

NRR-PMDAPEm Resource

From: Galvin, Dennis
Sent: Wednesday, March 16, 2016 1:57 PM
To: Regis.Repko@duke-energy.com; Arthur.Zaremba@duke-energy.com; Scott Connelly (Scott.Connelly@duke-energy.com); John Caves (John.Caves@duke-energy.com)
Cc: Joshua.Duc@duke-energy.com; Beasley, Benjamin; Dean, Jeremy; Oesterle, Eric; Barillas, Martha
Subject: Harris/Robinson Acceptance Review Draft Supplemental Information Request – LAR to Adopt Methodology Reports DPC-NF-2010 Revision 3 and DPC-NE-2011-P Revision 2 (MF7337, MF7338)
Attachments: Harris Robinson LAR DPC-NF-2010 DPC-NE-2011-P Non-Acceptance Letter with Opportunity to supplement Draft for Duke Energy MF7337-7338.pdf

Mr. Repko,

By letter dated February 3, 2016 (Agencywide Documents Access and Management System Accession No. ML16034A610), Duke Energy Progress, Inc. (Duke Energy) requested amendments to the technical specifications (TS) of Renewed Facility Operating License No. NPF-63 for the Shearon Harris Nuclear Power Plant, Unit 1 (Harris), and Renewed Facility Operating License No. DPR-23 for the H. B. Robinson Steam Electric Plant, Unit No. 2 (Robinson). Duke Energy requested the review and approval of DPC-NF-2010, Revision 3, "Nuclear Physics Methodology for Reload Design," and DPC-NE-2011-P, Revision 2, "Nuclear Design Methodology Report for Core Operating Limits of Westinghouse Reactors" and adoption of these two methodologies into the TS for Harris and Robinson. The methodologies will be used to support calculations as part of reload design analysis for Harris and Robinson. Approval of the methodologies is specific to Harris and Robinson and will allow Duke Energy to perform the subject analysis for each plant.

To complete its acceptance review, the NRC staff has prepared a supplemental information request. Please see the attached supplemental information request in DRAFT form.

A Sensitive Unclassified Non-Safeguards Information (SUNSI) review was completed by the staff on the draft supplemental information request and the staff concluded the supplemental information request does not contain SUNSI. If you find any information needs to be withheld from the public, please notify me within 5 days of receipt of this email.

Per Office of Nuclear Reactor Regulation (NRR) Office Instruction LIC-109, Revision 1, "Acceptance Review Procedures," dated July 16, 2009, (ADAMS Accession No. ML091810088), Section 4.1, "Discussion of Information Insufficiencies with the Licensee," a conference call should be arranged no more than working 5 days from this notification to discuss the information required to supplement the application. The licensee may supplement the application no more than working 13 days following the call. If the information responsive to the NRC staff's request is not received in that time frame, the application will not be accepted for review pursuant to 10 CFR 2.101, and the NRC will cease its review activities associated with the application.

If you have any questions, please contact me at (301) 415-6256.

Respectfully,

Dennis Galvin
Project Manager
U.S Nuclear Regulatory Commission
Office of Nuclear Reactor Regulation
Division of Operating Reactor Licensing
Licensing Project Branch 2-2

301-415-6256

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Subject: Harris/Robinson Acceptance Review Draft Supplemental Information Request – LAR to Adopt Methodology Reports DPC-NF-2010 Revision 3 and DPC-NE-2011-P Revision 2 (MF7337, MF7338)

Sent Date: 3/16/2016 1:57:16 PM

Received Date: 3/16/2016 1:57:17 PM

From: Galvin, Dennis

Created By: Dennis.Galvin@nrc.gov

Recipients:

"Joshua.Duc@duke-energy.com" <Joshua.Duc@duke-energy.com>

Tracking Status: None

"Beasley, Benjamin" <Benjamin.Beasley@nrc.gov>

Tracking Status: None

"Dean, Jeremy" <Jeremy.Dean@nrc.gov>

Tracking Status: None

"Oesterle, Eric" <Eric.Oesterle@nrc.gov>

Tracking Status: None

"Barillas, Martha" <Martha.Barillas@nrc.gov>

Tracking Status: None

"Regis.Repko@duke-energy.com" <Regis.Repko@duke-energy.com>

Tracking Status: None

"Arthur.Zaremba@duke-energy.com" <Arthur.Zaremba@duke-energy.com>

Tracking Status: None

"Scott Connelly (Scott.Connelly@duke-energy.com)" <Scott.Connelly@duke-energy.com>

Tracking Status: None

"John Caves (John.Caves@duke-energy.com)" <John.Caves@duke-energy.com>

Tracking Status: None

Post Office: HQPWMSMRS06.nrc.gov

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MESSAGE	2590	3/16/2016 1:57:17 PM
Harris Robinson LAR DPC-NF-2010 DPC-NE-2011-P Non-Acceptance Letter with Opportunity to supplement Draft for Duke Energy MF7337-7338.pdf	141523	

Options

Priority: Standard

Return Notification: No

Reply Requested: No

Sensitivity: Normal

Expiration Date:

