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December 19, 2008

U. S. Nuclear Regulatory Commission
Washington, DC 20555

ATTENTION: Document Control Desk

SUBJECT: **R.E. Ginna Nuclear Power Plant**
Docket No. 50-244

Application to Revise Technical Specification Limiting Conditions of Operation (LCOs) 3.3.2, 3.3.4, and 3.8.1

Pursuant to 10 CFR 50.90, R.E. Ginna Nuclear Power Plant, LLC (Ginna LLC) hereby requests an amendment to Ginna Renewed Operating License DPR-18. The proposed changes will modify Technical Specification requirements by:

- 1) Revising an error in Table 3.3.2-1 Function 1.a
- 2) Revising the Loss of Power Diesel Generator Start Instrumentation Limiting Safety System Settings (LSSS) in Surveillance Requirement (SR) 3.3.4.2
- 3) Revising the diesel generator load test value in SR 3.8.1.3

In accordance with 10 CFR 50.91(a)(1), Ginna LLC has performed a No Significant Hazards Consideration analysis. Ginna LLC has concluded that the changes proposed by this license amendment request present no significant hazards consideration under the standards set forth in 10 CFR 50.92(c), and, accordingly, a finding of "no significant hazards consideration" is justified.

The enclosure to this letter provides descriptions and assessments of the proposed changes. An attachment to the enclosure provides the existing Technical Specification pages marked up to show the proposed changes. There are no additional commitments associated with any of these amendment requests.

These proposed changes to the Technical Specifications and our determination of no significant hazards have been reviewed by our Plant Operation Review Committee (PORC), and they have concluded that implementation of these changes will not result in an undue risk to the health and safety of the public.

Approval of the proposed amendment is requested by December 18, 2009. Once approved, this amendment will be implemented within 60 days.

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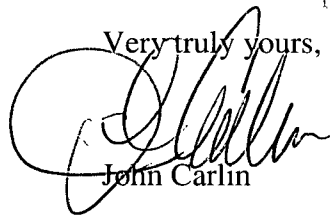
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In accordance with 10 CFR 50.91(b)(1), a copy of this amendment application is being provided to the designated New York State official.

Should you have questions regarding the information in this submittal, please contact Mr. David Wilson at (585) 771-5219 or at David.F.Wilson@Constellation.com.


Very truly yours,

A handwritten signature in black ink, appearing to read "John Carlin", is written over the typed name. The signature is fluid and cursive, with a large initial "J" and "C".

John Carlin

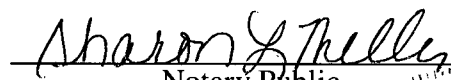
STATE OF NEW YORK :
: **TO WIT:**
COUNTY OF WAYNE :

I, John Carlin, being duly sworn, state that I am Vice President, R.E. Ginna Nuclear Power Plant, LLC (Ginna LLC), and that I am duly authorized to execute and file this request on behalf of Ginna LLC. To the best of my knowledge and belief, the statements contained in this document are true and correct. To the extent that these statements are not based on my personal knowledge, they are based upon information provided by other Ginna LLC employees and/or consultants. Such information has been reviewed in accordance with company practice and I believe it to be reliable.



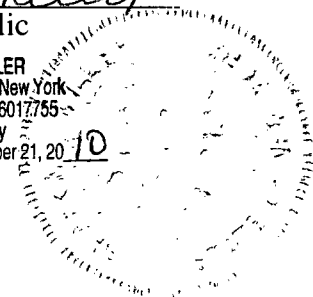
Subscribed and sworn before me, a Notary Public in and for the State of New York and County of Monroe, this 19 day of December, 2008.

WITNESS my Hand and Notarial Seal:



Notary Public

SHARON L. MILLER
Notary Public, State of New York
Registration No. 01M16017755
Monroe County
Commission Expires December 21, 20 10



My Commission Expires:

12-21-10
Date

Enclosure: Evaluation of Proposed Changes

- cc: S. J. Collins, NRC – Attachments 2 through 7 on CD
D. V. Pickett, NRC – Attachments 2 through 7 on CD
Resident Inspector, NRC (Ginna) – Attachments 2 through 7 on CD
P.D. Eddy, NYSDPS – Attachments 2 through 7 on CD
J. P. Spath, NYSERDA – Attachments 2 through 7 on CD

