



RULES AND DIRECTIVES
BRANCH
USNRC

Entergy Nuclear Northeast
Entergy Nuclear Operations, Inc.
440 Hamilton Ave.
White Plains, NY 10601-1813

2005 JUN 21 PM 12:16

RECEIVED

June 13, 2005
ENOC-05-001
CNRO-2005-00032

Chief, Rules and Directives Branch,
Division of Administrative Services
Office of Administration
U.S. Nuclear Regulatory Commission
Mail Stop T6-D59
Washington, D.C. 20555-0001

4/12/05

70 FR 19125

9

Subject: **Comments Regarding Draft NRC Generic Letter
2005-XX: Grid Reliability and the Impact on Plant
Risk and the Operability of Offsite Power**

Reference: 1. Federal Register, Vol. 70, No. 69, dated April 12, 2005, page 19125

Dear Sir or Madam:

Entergy Nuclear (Entergy) respectfully submits comments regarding "Draft NRC Generic Letter 2005-XX: Grid Reliability and the Impact on Plant Risk and the Operability of Offsite Power" contained in the Federal Register Notice dated April 12, 2005 (Reference 1).

Entergy has reviewed and provided input to the Nuclear Energy Institute's (NEI) letter on the aforementioned Federal Register Notice and generally supports NEI's position on this issue.

Entergy believes that INPO SOER 99-1, Addendum, addresses the issues associated with the deregulation of the power industry and many of the issues described in the NRC draft Generic Letter (GL). It appears that the draft GL is a duplication of a process that was already in progress in the industry (nuclear generators and transmission authorities) well before the August 14th blackout. The nuclear generating industry and the national and regional transmission organizations have been working together to develop and issue a North American Electric Reliability Council (NERC) standard which will address special operating requirements of the nuclear generators. Therefore, Entergy believes that the additional effort requested by the draft GL is unnecessary. Specific comments regarding the draft GL are provided in Attachment 1.

EREDS = ADM-03

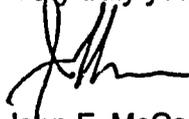
add = A. Markley
(AWM)

SESP Review Complete

Template = ADM-013

There are no commitments contained in this letter. If you have any questions, please contact Ms. Charlene Faison at 914-272-3378.

Very truly yours,



John F. McCann
Director, Nuclear Licensing
Entergy Nuclear Operations, Inc.

Attachment 1: As stated

cc: Next page

cc:

Mr. Samuel J. Collins
Regional Administrator, Region I
U.S. Nuclear Regulatory Commission
475 Allendale Road
King of Prussia, PA 19406

Resident Inspector's Office
Indian Point Unit 3 Nuclear Power Plant
U.S. Nuclear Regulatory Commission
P.O. Box 337
Buchanan, NY 10511

Senior Resident Inspector's Office
James A. FitzPatrick Nuclear Power Plant
U.S. Nuclear Regulatory Commission
P.O. Box 136
Lycoming, NY 13093

Mr. John Boska, Project Manager
Project Directorate I
Division of Licensing Project Management
Office of Nuclear Reactor Regulation
U.S. Nuclear Regulatory Commission
Mail Stop O-8-B1
Washington, DC 20555

USNRC Resident Inspector
Vermont Yankee Nuclear Power Station
320 Governor Hunt Road
P.O. Box 157
Vernon, Vermont 05354

Senior Resident Inspector's Office
Indian Point Unit 2 Nuclear Power Plant
U.S. Nuclear Regulatory Commission
P.O. Box 59
Buchanan, NY 10511

Mr. David O'Brien, Commissioner
Department of Public Service
112 State Street – Drawer 20
Montpelier, VT 05620

Senior Resident Inspector's Office
Pilgrim Nuclear Power Station
U.S. Nuclear Regulatory Commission
600 Rocky Hill Road – Mail stop 66
Plymouth, MA 02360

Mr. Richard Ennis, Project Manager
Project Directorate I
Division of Licensing Project Management
Office of Nuclear Reactor Regulation
U.S. Nuclear Regulatory Commission
Mail Stop O-8-B1
Washington, DC 20555

