



July 15, 2021
L-2021-138
10 CFR 50.54(f)

U. S. Nuclear Regulatory Commission
Attn: Document Control Desk
Washington DC 20555-0001

RE: Turkey Point Nuclear Plant, Units 3 and 4
Docket Nos. 50-250 and 50-251
Subsequent Renewed Facility Operating Licenses DPR-31 and DPR-41
GL 2004-02 Debris Transport Calculation Non-Conservatism

References:

1. Florida Power & Light letter L-2017-149, Updated Final Response to NRC Generic Letter 2004-02, December 29, 2017 (ADAMS Accession No. ML17363A265)
2. Florida Power & Light letter L-2021-072, Supplement to Updated Final Response to NRC Generic Letter 2004-02, April 14, 2021 (ADAMS Accession No. ML21104A139)

In Reference 1, as supplemented by Reference 2, Florida Power & Light Company (FPL) provided an updated final response to Generic Letter (GL) 2004-02, Potential Impact of Debris Blockage on Emergency Recirculation During Design Basis Accidents at Pressurized-Water Reactors, (ADAMS Accession No. ML042360586), for Turkey Point Units 3 and 4 (Turkey Point).

Recently, FPL learned of a non-conservatism in the Turkey Point debris transport evaluation that supported the submittal in Reference 1. Specifically, the non-conservatism occurred when determining the debris transport fractions for postulated breaks inside the Unit 3 steam generator compartment and the Units 3 and 4 reactor cavities, which incorrectly applied the pool fill-up transport fractions for selected debris types and resulted in non-conservative transported debris quantities. The issue has been entered into the Turkey Point corrective action program (CAP) and the calculations containing the non-conservatism have been revised. Table 3.e.6-13, Table 3.e.6-14 and Table 3.e.6-17 of the enclosure to this letter provide the corrected debris transport fraction values. These tables supersede Table 3.e.6-13, Table 3.e.6-14 and Table 3.e.6-17 of Reference 1. The non-conservatism did not impact the limiting breaks scenarios evaluated in Reference 1, as shown in existing Table 3.e.6-19 through Table 3.e.6-22 of Reference 1. As a result, the conclusions specified in Reference 1 are not affected.

This letter contains no new regulatory commitments.

Should you have any questions regarding this notification, please contact Robert Hess, Turkey Point Licensing Manager, at (305) 246-4112.

I declare under penalty of perjury that the foregoing is true and correct.

Executed on the 15th day of July 2021.

Sincerely,

A handwritten signature in blue ink, appearing to read 'M. Pearce', is written over a horizontal line.

Michael Pearce
Site Vice President, Turkey Point Nuclear Plant
Florida Power & Light Company

Enclosure

Florida Power & Light Company

6501 S. Ocean Drive, Jensen Beach, FL 34957

cc: USNRC Regional Administrator, Region II
USNRC Project Manager, Turkey Point Nuclear Plant
USNRC Senior Resident Inspector, Turkey Point Nuclear Plant
Ms. Cindy Becker, Florida Department of Health

Table 3.e.6-13 (Revised), PTN3 Overall Transport Fractions for Breaks in the SG Compartment

Debris Type	Debris Size		Loop A	Loop C
Nukon	Fines		-	-
	Small Pieces	Erosion Fines	-	-
		Small Pieces	-	-
	Large Pieces	Erosion Fines	-	-
		Large Pieces	-	-
Intact Blankets		-	-	
Temp-Mat	Fines		97%	-
	Small Pieces	Erosion Fines	8%	-
		Small Pieces	71%	-
	Large Pieces	Erosion Fines	4%	-
		Large Pieces	26%	-
Intact Blankets		0%	-	
Ceramic Fiber	Fines		-	-
	Small Pieces	Erosion Fines	-	-
		Small Pieces	-	-
	Large Pieces	Erosion Fines	-	-
		Large Pieces	-	-
Intact Blankets		-	-	
Kaowool	Fines		-	-
Mirror RMI	Fines (<4" a side)		3%	3%
	Large Pieces		0%	0%
Transco RMI	Fines (<4" a side)		3%	3%
	Large Pieces		0%	0%
Cal-Sil	Fines		97%	97%
	Small Pieces	Erosion Fines	17%	17%
		Small Pieces	3%	4%
Qualified Coatings	Particulate		97%	97%
Unqualified Coatings	Particulate		100%	100%
Latent Debris	Particulate/Fine		85%	85%

Table 3.e.6-14 (Revised), PTN3 Overall Transport Fractions for Breaks Inside the Reactor Cavity

Debris Type	Debris Size		Loop A	Loop C
Nukon	Fines		-	-
	Small Pieces	Erosion Fines	-	-
		Small Pieces	-	-
	Large Pieces	Erosion Fines	-	-
		Large Pieces	-	-
Intact Blankets		-	-	
Temp-Mat	Fines		-	-
	Small Pieces	Erosion Fines	-	-
		Small Pieces	-	-
	Large Pieces	Erosion Fines	-	-
		Large Pieces	-	-
Intact Blankets		-	-	
Ceramic Fiber	Fines		-	-
	Small Pieces	Erosion Fines	-	-
		Small Pieces	-	-
	Large Pieces	Erosion Fines	-	-
		Large Pieces	-	-
Intact Blankets		-	-	
Kaowool	Fines		-	-
Mirror RMI	Fines (<4" a side)		1%	1%
	Large Pieces		0%	0%
Transco RMI	Fines (<4" a side)		-	-
	Large Pieces		-	-
Cal-Sil	Fines		100%	100%
	Small Pieces	Erosion Fines	17%	17%
		Small Pieces	1%	2%
Qualified Coatings	Particulate		100%	100%
Unqualified Coatings	Particulate		100%	100%
Latent Debris	Particulate/Fine		100%	100%

Table 3.e.6-17 (Revised), PTN4 Overall Transport Fractions for Breaks Inside the Reactor Cavity

Debris Type	Debris Size		Loop A	Loop C
Nukon	Fines		100%	100%
	Small Pieces	Erosion Fines	8%	8%
		Small Pieces	28%	25%
	Large Pieces	Erosion Fines	3%	3%
		Large Pieces	0%	0%
Intact Blankets		0%	0%	
Temp-Mat	Fines		100%	100%
	Small Pieces	Erosion Fines	8%	8%
		Small Pieces	71%	71%
	Large Pieces	Erosion Fines	4%	4%
		Large Pieces	26%	26%
Intact Blankets		0%	0%	
Mirror RMI	Fines (<4" a side)		8%	8%
	Large Pieces		0%	0%
Mirror RMI in Cavity	Fines (<4" a side)		4%	4%
	Large Pieces		0%	0%
Transco RMI	Fines (<4" a side)		-	-
	Large Pieces		-	-
Cal-Sil	Fines		100%	100%
	Small Pieces	Erosion Fines	17%	17%
		Small Pieces	7%	7%
Qualified Coatings	Particulate		100%	100%
Unqualified Coatings	Particulate		100%	100%
Latent Debris	Particulate/Fine		100%	100%