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ATTACHMENTS

- 1. Proposed Technical Specification (TS) Changes (Mark-up)
- 2. DA-EE-93-006-08 "Instrument Performance Evaluation and Setpoint Verification: Undervoltage Relays and Voltmeters on 480V Safeguards Busses"
- 3. DA-EE-96-068-03 "Offsite Power Load Flow Study"
- 4. DA-EE-92-098-01 "Diesel Generator A Steady State Loading Analysis"
- 5. DA-EE-92-120-01 "Diesel Generator B Steady State Loading Analysis"
- 6. Calculation Change Notice 2007-0034 for DA-EE-92-098-01 "Diesel Generator A Steady State Loading Analysis"
- 7. Calculation Change Notice 2007-0033 for DA-EE-92-120-01 "Diesel Generator B Steady State Loading Analysis"

1.0 SUMMARY DESCRIPTION

This evaluation supports a request to amend Operating License DPR-18 for the R.E. Ginna Nuclear Power Plant.

The proposed three changes (Attachment 1) would revise the Operating License to:

- 1) Correct an error in Technical Specification (TS) Table 3.3.2-1 Function 1.a to reflect the correct CONDITIONS for applicable Modes 1, 2, 3 and 4.
- 2) Revise TS Limiting Condition of Operation (LCO) 3.3.4 degraded voltage relay and loss of voltage relay Limiting Safety System Settings (LSSS) values to reflect the revised analysis.
- 3) Revise the load requirement of Surveillance Requirement (SR) 3.8.1.3 to reflect values supported by the diesel generator accident loading analyses.

2.0 DETAILED DESCRIPTION

2.1 LCO 3.3.2

Amendment 85 to Ginna's TSs (Reference 1) contained an administrative error. Function 1.a of Table 3.3.2-1, Safety Injection Manual Initiation, was changed at that time to include Mode 4 but no commensurate change was made in the Required Actions. The Required Actions left in place a requirement to proceed to Mode 4 if the required safety injection manual initiation instrumentation cannot be restored. This does not satisfy the LCO, which requires manual safety injection initiation to be operable in Mode 4.

Table 3.3.2-1 of the Ginna TS lists the requirements for Engineered Safety Feature (ESF) Actuation Instrumentation in Mode 1 through Mode 5 and for the various conditions described in LCO 3.3.2. Function 1.a lists applicable conditions "D" (which requires restoring the channel to operable within 48 hours) and "G" (which, if conditions of D, E, or F cannot be met requires entering Mode 3 in 6 hours and Mode 4 in 12 hours).

The proposed change would alter the conditions specified for Function 1.a of Table 3.3.2-1 from "D" and "G" to "H" (restore the channel to operable within 48 hours) and "K" (if Required Action and associated completion time of Condition H, I, or J are not met enter Mode 3 within 6 hours and enter Mode 5 within 36 hours).

2.2 LCO 3.3.4

This proposed change to LCO 3.3.4 revises the LSSS values for the Loss of Power (LOP) Diesel Generator (DG) Start Instrumentation to be consistent with Ginna's revised analysis, DA-EE-93-006-08, "Instrument Performance Evaluation and Setpoint Verification: Undervoltage Relays and Voltmeters on 480V Safeguards Busses", and DA-EE-96-068-03, "Offsite Power Load Flow Study" (Attachment 2 and Attachment 3). These new LSSS values are currently being maintained under site administrative controls.

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2.3 LCO 3.8.1

The proposed change LCO 3.8.1 involves an increase in the required diesel generator minimum load value from 1950 kW to 2025 kW for SR 3.8.1.3. This change will ensure that the diesel generators are capable of synchronizing with the offsite electrical system and accepting loads greater than or equivalent to the maximum expected accident loads as determined by DA-EE-92-098-01 "Diesel Generator A Steady State Loading Analysis" and DA-EE-92-120-01, "Diesel Generator B Steady State Loading Analysis" (Attachments 4, 5) and their respective Calculation Change Notices (Attachments 6, 7). This more conservative load value is currently being maintained under site administrative controls.

3.0 TECHNICAL EVALUATION

3.1 LCO 3.3.2

The proposed amendment is administrative in nature and will correct an error created by a previously approved change that was also considered administrative in nature by the NRC. Ginna's TS are currently missing an additional mode constraint requirement necessary for an inoperable safety injection manual initiation pushbutton. The proposed amendment would make Table 3.3.2-1 consistent with other comparable TS in its section. The change that is being proposed will provide for a reasonable and conservative time for exiting the mode of applicability. The change is also conservative because it places the plant in a lower mode for the applicable condition.

