

UNITED STATES OF AMERICA
NUCLEAR REGULATORY COMMISSION

In the Matter of)
)
Rochester Gas and Electric Corporation) Docket No. 50-244
(R.E. Ginna Nuclear Power Plant))

**APPLICATION FOR AMENDMENT
TO OPERATING LICENSE**

Pursuant to Section 50.90 of the regulations of the U.S. Nuclear Regulatory Commission (NRC), Rochester Gas and Electric Corporation (RG&E), holder of Facility Operating License No. DPR-18, hereby requests that the Technical Specifications set forth in Appendix A to that license, be amended. This request for change is to revise the Administrative Controls with respect to the Reactor Coolant System (RCS) RCS Pressure and Temperature Limits Report to make the necessary changes in order place this document under licensee control and to revise the LTOP enable temperature methodology.

A description of the amendment request, necessary background information, justification of the requested changes, and no significant hazards and environmental considerations are provided in Attachment I. This evaluation demonstrates that the proposed changes do not involve a significant change in the types or a significant increase in the amounts of effluents or any change in the authorized power level of the facility. The proposed changes also do not involve a significant hazards consideration.

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A marked up copy of the Ginna Station Technical Specifications which show the requested changes is set forth in Attachment II. The proposed revised technical specifications are provided in Attachment III. The revised PTLR is provided in Attachment IV. Attachment V contains a redlined version of the low temperature overpressure protection (LTOP) setpoint methodology with respect to the currently approved version. Attachment VI contains a final version of the LTOP setpoint methodology. Attachment VII contains the first use of the LTOP enable temperature methodology while Attachment VIII contains a copy of WCAP-14684 as referenced within the PTLR.

WHEREFORE, Applicant respectfully requests that Facility Operating License No. DPR-18, and Attachment A to that license, be amended in the form attached hereto as Attachment III.

Rochester Gas and Electric Corporation

By Robert C. Mecredy
Robert C. Mecredy
Vice President
Nuclear Operations

Subscribed and sworn to before me
on this 24th day of April 1997.

Deborah A. Piperni
Notary Public

DEBORAH A. PIPERNI
Notary Public in the State of New York
ONTARIO COUNTY
Commission Expires Nov. 23, 1997



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Attachment I

R.E. Ginna Nuclear Power Plant

License Amendment Request

Revision of Reactor Coolant System (RCS) Pressure and Temperature Limits Report (PTLR) Administrative Controls Requirements

This attachment provides a description of the license amendment request (LAR) and the necessary justifications to support a revision to the RCS pressure and temperature (P/T) limits and low temperature overpressure protection (LTOP) limits contained in the PTLR as referenced by the Administrative Controls. This attachment is divided into six sections as follows. Section A summarizes all changes to the Ginna Station Technical Specifications while Section B provides the background and history associated with the changes being requested. Section C provides the justifications associated with these proposed changes. A no significant hazards consideration evaluation and environmental consideration of the requested changes to the Ginna Station Technical Specifications are provided in Sections D and E, respectively. Section F lists all references used in this attachment.

A. DESCRIPTION OF TECHNICAL SPECIFICATION CHANGES

This LAR proposes to revise the Ginna Station Technical Specifications to reflect a new PTLR in the Administrative Controls section. The change is summarized below and shown in Attachment II.

1. Administrative Controls 5.6.6

Item c will be revised to replace the reference to the May 23, 1996 NRC letter with a new reference that approves the first use of the PTLR methodology included as Attachment VI to this LAR. In addition, reference 1. is revised to reference this LAR as the source for the PTLR methodology while reference 2. is revised to reference the final NRC approved WCAP-14040-NP-A which is the basis for the new P/T curves. Reference 3. is no longer required and is therefore deleted. Finally, a typographical error in item d is corrected.



B. BACKGROUND

During the conversion to improved standard technical specifications (ISTS) for Ginna Station, RG&E proposed to relocate the LTOP and RCS P/T limits to the PTLR (Ref. 1). Associated with this change was the addition of a reference to the Administrative Controls section of technical specifications related to the PTLR documenting the methodology used for all changes to these limits. However, the only NRC approved methodology would be "new" with respect to determination of both the LTOP and RCS P/T limits. Due to time constraints, RG&E informed the NRC that use of this new methodology would be burdensome and instead, RG&E wished to retain the existing values. The NRC agreed with this concern and allowed the existing limits to be relocated to the PTLR but required changes to these limits to be reviewed and approved by the NRC as documented in Reference 2.

