

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

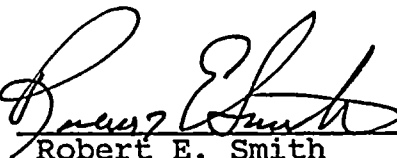
Pursuant to Section 50.90 of the regulations of the U.S. Nuclear Regulatory Commission (the "Commission"), Rochester Gas and Electric Corporation ("RG&E"), holder of Facility Operating License No. DPR-18, hereby requests that this license be amended to expire at midnight September 18, 2009 vice April 25, 2006. }

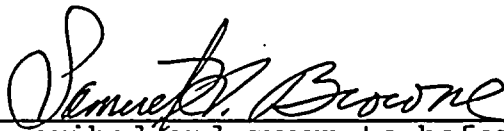
The proposed change is set forth in Attachment A to this Application. A safety evaluation is set forth in Attachment B. This evaluation also demonstrates that the proposed change does not involve a significant change in the types or a significant increase in the amounts of effluents or any change in the authorized power level of the facility. As demonstrated in Attachment B, the proposed change does not involve a significant hazards consideration.

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PDC

WHEREFORE, Applicant respectfully requests that Facility Operating License No. DPR-18 be amended in the form attached hereto as Exhibit A.

Rochester Gas and Electric Corporation

By   
Robert E. Smith  
Senior Vice President  
Production and Engineering

  
Subscribed and sworn to before me  
on this 5th day of October, 1989.

SAMUEL H. BROWNE  
NOTARY PUBLIC, State of New York  
Registration No. 4917041  
Qualified in Monroe City / Wayne Co.  
My Commission Expires Dec. 29, 1997

SAMUEL H. BROWNE  
NOTARY PUBLIC, State of New York  
Registration No. 4017041  
Created in Monroe Co., N.Y.  
My Commission Expires Dec 28, 19\_\_

ATTACHMENT A

R.E. GINNA NUCLEAR POWER PLANT

License Amendment Request

Description of Proposed Change to Operating License DPR-18

Pursuant to 10 CFR Part 50, Section 50.90, the holders of Operating License DPR-18 hereby propose the following changes:

License Expiration Date

Change paragraph F of the Facility Operating License for the R.E. Ginna Nuclear Power Plant License No. DPR-18 to read:

F. This amended license is effective as of the date of issuance and shall expire at midnight September 18, 2009.

Refer to Exhibit A for the actual page changes.

EXHIBIT A

ROCHESTER GAS AND ELECTRIC CORPORATION

DOCKET NO. 50-244

R.E. GINNA NUCLEAR POWER PLANT

FACILITY OPERATING LICENSE

License No. DPR-18

1. The Nuclear Regulatory Commission (the Commission) has found that:
  - A. The application complies with the requirements of the Atomic Energy Act of 1954, as amended (the Act), and the regulations of the Commission set forth in 10 CFR Chapter I and all required notifications to other agencies or bodies have been duly made;
  - B. Construction of the R.E. Ginna Nuclear Power Plant (the facility) has been substantially completed in conformity with Construction Permit No. CPPR-19, as amended, and the application, the provisions of the Act, and the rules and regulations of the Commission;
  - C. The facility will operate in conformity with the application, the provisions of the Act, and the rules and regulations of the Commission;
  - D. There is reasonable assurance (i) that the facility can be operated at power levels up to 1520 megawatts (thermal) without endangering the health and safety of the public; and (ii) that such activities will be conducted in compliance with the regulations of the Commission;
  - E. The applicant is technically and financially qualified to engage in the activities authorized by this operating license in accordance with the rules and regulations of the Commission;
  - F. The applicant has furnished proof of financial protection that satisfies the requirements of 10 CFR Part 140; and
  - G. The issuance of this license will not be inimical to the common defense and security or to the health and safety of the public.
2. The Provisional Operating License dated September 19, 1969, is superseded by Facility Operating License No. DPR-18 hereby issued to Rochester Gas and Electric Corporation to read as follows:

