

REGULATORY INFORMATION DISTRIBUTION SYSTEM (RIDS)

ACCESSION NBR: 8305030021 DOC. DATE: 83/04/22 NOTARIZED: NO DOCKET #
 FACIL: 50-244 Robert Emmet Ginna Nuclear Plant, Unit 1, Rochester G 05000244
 AUTH. NAME: MAIER, J. E. AUTHOR AFFILIATION: Rochester Gas & Electric Corp.
 RECIP. NAME: CRUTCHFIELD, D. RECIPIENT AFFILIATION: Operating Reactors Branch 5

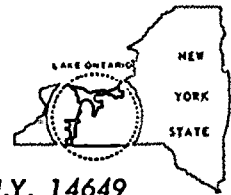
SUBJECT: Forwards "Structural Reanalysis Program for RE Ginna Nuclear Power Plant," per SEP Topics II-2.A, III-2, III-4.A & III-7.B.
 Final design expected to require 18-24 months. Final installation expected to require 2-2 1/2 yrs.

DISTRIBUTION CODE: A0355 COPIES RECEIVED: LTR 1 ENCL 1 SIZE: 2 + 38
 TITLE: OR Submittal: SEP Topic

NOTES: NRR/DL/SEP 1cy.

05000244

	RECIPIENT ID CODE/NAME	COPIES LTR ENCL	RECIPIENT ID CODE/NAME	COPIES LTR ENCL
	NRR ORB5 BC 01	3 13		
INTERNAL:	NRR/DL/ORAB 11	1 1	NRR/DL/SEPB 12	13 3
	NRR/DSI/AEB	1 1	NRR/DSI/CSB 07	1 1
	<u>REG. FILE</u> 04	1 1	RGN1	1 1
EXTERNAL:	ACRS 14	6 6	LPDR 03	1 1
	NRC IPDR 02	1 1	NTIS 05	1 1
NOTES:		1 1		



ROCHESTER GAS AND ELECTRIC CORPORATION • 89 EAST AVENUE, ROCHESTER, N.Y. 14649

JOHN E. MAIER
Vice President

TELEPHONE
AREA CODE 716 546-2700

April 22, 1983

Director of Nuclear Reactor Regulation
Attention: Mr. Dennis M. Crutchfield, Chief
Operating Reactors Branch No. 5
U.S. Nuclear Regulatory Commission
Washington, D.C. 20555

Subject: Structural Reanalysis Program, SEP Topics II-2.A,
III-2, III-4.A, and III-7.B
R. E. Ginna Nuclear Power Plant
Docket No. 50-244

Dear Mr. Crutchfield:

In a letter from John E. Maier of RG&E to Dennis Crutchfield, NRC, RG&E proposed that an overall structural reanalysis be performed for the Ginna facility, integrated so as to incorporate findings in several SEP topics related to natural phenomena. RG&E proposed a four-fold program, consisting of:

- 1) development of a suitable range of input parameters
- 2) development of reasonable acceptance criteria
- 3) definition of structures and systems requiring protection
- 4) value-impact assessment

This reanalysis has been completed, and is provided in the attached report "Structural Reanalysis Program for the R. E. Ginna Nuclear Power Plant," April 1983. The report provides the methodology employed to perform the structural analysis, the results of the analyses for a range of phenomenological loading conditions, the requirements for tornado missile protection, and RG&E's conclusions, based on an integrated evaluation of the results of the analysis. Also provided in the report is a discussion of margins and reserve capacity, both in structural and systems terms, and a discussion of the safety benefits to be derived from RG&E's proposed modifications.

RG&E has concluded that, for purposes of backfit design, tornado wind speed characteristics associated with a probability level of 10^{-5} per year, at an upper 95th percent confidence level, should be used. Because of the low probability of such an

8305030021 830422
PDR ADDCK 05000244
P PDR

A075

DATE April 22, 1983

TO Mr. Dennis M. Crutchfield

2

occurrence, RG&E has in general used an acceptance criteria associated with "extreme" loading conditions of 1.6 times the allowable stress. In certain cases, RG&E proposes to utilize additional materials and safety system reserve capacity, which may make use of some of the margin. In all cases, however, RG&E will demonstrate that all required safety functions will be available, and margin to account for uncertainties will be maintained.

The attached report provides the summary of information developed during the structural reanalysis program for SEP topics II-2.A, III-2, III-4.A and steel portions of III-7.B. The details of the analysis, which are in the form of appendices to the attached report, are currently undergoing final review and will be provided under separate cover by the end of April 1983. Also, the concrete portion of the SEP III-7.B topic was not performed as an integral part of the Structural Reanalysis Program, but is being performed as a separate analysis. The report providing RG&E's conclusions for the load, load combination, and code case changes for the concrete portions of the Ginna plant will also be provided by the end of April, 1983.

Following review and approval of these reports by the NRC, the final design is anticipated to require 18 to 24 months. Final installation is expected to require 2 to 2 1/2 years after design is complete. Work will be scheduled so that the most critical components and structures are addressed first.

Very truly yours,


John E. Maier

