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TO: Mr. Edson G. Case

FROM: LeBoeuf, Lamb, Leiby & MacRae Washington, D. C. 20036 LeBoeuf, Lamb, Leiby & MacRae

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DESCRIPTION DISTRIBUTION OF MATERIAL CONCERNING ONSITE EMERGENCY POWER SYSTEMS PLANT NAME: R. E. GINNA UNIT # 1 jcm 11/22/77

ENCLOSURE License No. DPR-18 Appl For Amend: tech specs proposed change concerning modifications of requirements for diesel generator testing...Notorized 11/16/77.....W/Att Cert of Svc..... 1p 15P NO ENCL/REPRO LTR'S & CERT OF SERV.

SAFETY FOR ACTION/INFORMATION

Table with columns for SAFETY and FOR ACTION/INFORMATION. Row 1: BRANCH CHIEF: (7) SCHWENGER. Row 2: PROJECT MANAGER. Row 3: LIC. ASST.

INTERNAL DISTRIBUTION

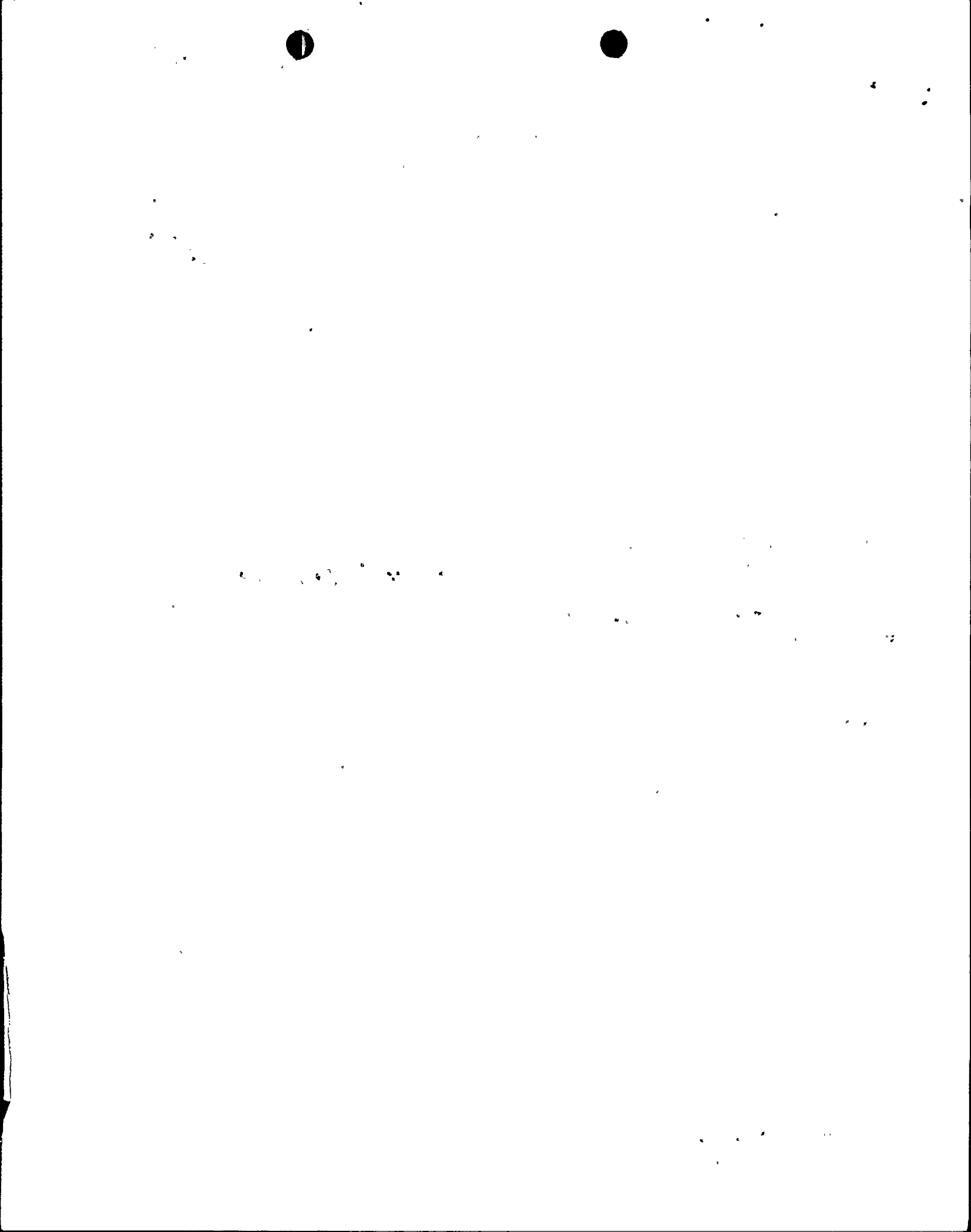
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EXTERNAL DISTRIBUTION