Mr. James J. Shea, Project Manager
Project Directorate I
Division of Licensing Project Management
Office of Nuclear Reactor Regulation
U.S. Nuclear Regulatory Commission
Mail Stop O-8-B1
Washington, DC 20555

Mr. Peter Smith
President
NYSERDA
17 Columbia Circle
Albany, NY 12203

Mr. Paul Eddy
NYS Department of Public Service
3 Empire State Plaza
Albany, NY 12223

cc: Continued

Dr. Bruce S. Mallet, Regional Administrator
U. S. Nuclear Regulatory Commission
Region IV
611 Ryan Plaza Drive, Suite 400
Arlington, TX 76011-8064

NRC Senior Resident Inspector
Arkansas Nuclear One
P. O. Box 310
London, AR 72847

U. S. Nuclear Regulatory Commission
Attn: Mr. Thomas W. Alexion
MS O-7 D1
Washington, DC 20555-0001

U. S. Nuclear Regulatory Commission
Attn: Mr. Drew Holland
MS O-7 D1
Washington, DC 20555-0001

U. S. Nuclear Regulatory Commission
Attn: Mr. Bhalchandra Vaidya
MS O-7D1
Washington, DC 20555-0001

NRC Senior Resident Inspector
P. O. Box 1050
St. Francisville, LA 70775

U.S. Nuclear Regulatory Commission
Attn: Mr. Michael K. Webb
MS O-7D1
Washington, DC 20555-0001

U.S. Nuclear Regulatory Commission
Attn: Mr. Nageswaran Kalyanam
MS O-7D1
Washington, DC 20555-0001

NRC Senior Resident Inspector
Waterford 3
P.O. Box 822
Killona, LA 70066-0751

Mr. T. L. Hoeg, GGNS Senior Resident

ATTACHMENT 1

**Comments Regarding Draft NRC Generic Letter
2005-XX: Grid Reliability and the Impact on Plant
Risk and the Operability of Offsite Power**

ENERGY NUCLEAR

Attachment 1

Comments Regarding Draft NRC Generic Letter 2005-XX: Grid Reliability and the Impact on Plant Risk and the Operability of Offsite Power

Entergy Nuclear's (Entergy) comments regarding draft NRC "Generic Letter 2005XX: Grid Reliability and the Impact on Plant Risk and the Operability of Offsite Power", are provided below:

1. Several of the questions regarding compliance with GDC 17 are unclear. GDC 17 establishes design requirements in part to minimize the potential for a loss of an offsite power source as a result of a loss of plant generation (i.e., a plant trip). However, the questions refer to formal agreements, procedures, and communication protocols rather than to specific design attributes. For example, Question 1 of the draft Generic Letter (GL) states, "If you do not have a formal agreement with your TSO, please describe why you believe you comply with the provisions of GDC 17 as stated above..." A clear distinction between plant's design and licensing basis and programmatic operational controls should be maintained. Compliance with design criteria is already addressed in plant FSARs.
2. The terms "levels of contingencies" and "various contingencies" are used in the draft GL. These terms are used in the draft GL without a standard definition. To avoid confusion, the terms "levels of contingencies" and "various contingencies" needs to be defined in the GL.
3. The information being requested regarding GDC 17, SBO, and maintenance rule will take a considerable amount of time to gather, especially for licensees that have multiple plants. Therefore, the time to respond to the GL should be changed to 120 days.
4. Overall, the flow and format of the draft GL could be streamlined. Questions 1-9 generally require a description of operational programs and plant capabilities followed by a series of questions intended to explain the scope of the response expected. If all of the questions are expected to be addressed, it would be helpful to number each question. For example, Question 2 contains approximately 11 sub-questions which could be labeled 2 a) through 2 k) to facilitate standard binning of information and ensure more complete responses.

5. GDC 17 states "An onsite electric power system and an offsite electric power system shall be provided to permit functioning of structures, systems, and components important to safety. The safety function for each system (assuming the other system is not functioning) shall be to provide sufficient capacity and capability to assure that (1) specified acceptable fuel design limits and design conditions of the reactor coolant pressure boundary are not exceeded as a result of anticipated operational occurrences and (2) the core is cooled and containment integrity and other vital functions are maintained in the event of postulated accidents.

