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ROCHESTER GAS AND ELECTRIC CORPORATION • 89 EAST AVENUE, ROCHESTER, N.Y. 14649-0001 • 585 546-2700

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ROBERT C. MECREDDY  
Vice President  
Nuclear Operations

July 30, 2002

Attn: Consistency Review  
New York State Department of State  
Division of Coastal Resources  
41 State Street – 8<sup>th</sup> Floor  
Albany, New York 12231

Subject: Coastal Management Program Consistency Certification  
R. E. Ginna Nuclear Power Plant  
License Renewal Application

Dear Sir or Madam:

Rochester Gas and Electric Corporation (RG&E) is requesting concurrence with the enclosed Coastal Management Program Consistency Certification. This certification presents RG&E's position that continued operation of the R. E. Ginna Nuclear Power Plant (Ginna Station) would be in compliance with the current New York Coastal Management Program. As required by this Program, please find an electronic copy of RG&E's application to the U.S. Nuclear Regulatory Commission (NRC) for the license renewal of Ginna Station. Also enclosed for your use is a printed copy of the *Environmental Report-Operating License Renewal Stage, R. E. Ginna Nuclear Power Plant*.

RG&E has prepared an application to renew the U.S. Nuclear Regulatory Commission (NRC) Operating Licenses for Ginna Station and has performed a review for consistency with the New York Coastal Management Program. In conjunction with the application to NRC, RG&E must submit a certification to the Federal licensing agency (NRC) and the State pursuant to the requirements of the Coastal Zone Management Act.

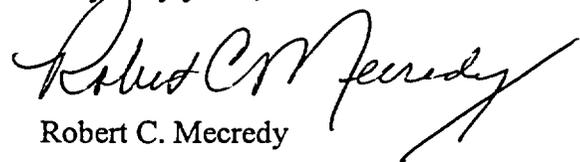
In accordance with NRC regulations for license renewal (10 CFR Part 54), RG&E has included an Environmental Report with its license renewal application. This report includes a description of the proposed action and the affected environment, and an analysis of environmental consequences and mitigating actions. Also included in this report is a complete list of licenses, permits, and other approvals from Federal, State, and local authorities for current Ginna Station operations, as well as approvals and consultations that would be required by the extended period of operation. A summary of this information is provided as part of the enclosed consistency certification.

The Environmental Report that RG&E included as part of the Ginna Station application includes a copy of RG&E's Coastal Management Program Consistency Determination including the New York State Department of State Coastal Management Program Federal Consistency Assessment Form that constitutes the consistency certification.

After your review of the Environmental Report and Consistency Certification, I would appreciate a letter concurring with the enclosed Coastal Management Program Consistency Certification. A copy of your response will be made available to the NRC at the time of their site visit.

If you have any questions or comments, please contact George Wrobel at (585) 771-3535.

Very truly yours,

A handwritten signature in black ink, appearing to read "Robert C. Mecredy". The signature is fluid and cursive, with a long, sweeping tail on the final letter.

Robert C. Mecredy

Enclosures

- 1-Coastal Management Program Consistency Determination
- 2-R. E. Ginna Nuclear Power Plant License Renewal Application (cd)
- 3-Environmental Report-Operating License Renewal Stage, R. E. Ginna Nuclear Power Plant

xc: Mr. Robert G. Schaaf (Mail Stop O-12-D3)  
Office of Nuclear Regulatory Regulation  
U.S. Nuclear Regulatory Commission  
One White Flint North  
11555 Rockville Pike  
Rockville, MD 20852

**New York State Department of State**  
**Coastal Management Program**  
**Federal Consistency Assessment Form**

NEW YORK STATE DEPARTMENT OF STATE  
COASTAL MANAGEMENT PROGRAM  
Federal Consistency Assessment Form

An applicant, seeking a permit, license, waiver, certification or similar type of approval from a federal agency which is subject to the New York State Coastal Management Program (CMP), shall complete this assessment form for any proposed activity that will occur within and/or directly affect the State's Coastal Area. This form is intended to assist an applicant in certifying that the proposed activity is consistent with New York State's CMP as required by U.S. Department of Commerce regulations (15 CFR 930.57). It should be completed at the time when the federal application is prepared. The Department of State will use the completed form and accompanying information in its review of the applicant's certification of consistency.

A. APPLICANT (please print)

1. Name: **Rochester Gas & Electric Corporation**
2. Address: **89 East Avenue, Rochester, NY 14649-001**
3. Telephone: Area Code **(585) 546-2700**

B. PROPOSED ACTIVITY

1. Brief description of activity:

**Rochester Gas & Electric Corporation is applying to the U.S. Nuclear Regulatory Commission to renew the operating license of the R. E. Ginna Nuclear Power Plant for an additional 20 years of plant operation.**

2. Purpose of activity:

**The purpose and need for the proposed action (renewal of an operating license) is to provide an option that allows for power generation capability beyond the term of a current nuclear power plant operating license to meet future system generating needs, as such needs may be determined by State, utility, and, where authorized, Federal (other than NRC) decision makers.**

3. Location of activity:

**Wayne County                      Town of Ontario                      1503 Lake Road**

4. Type of federal permit/license required: **U. S. Nuclear Regulatory Commission Operating License Renewal**

5. Federal application number, if known: **NRC Operating License DPR-18**

6. If a state permit/license was issued or is required for the proposed activity, identify the state agency and provide the application or permit number, if known: **Not Applicable**

C. COASTAL ASSESSMENT Check either "YES" or "NO" for each of these questions. The numbers following each question refer to the policies described in the CMP document (see footnote on page 2) which may be affected by the proposed activity.