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*RESIDENT PARTNERS WASHINGTON OFFICE
*ADMITTED TO THE DISTRICT OF COLUMBIA BAR

November 21, 1977

Mr. Edson G. Case
Acting Director
Office of Nuclear Reactor
Regulation
U.S. Nuclear Regulatory
Commission
Washington, D. C. 20555



Re: Rochester Gas and Electric Corporation
R. E. Ginna Nuclear Power Station, Unit No. 1
Docket No. 50-244

Dear Mr. Case:

As counsel for Rochester Gas and Electric Corporation, we hereby transmit three (3) signed originals and nineteen (19) copies of a document entitled, "Application for Amendment to Operating License." This Application seeks to amend Technical Specification 4.6 set forth in Appendix A to Provisional Operating License No. DPR-18, to modify the requirements for diesel generator testing. Forty (40) copies of this proposed change and of the safety evaluation therefor are also transmitted herewith.

A Certificate of Service showing service of these documents upon the persons listed therein is also enclosed.

Very truly yours,

Le Boeuf, Lamb, Leiby & MacRae

Enclosures



The following information was obtained from the records of the
 Bureau of the Census, Department of Commerce, Washington, D. C.
 for the year 1954:

State	Population	Area (sq. miles)	Density (per sq. mile)
Alabama	2,500,000	52,420	47.7
Alaska	100,000	588,000	0.17
Arizona	1,000,000	113,990	8.77
Arkansas	1,500,000	53,170	28.2
California	10,000,000	158,330	63.2
Colorado	2,000,000	104,240	19.2
Connecticut	3,500,000	5,540	631.7
Delaware	1,000,000	2,480	403.2
District of Columbia	2,000,000	280	714.3
Florida	4,000,000	55,560	72.0
Georgia	3,000,000	59,730	50.2
Idaho	1,000,000	84,360	11.9
Illinois	10,000,000	149,990	66.7
Indiana	5,000,000	36,420	137.3
Iowa	3,000,000	72,570	41.3
Kansas	2,500,000	82,270	30.4
Kentucky	3,500,000	40,360	86.7
Louisiana	3,000,000	52,430	57.2
Maine	1,000,000	33,330	30.0
Maryland	4,000,000	12,160	329.0
Massachusetts	5,000,000	8,010	624.2
Michigan	7,000,000	96,860	72.3
Minnesota	4,000,000	225,340	17.7
Mississippi	2,000,000	48,670	41.1
Missouri	4,000,000	69,700	57.4
Montana	1,000,000	147,040	6.8
Nebraska	2,000,000	77,340	25.9
Nevada	1,000,000	110,630	9.0
New Hampshire	1,000,000	9,340	107.1
New Jersey	8,000,000	19,270	415.2
New Mexico	1,500,000	121,740	12.3
New York	15,000,000	47,190	317.8
North Carolina	5,000,000	53,810	92.9
North Dakota	1,000,000	70,680	14.1
Ohio	10,000,000	44,820	223.1
Oklahoma	2,000,000	69,560	28.8
Oregon	2,000,000	98,380	20.3
Pennsylvania	12,000,000	46,050	260.6
Rhode Island	1,000,000	1,540	649.4
South Carolina	2,500,000	32,240	77.5
South Dakota	1,000,000	77,110	13.0
Tennessee	4,000,000	42,330	94.5
Texas	10,000,000	695,620	14.4
Utah	1,000,000	165,690	6.0
Vermont	1,000,000	9,440	105.9
Virginia	4,000,000	40,780	98.1
Washington	3,000,000	71,300	42.1
West Virginia	2,000,000	62,750	31.9
Wisconsin	5,000,000	65,350	76.5
Wyoming	1,000,000	97,810	10.2

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,)
Unit No. 1))

APPLICATION FOR AMENDMENT
TO OPERATING LICENSE

Pursuant to Section 50.90 of the regulations of the U.S. Nuclear Regulatory Commission (the "Commission"), Rochester Gas and Electric Corporation ("RG&E"), holder of Provisional Operating License No. DPR-18, hereby requests that the Technical Specification 4.6 set forth in Appendix A to that license be amended to modify the requirements for diesel generator testing. This request for a change in the Technical Specifications is submitted to eliminate conflicting requirements for diesel generator testing.

