



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

February 21, 2013

LICENSEES: Constellation Energy Nuclear Group LLC
R. E. Ginna Nuclear Power Plant LLC

FACILITIES: R. E. Ginna Nuclear Power Plant

SUBJECT: SUMMARY OF JANUARY 29, 2013, CATEGORY 1 MEETING WITH
CONSTELLATION ENERGY NUCLEAR GROUP – REGARDING PROPOSED
DIVERSE AND FLEXIBLE COPING STRATEGIES (FLEX) REFLECTING
PLANT UNIQUE FEATURES OF R. E. GINNA NUCLEAR POWER PLANT.

On January 29, 2013, the U.S. Nuclear Regulatory Commission (NRC) staff held a public meeting with representatives of Constellation Energy Nuclear Group LLC, the licensee for R. E. Ginna Nuclear Power Plant (Ginna), at NRC Headquarters, One White Flint North, 11555 Rockville Pike, Rockville, MD. The purpose of the meeting was to discuss the licensee's Diverse and Flexible Coping Strategies (FLEX) for Ginna. Enclosure 1 provides the list of attendees.

The licensee stated that Nuclear Energy Institute (NEI) guidance 12-06 and NRC Order EA-12-049 describe adoption of a phased approach to coping with an Extended Loss of AC Power (ELAP) event. It is assumed that mitigation of the event will transition from installed Ginna plant equipment to on-site (FLEX equipment). Presently, Ginna has some existing equipment on site previously installed to address external events. The licensee is also planning installation of several additional equipments, and provides alternate power configurations for existing installed plant equipment to meet the functional requirements for core cooling, containment cooling, and spent fuel pool cooling. Portions of these modifications incorporate performance requirements to benefit the NPFA-805 project and achieve risk reduction associated with the existing Turbine Driven Auxiliary Feedwater System. The licensee is performing significant enhancements to these modifications to ensure that the equipment is protected from extreme external events and can be credited as a portion of both the Phase 1 and Phase 2 FLEX strategies. The conceptual design includes a combination of installed and connected, installed and isolated, and uninstalled/portable equipment.

The licensee requested the NRC staff's feedback on how it intends to credit the existing installed equipment and the proposed new installed equipment as part of its mitigating strategies. Although the licensee's plans provide a measure of protection above what is required by NEI 12-06, the licensee has determined that its proposed strategy sufficiently deviates from its understanding of how a majority of the industry members intend to address these mitigating strategies to justify seeking the NRC staff's feedback.

The licensee's presentation is publicly available as agency document in Agencywide Document Access and Management System (ADAMS) Accession No. ML13030A386.

The licensee stated that the FLEX portion of the strategy includes a combination of the use of existing equipment, the use of newly installed and isolated equipment, and installation of new battery charger capabilities as discussed below.

1. Use of two existing Standby Auxiliary Feedwater (SBAFW) Pumps with a new installed (and isolated) 1000 kW diesel generator and a new installed 160,000 gallon condensate storage tank, both capable of supplying 24 hours of inventory. The initial installed equipment mitigation strategy is to supply, by manual operator action within 30 minutes, condensate from the tank to the pump(s) to either steam generator. The FLEX portion of the strategy would be to use dedicated FLEX pumps to refill the condensate tank from Lake Ontario, and continue to supply the steam generators via the SBAFW pumps. Also, a fuel oil tanker truck would be used to resupply the 1000 kW diesel.
2. A new installed (and isolated) charging pump, powered from the diesel generator identified above, taking suction from a dedicated 10,000 gallon borated water tank will be used. This arrangement would include a discharge line routed through a protected portion of the Auxiliary Building to a newly installed charging line connection. The pump would be manually aligned as required. With the installation of low leakage RCP seals, the timeframe to initiate charging is several hours. The FLEX strategy would be to blend boron and condensate to resupply the borated water tank. Another FLEX portion of the strategy is to use a diesel – driven portable FLEX charging pump, taking suction from the borated tank or the RWST, connected via high pressure hose, to a flanged connection in the charging system.
3. The licensee will install a manual transfer switch and alternate power connection for the AC input on the battery chargers. The preferred source of power will be the new diesel generator (same as identified in #1 above). Connection using pre-identified cables would be performed within the 8 hours that the existing batteries are available for continued operation. A second source of input to the station battery charger(s) would be a portable 100 kW FLEX diesel generator.

All of the equipment described above will be reasonably protected from extreme external natural phenomena. To address the need for tornado protection (Near Term Task Force Tier 3 recommendation), the licensee is using the current licensing basis tornado with a wind speed of 132 mph. The postulated tornado missiles are a steel rod traveling at 60% of the tornado wind speed, and a limited-aerial-height telephone pole traveling at 40% of the tornado wind speed.

At the end of the licensee's presentation, the NRC staff commented that the licensee had proposed a good strategy for responding to FLEX requirements as outlined in the NRC Order EA-12-049.

Please direct any inquiries to me at (301) 415-1476 or email mohan.thadani@nrc.gov.

A handwritten signature in black ink, reading "Mohan C. Thadani". The signature is fluid and cursive, with the first name "Mohan" being more prominent.

Mohan C. Thadani, Senior Project Manager
Plant Licensing Branch I-1
Division of Operating Reactor Licensing
Office of Nuclear Reactor Regulation

Docket Nos. 50-244
Enclosure:
List of Attendees

cc w/encl: Distribution via Listserv

LIST OF MEETING ATTENDEES AND BRIDGE LINE PARTICIPANTS

PUBLIC MEETING WITH

CONSTELLATION ENERGY NUCLEAR GROUP LLC

R. E. GINNA NUCLEAR POWER PLANT

JANUARY 29, 2013

<u>NAME</u>	<u>AFFILIATION</u>
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Enclosure

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/ra/

Mohan C. Thadani, Senior Project Manager
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Office of Nuclear Reactor Regulation

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