

U.S. Nuclear Regulatory Commission Public Meeting Summary

Title: Meeting with FPL to discuss the potential subsequent license renewal wear issues of Control Rod Drive Mechanism (CRDM) thermal sleeve flanges at Turkey Point based on recent operating experience (EPID No. L-2018-RNW-0002)

Meeting Identifier: 20180969

Date of Meetings: Monday, September 10, 2018

Location: Via Teleconference

Type of Meeting: Category 3

Purpose of the Meeting(s):

To discuss with FPL the potential subsequent license renewal wear issues of control rod drive mechanism (CRDM) thermal sleeve flanges at Turkey Point based on a recent operating experience, specifically a Part 21 Notification and NSAL-18-1 Revision 0, "Thermal Sleeve Flange Wear Leads to Stuck Control Rod," issued by Westinghouse ((Agencywide Documents Access and Management System (ADAMS) Accession Nos. ML18143B678 and ML18198A275, respectively), and NRC Information Notice 2018-10 (ADAMS Accession No. ML18214A710)

General Details:

The U.S. Nuclear Regulatory Commission (NRC) staff held a public teleconference with Florida Power & Light Company (FPL, the applicant) as part of the Turkey Point Nuclear Generating Units 3 and 4 (Turkey Point) Subsequent License Renewal (SLRA) safety review. The meeting started at 11:00 a.m. and ended at approximately 12:00 p.m. There were 10 NRC staff members present in the room and 11 staff members and contractors from FPL were on the phone. The meeting began with introductions of NRC staff in the room, NRC staff on the phone, and then FPL and contractor staff. No members of the public announced themselves on the phone or informed the NRC staff that they participated in the teleconference.

Summary of Meeting:

The staff began the meeting by discussing the recent operating experience documented in Westinghouse letters, LTR-NRC-18-34 "Notification of the Potential Existence of Defects Pursuant to Title 10 of the *Code of Federal Regulations* (10 CFR) Part 21" dated May 23, 2018 ((ADAMS Accession No. ML18143B678), LTR-NRC-18-53, "NSAL-18-1 Revision 0, "Thermal Sleeve Flange Wear Leads to Stuck Control Rod"" dated July 17, 2018 (ADAMS Accession No. ML18198A275), and NRC Information Notice 2018-10 "Thermal Sleeve Flange Wear Leads to Stuck Control Rod at Foreign Nuclear Plant" dated August 29, 2018 (ADAMS Accession No. ML18214A710). The staff was particularly interested in hearing how this recent operating experience would factor into the subsequent license renewal application.

The staff pointed out that Sections 3.1.2.2.10.1 and 3.1.2.2.10.2 of the Turkey Point SLRA provide discussions on the reactor pressure vessel head penetration CRDM thermal sleeve wear. Specifically, Section 3.1.2.2.10.2 states that the thermal sleeves “do not perform a subsequent license renewal intended function.” On the other hand, the notes for Table 2.3.1-2 of the Turkey Point SLRA, in part, states, “the thermal sleeves are considered to support the pressure boundary component intended function.”

In addition, the staff addressed the license renewal scoping requirements specified in 10 CFR 54.4(a)(2). Specifically, the regulation requires that the applicant must scope in non-safety systems, structures, and components whose failure could prevent satisfactory accomplishment of any of the safety-related functions including the capability to shut down the reactor and maintain it in a safe shutdown condition (i.e., 10 CFR 54.4(a)(1)(ii)). The staff also emphasized that recent operating experience indicates that the wear degradation of nozzle thermal sleeves could prevent satisfactory motion of control rod drive mechanisms and associated rod cluster control assemblies.

In response, the applicant asserted that:

- The stainless steel (SS) thermal sleeves of the CRDM were not scoped into the Turkey Point SLRA because they were determined to not be part of the reactor coolant pressure boundary and not safety-related components, and their failure could not affect satisfactory accomplishment of any of the functions identified under 10 CFR 54.4(a)(1);
- Reference to SS thermal sleeve in both Table 2.3.1-2 and notes for Table 2.3.1-2 was intended for the pressurizer’s thermal sleeves and not for the thermal sleeves of the CRDMs.
- The enhancements discussed in Section 3.1.2.2.10 include the aging management of loss of material due to wear at the centering tab location and at the bottom of the nickel alloy CRDM nozzle tubes which were scoped into Turkey Point SLRA, but not at the SS flanges for the thermal sleeves of CRDMs which were not scoped into Turkey Point SLRA.

Further, the applicant acknowledged that there could be confusion and would discuss internally.

Public Participation Themes:

No members of the public announced themselves on the phone or informed the NRC staff that they participated in the teleconference.

Action Items/Next Steps:

The NRC staff will issue follow up requests for additional information.

Attachments:

- Meeting description and agenda – ADAMS Accession No. ML18243A301

Title: Meeting with FPL to discuss the potential subsequent license renewal wear issues of CRDM thermal sleeve flanges at Turkey Point based on recent operating experience (EPID No. L-2018-RNW-0002) DATED

DISTRIBUTION:

PUBLIC

RidsNrrDmlr Resource
 RidsNrrDmlrMrpb Resource
 RidsNrrDmlrMphb Resource
 RidsNrrPMTurkeyPoint Resource

 LJames NRR/DMLR
 EOesterle NRR/DMLR
 SRuffin NRR/DMLR
 BFu NRR/DMLR
 ARezai NRR/DMLR
 GWilson NRR/DMLR
 JDonoghue NRR/DMLR
 MWentzel NRR/DORL
 STurk OGC
 EHouseman OGC
 JWachutka OGC
 SBurnell HQ/OPA
 RHanna RII/OPA

JLedford RII/OPA
 DAdams OCA
 DDecker OCA
 JPelchat RII/ORA
 RMusser RII/DRP
 LPressley RII/DRP
 DOrr RII/DRP
 RReyes RII/DRP
 LBurhart OEDO
 TInverso OEDO
 ELea RII/ORA
 JBowen OEDO
 PCooper RII/DRS

ADAMS Accession No.: ML18262A078

*concurring via email

OFFICE	PM:MRPB:DMLR	LA:MRPB:DMLR	TR:MPHB:DMLR	TR:MPHB:DMLR
NAME	LJames*	SLent	BFu	ARezai*
DATE	09/18/2018	09/19/2018	09/20/2018	09/19/2018
OFFICE	BC:MPHB:DMLR	SLS:DMLR	BC:MRPB:DMLR	PM:MRPB:DMLR
NAME	SRuffin	AHiser	EOesterle*	LJames
DATE	09/20/2018	09/26/2018	09/19/2018	09/26/2018

OFFICE RECORD COPY