1. Will the proposed activity result in any of the following: YES NO
- a. Large physical change to a site within the coastal area which will require the preparation of an environmental impact statement? (11, 22, 25, 32, 37, 38, 41, 43) .....      X
  - b. Physical alteration of more than two acres of land along the shoreline, land under water or coastal waters? (2, 11, 12, 20, 28, 35, 44).....      X
  - c. Revitalization/redevelopment of a deteriorated or underutilized waterfront site? (1).....      X
  - d. Reduction of existing or potential public access to or along coastal waters? (19, 20).....      X
  - e. Adverse effect upon the commercial or recreational use of coastal fish resources? (9,10).....      X
  - f. Siting of a facility essential to the exploration, development and production of energy resources in coastal waters or on the Outer Continental Shelf? (29).....      X
  - g. Siting of a facility essential to the generation or transmission of energy? (27).....      X
  - h. Mining, excavation, or dredging activities, or the placement of dredged or fill material in coastal waters? (15, 35).....      X
  - i. Discharge of toxics, hazardous substances or other pollutants into coastal waters? (8, 15, 35). X
  - j. Draining of stormwater runoff or sewer overflows into coastal waters? (33)..... X
  - k. Transport, storage, treatment, or disposal of solid wastes or hazardous materials? (36, 39) ..... X
  - l. Adverse effect upon land or water uses within the State's small harbors? (4) .....      X

2. Will the proposed activity affect or be located in, on, or adjacent to any of the following: YES NO
- a. State designated freshwater or tidal wetland? (44).....      X
  - b. Federally designated flood and/or state designated erosion hazard area? (11, 12, 17,)..... X
  - c. State designated significant fish and/or wildlife habitat? (7) .....      X
  - d. State designated significant scenic resource or area? (24).....      X
  - e. State designated important agricultural lands? (26) .....      X
  - f. Beach, dune or barrier island? (12) .....      X
  - g. Major ports of Albany, Buffalo, Ogdensburg, Oswego or New York? (3).....      X
  - h. State, county, or local park? (19, 20) .....      X
  - i. Historic resource listed on the National or State Register of Historic Places? (23).....      X

3. Will the proposed activity require any of the following: YES NO
- a. Waterfront site? (2, 21, 22).....      X
  - b. Provision of new public services or infrastructure in undeveloped or sparsely populated sections of the coastal area? (5) .....      X
  - c. Construction or reconstruction of a flood or erosion control structure? (13, 14, 16).....      X
  - d. State water quality permit or certification? (30, 38, 40)..... X
  - e. State air quality permit or certification? (41, 43) .....      X

4. Will the proposed activity occur within and/or affect an area covered by a State approved local waterfront revitalization program? (see policies in local program document)..... YES NO  
     X

**D. ADDITIONAL STEPS**

1. If all of the questions in Section C are answered "NO", then the applicant or agency shall complete Section E and submit the documentation required by Section F.
2. If any of the questions in Section C are answered "YES", then the applicant or agent is advised to consult the CMP, or where appropriate, the local waterfront revitalization program document\*. The proposed activity must be analyzed in more detail with respect to the applicable state or local coastal policies. On a separate page(s), the applicant or agent shall: (a) identify, by their policy numbers, which coastal policies are affected by the activity, (b) briefly assess the effects of the activity upon the policy; and, (c) state how the activity is consistent with each policy. Following the completion of this written assessment, the applicant or agency shall complete Section E and submit the documentation required by Section F.

**E. CERTIFICATION**

The applicant or agent must certify that the proposed activity is consistent with the State's CMP or the approved local waterfront revitalization program, as appropriate. If this certification cannot be made, the proposed activity shall not be undertaken. If this certification can be made, complete this Section.

"The proposed activity complies with New York State's approved Coastal Management Program, or with the applicable approved local waterfront revitalization program, and will be conducted in a manner consistent with such program "

Applicant/Agent's Name. **Robert C. Mecredy, Vice President, Nuclear Operations**  
Address: **R.E. Ginna Nuclear Power Plant, 1503 Lake Road, Ontario, NY 14519**

Telephone: Area Code (585) 771-3494

Applicant/Agent's Signature: \_\_\_\_\_

Date: July 30, 2002

**F. SUBMISSION REQUIREMENTS**

1. The applicant or agent shall submit the following documents to the New York State Department of State, Division of Coastal Resources, 41 State Street - 8th Floor, Albany, New York 12231.
  - a. Copy of original signed form
  - b. Copy of the completed federal agency application
  - c. Other available information which would support the certification of consistency.
2. The applicant or agent shall also submit a copy of this completed form along with his/her application to the federal agency
3. If there are any questions regarding the submission of this form, contact the Department of State at (518) 474-6000

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\*These state and local documents are available for inspection at the offices of many federal agencies, Department of Environmental Conservation and Department of State regional offices, and the appropriate regional and county planning agencies. Local program documents are also available for inspection at the offices of the appropriate local government.

R.E GINNA NUCLEAR POWER PLANT OPERATING LICENSE RENEWAL  
FEDERAL CONSISTENCY ASSESSMENT FORM SUPPLEMENTAL INFORMATION

The following table contains a listing of the New York State Coastal Management Program Policies affected by the proposed activity, license renewal of the R. E. Ginna Nuclear Power Plant. Discussion follows the table, detailing how the proposed activity affects the individual policies. Policies 11, 15, and 35 are not included in the discussion because there are no plans to construct new buildings or structures or to conduct mining, excavation, or dredging in coastal waters as part of the proposed activity.

**Table 1. New York State Coastal Management Program Policies Affected by R. E. Ginna License Renewal**

Policy 8	Protect fish and wildlife resources in the coastal area from the introduction of hazardous wastes and other pollutants which bio-accumulate in the food chain or which cause significant sublethal or lethal effect on those resources.
Policy 12	Activities or development in the coastal area will be undertaken so as to minimize damage to natural resources and property from flooding and erosion by protecting natural protective features including beaches, dunes, barrier islands, and bluffs.
Policy 17	Non-structural measures to minimize damage to natural resources and property from flooding and erosion shall be used whenever possible.
Policy 30	Municipal, industrial, and commercial discharge of pollutants, including but not limited to, toxic and hazardous substances, into coastal waters will conform to state and national water quality standards.
Policy 33	Best management practices will be used to ensure the control of stormwater runoff and combined sewer overflows draining into coastal waters
Policy 36	Activities related to the shipment and storage of petroleum and other hazardous materials will be conducted in a manner that will prevent or at least minimize spills into coastal water; all practicable efforts will be undertaken to expedite the cleanup of such discharges; and restitution for damages will be required when these spills occur.
Policy 38	The quality and quantity of surface water and groundwater supplies will be conserved and protected, particularly where such waters constitute the primary or sole source of water supply.
Policy 39	The transport, storage, treatment and disposal of solid wastes, particularly hazardous wastes, within coastal areas will be conducted in such a manner so as to protect groundwater and surface water supplies, significant fish and wildlife habitats, recreation areas, important agricultural land, and scenic resources.
Policy 40	Effluent discharged from major steam electric generating and industrial facilities into coastal waters will not be unduly injurious to fish and wildlife and shall conform to state water quality standards.

