

1/18/2011
76 FR 2924



11

MAR 18 2011

L-2011-094

RECEIVED

2011 MAR 21 PM 3:54

RULES AND DIRECTIVES

Ms. Cindy Bladey
Chief, Rules, Announcements and Directives Branch (RADB)
Division of Administrative Services
Office of Administration
Mail Stop: TWB-05-B01M
U.S. Nuclear Regulatory Commission
Washington, DC 20555-0001

Subject: Industry Comments on Draft Regulatory Issue Summary, "Adequacy of Station Electric Distribution System Voltages" (Docket ID NRC-2011-0013)

Florida Power and Light Company, the licensee for the St. Lucie Nuclear Plant, Units 1 and 2, and the Turkey Point Nuclear Plant, Units 3 and 4, (hereafter referred to as FPL) and its affiliates, NextEra Energy Seabrook, LLC (NextEra Energy Seabrook) the licensee for Seabrook Station; NextEra Energy Duane Arnold, LLC (NextEra Energy Duane Arnold), the licensee for Duane Arnold Energy Center; and NextEra Energy Point Beach, LLC (NextEra Energy Point Beach), the licensee for Point Beach Nuclear Plant, Units 1 and 2 (collectively referred to as NextEra Energy), appreciates the opportunity to comment on the above listed document, contained in NRC Docket ID NRC-2011-0013.

FPL and NextEra Energy endorse the comments provided by the Nuclear Energy Institute (NEI) and IEEE/Nuclear Power Engineering Committee (NPEC), Subcommittee 4. In addition, we re-highlight NEI's offered comment that the draft RIS greatly oversimplifies the regulatory and licensing aspects of the degraded voltage protection issue. As a result of this oversimplification, the draft RIS combines several generic communications and guidance documents that have affected the licensing bases of individual plants in different ways. Any efforts to standardize the varied approaches to providing protection in the event of a degraded grid voltage condition that are currently captured in the licensing bases of our individual plants should be undertaken in a manner that considers the overall safety impact of the proposed changes.

Sincerely,

Larry Nicholson
Director, Nuclear Licensing
NextEra Energy (FPL)

Enclosure: Attachment, FPL/NextEra Comments on RIS 2011-xx

NextEra Energy, Inc.

700 Universe Boulevard, Juno Beach, FL 33408

F-RIS = ADH-03

SUNSI Review Complete
Template = ADH-013

add = K. Miller (Kam 4)

Comments on RIS 2011-xx Distribution System Voltages

ID	Section, Page, and Line #	Comment	Proposed Resolution
1	Pg 6 of 10, DVR Setting Design Calculations, Line 8	This paragraph could be interpreted to require the LOCA sequence to be modeled at the DVR dropout setting. LOCA sequencing modeled at the DVR dropout setting would result in separation of the buses from the Preferred Power Source (off-site power) as the voltage would not recover above the DVR reset value.	<p>Clarify the intent is to show safety related equipment will function at the selected DVR dropout setting voltage and that it is not expected to start the LOCA sequence from this voltage level.</p> <p>Clarify that LOCA sequencing is evaluated using minimum switchyard voltage as starting point.</p>
2	Page 6 Degraded Voltage Relaying Design Calculations. Line 10 to 13	Having a sustained degraded voltage just above the LVR voltage setting (70%) is not practical without grid collapse and does not exist in Branch Technical Position #1 (PSB-1).	Clarify degraded voltages to be analyzed to a credible level.
3	Pg 6 of 10, DVR Setting Design Calculations, Line 12	The statement that the DVR ensures adequate operational (starting and running) is the first time in NRC correspondence that starting equipment at the DVR setpoint is expected. The example letter sent to Peach Bottom in June 1977 did not require starting of equipment at the DVR setpoint. This requirement should be removed from the RIS since it is not possible to start equipment at the DVR setpoint and not subsequently separate from offsite power. If the equipment starts at the DVR setpoint, the voltage will dip during the transient and must then recover above the reset point to avoid separation from offsite power. Since the reset point will always be above the DVR dropout point it will be impossible to reset the relay.	Remove starting of equipment at the DVR setpoint as a requirement.
4	Pg 7 of 10, DVR Setting Design Calcs Line 2	It is agreed that no credit is to be taken for voltage controlling equipment external to the Class 1E distribution system for the establishing the degraded voltage relay (DVR) settings; however, it should be clarified that for credit may be taken for minimum switchyard voltage/voltage drop calculations (or the Offsite/Onsite Design Interface Calculations).	Clarify that credit may be taken for automatic load tap changers and/or capacitor banks for minimum switchyard voltage/voltage drop calculations (or the Offsite/Onsite Design Interface Calculations).

Comments on RIS 2011-xx Distribution System Voltages

ID	Section, Page, and Line #	Comment	Proposed Resolution
5	Pg 8 of 10 SUMMARY OF ISSUES: Item 2 "Offsite/Onsite Design Interface Calculations", Subclause (c).	<p>NRC Generic Letter 79-36, Enclosure 2, Item 2 states that <i>"For multi-unit stations a separate analysis should be performed for each unit assuming (1) an accident in the unit being analyzed and simultaneous shutdown of all other units at the station; or (2) an anticipated transient in the unit being analyzed (e.g., unit trip) and simultaneous shutdown of all other units at that station, whichever presents the largest load situation."</i></p> <p><u>Comment:</u> NRC Draft RIS re-states NRC GL 79-36 verbatim, with an attempt to clarify <i>"anticipated transient"</i> by adding in parenthesis <i>"(anticipated operational occurrence)"</i> immediately afterwards. It is not clear what the added parenthetical statement is meant to convey, other than unit trip (which already exists in GL 79-36).</p>	It is recommended that this either be removed, or stated <i>"anticipated transient per station licensing basis"</i> .
6	Pg 8 of 10 SUMMARY OF ISSUES: Item 2 "Offsite/Onsite Design Interface Calculations", Subclause (c).	<p>NRC should clarify "simultaneous shutdown" with consideration to:</p> <ul style="list-style-type: none"> • Most multi-unit station's Licensing Basis consider an "orderly or controlled safe shutdown" of the other unit(s) not being analyzed. • NERC Std TPL-004-0; particularly Category D events per Table 1, where a <i>"loss of all generating units at a station"</i> may result in <i>"portions or all of the interconnected systems may or may not achieve a new, stable operating point"</i>. • IEEE Std 308-1974, Clause 8, subclause 8.1.1 <i>"Capacity"</i> describes this as a "concurrent safe shutdown on the remaining units". 	The wording for the proposed RIS, subclause 2.c should be revised to indicate "orderly or controlled safe shutdown of the remaining units, as per the station's licensing basis" instead of "simultaneous shutdown". Alternatively, the wording "shutdown consistent with the station licensing basis" could be used instead of "simultaneous shutdown".
7	Section 2, pg 8 of 10, e) and f)	These guidelines seem contradictory that you cannot credit procedurally controlled operator actions to reduce load but you have to assume the actions will be carried out when load is added.	Delete "e) Manual load shedding should not be assumed" or add allowance to credit procedurally controlled operator actions to decrease load.