- A. The license applies to the R.E. Ginna Nuclear Power Plant, a closed cycle, pressurized, light-water-moderated and cooled reactor, and electric generating equipment (herein referred to as "the facility") which is owned by the Rochester Gas and Electric Corporation (hereinafter "the licensee" or "RG&E"). The facility is located on the licensee's site on the south shore of Lake Ontario, Wayne County, New York, about 16 miles east of the City of Rochester and is described in license application Amendment No. 6, "Final Facility Description and Safety Analysis Report", and subsequent amendments thereto, and in the application for power increase notarized February 2, 1971, and Amendment Nos. 1 through 4 thereto (herein collectively referred to as "the application").
- B. Subject to the conditions and requirements incorporated herein, the Commission hereby licenses RG&E:
- (1) Pursuant to Section 104b of the Act and 10 CFR Part 50, "Domestic Licensing of Production and Utilization Facilities", to possess, use, and operate the facility at the designated location in Wayne County, New York, in accordance with the procedures and limitations set forth in this license;
  - (2) Pursuant to the Act and 10 CFR Part 70, to receive, possess, and use at any time special nuclear material or reactor fuel, in accordance with the limitations for storage and amounts required for reactor operation as described in the Final Safety Analysis Report, as amended, and Commission Safety Evaluations dated November 15, 1976, October 5, 1984, and November 14, 1984.
    - (a) Pursuant to the Act and 10 CFR Part 70, to receive and store four (4) mixed oxide fuel assemblies in accordance with the licensee's application dated December 14, 1979 (transmitted by letter dated December 20, 1979);
    - (b) Pursuant to the Act and 10 CFR Part 70, to possess and use four (4) mixed oxide fuel assemblies in accordance with the licensee's application dated December 14, 1979 transmitted by letter dated December 20, 1979), as supplemented February 20, 1980 and March 5, 1980;
  - (3) Pursuant to the Act and 10 CFR Parts 30, 40, and 70, to receive, possess, and use at any time any byproduct, source, and special nuclear material as sealed neutron sources for reactor startup, sealed sources for reactor instrumentation and radiation monitoring equipment calibration, and as fission detectors in amounts as required;

- (4) Pursuant to the Act and 10 CFR Parts 30, 40, and 70, to receive, possess, and use in amounts as required any byproduct, source, or special nuclear material without restriction to chemical or physical form, for sample analysis or instrument calibration or associated with radioactive apparatus or components; and
  - (5) Pursuant to the Act and 10 CFR Parts 30 and 70, to possess, but not separate, such byproduct and special nuclear materials as may be produced by the operation of the facility.
- C. This license shall be deemed to contain and is subject to the conditions specified in the following Commission regulations in 10 CFR Part 20, Section 30.34 of Part 30, Section 40.41 of Part 40, Sections 50.54 and 50.59 of Part 50, and Section 70.32 of Part 70; and is subject to all applicable provisions of the Act and rules, regulations and orders of the Commission now or hereafter in effect; and is subject to the additional conditions specified below:
- (1) Maximum Power Level

RG&E is authorized to operate the facility at steady-state power levels up to a maximum of 1520 megawatts (thermal).
  - (2) Technical Specifications

The Technical Specifications contained in Appendix A are hereby incorporated in the license. The licensee shall operate the facility in accordance with the Technical Specifications.
  - (3) Fire Protection
    - (a) The licensee shall maintain in effect all fire protection features described in the licensee's submittals referenced in and as approved or modified by the NRC's Fire Protection Safety Evaluation (SE) dated February 14, 1979 and SE supplements dated December 17, 1980, February 6, 1981 and June 22, 1981, or configurations subsequently approved by the NRC, subject to provisions (b) and (c) below.
    - (b) The licensee may make no change to the approved fire protection features which would decrease the level of fire protection in the plant without prior approval of the Commission. To make such a change the licensee must submit an application for license amendment pursuant to 10 CFR 50.90.