Subsequent to the conversion to ISTS, the NRC completed its review of the latest reactor vessel capsule data and the associated impact on the pressurized thermal shock evaluation for Ginna Station (Ref. 3). Incorporation of this information into the PTLR required a reassessment of the P/T curves and LTOP setpoints that are included in the PTLR. However, the fluence factor methodology used for the Ginna Station PTS evaluation was an earlier version than that required by WCAP-14040-NP-A (Ref. 4) which was to be the basis for the P/T methodology. Since an update of the associated documents could not be completed in the time frame required to support start-up from the 1996 refueling outage, the NRC approved a PTLR for use at Ginna Station until December 31, 1996 using an estimated fluence factor value (Ref. 5).

Subsequent to this, while attempting to close out the fluence factor methodologies, the NRC questioned RG&E's approach for determining LTOP enable temperature. Specifically, the NRC identified that the determination of the LTOP enable temperature required consideration of RCS liquid temperature measurement accuracy per the methodology currently specified in Specification 5.6.6. Upon further evaluation, RG&E agreed to address this concern by first submitting a relief request (Ref. 6) and then by requesting an exemption to regulations (Ref. 7). Subsequently, the NRC identified that the liquid temperature accuracy question should be instead addressed by a new LAR which updated the methodology in Specification 5.6.6. To allow RG&E sufficient time to address this issue, the PTLR expiration date was changed to July 1, 1997 (Ref. 8).

The purpose of this LAR is to complete implementation of Generic Letter 96-03 for Ginna Station and to respond to the July 1, 1997 time limit on the existing PTLR. Generic Letter 96-03 requires that licensees reference the P/T and LTOP methodologies in the technical specifications and provide a proposed PTLR using the methodology for NRC review. Sections 1, 2, and 4 of WCAP-14040-NP-A (Ref. 4) have been generically approved for use by the NRC for P/T limits and is being proposed as the P/T limit methodology. The current LTOP methodology for Ginna Station (Ref. 1) replaced that provided in Section 3 of WCAP-14040 due to RG&E specific issues and was previously reviewed by the NRC and found to be acceptable (Ref. 5). However, the LTOP enable temperature methodology is being revised to clarify the specific RCS temperature accuracy requirements and allow the use of ASME XI Code Case N-514. A redlined version of the methodology showing all changes from the previous NRC approved version is provided in Attachment V while a final version is provided in Attachment VI to this LAR.

Therefore, this LAR provides a proposed PTLR (and supporting documentation as provided in WCAP-14684) and includes a reference to WCAP-14040-NP-A and this LAR in the Administrative Controls as the basis for the methodology. It should be noted that even though the technical specifications do not require reactor vessel material information to be located within the PTLR, this information is provided consistent with Generic Letter 96-03. This includes a revised RT_{PTS} value based on the attached WCAP-14684. The revised RT_{PTS} value also includes changes made as a result of additional surveillance capsule chemistry analyses.

C. JUSTIFICATION OF CHANGES

This section provides the justification for all changes described in Section A above and shown in Attachment II. The justifications are organized based on whether the change is: more restrictive (M), less restrictive (L), administrative (A), or the requirement is relocated (R). The justifications listed below are also referenced in the technical specification(s) which are affected (see Attachment II).

C.1 Administrative

1. Administrative Controls Section 5.6.6.c is revised to replace reference to the May 23, 1996 submittal with a new reference that approves the first use of the PTLR methodology. In addition, the Administrative Controls content is revised consistent with GL 96-03 and the references for PTLR methodology with respect to RCS P/T limits is updated. These changes are administrative in nature since the RCS P/T limits were previously relocated from technical specifications to the PTLR. The only change being requested is to update the PTLR consistent with generically approved WCAP-14040-NP-A used in the Administrative Controls section.



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2. A typographical error in Administrative Controls Section 5.6.6.d is corrected to provide consistency with NUREG-1431.

