



Crystal River Nuclear Plant  
15760 W. Power Line Street  
Crystal River, FL 34428  
Docket 72-1035  
Docket 50-302  
Operating License No. DPR-72

Ref: 10 CFR 50.9

May 24, 2018  
3F0518-02

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

Subject: Crystal River Unit 3 - NRC Commitment Change Report – May 2018

Dear Sir:

The purpose of this letter is to provide notification of inactivations or modifications to regulatory commitments contained in previously docketed correspondence from Duke Energy Florida, LLC, (DEF), to the NRC. The attached report contains the Crystal River Unit 3 (CR-3) Nuclear Operations Commitment System (NOCS) reference numbers, source of the original commitment, statement of the original commitment, statement of commitment modification, if revised, and justification for the inactivation or modification. This report is being submitted in accordance with Nuclear Energy Institute (NEI) document NEI 99-04, Revision 0, "Guidelines for Managing NRC Commitment Changes," dated July 1999.

Of the two hundred ninety one (291) CR-3 regulatory commitments that were modified or inactivated between January 5, 2016 and December 31, 2017, only one modified or inactivated regulatory commitment met the NEI 99-04 criteria for NRC notification. Attachment 1 contains the NRC Commitment Change Report – May 2018.

No new regulatory commitments are made in this letter.

If you have any questions regarding this submittal, please contact Mr. Phil Rose, Nuclear Regulatory Affairs, at (352) 501-3172.

Sincerely,

Terry D. Hobbs  
General Manager Decommissioning  
Crystal River Nuclear Plant

TDH/par

Attachment NRC Commitment Change Report – May 2018

xc: Regional Administrator, Region I  
NMSS Project Manager

**DUKE ENERGY FLORIDA, LLC**

**CRYSTAL RIVER UNIT 3**

**LICENSE NUMBER DPR-72**

**DOCKET NUMBER 50-302**

**DOCKET NUMBER 72-1035**

**ATTACHMENT**

**NRC COMMITMENT CHANGE REPORT – May 2018**

**Nuclear Operations Commitment System (NOCS) Number: 1520**

**Source Document:**

Crystal River Unit 3 (CR-3) to NRC letter, 3F0379-06, dated March 16, 1979.

**Original Commitment:**

Accelerated exposure of new spent fuel rack material to Gamma radiation will be achieved by providing a sample holder which can be moved each outage to a new storage location surrounded by freshly discharged fuel. The sample holder will be similar in size and basic shape to a fuel assembly with the samples located around the periphery of the holder. The sample holder will be moved from storage location to location using available fuel handling equipment. The composite material samples will be placed between stainless steel sheets and exposed to pool water to simulate the geometry that exists in the fuel racks.

With regard to the Spent Fuel Pool rack surveillance program, samples will be provided which are exposed simultaneously to the pool water and Gamma radiation and samples which are exposed to pool water only.

Also, with regard to the spent fuel pool rack surveillance program, sufficient samples of the B4C composite material must be available so that the mechanical properties can be determined as a function of exposure on a regularly scheduled basis throughout the life of the fuel racks.

**Modify/Inactivate Commitment:**

INACTIVATE: This commitment is no longer required due to all spent fuel is now in dry storage and Technical Specifications have been modified to prevent any fuel from being placed back into the spent fuel pools.

**Justification for Change (when the change was approved on October 16, 2017):**

This change to the commitment are justified for several reasons:

CR3 is a decommissioned unit. All fuel in both SF pool A (carborundum) and SF pool B (Boral) is being removed and placed in dry storage. Over half the spent fuel has already been unloaded from the pools. Current estimates show all fuel removed from the pools by the end of the first quarter of 2018 (within 6 months). Since there will be no fuel in SF pool A after this point, there is no need to maintain a surveillance on material whose sole purpose is to prevent criticality of the fuel assemblies.

The next scheduled surveillance is 2023. The last surveillance performed in 2014 showed an average weight loss of < 10%. The acceptance criteria is weight loss < 20%. The projected average weight loss at the 2023 surveillance date (assuming fuel was not removed from the pools) is < 12%. Therefore, there is significant margin even projecting another 5 years (to 2023). Less than 6 months remain before the fuel is completely removed.

The next scheduled surveillance is 2023. All fuel will be removed before that point. Therefore, there is no need to maintain most recently discharged fuel around the samples, if all fuel is removed before the next sample date.