(c) The licensee may make changes to approved fire protection features which do not decrease the level of fire protection without prior Commission approval provided such changes do not otherwise involve a change in a license condition or technical specification or result in an unreviewed safety question (see 10 CFR 50.59). However, the licensee shall maintain, in an auditable form, a current record of all such changes including an analysis of the effects of the change on the level of fire protection and shall make such records available to NRC inspectors upon request. All changes to the approved features made without prior Commission approval shall be reported annually to the Director of the Office of Nuclear Reactor Regulation.

(4) Secondary Water Chemistry Monitoring Program

The licensee shall implement a secondary water chemistry monitoring program to inhibit steam generator tube degradation. This program shall be described in the plant procedures and shall include:

- (a) Identification of a sampling schedule for the critical parameters and control points for these parameters;
- (b) Identification of the procedures used to measure the values of the critical parameters;
- (c) Identification of process sampling points;
- (d) Procedure for the recording and management of data;
- (e) Procedures defining corrective actions for off control point chemistry conditions; and
- (f) A procedure identifying (i) the authority responsible for the interpretation of the data, and (ii) the sequence and timing of administrative events required to initiate corrective action.

(5) Systems Integrity

The licensee shall implement a program to reduce leakage from systems outside containment that would or could contain highly radioactive fluids during a serious transient or accident to as low as reasonably achievable levels. This program shall include the following:

- (a) Provisions establishing preventive maintenance and periodic visual inspection requirements; and



(b) Leak test requirements for each system at a frequency not to exceed refueling cycle intervals.

(6) Iodine Monitoring

The licensee shall implement a program which will ensure the capability to accurately determine the airborne iodine concentration in vital areas under accident conditions. This program shall include the following:

- (a) Training of personnel;
- (b) Procedures for monitoring; and
- (c) Provisions for maintenance of sampling and analysis equipment.

D. The facility requires exemptions from certain requirements of 10 CFR 50.46(a)(1), 50.48(c)(4), and Appendix J to 10 CFR Part 50. These include: (1) an exemption from 50.46(a)(1), that ECCS performance be calculated in accordance with an acceptable calculational model which conforms to the provisions in Appendix K (SER dated April 18, 1978). The exemption will expire upon receipt and approval of revised ECCS calculations; (2) certain exemptions from Appendix J to 10 CFR Part 50 section III.A.4(a) maximum allowable leakage rate for reduced pressure tests, section III.B.1 acceptable technique for performing local (Type B) leakage rate tests, section III.D.1 scheduling of containment integrated leakage rate tests, and section III.D.2 testing interval for containment airlocks (SER dated March 28, 1978); and (3) an exemption to the scheduler requirements for the alternative shutdown system as set forth in 10 CFR 50.48(c)(4) (NRC letter dated May 10, 1984). The exemption is effective until startup from the 1986 refueling outage. The aforementioned exemptions are authorized by law and will not endanger life or property or the common defense and security and are otherwise in the public interest. Therefore, the exemptions are hereby granted pursuant to 10 CFR 50.12.

E. Physical Protection - The licensee shall maintain in effect and fully implement all provisions of the following Commission-approved documents, including amendments and changes made pursuant to the authority of 10 CFR 50.54(p), which are being withheld from public disclosure pursuant to 10 CFR 73.21:

- (1) Security Plan collectively titled "R.E. Ginna Nuclear Power Plant Unit 1 Security Plan", dated January 18, 1978, as revised December 8, 1978, March 27, 1979, June 29, 1979, December 14, 1979, and September 10, 1980.

