## September 10, 2003

Mr. William R. Kanda Vice President - Nuclear, Perry FirstEnergy Nuclear Operating Company P. O. Box 97, A210 10 Center Road Perry, OH 44081

SUBJECT: NOTICE OF ENFORCEMENT DISCRETION FOR FIRSTENERGY NUCLEAR

OPERATING COMPANY REGARDING PERRY (NOED 03-3-006)

Dear Mr. Kanda:

By letter dated September 8, 2003, your staff requested that the U.S. Nuclear Regulatory Commission (NRC) exercise discretion not to enforce compliance with the actions required in Technical Specification (TS) 3.7.1 regarding one inoperable emergency service water (ESW) division, and TS 3.8.1 regarding an emergency diesel generator which required ESW support to be operable. Your letter documented information previously discussed with the NRC in a telephone conference which occurred on September 4, 2003, at approximately 12:00 p.m. (All times discussed in this letter refer to Eastern Daylight Time). At the time of the telephone conference, the Perry nuclear plant was operating in Mode 1 (Power Operation).

The principal NRC staff members who participated in that telephone conference included: Geoffrey Grant, Director, Division of Reactor Projects, RIII; Anthony Mendiola, Section Chief; Stephen Sands, Project Manager, Douglas Pickett, Project Manager, Division of Licensing Project Management, NRR; Steven Unikewicz, Engineer; Thomas Scarbrough, Engineer, Mechanical and Civil Engineering Branch, NRR; Patrick Hiland, Acting Deputy Division Director; Mark Ring, Branch Chief, Division of Reactor Projects, RIII; Ray Powell, Senior Resident Inspector, Perry; and Sonia Burgess, Senior Reactor Analyst, Division of Reactor Safety, RIII.

Your staff stated that on September 4, 2003, at 5:17 p.m., Perry would not be in compliance with Technical Specification 3.7.1, action statement A.1 to restore the Division 1 ESW subsystem to OPERABLE status within 72 hours and Technical Specification 3.8.1, action statement B.4 to restore the required diesel generator (DG) to operable status within 72 hours. These requirements were entered at 5:17 p.m. on September 1, 2003, when the "A" ESW pump was declared inoperable. With the ESW pump not restored in 72 hours, then Technical Specification 3.7.1 Emergency Service Water (ESW) System - Division 1 and 2, Required Actions B.1 and B.2, and, Technical Specification 3.8.1 AC Sources - Operating, Required Actions F.1 and F.2, specified that the plant be in MODE 3 in 12 hours and MODE 4 in 36 hours. To preclude a required entry into MODE 3 and MODE 4, you requested an additional 72 hours to restore the "A" ESW pump.

Your staff requested that a Notice of Enforcement Discretion (NOED) be granted pursuant to the NRC's policy regarding exercise of discretion for an operating facility, set out in Section VII.C, of the "General Statement of Policy and Procedures for NRC Enforcement Actions" (Enforcement Policy), NUREG-1600, and be effective for the period of 72 hours from 5:17 p.m. on September 4, to 5:17 p.m. on September 7, 2003. This letter documents our telephone conversation when we orally granted this NOED on September 4, 2003 at approximately 3:30 p.m. We understand that you restored the "A" ESW pump to an operable status and exited from the Required Actions of Technical Specifications 3.7.1 and 3.8.1 and from this NOED on September 5, 2003, at 6:55 p.m.

The "A" ESW pump had been declared inoperable on September 1 when low flow alarms were received on the ESW system. Disassembly of the pump revealed that a coupling sleeve on the pump shaft had broken. Examination of the coupling concluded that improper installation and ensuing stress corrosion cracking led to the coupling failure. The time projected for procurement and installation of replacement parts and post maintenance testing exceeded the allowed outage time of 72 hours.

Your staff requested this NOED after consideration of the safety significance and potential consequences of a plant shutdown from a probabilistic risk perspective. The risk incurred during operation was qualitatively compared to the risk of shutting the reactor down and performing repairs off-line. Your evaluation concluded that there was less risk related to operating the plant with the "A" ESW pump out of service for an additional 72 hours than the risk associated with shutting down the plant with the "A" ESW pump out of service. The change in risk associated with the large early release probability (LERP) for operating an additional 72 hours with the "A" ESW pump unavailable was determined by your staff to be small (3.6 E-10) and less than the LERP for a reactor scram.