The proposed technical specification change is set forth in Attachment A to this Application. A safety evaluation is set forth in Attachment B. This evaluation also demonstrates that the proposed change does 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.

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

Rochester Gas and Electric Corporation

By *L.D. White, Jr.*

L. D. White, Jr.
Vice President,
Electric and Steam Production

Subscribed and sworn to before me
on this *16th* day of November 1977.

Gary L. Reiss

GARY L. REISS
NOTARY PUBLIC, State of N. Y. Monroe Co.
My Commission Expires March 30, 19*79*.

BEFORE THE UNITED STATES
NUCLEAR REGULATORY COMMISSION

In the Matter of)
)
ROCHESTER GAS AND ELECTRIC) Docket No. 50-244
CORPORATION)
(R. E. Ginna Nuclear Power)
Station, Unit No. 1))

CERTIFICATE OF SERVICE

I hereby certify that I have served a document entitled, "Application for Amendment to Operating License" together with a copy of the proposed changes to Technical Specifications and the safety evaluation therefor by mailing copies thereof first class, postage prepaid to each of the following persons this 21st day of November, 1977:

Chairman, Atomic Safety
and Licensing Board
U.S. Nuclear Regulatory
Commission
Washington, D. C. 20555

Atomic Safety and Licensing
Appeal Board
U.S. Nuclear Regulatory
Commission
Washington, D. C. 20555

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Legal Director
U.S. Nuclear Regulatory
Commission
Washington, D. C. 20555

Edward Luton, Esq.
Atomic Safety and Licensing
Board
U.S. Nuclear Regulatory
Commission
Washington, D. C. 20555

Dr. Emmeth A. Luebke
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Mr. Robert N. Pinkney
Supervisor
Town of Ontario
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Ontario, New York 14519

Jeffrey L. Cohen, Esq.
New York State Energy Office
Swan Street Building
Core I, Second Floor
Empire State Plaza
Albany, New York 12223



Arthur M. Schwartzstein
LeBoeuf, Lamb, Leiby & MacRae
Attorneys for Rochester Gas and
Electric Corporation

ATTACHMENT A

1. Replace Technical Specification pages 4.6-1 and 4.6-2 with the revised pages 4.6-1, 4.6-1a and 4.6-2.



1953

4.6 Emergency Power System Periodic Tests

Applicability

Applies to periodic testing and surveillance requirements of the emergency power system.

Objective

To verify that the emergency power system will respond promptly and properly when required.

Specification

The following tests and surveillance shall be performed as stated:

4.6.1 Diesel Generators

Each diesel generator shall be demonstrated operable:

- a. Except during cold or refueling shutdown at least once per 31 days by:
 1. Verifying the fuel level in the day tank,
 2. Verifying a minimum oil storage of 10,000 gallons is at the station,
 3. Verifying the fuel transfer pump can be started and transfer fuel from the storage system to the day tank,
 4. Verifying the diesel starts from normal standby conditions,
 5. Verifying the generator is synchronized, loaded to at least 1950 kw but less than the 2 hour rating of 2250 kw and operates for at least 60 minutes but less than 120 minutes,
 6. Verifying the diesel generator is aligned to provide standby power to the associated emergency buses.
- b. The tests in specification 4.6.1a will be performed prior to exceeding 5% power if the time since the last test exceeds 31 days.
- c. At least once per 92 days by verifying that a sample of diesel fuel from the fuel storage tank is within the following limits:

water and sediment.	0.10 volume percent
viscosity, SSU at 100°F	32 to 45



THE UNIVERSITY OF CHICAGO

PHYSICS DEPARTMENT

REPORT OF THE

COMMISSION

ON

THE PROGRESS OF

RESEARCH

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AND

RECOMMENDATIONS

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d. At least once per 18 months during shutdown by:

1. Inspecting the diesel in accordance with the manufacturer's recommendations for this class of standby service,
2. Verifying the generator capability to reject a load of 295 KW without tripping,
3. Simulating a loss of offsite power in conjunction with a safety injection test signal and:

(a) Verifying de-energization of the emergency buses and load shedding from the emergency buses.

(b) Verifying the diesel starts from normal standby condition on the auto-start signal, energizes the emergency buses with permanently connected loads, energizes the automatically connected emergency loads with the following maximum breaker closure times after the initial starting signal for trains A and B not being exceeded

	A	B
Diesel plus Safety Injection Pump plus RHR Pump	20 sec	22 sec
All breakers	40 sec	42 sec

and operates for \geq five minutes while its generator is loaded with emergency loads.