- (2) Safeguards Contingency Plan included as revised Chapter 8 (Revisions 12 and 13), submitted pursuant to 10 CFR 73.40 by the licensee's letter dated April 3, 1980, as revised by letter dated July 24, 1980, to the "R.E. Ginna Nuclear Power Plant Unit 1 Security Plan", dated January 18, 1978, as revised April 3, 1980, July 24, 1980, and September 10, 1980.
- (3) The licensee shall fully implement and maintain in effect all provisions of the Commission-approved Guard Training and Qualification Plan, including amendments and changes made pursuant to the authority of 10 CFR 50.54(p). This approved Plan consists of a document withheld from public disclosure pursuant to 10 CFR 73.21 identified as "R.E. Ginna Nuclear Power Plant, Unit No. 1 Training and Qualification Plan", dated April 23, 1981 (transmitted by letter dated May 4, 1981), including revised pages dated July 29, 1981 (transmitted by letter dated July 30, 1981).

F. This amended license is effective as of the date of issuance and shall expire at midnight, September 18, 2009.

FOR THE NUCLEAR REGULATORY COMMISSION

Attachment:  
Appendix A - Technical Specifications

Date of Issuance:

Highlighted in January 19, 1988 submittal

## ATTACHMENT B

### Reasons for Change:

The current Operating License expiration date (April 25, 2006) is 40 years from the date of issuance of the Construction Permit. Because approximately 29 months were required to construct the R.E. Ginna Nuclear Power Plant to the point of fuel loading and startup testing, the effective period of the license is approximately 37 years and 7 months. Current NRC policy is to issue operating licenses for a 40-year period beginning with the date of issuance. The requested change in expiration date of the R.E. Ginna Nuclear Power Plant Operating License would provide for the 40-year period of operation.

Rochester Gas and Electric Corporation believes that the useful life of the R.E. Ginna Nuclear Power Plant is significantly more than the 40 years requested in this license amendment application. We are currently involved in a Plant Life Extension Program (PLEX) for the Ginna plant. The purpose of this program is to determine the optimum safe operating life of the facility and establish a program of surveillance, testing, and planned replacement/refurbishment to support this goal.

### Determination of Significant Hazards Considerations:

The proposed change to the Operating License has been evaluated to determine whether it constitutes a significant hazards consideration as required by 10 CFR Part 50, Sections 50.91 using the standards provided in Section 50.92. This analysis is provided below:

1. The proposed amendment will not involve a significant increase in the probability or consequences of an accident previously evaluated.

The R.E. Ginna Nuclear Power Plant was designed and constructed primarily on the basis of 40 years of plant operation. For example, the reactor vessel was designed and fabricated for a 40-year life. A comprehensive vessel materials surveillance program is maintained in accordance with 10 CFR Part 50, Appendix H. Analyses were performed to demonstrate compliance with the NRC pressurized thermal shock screening criteria. All of the  $RT_{PTS}$  values remain below the NRC screening values for PTS using the projected fluence exposure through 32 EFPY. At the projected capacity factor of 80% this corresponds to the 40-year life of the plant. This information was contained in WCAP-11026 which was transmitted to the NRC on January 13, 1986 as an attachment to a letter from R. Kober of RG&E to G. Lear.

During the 1989 Refueling Outage a visual examination of the internal surfaces, nozzles and reactor internals and an ultrasonic examination of all accessible welds were performed. These examinations were performed in accordance with the requirements of the Ginna Station Second Interval Inspection Plan, Section XI of the ASME Boiler and Pressure Vessel Code (1974 Edition including Addenda through summer 1975) and Regulatory Guide 1.150, Rev. 1.

During this inspection, the one reportable indication found during the 1979 outage was re-examined. In a letter, dated May 4, 1989, from Robert E. Smith of RG&E was sent to the NRC and detailed the results of the 1989 Reactor Vessel Examination. This report discussed the one reportable indication in full detail. In letters of June 4, 1989 and July 7, 1989 from Allen R. Johnson of the NRC to Robert C. Mecredy of RG&E, the NRC agreed with the analysis provided by RG&E and closed out the TAC (71906) associated with the vessel examination issue. This being the case, no extraordinary inspection of the vessel is required and inservice inspection will subsequently continue on a normal schedule.