With regard to Policy 8, the renewal of the R. E. Ginna Nuclear Power Plant operating license would have no additional effect on the fish and wildlife resources through the introduction of hazardous wastes and other pollutants. Hazardous wastes and other pollutants which bio-accumulate in the food chain that Ginna Station operations would generate or have on site would be present in the following: effluent discharges from operations, pesticides used for facility and property maintenance, petroleum bulk storage, chemical bulk storage, and mixed and hazardous wastes generated by operations. State and federal programs regulate these potential sources of hazardous materials. All effluent discharges are regulated under the New York State Department of Environmental Conservation through the State Pollutant Discharge Elimination System (SPDES) permit program and Ginna Station has been issued a SPDES permit (NY-0000493) with effluent limitations, monitoring requirements, and other conditions that ensures that all discharges are in compliance with Title 8 of Article 17 of the Environmental Conservation Law of New York State and the Clean Water Act as amended (33 U.S.C. Section 1251 et seq.). Ginna Station is in compliance with its SPDES permit and is meeting all requirements and conditions set forth in the permit and is, therefore, protecting fish and wildlife resources in the Lake Ontario area where the plant is located.

Pesticide use is regulated by the New York State Department of Environmental Conservation (NYSDEC) under 6 NYCRR Part 325. Ginna Station has in place the NYSDEC Pesticide Business Registration and labels, prepares the required annual reports to the State, and maintains appropriate applicator certifications to ensure that pesticide use

and storage on site are done properly and in accordance with regulations and is, therefore, protecting fish and wildlife resources in the Lake Ontario area where the plant is located.

Petroleum bulk storage on site is regulated by the New York State Department of Environmental Conservation under 6 NYCRR Parts 612.2-3, 613.6, and 613.8-9. Ginna Station facilities have the appropriate registrations and procedures are in place for spill prevention, response, and reporting. Chemical bulk storage on site is regulated by the New York State Department of Environmental Conservation under 6 NYCRR Parts 595.3, 596.2, 596.4, 596.6, 598.1, 598.4-5, and 598.7-10. Ginna Station has in place a Spill Prevention, Control, and Countermeasures Plan as required under 40 CFR 112 to prevent the discharge of oil to surface waters or surface water tributaries. Ginna Station facilities have the appropriate registrations and procedures in place for proper materials handling and storage; spill prevention, response, and reporting; and storage systems inspection, maintenance, and repair. Ginna Station has in place processes and procedures to ensure that hazardous chemicals stored and used on site are handled and stored in accordance with applicable State and Federal regulations. Ginna Station is, therefore, protecting fish and wildlife resources in the Lake Ontario area.

Mixed and hazardous wastes generated on site are packaged, temporarily stored, and shipped off site for processing and disposal. The New York State Department of Environmental Conservation regulates these activities under 6 NYCRR Parts 372.2, 373.1.1, 373.2, and 373.3. Ginna Station has in place processes and procedures to ensure that mixed and hazardous wastes are packaged, stored, and shipped so as to comply with the applicable State and Federal regulations, thus ensuring that fish and wildlife resources are protected. In summary, the hazardous wastes and other pollutants, which bio-accumulate in the food chain and could be introduced into the environment as a result of Ginna Station operations, are minimized through compliance with applicable environmental regulations. Fish and wildlife resources in the Lake Ontario area are, therefore, protected and the proposed activity is consistent with Policy 8.

With respect to Policies 12 and 17, a revetment composed of large stones covers the shoreline of Lake Ontario, within the Ginna Station protected area. The revetment was originally designed to provide surge flooding protection. The continued operation of the Ginna Station during the license renewal period will not involve any activities that would disturb the shoreline either to the east or west of the revetment. There are no plans for activities along the shoreline in the protected area. Ginna Station has no plans for activities or development along the shoreline as a part of the proposed activity, and so the proposed activity is consistent with Policies 12 and 17.

With respect to Policy 30, the effluent discharges from Ginna Station are regulated under the New York State Department of Environmental Conservation through the State Pollutant Discharge Elimination System (SPDES) permit program. Ginna Station has been issued a SPDES permit (NY-0000493) with effluent limitations, monitoring requirements, and other conditions, that ensures that all discharges are in compliance with Title 8 of Article 17 of the Environmental Conservation Law of New York State and the Clean Water Act as amended (33 U.S.C. Section 1251 et seq.). Ginna Station is in compliance with its SPDES permit and is meeting all requirements and conditions set forth in the permit and the proposed activity is therefore consistent with Policy 30.

With respect to Policy 33, Ginna Station has in place a Storm Water Pollution Prevention Plan. Best management practices to control storm water runoff and sewer overflows are an element of that plan. The New York State Department of Environmental Conservation regulates storm water management under 6 NYCRR, Part 751, ECL 17-0701 and 17-0808, and GP-98-03. The U.S. Environmental Protection Agency has authority under 40 CFR 122. The proposed activity is therefore consistent with Policy 33.

With respect to Policy 36, Ginna Station has in place procedures to ensure that petroleum and other hazardous materials used on site are safely handled and stored. The New York State Department of Environmental Conservation regulates petroleum bulk storage under the authority of 6 NYCRR Parts 612.2-3, 613.6, and 613.8-9. Ginna Station facilities have the appropriate registrations and procedures are in place to prevent and report spills. Chemical bulk storage on site is regulated by the New York State Department of Environmental Conservation under 6 NYCRR Parts 595.3, 596.2, 596.4, 596.6, 598.1, 598.4-5, and 598.7-10. Ginna Station has in place a Spill Prevention, Control, and Countermeasures Plan as required under 40 CFR 112 to prevent the discharge of oil to surface waters or surface water tributaries. Ginna Station facilities have the appropriate registrations and procedures in place for proper materials handling and storage; spill prevention, response, and reporting; and storage systems inspection, maintenance, and repair. Ginna Station has in place processes and procedures to ensure that hazardous

chemicals stored and used on site are handled and stored in accordance with applicable State and Federal regulations so as to prevent the release of these materials to coastal waters. Therefore, the proposed activity is consistent with Policy 36.