C.2 Less Restrictive

1. Administrative Controls Section 5.6.6.c is revised to replace the previously approved LTOP methodology (Ref. 1) with that provided in Attachment VI (Attachment V provides a "red-line" comparison to the previously approved methodology to show all differences). The proposed new LTOP methodology allows the LTOP enable temperature to be determined using ASME Section XI Code Case N-514. This code case allows the LTOP enable temperature to be the higher of: (1) a RCS temperature of 200°F, or (2) at the RCS temperature corresponding to a reactor vessel metal temperature at the 1/4 thickness from the inside vessel surface of $RT_{NDT} + 50^\circ\text{F}$. This differs from the current specified methodology that was based on Branch Technical Position RSB 5-2 which requires using a LTOP enable temperature of either: (1) a RCS temperature of 200°F, or (2) at the RCS temperature corresponding to a reactor vessel metal temperature at the 1/4 thickness from the inside vessel surface of $RT_{NDT} + 90^\circ\text{F}$, whichever of the two is greater. Effectively reducing the LTOP enable temperature by 40°F is acceptable due to the margin inherent in the ASME Section XI, Appendix G calculations used in the determination of the RT_{NDT} value. This was recognized by ASME in their approval of Code Case N-514 on February 12, 1992 and incorporating it into the 1993 Addenda to ASME Code Section XI, Appendix G. Instrument error must still be addressed when determining the RCS temperature corresponding to the $RT_{NDT} + 50^\circ\text{F}$ enable temperature setpoint.

There are not any more restrictive (M), or relocated (R) changes associated with this LAR.

D. SIGNIFICANT HAZARDS CONSIDERATION EVALUATION

The proposed changes to the Ginna Station Technical Specifications as identified in Section A and justified in Section C have been evaluated with respect to 10 CFR 50.92(c) and shown to not involve a significant hazards consideration as described below. This section is organized based on Section C above.



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D.1 Evaluation of Administrative Changes

The administrative changes discussed in Section C.1 do not involve a significant hazards consideration as discussed below:

1. Operation of Ginna Station in accordance with the proposed changes does not involve a significant increase in the probability or consequences of an accident previously evaluated. The proposed changes revise Administrative Controls Section 5.6.6.c to update the reference to the NRC's approval of the first use of the PTLR methodology, update the RCS P/T methodology to the final NRC approved version, and to correct a typographical error. These changes complete implementation of Generic Letter 96-03 by referencing NRC approved methodology within the Administrative Controls. As such, these changes are administrative in nature and do not impact initiators or analyzed events or assumed mitigation of accident or transient events. Therefore, these changes do not involve a significant increase in the probability or consequences of an accident previously analyzed.
2. Operation of Ginna Station in accordance with the proposed changes does not create the possibility of a new or different kind of accident from any accident previously evaluated. The proposed changes do not involve a physical alteration of the plant (i.e., no new or different type of equipment will be installed) or changes in the methods governing normal plant operation. The proposed changes will not impose any new or different requirements. Thus, this change does not create the possibility of a new or different kind of accident from any accident previously evaluated.
3. Operation of Ginna Station in accordance with the proposed changes does not involve a significant reduction in a margin of safety. The proposed changes will not reduce a margin of plant safety because the methodology have been shown to ensure that the P/T and LTOP limits in the PTLR continue to meet all necessary requirements for reactor vessel integrity. These changes are administrative in nature since the limits were previously relocated to the PTLR under a separate LAR. As such, no question of safety is involved, and the change does not involve a significant reduction in a margin of safety.

Based upon the above information, it has been determined that the proposed administrative changes to the Ginna Station Technical Specifications do not involve a significant increase in the probability or consequences of an accident previously evaluated, does not create the possibility of a new or different kind of accident previously evaluated, and does not involve a significant reduction in a margin of safety. Therefore, it is concluded that the proposed changes meet the requirements of 10 CFR 50.92(c) and do not involve a significant hazards consideration.