The analyses contained in the R.E. Ginna Nuclear Power Plant Final Safety Analysis Report were performed on the basis of not less than 40 years of expected plant life.

Analyses and information presented in the R.E. Ginna Nuclear Power Plant Environmental Report, in general, were not dependent on any specific period of plant operation.

Procedures and programs are in place to detect abnormal deterioration and aging of critical plant components. Examples include:

- a. Plant pressure retaining vessels, piping, and support systems are inspected in accordance with Section XI of the ASME Boiler and Pressure Vessel Code and 10 CFR Part 50, Section 50.55a(g), except where specific written relief has been granted by the NRC pursuant to 10CFR50, Section 50.55a(g)(6)(i). Safety-related pumps and valves are included in a test program meeting the requirements of Section XI of the Code and the plant Technical Specifications.
- b. Safety-related electrical equipment has been environmentally qualified in accordance with the requirements of 10 CFR Part 50, Section 50.49. Aging analyses establish required intervals for equipment replacement. No items would be affected by the extension.
- c. A number of special inspections and investigations have been performed by the R.E. Ginna Nuclear Power Plant technical staff providing additional assurance that abnormal or unanticipated degradation will not occur in components required for safe and reliable plant operation. These inspections have included such items as pipe, valve, and fitting wall thickness measurements in steam, feedwater and condensate lines subject to erosion. As an example of this ongoing effort, a motor operated valve diagnostic program is being implemented at Ginna. This program is providing valuable data to insure continued reliability and performance of the motor operated valves. Additional inspections of this nature will be identified as part of the R.E. Ginna plant-specific PLEX Program.

The requested extension on the R.E. Ginna Nuclear Power Plant license will allow the plant to operate for the length of time contemplated during the design process. The station has programs and procedures in place to monitor the power plant to give reasonable assurance that equipment and systems will continue to meet their design parameters. The extension of the licensed operating period, therefore, will not significantly increase the probability or consequences of accidents that have been previously evaluated.

2. The proposed amendment will not create the possibility of a new or different kind of accident from any accident previously analyzed.

The proposed amendments involve only a change in the expiration date of the Operating License. No safety analyses are affected. No new or different accident type is created. The accident analyses presented in the Updated Final Safety Analysis Report remain bounding.

3. The proposed amendment will not involve a significant reduction in the margin of safety.

The proposed amendment involves only a change in the expiration date of the Operating License. No safety margins are affected.

The licensing bases of the plant, as described in the Updated Final Safety Analysis Report and the Environmental Report, are applicable for 40 years of plant operation.

For the reasons stated above, we have concluded that these license amendments do not involve a significant hazards consideration.

#### Review of R.E. Ginna Nuclear Power Plant Environmental Report

We have reviewed the original R.E. Ginna Nuclear Power Plant Environmental Report, and the 1982 update. We have concluded that the environmental impact associated with operation of the R.E. Ginna Nuclear Power Plant for a 40-year period of operation was considered in this report. The Environmental Report, as supplemented, does not generally use or discuss a specific period of plant operation in the evaluations presented.

In the approximately 7 years of plant operation since the Environmental Report was updated, a number of modifications have been made to the R.E. Ginna Nuclear Power Plant and surrounding site and facilities. These modifications, in general, had the effect of improving the reliability and safety of the plant or reducing the environmental impact of plant operation. They include:

#### a. Facilities

Many modifications to the plant have been made since the original Operating License has been issued. Significant modifications are described in the R.E. Ginna Updated Final Safety Analysis Report. Modifications made without prior NRC approval in accordance with the provisions of 10 CFR Part 50, Section 50.59, were reported to the Commission. Modifications requiring prior NRC approval were made following receipt of an NRC Safety Evaluation Report. No modification was found to affect the conclusions of the R.E. Ginna Nuclear Power Plant Environmental Report.