With respect to Policy 38, Ginna Station does not use groundwater as a resource for any plant operations or as a potable water resource. Processes and procedures are in place for the handling and storage of hazardous materials on site to prevent spills and to respond to any that occur so as to minimize impacts to groundwater or surface water resources. Effluents from plant operations are regulated under Ginna Station's SPDES permit so as to minimize the impacts to surface water supplies (Deer and Mill Creeks and Lake Ontario) and minimize water use. A Stormwater Pollution Prevention Plan is in place to protect surface water resources. Ginna Station has in place a Spill Prevention, Control, and Countermeasures Plan as required under 40 CFR 112 to prevent the discharge of oil to surface waters or surface water tributaries. Ginna Station has in place processes and procedures that conserve and protect both groundwater and surface water resources. Therefore, the proposed activity is consistent with Policy 38.

With respect to Policy 39, Ginna Station does not dispose of solid waste on site. Mixed and hazardous wastes generated on site are packaged, temporarily stored, and shipped off site for processing and disposal. The New York State Department of Environmental Conservation regulates these activities under 6 NYCRR Parts 372.2, 373.1.1, 373.2, and 373.3. Ginna Station has in place processes and procedures to ensure that mixed and hazardous wastes are packaged, stored, and shipped so as to comply with the applicable State and Federal regulations, thus ensuring that groundwater and surface water supplies, significant fish and wildlife habitats, recreation areas, important agricultural land, and scenic resources are protected. The proposed activity is therefore consistent with Policy 39.

With respect to Policy 40, the effluent discharges from Ginna Station are regulated under the New York State Department of Environmental Conservation through the State Pollutant Discharge Elimination System (SPDES) permit program. Ginna Station has been issued a SPDES permit (NY-0000493) with effluent limitations, monitoring requirements, and other conditions that ensure that all discharges are in compliance with Title 8 of Article 17 of the Environmental Conservation Law of New York State and the Clean Water Act as amended (33 U.S.C. Section 1251 et seq.). Ginna Station is in compliance with its SPDES permit and is meeting all requirements and conditions set forth in the permit and so is minimizing impacts to fish and wildlife. The proposed activity is, therefore, consistent with Policy 40.

## COASTAL MANAGEMENT PROGRAM CONSISTENCY DETERMINATION

New York has an approved coastal zone management program documented by the U.S. Nuclear Regulatory Commission (NRC) (Ref. 1). Rochester Gas and Electric Corporation (RG&E) has determined that the proposed R. E. Ginna Nuclear Power Plant (Ginna Station) license renewal complies with the New York-approved coastal management program and will be conducted in a manner consistent with such program.

### **Proposed Activity**

RG&E operates Ginna Station pursuant to NRC Operating License DPR-18, which will expire September 18, 2009. RG&E is applying to the NRC for renewal of the license, which would permit RG&E to operate Ginna Station for an additional 20 years (i.e., until September 18, 2029). License renewal would give RG&E the option of relying on Ginna Station to meet a portion of New York's future needs for electric generation.

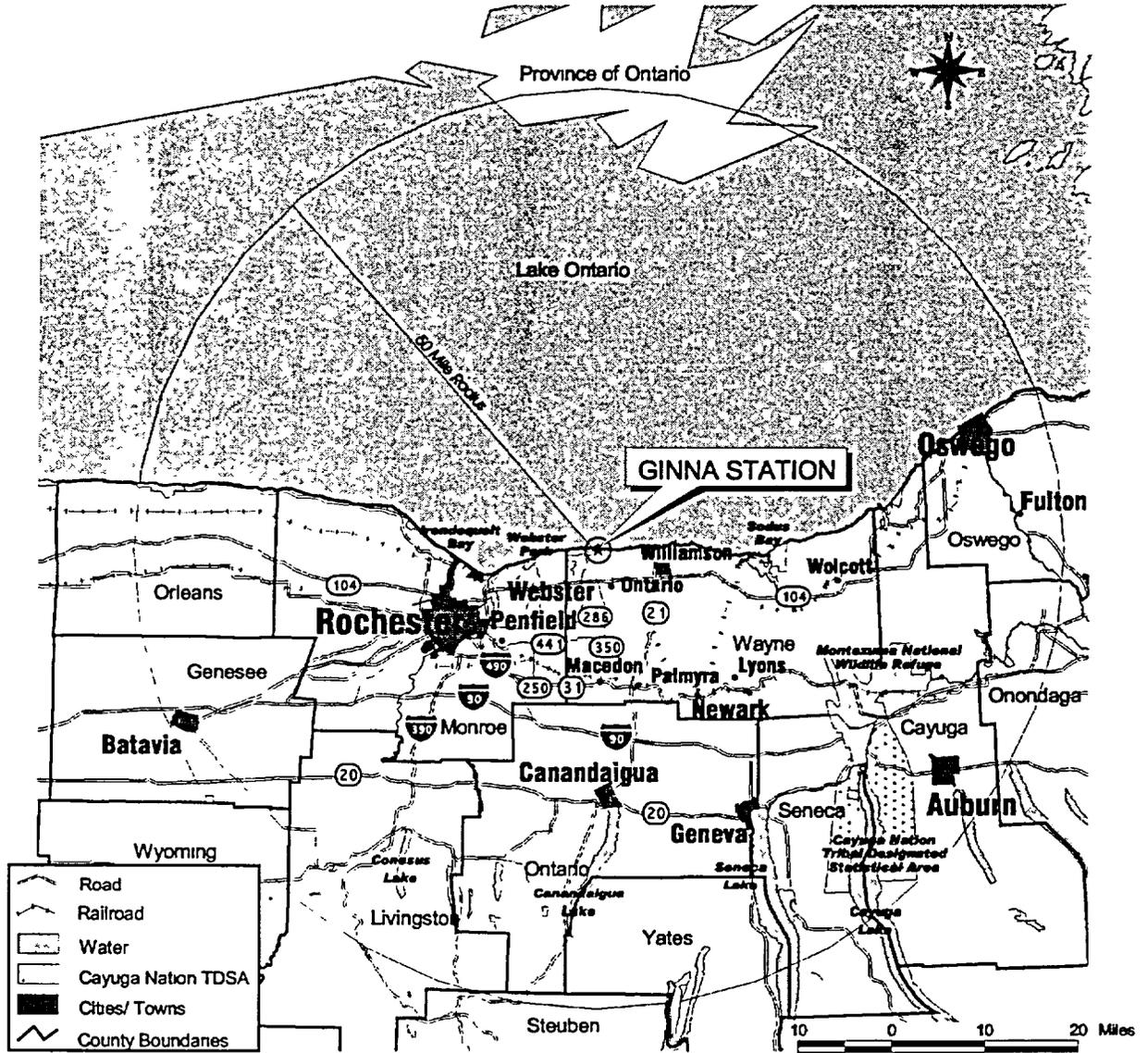
Ginna Station is located on the southern shore of Lake Ontario in the Town of Ontario, in the northwest corner of Wayne County, New York, approximately 20 miles east of the center of the City of Rochester and 40 miles west-southwest of Oswego (see Figures 1 and 2).

