

June 6, 2006

Mr. Biff Bradley  
Nuclear Energy Institute  
Suite 400  
1776 I Street, NW  
Washington, DC 20006-3708

Mr. Michael P. Gallagher  
Director, Licensing & Regulatory Affairs  
Exelon Nuclear  
200 Exelon Way  
Kennett Square, PA 19348

Dear Mr. Bradley and Mr. Gallagher:

The Nuclear Regulatory Commission staff is conducting its review of Risk Management Technical Specifications Initiative 5b, Surveillance Frequency Control Program, which includes the Limerick license amendment request of June 11, 2004, and the Nuclear Energy Institute (NEI) proposed process methodology document NEI 04-10. Enclosed are the final set of staff comments and requests for additional information (RAIs) (see Enclosure) resulting from its review of the initial submittals.

We are prepared to meet with you to further discuss these comments and RAIs. Please contact Bob Tjader at (301) 415-1187 or e-mail [trt@nrc.gov](mailto:trt@nrc.gov) if you have any questions or need further information on these proposed changes.

Sincerely,

*/RA/*

Timothy J. Kobetz, Chief  
Technical Specifications Branch  
Division of Inspection & Regional Support  
Office of Nuclear Reactor Regulation

Enclosure:  
As stated

cc: See attached page

June 6, 2006

Mr. Biff Bradley  
Nuclear Energy Institute  
Suite 400  
1776 I Street, NW  
Washington, DC 20006-3708

Mr. Michael P. Gallagher  
Director, Licensing & Regulatory Affairs  
Exelon Nuclear  
200 Exelon Way  
Kennett Square, PA 19348

Dear Mr. Bradley and Mr. Gallagher:

The Nuclear Regulatory Commission (NRC) staff is conducting its review of Risk Management Technical Specifications (RMTS) Initiative 5b, Surveillance Frequency Control Program, which includes the Limerick license amendment request (LAR) of June 11, 2004, and the Nuclear Energy Institute (NEI) proposed process methodology document NEI 04-10. Enclosed are the final set of staff comments and requests for additional information (RAIs) (see Enclosure) resulting from its review of the initial submittals.

We are prepared to meet with you to further discuss these comments and RAIs. Please contact me at (301) 415-1187 or e-mail [trt@nrc.gov](mailto:trt@nrc.gov) if you have any questions or need further information on these proposed changes.

Sincerely,

Timothy J. Kobetz, Chief  
Technical Specifications Branch  
Division of Inspection & Regional Support  
Office of Nuclear Reactor Regulation

Enclosure:  
As stated

cc: See attached page

DISTRIBUTION:  
See next page

ADAMS ACCESSION NUMBER: ML061520205

OFFICE	ITSB/DIRS	EEEEB/DE	ITSB/DIRS	
NAME	TRTjader	GAWilson	TJKobetz	
DATE	6/2/06	6/6/06	6/6/06	

**OFFICIAL RECORD COPY**

Letter to Mr. Biff Bradley and M. Gallagher from T.J. Kobetz dated:

cc via e-mail:

Mr. Tony Pietrangelo  
Nuclear Energy Institute  
[arp@nei.org](mailto:arp@nei.org)

Mr. Biff Bradley  
Nuclear Energy Institute  
[reb@nei.org](mailto:reb@nei.org)

Mr. Mike Schoppman  
Nuclear Energy Institute  
[mas@nei.org](mailto:mas@nei.org)

Mr. Alan Hackerott, Chairman  
Omaha Public Power District  
[hhackerott@oppd.com](mailto:hhackerott@oppd.com)

Mr. Ray Schneider  
Westinghouse Electric Company  
[raymond.e.schneider@us.westinghouse.com](mailto:raymond.e.schneider@us.westinghouse.com)

Mr. Jim Kenny  
Pennsylvania Power & Light Company  
[jimkenny@pploweb.com](mailto:jimkenny@pploweb.com)

Mr. James Andrachek  
Westinghouse Electric Company  
[Andracjd@westinghouse.com](mailto:Andracjd@westinghouse.com)

Mr. John Gaertner  
EPRI  
[jgaertner@erpi.com](mailto:jgaertner@erpi.com)

Mr. Frank Rahn  
EPRI  
[frahn@epri.com](mailto:frahn@epri.com)

Mr. Gabe Salamon  
NMC  
[gabor.salamon@nmcco.com](mailto:gabor.salamon@nmcco.com)

Mr. Glenn Stewart  
Exelon  
[glenn.stewart@exeloncorp.com](mailto:glenn.stewart@exeloncorp.com)

Mr. Michael S. Kitlan, Jr.  
Duke Energy Corporation  
[mskitlan@duke-energy.com](mailto:mskitlan@duke-energy.com)

Mr. Donald Hoffman  
EXCEL Services Corporation  
[donaldh@excelservices.com](mailto:donaldh@excelservices.com)

Mr. Wayne Harrison  
STP  
[awharrison@stpegs.com](mailto:awharrison@stpegs.com)

Mr. Jerry Andre  
Westinghouse Electric Company  
[Adykes@absconsulting.com](mailto:Adykes@absconsulting.com)

Mr. Eugene Kelly  
Exelon  
[eugene.kelly@exeloncorp.com](mailto:eugene.kelly@exeloncorp.com)

Mr. Andrew Dykes  
ABSC  
[Adykes@absconsulting.com](mailto:Adykes@absconsulting.com)

Mr. Courtney Smyth  
PSEG Nuclear LLC  
[courtneysmyth@pseg.com](mailto:courtneysmyth@pseg.com)

Mr. Gary Chung  
SCE-SONGS  
[gary.chung@songs.sce.com](mailto:gary.chung@songs.sce.com)