Recipients Received:

Mr. Regis T. Repko
Senior Vice President - Governance, Projects and Engineering
Duke Energy Corporation
Mail Code EC07H
P.O. Box 1006
Charlotte, NC 28201-1006

SUBJECT: SHEARON HARRIS NUCLEAR POWER PLANT, UNIT NO. 1 AND H. B. ROBINSON STEAM ELECTRIC PLANT, UNIT 2 – SUPPLEMENTAL INFORMATION NEEDED FOR ACCEPTANCE OF REQUESTED LICENSING ACTION REGARDING DUKE ENERGY PROGRESS, INC. APPLICATION TO REVISE TECHNICAL SPECIFICATIONS TO ADOPT METHODOLOGY REPORTS DPC-NF-2010 REVISION 3 “NUCLEAR PHYSICS METHODOLOGY FOR RELOAD DESIGN” AND DPC-NE-2011-P REVISION 2, “NUCLEAR DESIGN METHODOLOGY REPORT FOR CORE OPERATING LIMITS OF WESTINGHOUSE REACTORS” (CAC NOS. MF7337/MF7338)

Dear Mr. Repko:

By letter dated February 3, 2016 (Agencywide Documents Access and Management System Accession No. ML16034A610), Duke Energy Progress, Inc. (Duke Energy) requested amendments to the technical specifications (TS) of Renewed Facility Operating License No. NPF-63 for the Shearon Harris Nuclear Power Plant, Unit 1 (Harris), and Renewed Facility Operating License No. DPR-23 for the H. B. Robinson Steam Electric Plant, Unit No. 2 (Robinson). Duke Energy requested the review and approval of DPC-NF-2010, Revision 3, “Nuclear Physics Methodology for Reload Design,” and DPC-NE-2011-P, Revision 2, “Nuclear Design Methodology Report for Core Operating Limits of Westinghouse Reactors” and adoption of these two methodologies into the TS for Harris and Robinson. The methodologies will be used to support calculations as part of reload design analysis for Harris and Robinson. Approval of the methodologies is specific to Harris and Robinson and will allow Duke Energy to perform the subject analysis for each plant.

The purpose of this letter is to provide the results of the U.S. Nuclear Regulatory Commission (NRC) staff’s acceptance review of this amendment request. The acceptance review was performed to determine if there is sufficient technical information in scope and depth to allow the NRC staff to complete its detailed technical review. The acceptance review is also intended to identify whether the application has any readily apparent information insufficiencies in its characterization of the regulatory requirements or the licensing basis of the plant.

Consistent with Section 50.90 of Title 10 of the *Code of Federal Regulations* (10 CFR), an amendment to the license (including the technical specifications) must fully describe the changes requested, and following as far as applicable, the form prescribed for original applications. Section 50.34 of 10 CFR addresses the content of technical information required. This section stipulates that the submittal address the design and operating characteristics, unusual or novel design features, and principal safety considerations.

In order to make the application complete, the NRC staff requests that Duke Energy supplement the application to address the information requested in the enclosure by [DATE]. This will enable the NRC staff to begin its detailed technical review. If the information responsive to the NRC staff's request is not received by the above date, the application will not be accepted for review pursuant to 10 CFR 2.101, and the NRC will cease its review activities associated with the application. If the application is subsequently accepted for review, you will be advised of any further information needed to support the staff's detailed technical review by separate correspondence.

The information requested and associated time frame in this letter were discussed with [CONTACT] of your staff on [DATE].

R. Repko

- 3 -

If you have any questions, please contact me at (301) 415-6256 or Dennis.Galvin@nrc.gov.

Sincerely,

Dennis Galvin, Project Manager
Plant Licensing Branch 2-2
Division of Operating Reactor Licensing
Office of Nuclear Reactor Regulation

Docket No(s).

cc: Distribution via Listserv

R. Repko

- 2 -

If you have any questions, please contact me at (301) 415-6256 or Dennis.Galvin@nrc.gov.

Sincerely,

Dennis Galvin, Project Manager
Plant Licensing Branch 2-2
Division of Operating Reactor Licensing
Office of Nuclear Reactor Regulation

Docket No(s).

cc: Distribution via Listserv

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ADAMS Accession No. ML

OFFICE	DORL/LPL2-2/PM	DORL/LPL2-2/LA	NRR/DSS/SNPB/BC	NRR/DSS/SNPB/BC	
NAME	DGalvin	BClayton	JDean	EOesterle	
DATE					
OFFICE	NRR/DSS/D	DORL/LPL2-2/BC	NRR/DORL/D	DORL/LPL2-2/PM	
NAME	TMCginty	BBeasley	ABoland	DGalvin	
DATE					

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SUPPLEMENTAL INFORMATION NEEDED

AMENDMENT REQUEST

DUKE ENERGY PROGRESS, INC.