Ginna Station is shown in Figure 3. The plant consists of a pressurized light-water reactor with two steam generators that produce steam that turns turbines to generate electricity. The plant is capable of an output of 1,520 megawatts (thermal) [MW(t)], with a corresponding net electrical output of approximately 490 megawatts (electric) [MW(e)].

Ginna Station utilizes a once-through heat dissipation system that withdraws cooling water from and discharges to Lake Ontario. RG&E uses small amounts of chlorine in the cooling water system that discharges to offsite surface waters. There are eleven outfalls permitted under the site's State Pollutant Discharge Elimination System permit. The main outfall is associated with the once-through and intake cooling water systems discharging through the discharge canal to Lake Ontario. The next seven of these are internal outfalls, discharging to the discharge canal and ultimately to Lake Ontario. The last three outfalls discharge to Mill Creek (as designated in the SPDES permit) and consist of two unmonitored storm water runoff outfalls and a Redundant House service water discharge.

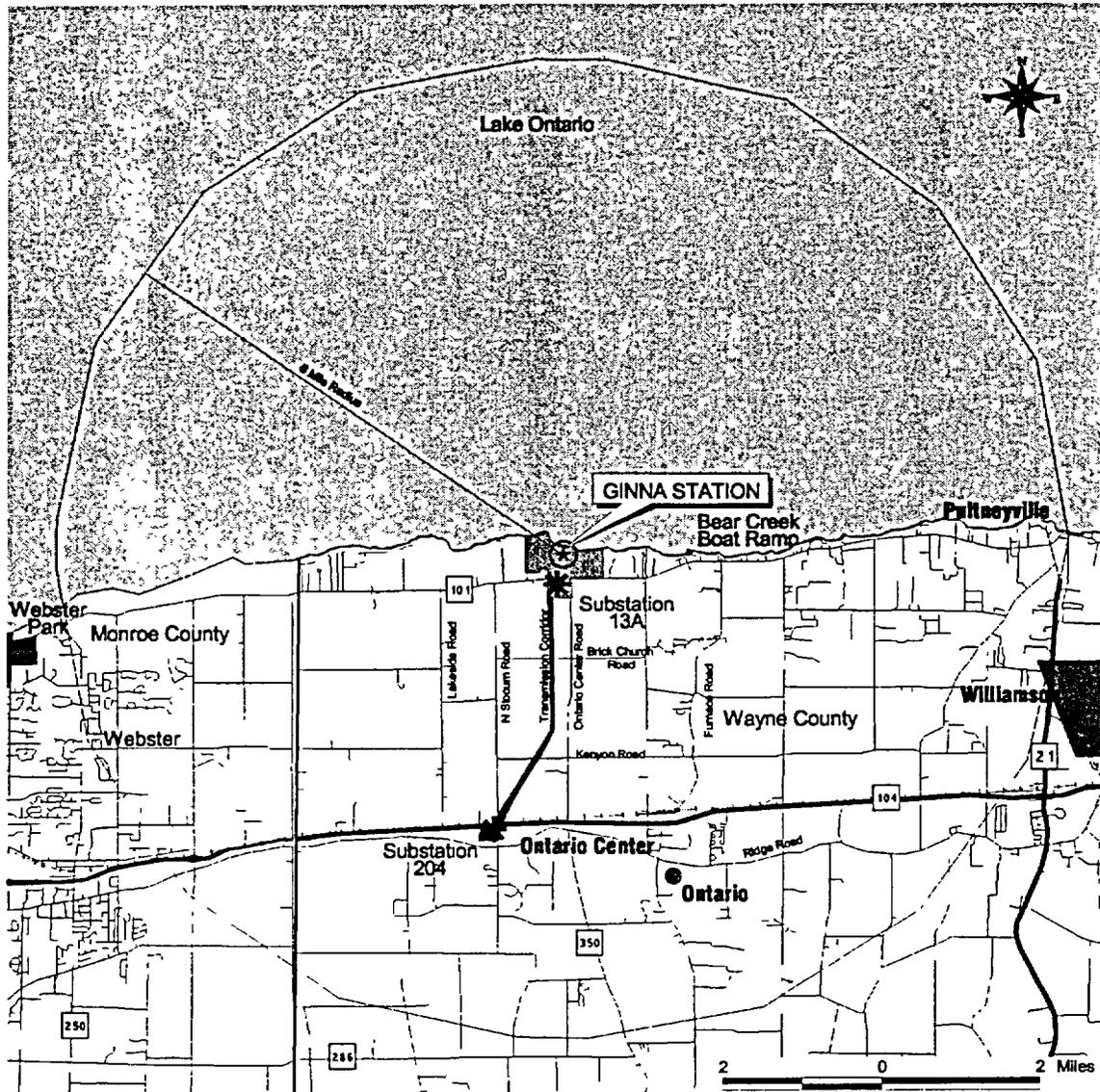
Ginna Station uses once-through cooling water from Lake Ontario to remove waste heat from the electricity generation process in a two-loop, three-stage heat-transfer design. The primary and secondary loops are closed systems utilizing demineralized water that has been treated to control chemistry and corrosion. The final stage of the heat transfer system involves the circulating water system, which is unconfined. Lake water is withdrawn through an offshore intake structure into a concrete-lined