Letter to: Mr. Bradley and Mr. Gallager, by T.J. Kobetz Dated:

DISTRIBUTION:

ADAMS

PUBLIC

TSS R/F

TSS Staff

RidsNrrDIRS

RidsNrrAdro

RidsNrrDss

RidsNrrDssSbpb

RidsNrrDssSbwb

RidsNrrDra

RidsNrrDrp

RidsNrrDnrl

RidsNrrDorl

RidsNrrDir

RidsNrrDe

RidsOgcRp

RidsAcrcAcnwMailCenter

NSaltos (NTS)

MLWohl (MLW1)

GSShukla (GSS)

FMReinhart (FMR)

DGHarrison (DGH)

CKDoutt (CKD)]

DFThatcher (DFT)

PFPrescott (PFP)

KCoyne (KXC)

MDrouin (MXD)

MCThadani (MCT)

GWMorris (GWM2)

YGHsii (YGH)

DHShum (DHS)

GWParry (GWP)

ABWang (ABW)

BMPham (BMP)

AJHowe (AJH1)

TWAlexion (TWA)

MAStutzkie (MAS7)

DHJaffe (DHJ)

LAMrowca (LXM4)

JSKim (JSK)

GAWilson (GAW1)

METonacci (MET)

**REQUEST FOR ADDITIONAL INFORMATION  
RELOCATE SURVEILLANCE TEST FREQUENCIES  
FROM THE BODY OF THE TECHNICAL SPECIFICATIONS AND  
PLACE THEM INTO A RISK BASED OWNER CONTROLLED PROGRAM**

RAI 1      Integrated Decision Making Panel (Expert Panel) Review of Surveillance Frequencies Based on Codes and Standards

Provide deterministic criteria in the basis document that would be used to approve revisions to surveillance frequencies that are based upon approved Codes and Standards.

A critical attribute for any calibration or surveillance test is the interval between calibrations or tests. Many of the present surveillances, surveillance test intervals, and acceptance criteria were established over a 40 year history of industry consensus standards and regulatory endorsement through the regulatory guide processes. The guidance in RG 1.174 states that sufficient safety margins are maintained when codes and standards (e.g., American Society of Mechanical Engineers (ASME), Institute of Electrical and Electronic Engineers (IEEE) or alternatives approved for use by the Nuclear Regulatory Commission (NRC) are met.

The current draft of the methodology document recognizes that Codes and Standards help maintain safety margins but does not contain criteria for revising surveillance frequencies. The importance of recognizing requirements based on codes and standards is demonstrated by an example evaluation included with the Limerick pilot plant request (STI#4). The example indicated the Expert Panel determined there were no codes or standards associated with the Limerick emergency diesel generator (EDG) surveillance test frequencies. However the EDG surveillances are directly mentioned in IEEE Std.- 387, "Standard Criteria for Diesel-Generator Units Applied as Standby Power Supplies for Nuclear Power Generating Stations." Refer to attached Table 1.

RAI 2      Technical Specification Surveillance Frequencies vs Acceptance Criteria

Provide deterministic criteria in the basis document to address whether more conservative acceptance criteria will be necessary for an extended surveillance frequency. Specifically, discuss when a surveillance frequency extension would require a change in the acceptance criteria, such as the as-found and as-left allowable values.

RAI 3      Monitoring for Conditioning/Exercising

Provide deterministic criteria in the basis document that evaluates the degree that a surveillance provides a conditioning exercise to maintain equipment operability, prior to changing the surveillance frequency.

Many surveillances exercise safety-related components and supporting systems on a periodic basis. This periodic exercise of the components provide a measure of conditioning, such as lubrication of bearings and electro-pneumatic relays, or electrical contact wiping (cleaning) of built-up oxidation.

Enclosure

RAI 4          Controls on the Time of Permitted Surveillance Frequency Extensions

Provide deterministic criteria in the basis document of a minimum number of surveillance intervals that would be required to establish a database to further extend a previously extended surveillance frequency.

RAI 5          Monitoring Criteria For Returning to the Original Surveillance Frequency

Provide deterministic criteria in the basis document that describes how monitoring and feedback of a surveillance with an extended frequency would result in a return to the original frequency when the number of surveillance test failures are determined to be too many.

**TABLE 1**

**A Comparison of Selected Limerick Technical Specifications for  
the Emergency Diesel Generators to  
IEEE Standards and NRC Regulatory Guides**

<b>Emergency Diesel Generator Surveillances</b>			
	Limerick Tech Spec 4.8.1.1.x.x.x.	IEEE-387-1995 Section 7.5.x	Reg Guide 1.9 Endorses 387-1984
Monthly Interval Availability Tests			
Start	2.a.4	7.5.1	2.2.1
Load Run	2.a.5	7.5.2	2.2.2
Six Month Availability Tests			
Fast Start and Load	2.h	7.5.3	2.2.3
Shutdown/Refueling Outage Interval System Operation Tests			
LOOP	2.e.4	7.5.4	2.2.4
ECCS Actuation	2.e.5	7.5.5	2.2.5
Combined ECCS and LOOP	2.e.6	7.5.6	2.2.6
Largest Load Reject	2.e.2	7.5.7	2.2.7
Design Load Reject	2.e.3	7.5.8	2.2.8
Endurance and Load	2.e.8.a	7.5.9	2.2.9
Hot Restart	2.e.8.b	7.5.10	2.2.10
Synchronizing	2.e.10	7.5.11	2.2.11
Protective Trip Bypass	2.e.7	7.5.12	2.2.12
Test Mode Override	2.e.11	7.5.13	2.2.13
10 Year Interval Division Independence			
Independence	2.f	7.5.14	2.2.14