During 1978 a Deep Bed Condensate Polishing System was brought on-line at Ginna Station for the purpose of improving the secondary side steam generator water chemistry. This system was housed in a 6,000 ft<sup>3</sup> addition attached to the turbine building. While this system has had a beneficial effect on steam generator chemistry, additional waste products have been produced which require chemical treatment prior to discharge into Lake Ontario. The discharges are acceptable to the NY State Department of Environmental Conservation and are included in the Company's SPDES permit discussed in Section c. below.

#### b. Land Use

While some construction (e.g., the condensate polisher building) has taken place on the Ginna site since the 1982 EIS update, site boundaries and acreage have not changed. None of the new facilities will result in any additional impact upon local land use or terrestrial ecosystems and therefore the impacts described in the EIS remain valid.

#### c. Water Quality and Thermal Discharge-Related Impacts

The Ginna Station circulating cooling water system is regulated by the State Pollutant Discharge Elimination System (SPDES) Permitting Program which is an EPA-initiated program (subsequently transferred to the State of New York) which authorizes and monitors discharges to water bodies in order to ensure the protection of the environment from chemical, physical, and biological degradation. In May 1985 the New York State Department of Environmental Conservation issued SPDES Permit No. NY-000 0493 for the Ginna Station. This permit is renewable on a five year basis. All water quality issues including chemical discharges, discharge flows, thermal discharge, and biological impacts come under the jurisdiction of this permit. Additionally, this permit authorized variances for the existing cooling water intake and discharge systems pursuant to Sections 316(a) and (b) of the Clean Water Act for the five year life of the permit. Because this permit was issued subsequent to the 1982 EIS update, impacts since that time have been, and will continue to be, thoroughly reviewed in the SPDES process.

A significant change to the circulating cooling water system description which has been made since the 1982 EIS update is the revision of total daily discharge flow from 576 million gallons per day to 490 million gallons per day. This revision was made in 1985 and was based on recalculated heat rejection rates for the Station. Additionally, since the 1982 EIS update a number of reports related to the aquatic ecological impacts of Ginna Station operation have been prepared. Following is a list of the significant aquatic ecological reports prepared for Ginna Station since the 1982 EIS update.

RG&E REPORT NO.	TITLE
B-13-289	1977-1981 Entrainment Program Summary Report, Ginna Nuclear Power Station, 1985
B-13-290	1978-1983 Fish Program Summary Report, Ginna Nuclear Power Station, 1986
B-13-293	Ginna Nuclear Power Station, Impingement Program Plan of Study, 1985
B-13-328	Fish Impingement Program, 1982 through 1986 Analysis Report, Ginna Nuclear Power Station, 1987

The applicant believes that the SPDES Permitting Program is adequate to monitor present and future water quality impacts of Ginna Station. Therefore, no additional water quality impact analyses are necessary in this application.

#### d. Radiological Effects and Radwaste Treatment Systems

Releases of radioactive liquid and gaseous wastes from Ginna have remained among the lowest of U.S. generating plants during the past decade. Volume of radwaste shipped is among the lowest of U.S. nuclear generating plants. The following table is a summary of the most recent Ginna offsite radiation dose assessment which covers the period of January 1 through December 31, 1988. These annual doses are substantially lower than those reported in the Final Environmental Impact Statement (FEIS).

Gaseous Release

	Calculated Dose Based on Release Date	10 CFR 50 Appendix I Guidelines Per Unit Per Year
Maximum Site Boundary Gamma Air Dose (mrad)	0.000019	10
Maximum Site Boundary Beta Air Dose (mrad)	0.000011	20
Total Maximum Offsite Dose to Any Organ (mrem)	0.0060	15

Liquid Releases

Total Maximum Offsite Whole Body Dose (mrem)	0.011	3
Total Maximum Offsite Organ Dose (mrem)	0.010	10

There have been no land use changes which have significantly affected offsite dose calculations. Results of the 1988 offsite dose calculations for the critical receptor are provided below. This 1988 data is typical and is expected to be typical of dose assessments through 2009.