(c) Verifying that all diesel generator trips, except engine overspeed, low lube oil pressure, and overcrank, are automatically bypassed upon loss of voltage on the emergency bus and/or safety injection actuation signal.



4.6.2 Station Batteries

- a. Every month the voltage of each cell (to the nearest 0.01 volt), the specific gravity and temperature of a pilot cell in each battery shall be measured and recorded.
- b. Every 3 months the specific gravity of each cell, the temperature reading of every fifth cell, the height of electrolyte, and the amount of water added shall be measured and recorded.

1957

Dear Mr. [Name],
I have your letter of [Date] regarding [Subject].
I am sorry that I cannot give you a more definite answer at this time.
The matter is still under consideration and I will contact you again as soon as a final decision has been reached.
Thank you for your patience and understanding.

Sincerely,
[Name]
[Title]
[Company Name]

Enclosed for you are [Number] copies of [Document Name].
If you have any questions, please do not hesitate to contact me at [Phone Number].
Very truly yours,
[Name]

Yours faithfully,
[Name]
[Title]
[Company Name]

Attachment B

Technical Specification 4.6.1, diesel generator testing, now requires that the diesel generator be loaded to its nameplate rating (4.6.1.a) and that the electrical loads on the diesel generator not be increased beyond the long term rating of 1950kw (4.6.1.d). The generator nameplate specifies 2500kVa and 80% power factor. To remedy the inconsistency, the testing requirements for the diesel generator have been revised. In addition, testing requirements have been expanded to include other components important to diesel generator operability. The Standard Technical Specifications published by the NRC have been used as guidance in preparation of the proposed Technical Specifications.

Operability of the diesel generators is assured by periodic testing on a 31 day interval. This includes assuring that at least 10,000 gallons of fuel oil are on site, as specified in FSAR Section 8.2.3 and checking the fuel oil level in the day fuel tank. Since the day tank provides fuel for approximately 3 hours of diesel operation, the entire balance of the 10,000 gallon onsite supply need not be automatically available to each diesel. Operator action is acceptable to provide this fuel to the diesel. The fuel transfer pumps are tested. The diesel generator is loaded for at least 60 minutes to at least its continuous rating of 1950kw but not beyond its 2 hour rating of 2250kw. Finally, the diesel generator is aligned to provide standby power to associated emergency busses. By performing these tests, assurance is provided that, if required, the diesel generators would start, accept load, and operate as assumed in the safety analyses.

The fuel oil is demonstrated to meet the manufacturer's recommended limits for viscosity, water and sediment at least once every 92 days. This will provide assurance of the acceptability of the diesel fuel.

At least once every 18 months, comprehensive testing will be performed during a shutdown. This includes testing that cannot be performed during normal plant operation. As in the present Technical Specifications, the diesel is inspected in accordance with the manufacturer's instructions. Verification is obtained that the largest single emergency load, 295kw, can be rejected without tripping the diesel generator. The value of 295kw is based upon the 350 horsepower motor for a safety injection pump (see FSAR Table 8.2-1). The specifications would continue to require testing the diesel generator by simulating a loss of offsite power in conjunction with a safety injection signal. Breaker closure times for loads are recorded and are required to meet acceptance criteria as established in the safety analyses.

SECRET

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Each safeguards load which is automatically sequenced onto the diesel generator has its own individual timer which controls its loading. Because verification of the operability of the timer would require taking the entire train out of service or starting the entire train and because testing at refueling intervals in the past has not disclosed unacceptable drift in the timer setpoints, it is proposed that timer testing be performed at refueling outages.

In addition, testing is performed to assure that generator trips are properly set. A more complete description of diesel generator trips may be found in Supplement 1 to Technical Supplement Accompanying Application for a Full-Term Operating License, December 20, 1973. (response to question 9).

The Ginna design does not provide for full flow verification to demonstrate the magnitude of the automatically connected loads under simulated accident conditions. Pumps are supplied with small recirculation lines rather than full flow test loops. Thus, confirmation of acceptability of diesel generator loadings has been provided through analyses. These analyses are summarized in Section 8.2.3 of the FSAR and in the discussion of Safety Guide 9 in the Technical Supplement Accompanying Application for a Full-Term Operating License.

By performing the proposed tests, assurance will be provided that the diesel generators will perform their required safety function if required.



10

THE
FEDERAL
BUREAU OF
INVESTIGATION
OF THE
DEPARTMENT OF JUSTICE
WASHINGTON, D. C. 20535