The onsite electric power supplies, including the batteries, and the onsite electric distribution system, shall have sufficient independence, redundancy, and testability to perform their safety functions assuming a single failure.

Electric power from the transmission network to the onsite electric distribution system shall be supplied by two physically independent circuits (not necessarily on separate rights of way) designed and located so as to minimize to the extent practical the likelihood of their simultaneous failure under operating and postulated accident and environmental conditions." [i.e., not single failure proof] "A switchyard common to both circuits is acceptable. Each of these circuits shall be designed to be available in sufficient time following a loss of all onsite alternating current power supplies and the other offsite electric power circuit, to assure that specified acceptable fuel design limits and design conditions of the reactor coolant pressure boundary are not exceeded. **One of these circuits shall be designed to be available within a few seconds following a loss-of-coolant accident** to assure that core cooling, containment integrity, and other vital safety functions are maintained.

Provisions shall be included to minimize the probability of losing electric power from any of the remaining supplies as a result of, or coincident with, the loss of power generated by the nuclear power unit, the loss of power from the transmission network, or the loss of power from the on-site electric power supplies." (Emphasis added)

Minimizing the probability of losing electric power from either off-site or on-site circuits after trip of the nuclear unit, as required by GDC 17, is a less demanding standard than the one the draft GL appears to be trying to impose; "The loss of power generated by the nuclear power unit (trip) is an anticipated operational occurrence. It is therefore necessary that the offsite power circuits be designed to be available following a trip of the unit in order to permit the functioning of SSCs necessary to respond to the event." GDC 17 allows a several second delay in availability of the one line which it requires to be sized to handle loss of coolant accident (LOCA) loads and is silent with respect to the amount of time allowed for complete recovery of the second line. The draft GL does not appear to be in agreement with GDC 17, by implying the off-site power circuits must be available immediately following a trip.

6. Under the heading "*Losses of offsite power caused by grid failures at a frequency of ≥ 20 years in accordance with 10 CFR 50.63 as developed in Table 4 of Regulatory Guide 1.155*", the draft GL states:

"The data collected in accordance with TI2515/156 indicate that some nuclear power plants have experienced grid-related LOOP events since the nuclear power plants were initially analyzed in accordance with the criteria in RG 1.155. The staff is concerned that these nuclear power plants have not been reanalyzed to determine whether their SBO coping durations remain consistent with the guidance in RG 1.155 subsequent to these LOOP events. The staff is also concerned that some plants may be inappropriately eliminating some of these grid events from their operating experience data base. "

The definition of LOOP is inconsistent. Some events, such as the August, 2003 blackout clearly caused a risk-significant LOOP event at a number of plants in the Northeast. Other events, that could potentially be classified as LOOP events using some definitions, do not meet the NUREG-1022 definition of a LOOP, for example, as the emergency buses can remain energized even if off-site circuits are denenergized. A LOOP that occurs for a few seconds while a plant has been shut down for some time, probably has little risk significance. The need to count these types of events in determining SBO risk should be evaluated on a case by case basis. Additionally, plants are expected to classify their expected LOOP frequency going forward. Using the historical LOOP frequency may not accurately characterize the future LOOP frequency due to implementation of various lessons learned from past LOOP events. Ensuring that the power grid is more robustly protected against failures that could result in LOOP events may be one of the acceptable means of ensuring compliance with Regulatory Guide 1.155.

7. Entergy believes that INPO SOER 99-1, Addendum, addresses the issues associated with the deregulation of the power industry and many of the issues described in the draft GL. It appears that the draft GL is a duplication of a process that was already in progress in the industry (nuclear generators and transmission authorities) well before the August 14th blackout. The nuclear generating industry and the national and regional transmission organizations have been working together to develop and issue a North American Electric Reliability Council (NERC) standard which will address special operating requirements of the nuclear generators. Therefore, Entergy believes that the additional effort requested by the draft GL is unnecessary.