Critical Receptor for 1988:

Sector : ESE  
Distance : 670 Meters  
Pathway : Ground, Inhalation, Vegetation  
Age Group : Child  
Thyroid Dose : 0.000019 mrem

Occupational radiation exposure at the R.E. Ginna plant has been reduced to less than the U.S. average for PWRs for the last four years. This has been achieved despite an early history of fuel leakage and a later history of increasing steam generator inspection and repair requirements. The exposure reduction is attributed to a management commitment to "As Low As Reasonably Achievable (ALARA)" exposures, and an experienced and motivated radiation protection support group. The program receives constant attention through the Corporate ALARA Committee and was recently enhanced by adoption by the Engineering Department of the ALARA/Radiation Safety Design Review procedure.





The annual personnel dose received at Ginna for each of the last five years is summarized below. The average annual dose for that period is approximately 348 man-rem. Dose rates are stable and are not expected to increase significantly in the future, in fact, a decrease is possible due to recently developed dilute chemical decontamination techniques. The increased use of robotics in maintenance will also tend to reduce the annual dose. Annual maintenance activities are not expected to change significantly due to the increase in plant life.

Overall, the Ginna annual dose is not expected to exceed the last five years of operation and be approximately 350 man-rem per year for the period of 2006 to 2009.

<u>Year</u>	<u>Total Dose (man-rem)</u>
1984	370
1985	410
1986	363
1987	330
1988	269

In addition to operational methods and procedures which are employed to reduce public and occupational doses, many modifications have been made to the plant to reduce effluents, radwaste shipments and personnel exposure. Major changes include installation of a charcoal filter in the auxiliary building ventilation system, the addition of polishing demineralizers for the liquid radwaste system and the use of a supercompactor to reduce the number of radwaste shipments. Installation of a reactor head shield and use of robotic equipment for inspection and repair have reduced occupational doses.

The R.E. Ginna Nuclear Power Plant spent fuel storage pool has been reracked to maximum capacity, but will not provide adequate storage to the end of the current licensed operation. The rod consolidation process is being explored and a demonstration program has been conducted. Rod consolidation would provide for operation beyond the year 2009 with full core discharge capability. If a Federal repository is not available by then, other methods of onsite storage, such as dry cask storage, could be employed.

e. **Population**

Recent population densities have been compared with the 1970 U.S. Census Bureau statistics used in the original EIS. The applicant has obtained 1984 population data for the thirteen county area included in the 50 mile radius of the plant. This information indicates that the population in this thirteen county area has increased by only 3% overall. Since this increase is substantially below both the original RG&E and NRC estimates for 1984, the resultant impacts upon populations should actually be less than those originally estimated in the EIS.

The 1980 population for a 2 mile radius around the Ginna site is 1078 people. This population is estimated to increase to 1390 by the year 2015 based on the 1980-1985 population growth rate for Wayne County. Population centers with populations greater than 25,000 people, within the 50 mile radius of the plant, include Monroe County with the City of Rochester (Rochester 1984 population: 243,000), and the City of Auburn, N.Y. These are identified below, along with population projections for the year 2015, based on the 1970-1980 population growth rates for these areas.

<u>POPULATION CENTER</u>	<u>LOCATION</u>	<u>POPULATION</u>	
		<u>1984</u>	<u>2015</u>
Monroe County	20 mi WSW	711,200	742,100
Auburn, N.Y.	45 mi ESE	32,000	35,500

We conclude that the environmental impacts caused by the presence of the R.E. Ginna Nuclear Power Plant are minimal and that there have been no significant negative changes caused by modifications which have been made to the plant. This record provides a basis to show that the environmental cost of continued operation of the plant, at least to the September 2009 date, is minimal in comparison to the societal benefits of the use of relatively inexpensive energy which is generated at the plant.