Figure 1  
50-Mile Region

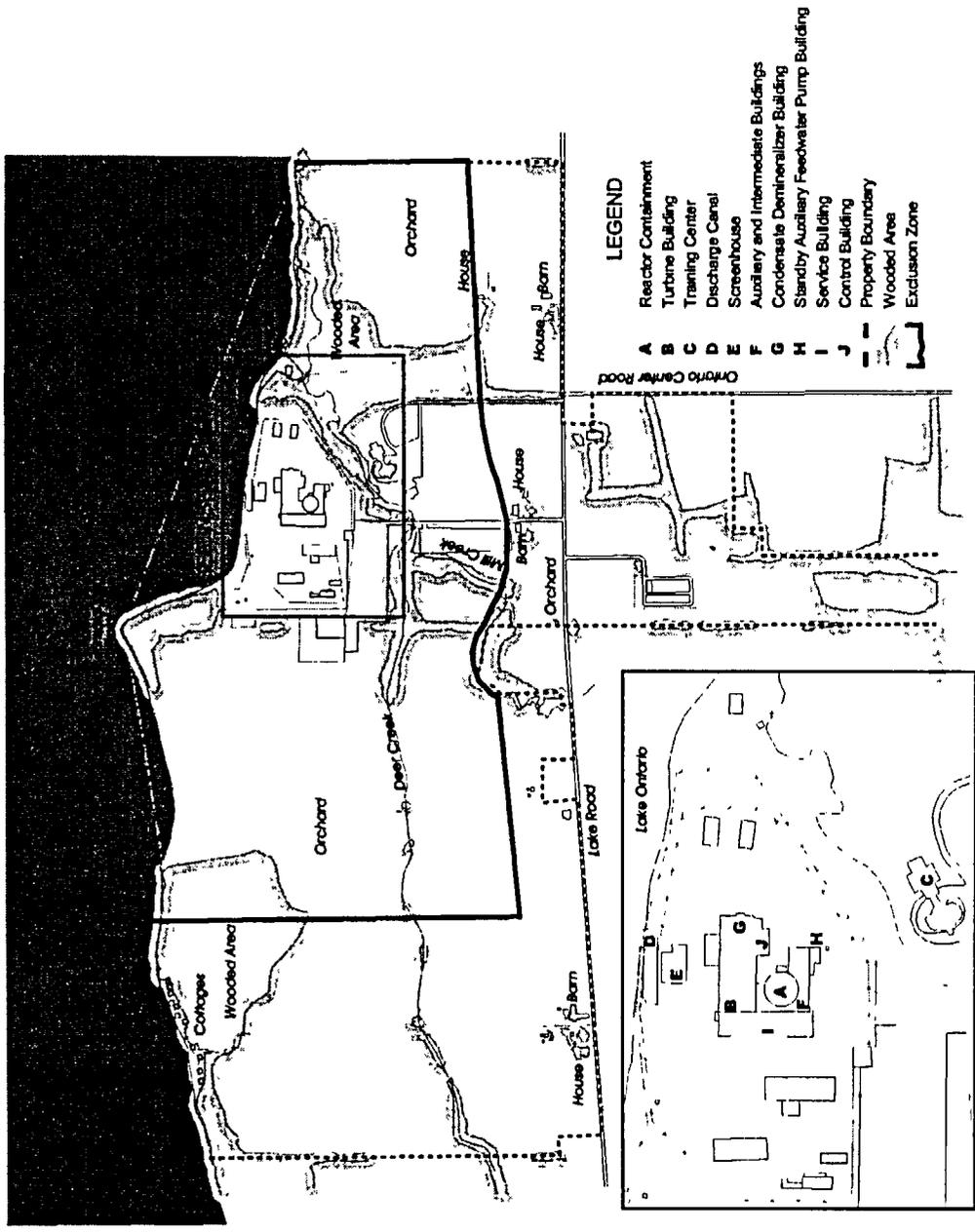


TSDA: Tribal Designated Statistical Area

Figure 2  
6-Mile Region



**Figure 3  
Site Map**



tunnel, which directs the water into the screenhouse. This water then passes through the four parallel traveling screens before it is pumped through the main condensers to the discharge canal. The heated water is discharged back to Lake Ontario at the shoreline. The cooling water intake structure is located approximately 3,100 feet offshore at a depth of about 33 feet of water at mean lake level (244.7 feet) and is completely submerged below the surface of the Lake. Even an occurrence of historical low water level will result in no less than 15 feet of water covering the intake structure. The intake itself is an octagonal-shaped structure, 50.8 feet across, containing electrically heated screen racks in each of the eight 17.3-foot-wide by 10-foot-high ports. Heavy screen racks with bars spaced 10-14 inches apart, center to center, prevent large objects from entering the system. At conditions of full flow (354,600 gallons per minute), the velocity at the intake screen racks is 0.8 feet per second. Water enters the intake from all sides in a circle, protecting against stoppage by a single, large piece of material. The low velocity plus the submergence provide assurance that floating ice will not plug the intake.

The discharge canal transports the heated cooling water to Lake Ontario, where it is discharged at the shoreline to the surface of the Lake. Normal temperature increase over ambient water at the point of discharge is about 20 degrees Fahrenheit (°F), and the size of the thermal plume is normally about 175 acres. Temperature of the discharged cooling water and extent of the thermal plume is limited by the State Pollutant Discharge Elimination System permit for Ginna Station.

The service water system for Ginna Station is also a once-through cooling system, but uses much less water than the circulating water system. Up to 14,600 gallons per minute of lake water are pumped from the screenhouse through heat exchangers for non-contact cooling for a wide variety of plant equipment. Discharge is to the discharge canal and low-level chlorination is used to control biofouling of the system. An alternate service water discharge flow path exists via a discharge structure to Deer Creek. This path is used very infrequently, primarily during surveillance testing or when maintenance work is required in the preferred service water discharge path. When in use, flows are documented in the monthly Discharge Monitoring Report submitted to the New York State Department of Environmental Conservation and chlorine injection is not allowed in the system.

Ginna Station uses approximately 100,000 gallons of water per day from the Ontario Water District in the Town of Ontario. This municipal water is the source of supply for the plant's process (auxiliary boiler feed and condensate to makeup and polishing), potable, and sanitary water systems. Ginna Station discharges treated waste process water into the discharge canal. These discharges are regulated under the plant's State Pollutant Discharge Elimination System permit. Sanitary wastewater is not disposed on site, but is piped to the Town of Ontario, New York's, wastewater treatment system for treatment and disposal.

RG&E employs a permanent workforce of approximately 500 employees at Ginna Station. Approximately 48 percent of the workforce lives in Wayne County and 44 percent lives in Monroe County. The site workforce increases by as many as 700 workers for temporary (30 to 40 days) duty during refueling outages that occur about

once every eighteen months. RG&E does not anticipate the need for additional staff to support operations during extended operations.

