November 24, 1999

MEMORANDUM TO:	Loren Plisco, Director
	Division of Reactor Projects
	Region II

FROM: Suzanne C. Black, Deputy Director/Original signed by: Division of Licensing Project Management Office of Nuclear Reactor Regulation

SUBJECT:

TASK INTERFACE AGREEMENT 99-03 - POTENTIAL NON-CONSERVATIVE ASSUMPTIONS FOR FUEL-HANDLING ACCIDENTS (TAC NOS. MA5130 AND MA5131)

By memorandum dated March 23, 1999, your office requested assistance in the evaluation of the assumptions related to the assessment of the release of radioactive material in a postulated fuel-handling accident at the McGuire Nuclear Station. Your request was triggered by a concern that was identified by the resident inspectors during a follow-up on fuel-handling activities at the McGuire Nuclear Station, which is documented as Unresolved Item 50-369, 370/97-10-01, "Radiological Consequences of a Fuel-Handling Accident Involving High-Burnup Fuel." Specifically, the inspectors questioned whether the assumptions used in the analysis for assessing the radiological consequences of a postulated fuel-handling accident are nonconservative. Your request contained five specific questions, but it acknowledged that two questions (identified as questions 4 and 5 in our response) are within the scope of an ongoing agency review and evaluation of high burnup fuel.

The staff's evaluation has been performed by the Reactor Systems Branch (Questions 1 and 5, and parts of 4) and Probabilistic Safety Assessment Branch (Questions 2, 3, and part of 4). Also, the appropriate staff from the Office of Nuclear Regulatory Research has been consulted. The attached safety evaluation concludes that adequate conservatism is recognized in the subject assumptions.

Further, the current Facility Operating Licenses for McGuire Nuclear Station, NPF-9 for Unit 1 and NPF-17 for Unit 2, state that the maximum rod average burnup for any rod shall be limited to 60 Gwd/mtU until the completion of an NRC environmental assessment supporting an increased limit. This requirement was part of Amendments Nos.188 (Unit 1) and 169 (Unit 2), dated September 22, 1999.

This completes our effort on TIA 99-03 and TAC Nos. MA5130 and MA5131. If you have any questions regarding this review, please contact Frank Rinaldi at (301) 415-1447.

Docket Nos. 50-369 and 50-370

Attachment: Safety Evaluation w/Appendix

cc w/att: R. Blough, RI

- J. Barnes, RII
 - G. Grant, RIII
 - K. Brockman, RIV

ARC FREF GENTER COP

*See previous concurrence

DFOI

To receive a copy of t	his document, indicate in the box	c: "C" = Copy without attachment/enclosure	"E" = Copy with
attachment/enclosure	"N" = No copyDocument Name:	G:\PDII-1\MCGUIRE\tia9903.wpd	

OFFICE	PM:PDII-1*	Ε	LA:PDII-1*		SRXB*	SPSB*	SC:PDII-1*
NAME	FRinaldi:cn		CHawes		JWermiel	RBarrett	REmch
DATE	11/16/99		11/16/99		11/16/99	11/16/99	11/18/99
OFFICE	D:PDII*		DD:DLPM	C	•		
NAME	HBerkow		SBlack Th				
DATE	11/18/99		11/24/19		1 1		

PDR ADOCIC'

OFFICIAL RECORD COPY



UNITED STATES NUCLEAR REGULATORY COMMISSION WASHINGTON, D.C. 20555-0001

November 24, 1999

MEMORANDUM TO: Loren Plisco, Director Division of Reactor Projects Region II

FROM:

Suzanne C. Black, Deputy Director Suzanne C. Black Division of Licensing Project Management Office of Nuclear Reactor Regulation

SUBJECT:

TASK INTERFACE AGREEMENT 99-03 - POTENTIAL NON-CONSERVATIVE ASSUMPTIONS FOR FUEL-HANDLING ACCIDENTS (TAC NOS. MA5130 AND MA5131)

By memorandum dated March 23, 1999, your office requested assistance in the evaluation of the assumptions related to the assessment of the release of radioactive material in a postulated fuel-handling accident at the McGuire Nuclear Station. Your request was triggered by a concern that was identified by the resident inspectors during a follow-up on fuel-handling activities at the McGuire Nuclear Station, which is documented as Unresolved Item 50-369, 370/97-10-01, "Radiological Consequences of a Fuel-Handling Accident Involving High-Burnup Fuel." Specifically, the inspectors questioned whether the assumptions used in the analysis for assessing the radiological consequences of a postulated fuel-handling accident are nonconservative. Your request contained five specific questions, but it acknowledged that two questions (identified as questions 4 and 5 in our response) are within the scope of an ongoing agency review and evaluation of high burnup fuel.

The staff's evaluation has been performed by the Reactor Systems Branch (Questions 1 and 5, and parts of 4) and Probabilistic Safety Assessment Branch (Questions 2, 3, and part of 4). Also, the appropriate staff from the Office of Nuclear Regulatory Research has been consulted. The attached safety evaluation concludes that adequate conservatism is recognized in the subject assumptions.

Further, the current Facility Operating Licenses for McGuire Nuclear Station, NPF-9 for Unit 1 and NPF-17 for Unit 2, state that the maximum rod average burnup for any rod shall be limited to 60 Gwd/mtU until the completion of an NRC environmental assessment supporting an increased limit. This requirement was part of Amendments Nos.188 (Unit 1) and 169 (Unit 2), dated September 22, 1999.

This completes our effort on TIA 99-03 and TAC Nos. MA5130 and MA5131. If you have any questions regarding this review, please contact Frank Rinaldi at (301) 415-1447.

Docket Nos. 50-369 and 50-370

Attachment: Safety Evaluation w/Appendix

cc w/att: R. Blough, RI

- J. Barnes, RII
- G. Grant, RIII
- K. Brockman, RIV