3.2 LCO 3.3.4

There are two channels of LOP DG start instrumentation on each 480 Volt safeguards bus. Each channel contains one loss of voltage relay and one degraded voltage relay. A one-out-of-two logic in both channels will cause the following actions on the associated safeguards bus:

- a. Trip of the normal feed breaker from offsite power
- b. Trip of the bus-tie breaker to the opposite electrical train (if closed)
- c. Shed of all bus loads except the containment spray pump, component cooling water pump (if no safety injection signal is present), and safety related motor control centers; and
- d. Start of the associated diesel generator

The degraded voltage logic is provided on each 480V safeguards bus to protect ESF components from exposure to long periods of reduced voltage conditions which can result in degraded performance and to ensure that the required motors start. The loss of voltage logic is provided on each 480V safeguards bus to ensure the diesel generator is started within the time limits assumed in the accident analysis to provide the required electrical power if offsite power is lost.

The degraded voltage relays have time delays which have inverse operating characteristics such that the lower the bus voltage, the faster the operating time. The loss of voltage relays have

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definite time delays, which are set to permit voltage transients during worst case motor starting conditions.

The current TS degraded voltage and loss of voltage relay LSSS required values do not reflect plant design basis requirements as defined in the plant load flow analysis, DA-EE-96-068-03 (Attachment 3). The proposed values are based on the revised Design Analysis DA-EE-93-006-08 (Attachment 2), and are consistent with the methodology previously reviewed in Reference 1.

Ginna's TS formerly listed 414V as the minimum degraded bus voltage. The TS later shifted to LSSS values for degraded voltages, which included both voltage ranges and times. The times currently listed as part of these LSSS values do not provide enough time for the offsite power Load Tap Changers (LTCs) to recover the safeguards bus voltages prior to degraded voltage relay operation. This is not in support of the load analysis DA-EE-96-068-03 (Attachment 3).

DA-EE-93-006-08 (Attachment 2) documents the calculations which determined the new protective relay setpoints set forth in this request. This analysis also provides justification for the changes, demonstrating the proper application of the relays on the 480V safeguards busses, including proper coordination to ensure protection from thermal damage to loads on the 480V busses and coordination with sources of power to the 480V busses.

3.3 LCO 3.8.1

The onsite standby power sources consist of two emergency diesel generators connected to the safeguards buses which provide emergency power in the event all other AC power is lost. The diesel generators are designed to operate following a Design Basis Accident (DBA) or Anticipated Operational Occurrence (AOO) until offsite power can be restored. Each diesel generator consists of an ALCO engine coupled to a Westinghouse 1950-kW (continuous rating), 0.8 power factor, 900 rpm, three-phase, 60-cycle, 480 V generator. In the event of loss of offsite power, or abnormal conditions where offsite power is tripped as a consequence of bus loss of voltage or degraded voltage, the diesel generators automatically start and tie to their respective buses.

Each diesel generator is sized to start and carry the engineered safety features required during worst case accident loading conditions. The new proposed required minimum load value in SR 3.8.1.3, (2025 kW), is well within the diesel generator's extended load ratings of 2300 kW (30-minute rating) and 2250 kW (2 hour rating). The SR limits the surveillance test to less than 120 minutes which ensures that the DG continuous duty ratings are not challenged. The proposed value was chosen to be consistent and bounded by the calculated expected maximum load following a DBA, as determined by Design Analysis DA-EE-92-098-01 (Attachment 4), Calculation Change Notice 2007-0034 (Attachment 6), Design Analysis DA-EE-92-120-01 (Attachment 5), and Calculation Change Notice 2007-0033 (Attachment 7).

4.0 REGULATORY EVALUATION

4.1 Applicable Regulatory Requirements/Criteria

10 CFR 50.36: Section (c)(1)(ii)(A) specifies that: "... Where a limiting safety system setting is specified for a variable on which a safety limit has been placed, the setting must be so chosen that automatic protective action will correct the abnormal situation before a safety limit is exceeded. ..." As such, 10 CFR 50.36 requires that limits for instrument channels that initiate protective functions must be included in the TSs.

GDC 17, Electrical Power Systems, requires, in part, that: "...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) that the core is cooled and containment integrity and other vital functions are maintained in the event of postulated accidents."

GDC 20, Protection Systems Functions, requires, in part, that: "...The protection system shall be designed (1) to initiate automatically the operation of appropriate systems including the reactivity control systems, to assure that specified acceptable fuel design limits are not exceeded as a result of anticipated operational occurrences and (2) to sense accident conditions and to initiate the operation of systems and components important to safety."