In compliance with the NRC regulations, RG&E has analyzed the effects of plant aging and identified activities needed for Ginna Station to operate for an additional 20 years. RG&E conservatively assumes that renewal of the Ginna Station operating license would require the addition of no more than 60 workers to perform the additional license renewal surveillance, monitoring, inspection, testing, trending, and reporting. Ginna Station license renewal would involve no plant refurbishment.

Ginna Station transmission lines connect the plant through corridors to the State's electric grid at Substation 204 (Fruitland), south of the plant (see Figure 2). Four underground cables transmit electricity from the plant to Substation 13A, which is located south of the plant on the south side of Lake Road. Four overhead transmission lines emanate from Substation 13A and run in a southerly direction to connect to the transmission grid at Substation 204. RG&E owns the transmission corridor from Ginna Station to Substation 204 and maintains it as a low-growing vegetative community with selected management techniques under a New York State Public Service Commission-approved long-range vegetation management plan

Ginna Station provides about 40 percent of the electrical load in the RG&E service territory, located primarily in upstate western New York. In other words, the extended operation of Ginna Station would meet the electrical needs of approximately one million people in the RG&E nine-county service area.

### **State Program**

New York's coastal management program is administered by the New York Department of State, Division of Coastal Resources. For federal agency activities, the Division reviews projects to ensure adherence to the State program or an approved Local Waterfront Revitalization Program. Applicants for federal agency approvals or authorizations are required to submit copies of federal applications to the Division, together with a Federal Consistency Assessment Form and consistency certification. The Department reviews the consistency certification and proposal for consistency with the State of New York Coastal Management Program as documented in 44 specific policies established in the Department's 1982 Final Environmental Impact Statement. The policies articulate the State's vision for its coast by addressing the following areas:

- Development
- Fish and Wildlife
- Flooding and Erosion Hazards
- General
- Public Access
- Recreation
- Historic and Scenic Resources
- Agricultural Lands

- Energy and Ice Management
- Water and Air Resources

Tables 1 and 2 identify licenses, permits, consultations and other approvals necessary for Ginna Station continued operation and license renewal, respectively.

RG&E consulted with the Federal and State regulator agencies listed below to inform them of plans to seek license renewal for Ginna Station. RG&E described for the agencies its license renewal efforts and requested input from the agency representatives regarding issues of concern.

**Federal**

U.S. Fish and Wildlife Service  
 U.S. Army Corps of Engineers  
 U.S. Environmental Protection Agency

**State of New York**

Department of State  
 Department of Environmental Conservation  
 Office of Parks, Recreation, and Historic Preservation

**Probable Effects**

The NRC has prepared a *Generic Environmental Impact Statement for License Renewal of Nuclear Plants* (GEIS) which analyzes the environmental impacts associated with the renewal of nuclear power plant operating licenses (Ref. 2; Ref. 3). The NRC has codified its findings by rulemaking (10 CFR Part 51, Subpart A, Appendix B, Table B-1). The codification identifies 92 potential environmental issues, 69 of which are generically identified as having small impacts and are called "Category 1" issues. Absent findings of new and significant information, the NRC will rely on its codified findings, as amplified by supporting information in the GEIS, for its assessment of environmental impacts associated with license renewal. The codification and GEIS discuss the following types of Category 1 environmental issues:

- Surface water quality, hydrology, and use;
- Aquatic ecology;
- Groundwater use and quality;
- Terrestrial resources;
- Air quality;
- Land use;
- Human health;
- Socioeconomics;

**Table 1**  
**Environmental Authorizations for Current Operations**  
**R.E. Ginna Nuclear Power Plant**

Agency	Authority	Requirement	Number	Expiration Date	Authorized Activity
New York State Department of Environmental Conservation	NYS ECL Part 675	Water Withdrawal Registration	NYGLWR-0002810	07/10/02 <sup>a</sup>	Withdraw water from Lake Ontario
State of Tennessee Department of Environment and Conservation	Tennessee Code Annotated 68-202-206	Radioactive Shipment License	T-NY004-L01	12/31/02	Shipment of radioactive material to a licensed disposal/processing facility within Tennessee
Utah Department of Environmental Quality	R313-26 of the Utah Radiation Control Rules	Utah Department of Environmental Quality Division of Radiation Control Generator Site Access Permit Accessing A Land Disposal Facility Within Utah	0109 000 005	06/30/03	Delivery of radioactive wastes to a land disposal facility located within Utah
South Carolina Department of Health and Environmental Control	Act No. 429 of 1980 (South Carolina Radioactive Waste Transportation and Disposal Act)	South Carolina Radioactive Waste Transport Permit	0034-31-01	12/31/02	Transport of radioactive waste into South Carolina
New York State Department of Environmental Conservation	NYS ECL 11-0515 (1), NYCRR Part 175	New York State Fish and Wildlife License	LCP01-756	12/31/02	Collection and possession of fish and wildlife
New York State Department of Environmental Conservation	NYS ECL Article 40	Hazardous Substance Bulk Storage Registration Certificate	8-000170	07/18/03	Registration of hazardous substance bulk storage on site

**Table 1 (continued)**  
**Environmental Authorizations for Current Operations**  
**R.E. Ginna Nuclear Power Plant**

Agency	Authority	Requirement	Number	Expiration Date	Authorized Activity
New York State Department of Environmental Conservation	NYS ECL Title 8 of Article 17	State Pollution Discharge Elimination System (SPDES) Permit	NY-0000493	02/01/03	Discharge of wastewaters to waters of the State
U.S. Department of Transportation	49 CFR Part 107, Subpart G	Certificate of Registration for Transportation of Hazardous Materials	06200255003K	06/30/03	Transportation of hazardous materials
U.S. Nuclear Regulatory Commission	Atomic Energy Act (42 USC 2011 et seq.), 10 CFR 50.10	Facility Operating License	DPR-18	09/18/09	License to operate a nuclear power plant

a. Registration renewal submitted June 24, 2002.

