missing 	<ul style="list-style-type: none"> Large surface area deformations (over 50% of surface) which would cause higher heat absorptions <4.5 inches thick 	<ul style="list-style-type: none"> Cracks determined to interfere with structural integrity <2 inches thick
V	<ul style="list-style-type: none"> Improper non-combustible door labeling material. Several small open exposed holes in doors, door gap issues not exceeding 25% of manufacturer's recommended specifications or up to 3/8" gap. Multiple holes in door on one side of a door surface with less than 1/8" inch opening. Door frames with greater than 1/8" thru gap 	<ul style="list-style-type: none"> Small screw holes in doors <3/8" on both sides Improperly installed fire door hardware (other than latch) Bent or warped fire door with gaps less than 1 inch Fire door to frame or floor clearance gaps up to 1 inch. 	<ul style="list-style-type: none"> Multiple holes in door surface with greater than 1 inch opening Door latch not functional, Latch engagement <1/2 inch. 	<ul style="list-style-type: none"> Door propped open or broken latch.
VI	<ul style="list-style-type: none"> Damper not in maintenance inspection program. Damper frames with greater than 3/8" thru gap. Damper can close completely 	<ul style="list-style-type: none"> Damper will close greater than 95%, Temperature of fusible link excessively high or fusible link improperly installed. 	<ul style="list-style-type: none"> Damper will close >90%, No damper at fire barrier in steel duct work Damper is not rated to close against anticipated ventilation 	<ul style="list-style-type: none"> Damper sealing less than or equal to 90%, will not close Broken latch (where latch required for closure) No damper installed
VII	<ul style="list-style-type: none"> Conduits smaller than 1 inch with 3 feet on each side of barrier 	<ul style="list-style-type: none"> Conduits > 4 Inch with greater than 5 feet on each side of barrier or >2 Inch with greater than 3 feet on each side of 	<ul style="list-style-type: none"> Conduits > 4 Inch with less than 5 feet on each side of barrier or >2 Inch with less than 3 feet on each side of barrier 	

		barrier		
		Degradation Level (minimum criteria to be within level)		
Barrier Type		Level 1 =	No or minor effect to fire rating, no reduction in rating	
I =	Elastomers: low density foams / high density	Level 2 =	Fire barrier rating is reduced to approximately 65%	
II =	Sacrificial and Non-Sacrificial Board / Blanket (Wool or Ceramic Fiber)	Level 3 =	Fire barrier rating is reduced to approximately 35%	
III =	Unique / Boot Seals	Level 4 =	Fire barrier or penetration integrity is severely challenged - No credit for barrier	
IV =	Concrete			
V =	Doors			
VI =	Dampers			
VII =	Unfilled Conduits			
	Hazards evaluations included on each side			