D.2 Evaluation of Less Restrictive Changes

The less restrictive changes discussed in Section C.2 do not involve a significant hazards consideration as discussed below:

1. Operation of Ginna Station in accordance with the proposed changes does not involve a significant increase in the probability or consequences of an accident previously evaluated. The proposed change revises Administrative Controls Section 5.6.6 to replace the LTOP enable temperature methodology with use of ASME Section XI Code Case N-514. This code case effectively reduces the LTOP enable temperature by up to 40°F over the current methodology. However, as shown in Section C.2, sufficient margin remains within the LTOP enable temperature calculation to ensure that the reactor vessel remains intact following all analyzed events. Therefore, these changes do not involve a significant increase in the probability or consequences of an accident previously analyzed.
2. Operation of Ginna Station in accordance with the proposed changes does not create the possibility of a new or different kind of accident from any accident previously evaluated. The proposed changes do not involve a physical alteration of the plant (i.e., no new or different type of equipment will be installed) or changes in the methods governing normal plant operation. The proposed changes will not impose any new or different requirements. Thus, this change does not create the possibility of a new or different kind of accident from any accident previously evaluated.
3. Operation of Ginna Station in accordance with the proposed changes does not involve a significant reduction in a margin of safety. The proposed changes will not reduce a margin of plant safety because the methodology has been shown to ensure that the LTOP limits in the PTLR continue to meet all necessary requirements for reactor vessel integrity. The ASME Code specifically recognizes that Code Case N-514 provides necessary margin such that the change does not involve a significant reduction in a margin of safety.

Based upon the above information, it has been determined that the proposed less restrictive change to the Ginna Station Technical Specifications do not involve a significant increase in the probability or consequences of an accident previously evaluated, does not create the possibility of a new or different kind of accident previously evaluated, and does not involve a significant reduction in a margin of safety. Therefore, it is concluded that the proposed changes meet the requirements of 10 CFR 50.92(c) and do not involve a significant hazards consideration.



E. ENVIRONMENTAL CONSIDERATION

RG&E has evaluated the proposed changes and determined that:

1. The changes do not involve a significant hazards consideration as documented in Section D above;
2. The changes do not involve a significant change in the types or significant increase in the amounts of any effluents that may be released offsite since no specifications related to offsite releases are affected; and
3. The changes do not involve a significant increase in individual or cumulative occupational radiation exposure since no new or different type of equipment are required to be installed as a result of this LAR.

Accordingly, the proposed changes meet the eligibility criteria for categorical exclusion set forth in 10 CFR 51.22(c)(9). Therefore, pursuant to 10 CFR 51.22(b), an environmental assessment of the proposed changes is not required.

F. REFERENCES

1. Letter from R.C. Mecredy, RG&E, to A.R. Johnson, NRC, Subject: *Technical Specifications Improvement Program, Reactor Coolant System (RCS) Pressure and Temperature Limits Report (PTLR)*, dated December 8, 1995.
2. Letter from L. B. Marsh, NRC, to R.C. Mecredy, RG&E, Subject: *R.E. Ginna - Acceptance for Referencing of Pressure Temperature Limits Report (TAC No. M92320)*, dated December 26, 1995.
3. Letter from A.R. Johnson, NRC, to R.C. Mecredy, RG&E, Subject: *R.E. Ginna Nuclear Power Plant - Pressurized Thermal Shock Evaluation (TAC No. M93827)*, dated March 22, 1996.
4. WCAP-14040-NP-A, *Methodology Used to Develop Cold Overpressure Mitigating System Setpoints and RCS Heatup and Cooldown Limit Curves*, January 1996.
5. Letter from G.S. Vissing NRC, to R.C. Mecredy, RG&E, Subject: *Issuance of Amendment No. 64 to Facility Operating License No. DPR-18, R.E. Ginna Nuclear Power Plant (TAC No. M94770)*, dated May 23, 1996.
6. Letter from R.C. Mecredy, RG&E, to G.S. Vissing, NRC, Subject: *Request to Use ASME Code Case N-514 in the Determination of Low Temperature Overpressure Protection (LTOP) Enable Temperature*, dated December 18, 1996.



7. Letter from R.C. Mecredy, RG&E, to G.S. Vissing, NRC, Subject: *Request for Exemption to 10 CFR 50.60 to Use American Society of Mechanical Engineers (ASME) Code Case N-514 in the Determination of Low Temperature Overpressure Protection (LTOP) Enable Temperature*, dated February 10, 1997.
8. Letter from G.S. Vissing, NRC, to R.C. Mecredy, RG&E, Subject: *R.E. Ginna - Acceptance of Request to Extend Time for Approval of Revision of Pressure and Temperature Limits Report (PTLR) (TAC No. M97313)*, dated December 10, 1996.