**Table 2**  
**Environmental Authorizations for**  
**R.E. Ginna Nuclear Power Plant License Renewal<sup>a</sup>**

Agency	Authority	Requirement	Remarks
U.S. Nuclear Regulatory Commission	Atomic Energy Act (42 USC 2011 et seq.)	License renewal	Environmental report submitted in support of license renewal application
U.S. Fish and Wildlife Service	Endangered Species Act, Section 7 (16 USC 1536)	Consultation	Requires federal agency issuing a license to consult with FWS
New York State Department of Environmental Conservation	Clean Water Act, Section 401 (33 USC 1341)	Certification	SPDES permit documents compliance with Clean Water Act standards
New York State Office of Parks, Recreation, and Historic Preservation	National Historic Preservation Act, Section 106 (16 USC 470f)	Consultation	Requires federal agency issuing a license to consider cultural impacts and consult with State Historic Preservation Officer
New York State Department of State	Federal Coastal Zone Management Act (16 USC 1451 et seq.)	Certification	Requires an applicant to provide certification to the federal agency issuing the license that license renewal would be consistent with the federally approved state coastal zone management program; based on its review of the proposed activity, the State must concur with or object to the applicant's certification

<sup>a</sup>. No renewal-related requirements identified for local or other agencies.  
FWS = U.S. Fish and Wildlife Service  
SPDES = State Pollutant Discharge Elimination System

- Uranium fuel cycle and waste management; and
- Decommissioning.

For plants such as Ginna Station that are located within the coastal zone, many of these issues involve impact to the coastal zone. RG&E has adopted by reference the GEIS analysis for all Category 1 issues.

The NRC review of environmental impacts arising out of license renewal identified 21 issues as “Category 2,” for which license renewal applicants must submit additional, site-specific information.<sup>1</sup> There are 16 Category 2 issues that are applicable to Ginna Station.<sup>2</sup> The applicable issues and conclusions for these issues are as follows:

Aquatic ecology – RG&E has a current State Pollutant Discharge Elimination System permit and related correspondence equivalent to Clean Water Act Section 316(b) determination. It has been documented that the existing intake structure reflects the best technology available for minimizing entrainment and impingement impacts. Thermal plume studies indicated the thermal discharge from Ginna Station complies with New York Water Quality Standards and has an approved Clean Water Act Section 316(a) variance. Consequently, the impacts of continued plant operation from entrainment, impingement, and heat shock would be small.

Terrestrial resources – RG&E has no plans to perform major refurbishment activities; therefore, impacts due to refurbishment are not expected.

Threatened and endangered species – RG&E has no plans to perform major refurbishment activities; therefore, impacts due to refurbishment are not expected and impacts to these species through license renewal would be small.

Air quality – RG&E has no plans to perform major refurbishment activities; therefore, impacts due to refurbishment are not expected.

Human Health – Ginna Station transmission lines meet the National Electric Safety Code® recommendations for preventing electric shock from induced currents; therefore, the impact from electric shock would be small.

Socioeconomics – RG&E has no plans for refurbishment activities; therefore, impacts to the local education system and transportation due to refurbishment are not expected. RG&E’s conservative bounding analysis of 60 additional license renewal personnel would not result in significant impacts to available housing or local water systems.

Offsite land use – RG&E has no plans to perform major refurbishment activities; therefore, impacts due to refurbishment are not expected. The tax-related impacts of continued operations would be small.

<sup>1</sup> 10 CFR 51, Subpart A, Appendix B, Table B-1, also identifies two issues as “NA,” for which the NRC could not come to a conclusion regarding categorization. RG&E believes that these issues, chronic effects of electromagnetic fields and environmental justice, do not affect the “coastal zone” as that phrase is defined by the Coastal Zone Management Act [16 USC 1453(1)].

<sup>2</sup> Some Category 2 issues are applicable to plants having features that are not present at Ginna Station (e.g., cooling towers).

Historic and archeological resources – RG&E has no plans to perform major refurbishment activities; therefore, impacts due to refurbishment are not expected, and continued operations would have no impacts.

Severe accident mitigation alternatives – RG&E identified four potentially cost-beneficial modifications that would reduce the impacts of a severe accident.

## **Findings**

1. The NRC has determined that the significance of Category 1 issue impacts is small. A small significance level is defined by the NRC as follows:

For the issue, environmental effects are not detectable or are so minor that they will neither destabilize nor noticeably alter any important attribute of the resource. For the purpose of assessing radiological impacts, the Commission has concluded that those impacts that do not exceed permissible levels in the Commission's regulations are considered small as the term is used in this table. (10 CFR Part 51, Subpart A, Appendix B, Table B-1)

RG&E has adopted by reference the NRC findings for Category 1 issues.

2. For applicable Category 2 issues, RG&E has determined that the environmental impacts are small as that term is defined by the NRC. Impact to the coastal zone, therefore, would also be small.
3. To the best of its knowledge, RG&E is in compliance with New York licenses, permits, approvals, and other requirements as they apply to Ginna Station impacts on the New York coastal zone.
4. Ginna Station license renewal and continued operation of Ginna Station facilities, and their effects, are all consistent with the enforceable policies of the New York Coastal Management Program.

## **State Notification**

By this certification, the State of New York is notified that the Ginna Station license renewal is consistent with the New York Coastal Management Program. Attached to this Determination is a completed New York State Department of State Federal Consistency Assessment Form. The State's concurrence, objections, or notification of review status shall be sent to the following contacts:

Dr. P. T. Kuo  
Program Director  
License Renewal and Environmental Impacts  
Division of Regulatory Improvement Programs  
U. S. Nuclear Regulatory Commission  
Washington, D.C. 20555-0001  
(301) 415-3147

George Wrobel, License Renewal Manager  
Rochester Gas and Electric Corporation  
R. E. Ginna Nuclear Power Plant  
1503 Lake Road  
Ontario, NY 14519  
(585) 771-3535

## References

- Ref. 1 U.S. Nuclear Regulatory Commission. "Procedural Guidance for Preparing Environmental Assessments and Considering Environmental Issues." Revision 2. Office of Nuclear Reactor Regulation. Washington, D.C. 1999.
- Ref. 2 U.S. Nuclear Regulatory Commission. *Generic Environmental Impact Statement for License Renewal of Nuclear Plants*. NUREG-1437. Office of Nuclear Regulatory Research. Washington, D.C. May 1996.
- Ref. 3 U.S. Nuclear Regulatory Commission. *Generic Environmental Impact Statement for License Renewal of Nuclear Plants*. Section 6.3, "Transportation," and Table 9-1, "Summary of Findings on NEPA Issues for License Renewal of Nuclear Power Plants." NUREG-1437, Vol. 1, Addendum 1. Office of Nuclear Reactor Regulation. Washington, D.C., August 1999.