4.2 Precedent

None

4.3 Significant Hazards Consideration

R.E. Ginna Nuclear Power Plant, LLC has evaluated whether or not a significant hazards consideration is involved with the proposed amendment by focusing on the three standards set forth in 10 CFR 50.92, "Issuance of amendment," as discussed below:

1. Do the proposed changes involve a significant increase in the probability or consequences of an accident previously evaluated?

Response: No

The proposed changes to LCO 3.3.2 correct an administrative error which directed inadequate action in the event that a channel of instrumentation is lost for manual safety injection initiation. The amendment places the plant in a more conservative condition, Mode 5, if the other Required Actions cannot be executed within their periodicity.

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The proposed changes to LCO 3.3.4 provide setpoint changes based on a revised calculation, which generated new setpoints for the loss of voltage relays and degraded voltage relays. The new setpoints ensure the protective relays will function when required, will ensure protection from thermal damage to loads on the 480V busses, and will not cause unintended diesel generator starts even in worst case scenarios, with power provided from offsite.

The proposed changes to LCO 3.8.1 involve an increase in the minimum load band value for diesel generator surveillance SR 3.8.1.3. This change ensures that the diesel generators are capable of synchronizing with the offsite electrical system and accepting loads greater than or equal the equivalent of the maximum expected accident loads. The new load band value is more conservative than the existing value and provides a more thorough test to ensure equipment emergency response capability.

Therefore, the probability or consequences of an accident previously evaluated will not be significantly increased.

2. Do the proposed amendments create the possibility of a new or different kind of accident from any accident previously evaluated?

Response: No

The proposed changes involve correcting an administrative error and revising previously established values associated with the diesel generators to increase conservatism. None of these proposed changes involve a physical alteration of the plant (i.e., no new or different types of equipment will be installed) or a change in methods governing normal plant operation. The proposed changes preserve the safety analysis assumptions related to accident mitigation. No initiators or accident precursors are created by this change. Therefore, the possibility of a new or different kind of accident not previously evaluated is not created.

3. Do the proposed amendments involve a significant reduction in a margin of safety?

Response: No

The level of safety of facility operation is unaffected by any of the proposed changes. The requested administrative change is conservative compared to the existing requirement. The response of the diesel generators to accident transients reported in the Updated Final Safety Analysis Report (UFSAR) is unaffected by these changes. The proposed changes preserve the safety analysis assumptions related to accident mitigation. Therefore, these changes do not involve a significant reduction in a margin of safety.

Based on the above, R.E. Ginna Nuclear Power Plant, LLC, concludes that the proposed amendments present no significant hazards consideration under the standards set forth in 10 CFR 50.92(c), and, accordingly, a finding of "no significant hazards consideration" is justified.

4.4 Conclusions

In conclusion, based on the considerations discussed above, (1) there is reasonable assurance that the health and safety of the public will not be endangered by operation in the proposed manner, (2) such activities will be conducted in compliance with the Commission's regulations, and (3) the issuance of the amendment will not be inimical to the common defense and security or to the health and safety of the public.

5.0 ENVIRONMENTAL CONSIDERATION

A review has determined that the proposed amendment would change a requirement with respect to installation or use of a facility component located within the restricted area, as defined in 10 CFR 20, or would change an inspection or surveillance requirement. However, the proposed amendment does not involve (i) a significant hazards consideration, (ii) a significant change in the types or significant increase in the amounts of any effluent that may be released offsite, or (iii) a significant increase in individual or cumulative occupational radiation exposure. Accordingly, the proposed amendment meets the eligibility criterion for categorical exclusion set forth in 10 CFR 51.22(c)(9). Therefore, pursuant to 10 CFR 51.22(b), no environmental impact statement or environmental assessment need be prepared in connection with the proposed amendment.


6.0 REFERENCES

1. Safety Evaluation by the Office of Nuclear Reactor Regulation Related to Amendment No. 85 to Renewed Facility Operating License No. DPR-18, dated September 22, 2004.

ATTACHMENT 1

Proposed Technical Specification (TS) Changes (Mark-up)

Table 3.3.2-1
Engineered Safety Feature Actuation System Instrumentation

FUNCTION	APPLICABLE MODES OR OTHER SPECIFIED CONDITIONS	REQUIRED CHANNELS	CONDITIONS	SURVEILLANCE REQUIREMENTS	LIMITING SAFETY SYSTEM SETTINGS ^(a)
1. Safety Injection					
a. Manual Initiation	1,2,3,4	2		SR 3.3.2.4	NA
b. Automatic Actuation Logic and Actuation Relays	1,2,3,4	2 trains	I,K	SR 3.3.2.7	NA
c. Containment Pressure-High	1,2,3,4	3	J,K	SR 3.3.2.1 SR 3.3.2.2 SR 3.3.2.5	≤ 4.61 psig
d. Pressurizer Pressure-Low	1,2,3 ^(b)	3	L,M	SR 3.3.2.1 SR 3.3.2.2 SR 3.3.2.5 SR 3.3.2.6	≥ 1729.8 psig
e. Steam Line Pressure-Low	1,2,3 ^(b)	3 per steam line	L,M	SR 3.3.2.1 SR 3.3.2.2 SR 3.3.2.5 SR 3.3.2.6	≥ 393.8 psig