H. B. ROBINSON STEAM ELECTRIC PLANT, UNIT NO. 2

DOCKET NO. 50-261

By letter dated February 3, 2016 (Agencywide Documents Access and Management System (ADAMS) Accession No. ML16034A610), Duke Energy Progress, Inc. (Duke Energy) requested amendments to the technical specifications (TS) of Renewed Facility Operating License No. NPF-63 for the Shearon Harris Nuclear Power Plant, Unit 1 (Harris), and Renewed Facility Operating License No. DPR-23 for the H. B. Robinson Steam Electric Plant, Unit No. 2 (Robinson). Duke Energy requested the review and approval of DPC-NF-2010, Revision 3, "Nuclear Physics Methodology for Reload Design," and DPC-NE-2011-P, Revision 2, "Nuclear Design Methodology Report for Core Operating Limits of Westinghouse Reactors" and adoption of these two methodologies into the TS for Harris and Robinson. The methodologies will be used to support calculations as part of reload design analysis for Harris and Robinson. Approval of the methodologies is specific to Harris and Robinson and will allow Duke Energy to perform the subject analysis for each plant.

By letter dated March 5, 2015 (ADAMS Accession No. ML15075A211), as supplemented by letters dated August 10, 2015, and December 17, 2015, and February 1, 2016 (ADAMS Accession Nos. ML15253A680, ML15356A315, and ML16032A004), Duke Energy, requested amendments to the Harris and Robinson TSs to adopt the methodology report DPC-NE-2005-P, Revision 5, "Thermal-Hydraulic Statistical Core Design Methodology," for application specific to Harris and Robinson. In its submittal, Duke Energy requested review and approval of DPC-NE-2005-P, Revision 5, which adds Appendix H and Appendix I to DPC-NE-2005-P, allowing the methodology be used at Harris and Robinson to perform the subject analysis in-house. On March 8, 2016, the Nuclear Regulatory Commission (NRC) issued the requested amendments (ADAMS Accession No. ML16049A630).

By letter dated August 19, 2015 (ADAMS Accession No. ML15236A044), Duke Energy requested amendments to the Harris and Robinson TSs, for the review, approval, and adoption of DPC-NE-1008-P, Revision 0, "Nuclear Design Methodology Using CASMO-5/SIMULATE-3 for Westinghouse Reactors," to allow Duke Energy to perform reactor physics calculations as part of the reload design safety analysis for Shearon Harris and Robinson. Approval of the new methodology at Harris and Robinson will allow Duke Energy to perform the subject analysis at each plant, as opposed to utilizing contract services.

By letter dated December 1, 2015 (ADAMS Accession No. ML15309A728), the NRC accepted DPC-NE-1008-P for review. The acceptance letter noted, "The previously approved Duke Energy methodology CASMO-4 and other methodology submittals required over a 12 month review schedule due to the complexity of the technical review. Precedence has shown that new methodologies take between 18 to 24 months to complete their review and Duke's requested due date may not be met."

1. Attachment 2 to the February 3, 2016 submittal, "Evaluation of the Proposed Change," states that CASMO-5/Simulate-3 is incorporated by reference into DPC-NF-2010,

Enclosure

Revision 3. Specifically, Section 3.0, "Nuclear Code System," of DPC-NF-2010, Revision 3, describes the use of CASMO-5/SIMULATE-3 for nuclear design calculations. As described above, CASMO-5/SIMULATE-3, as documented in DPC-NE-1008-P, is currently under review, and thus is unapproved.

Per Office of Nuclear Reactor Regulation (NRR) Office Instruction LIC-109, Revision 1, dated July 16, 2009, (ADAMS Accession No. ML091810088) the incorporation by reference of an unapproved report meets two criteria for non-acceptance in Section 3.1.1: (1) Use of Approved Guidance and (2) Linked RLAs [requested licensing actions]. Regarding the use of approved guidance, incorporating by reference an unapproved methodology report such as DPC-NE-1008-P is similar to referencing an unapproved topical report. The guidelines in LIC-109 state, "Simply citing unapproved guidance is not acceptable." Regarding linked RLAs, the approval of DPC-NF-2010, Revision 3 is contingent on the approval of DPC-NE-1008-P. The guidelines in LIC-109 state, "An RLA should not be accepted for NRC review and approval until all prerequisite RLAs have been reviewed and approved by the NRC."

2. DPC-NE-2011-P, Revision 2, Sections 1.3, "Applicability of the Method," 2.1 "Description of the Models Used," and 3.1, "Power Distribution," reference DPC-NE-1008-P as if it were already approved. Consistent with the previous discussion of DPC-NE-1008-P, this referencing of an unapproved report also meets two of criteria for non-acceptance in LIC-109, Revision 1.

DPC-NE-2011-P, Revision 2, Section 4.3, "LOFA [loss of flow accident] DNB [departure from nucleate boiling] Margin Calculations," references DPC-NE-2005-P, Revision 5 as if it were already approved, which was not the case when DPC-NE-2011-P, Revision 2 was submitted on February 3, 2016. As it has been recently approved, this is no longer a concern. However, were it still under review, it would also provide a basis for non-acceptance of the RLA.

The licensee is requested not to incorporate by reference unapproved methodology reports and ensure the February 3, 2016 RLA is not contingent on other RLAs.