For compensatory measures, during the additional time that the ESW pump was inoperable, your staff committed to the following: (1) alternate trains of AC/DC electrical systems, ESW, residual heat removal, high pressure core spray, the motor feed pump, the diesel fire pump, Bus L 10, and the reactor core isolation cooling system would be posted as protected in the plant and control room; (2) all scheduled work would be reviewed for current plant risk; (3) access to risk sensitive areas would be restricted; (4) all Division 2 and 3 equipment would be maintained operable; (5) your staff would notify the load dispatcher to suspend work that could affect the stability of offsite power to the Perry switchyard; and (6) shiftly briefs of the operators would be conducted on the enforcement discretion, ESW system status, and contingency requirements. The Resident Inspector staff verified that these compensatory measures were implemented while this NOED was in effect.

The NRC reviewed your written request for enforcement discretion dated September 8, 2003, and verified consistency between your oral and written requests. The written request confirmed that the plant oversight review committee had approved the NOED request for 72 hours instead of the 48 hours initially proposed. The NRC's basis for this discretion considered (1) that the failure of the "A" ESW pump was adequately understood, and the Divisions 2 and 3 ESW pumps were not likely in a similar condition, (2) the compensatory measures taken to reduce the probability of a plant transient while ensuring the availability of other risk significant equipment; and (3) the qualitative risk evaluation determined that the risk of continued

W. Kanda -3-

operation with the "A" ESW pump out of service for an additional 72 hours did not result in an increased risk over shutting down the unit.

Although the NRC does not have a plant specific shutdown risk analysis, we did perform a qualitative evaluation of this issue. The NRC determined that the risk of continued operation with your compensatory measures for the additional 72 hour period of the NOED did not result in an increased risk over shutting down the unit with the "A" ESW pump inoperable. The basis of our decision was that there was no net increase in risk associated with extending the allowed outage time for TS 3.7.1 from 72 hours to a total of 144 hours. Based on this qualitative evaluation the NRC accepted your staff's safety rationale.

The NRC's qualitative determination that the risk of continued operation for the additional 72 hour period did not result in an increased risk over shutting down the unit considered the compensatory actions you took. Other risk perspectives that you provided were useful in deciding on the acceptability of your safety rationale. Your comparison of the compensated incremental conditional core damage probability (ICCDP) with the scram conditional core damage probability (CCDP) provided some insight. However, it should be noted that these two metrics were not readily comparable. Notwithstanding this point, we found your safety rationale acceptable.

Based on the above considerations, the NRC staff concluded that Criterion B.2.1.1.a and the applicable criteria in Section C.4 to NRC Manual Chapter 9900, "Technical Guidance, Operations - Notices of Enforcement Discretion," were met. Criterion B.2.1.1.a states that for an operating plant, the NOED is intended to avoid unnecessary transients as a result of compliance with the license condition and, thus, minimize potential safety consequences and operational risks.

On the basis of the NRC staff's evaluation of your request, we concluded that granting of this NOED is consistent with the Enforcement Policy and staff guidance, and had no adverse impact on public health and safety. Therefore, we exercised discretion from 5:17 p.m. on September 4, to 5:17 p.m. on September 7, 2003, not to enforce compliance with TS 3.7.1 and 3.8.1. As noted earlier, we understand that you restored the pump to an operable status and exited from this NOED on September 5, 2003, at 6:55 p.m.

As stated in the Enforcement Policy, action may be taken, to the extent that violations were involved, for the root cause that led to the noncompliance for which this NOED was necessary.

Sincerely,

/RA/

Geoffrey E. Grant, Director Division of Reactor Projects

Docket No. 50-440 License No. NPF-58

See Attached Distribution

DOCUMENT NAME: G:\perr\ML032530548.wpd \*See previous concurrence

To receive a copy of this document, indicate in the box:"C" = Copy without enclosure "E" = Copy with enclosure"N" = No copy

OFFICE	RIII	Ν	RIII	Ε	RIII	Ε	RIII	С	RIII		RIII	
NAME	RLerch/trn		MRing MPa		MParker	BClayton*		<b>)</b> *	ELeeds for TMendiola (per telecon)		GGrant	
DATE	09/10/03		09/10/03		09/10/03		09/08/03		09/10/03		09/10/03	

OFFICIAL RECORD COPY

W. Kanda -4-

cc w/encl: G. Leidich, President - FENOC

K. Cimorelli, Acting Director, Maintenance Department

V. Higaki, Manager, Regulatory Affairs

J. Messina, Director, Nuclear Services Department T. Lentz, Director, Nuclear Engineering Department T. Rausch, Plant Manager,

Nuclear Power Plant Department Public Utilities Commission of Ohio

Ohio State Liaison Officer

R. Owen, Ohio Department of Health

W. Kanda -5-

## ADAMS Distribution:

AJM

DFT

SPS1

RidsNrrDipmlipb

GEG

HBC

RJP

C. Ariano (hard copy)

DRPIII

DRSIII

PLB1

JRK1