SURVEILLANCE REQUIREMENTS

- NOTE -

When a channel is placed in an inoperable status solely for the performance of required Surveillances, entry into the associated Conditions and Required Actions may be delayed for up to 4 hours provided the second channel maintains LOP DG start capability.

SURVEILLANCE		FREQUENCY
SR 3.3.4.1	Perform TADOT.	31 days
SR 3.3.4.2	Perform CHANNEL CALIBRATION with Limiting Safety System Settings (LSSS) ^(a) for each 480 V bus as follows: a. Loss of voltage LSSS ≥ 371.6 V and ≤ 378.0 V with a time delay of ≥ 1.64 seconds and ≤ 2.61 seconds. b. Degraded voltage LSSS ≥ 419.6 V and ≤ 424.4 V with a time delay of ≥ 30.7 seconds and ≤ 1589 seconds (@ 416.8 V) and ≥ 25.1 seconds and ≤ 494.9 seconds (@ 368 V).	24 months

(a)

A channel is OPERABLE when both of the following conditions are met:

1. The absolute difference between the as-found Trip Setpoint (TSP) and the previous as-left TSP is within the CHANNEL CALIBRATION Acceptance Criteria. The CHANNEL CALIBRATION Acceptance Criteria is defined as:

$$|\text{as-found TSP} - \text{previous as-left TSP}| \leq \text{CHANNEL CALIBRATION uncertainty}$$

The CHANNEL CALIBRATION uncertainty shall not include the calibration tolerance.

2. The as-left TSP is within the established calibration tolerance band about the nominal TSP. The nominal TSP is the desired setting and shall not exceed the LSSS. The LSSS and the established calibration tolerance band are defined in accordance with the Ginna Instrument Setpoint Methodology. The channel is considered operable even if the as-left TSP is non-conservative with respect to the LSSS provided that the as-left TSP is within the established calibration tolerance band.

- a. Loss of voltage LSSS ≥ 372.0 V and ≤ 374.8 V with a time delay of ≥ 2.13 seconds and ≤ 2.62 seconds.
- b. Degraded voltage LSSS ≥ 420.0 V and ≤ 423.6 V with a time delay of ≥ 68.1 seconds and ≤ 125 seconds (@ 420.0V) and ≥ 71.8 seconds and ≤ 125 seconds (@ 423.6V).

SURVEILLANCE	FREQUENCY
<p>SR 3.8.1.3</p> <p style="text-align: center;">----- - NOTE - -----</p> <ol style="list-style-type: none"> 1. DG loadings may include gradual loading as recommended by the manufacturer. 2. Momentary transients outside the load range do not invalidate this test. 3. This Surveillance shall be conducted on only one DG at a time. 4. This SR shall be preceded by and immediately follow without shutdown a successful performance of SR 3.8.1.2 or SR 3.8.1.9. <p style="text-align: center;">-----</p> <p>Verify each DG is synchronized and loaded and operates for ≥ 60 minutes and < 120 minutes at a load ≥ 1950 kW and < 2250 kW.</p>	<p>31 days</p>
<p>SR 3.8.1.4</p> <p>Verify the fuel oil level in each day tank.</p>	<p>31 days</p>
<p>SR 3.8.1.5</p> <p>Verify the DG fuel oil transfer system operates to transfer fuel oil from each storage tank to the associated day tank.</p>	<p>31 days</p>
<p>SR 3.8.1.6</p> <p>Verify transfer of AC power sources from the 50/50 mode to the 100/0 mode and 0/100 mode.</p>	<p>24 months</p>
<p>SR 3.8.1.7</p> <p style="text-align: center;">----- - NOTE - -----</p> <ol style="list-style-type: none"> 1. This Surveillance shall not be performed in MODE 1, 2, 3, or 4. 2. Credit may be taken for unplanned events that satisfy this SR. <p style="text-align: center;">-----</p> <p>Verify each DG does not trip during and following a load rejection of ≥ 295 kW.</p>	<p>24 months</p>

