

**New York State Department of Environmental Conservation  
Division of Environmental Permits, Region 8**

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Erin M. Crotty  
Commissioner

September 26, 2003

Mr. Robert G. Schaaf  
Project Manager  
License Renewal and Environmental Impacts Program  
Division of Regulatory Improvement Programs  
Office of Nuclear Reactor Regulation  
U.S. Nuclear Regulatory Commission  
Mail Stop o-11F1  
Washington, DC 20555-0001

Re: Department Review and Comment  
Supplement 14, Generic Environmental Impact Statement (EIS) for License Renewal of Nuclear  
Plants regarding the R.E. Ginna Nuclear Power Plant (Draft NUREG-1437, Supplement 14)  
Ontario (T), Wayne (C)

Dear Mr. Schaaf:

Department staff attended the meeting on August 7, 2003 to discuss the Supplement 14, Generic Environmental Impact Statement (EIS) for License Renewal of Nuclear Plants regarding the R.E. Ginna Nuclear Power Plant (Draft NUREG-1437, Supplement 14). We found the meeting very informative and helpful in our review of the draft supplemental EIS. Staff have reviewed the document and we offer the following comments for your consideration:

**Storage of Spent Fuel:**

The Draft Supplement indicates that onsite storage and offsite disposal of spent nuclear fuel are Category 1 issues (Page A-19). Therefore, site-specific information on spent fuel storage is not provided in the Draft Supplement 14 for the Ginna facility. As the Department recommended in the enclosed letter on the Generic Environmental Impact Statement (letter from Barbara Youngberg, NYSDEC to the Chief, Rules and Directives Branch, September 18, 2003), certain aspects of on-site storage of spent fuels are site specific and should be addressed in the site specific supplements. These include the current status of storage capacity at a facility and the plans for storage of the additional spent fuel to be generated during the term of the renewed facility. We understand that the GEIS will not be revised prior to the preparation and issuance of the final Supplement for the Ginna facility, therefore, at this time, Spent Fuel is a Category 1 issue. However, the Department felt it was important to raise this point and to recommend that this information be disclosed for the Ginna facility. Therefore, we recommend that the type (wet or

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dry), capacity, and remaining life of the current storage for spent fuel be disclosed. In addition, as we stated in our previous letter dated December 11, 2002, the Department recommends that the amount of spent fuel to be generated over the life of the extended license be estimated and the proposed plans for containment of this fuel during the license term be disclosed.

#### **Severe Accident Mitigation Alternative (Appendix G):**

On page G-6 of Appendix G it is stated that: "A summary listing of those changes that resulted in the greatest impact on the total CDF was provided in response to an RAI (RG&E 2003b), and include: ...." One of those changes is found on page G-7 and states: "Added fires, internal floods, and shutdown risk models to the fault trees to enable their solution and risk ranking. Removed loss of spent fuel pool cooling and fuel-handling accidents and analyzed separately, because they do not lead to core damage".

This implies that loss of spent fuel cooling has already been analyzed or will be done separately. If this is correct, the Department would like to see this analysis. If this analysis has not been done, the Department recommends that Spent Fuel Cooling Water Loss be evaluated and added to Appendix G of Supplement 14 as a part of Severe Accident Mitigation Alternatives.

#### **Impingement and Entrainment (Sections 4.1.1 and 4.1.2) :**

The Department considers that the conclusions made at the bottom of GEIS page 4-10 and top of GEIS page 4-13, which states, "no new measures are warranted to mitigate the impacts of entrainment and impingement," are premature.

As noted in the GEIS, the Department is requiring RG&E to conduct an entrainment abundance study, since no such studies have been done in over 20 years. In addition, over the past few years, the Regional Fisheries' Office has seen a large increase in the smallmouth bass populations along the South shore of Lake Ontario. Department regional and central office Habitat and Fisheries staff have subsequently modified the SPDES permit to include a one-year entrainment study, with results dictating the possible need of a longer term study.

Impingement has been studied on a regular basis since the plant went on line. The impact to alewife and smelt have been well documented. Department staff have acknowledged the statement of minimal impact on a lake-wide population level of alewives and smelt, but have concerns over species shifts and local populations. With the above mentioned increase in the smallmouth bass, coupled with reports of bass being caught in deeper water, the Department has required continuing the impingement monitoring. RG&E has agreed to continue the impingement monitoring program.

RG&E has also been on a schedule to upgrade their traveling intake screens with measures to improve the survival of impinged fish. These upgrades are expected to continue in the future.

Based on the results of these studies, and other relevant information, the Department will determine whether the intake meets best technology available (BTA) for minimizing adverse environmental impacts, and whether any mitigation is required.

EPA's proposed Phase II Rule (Federal Register / Vol. 67, No. 68 / Tuesday, April 9, 2002) requires existing

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facilities to reduce impingement mortality by 80-95% and entrainment abundance by 60-90%. After EPA issues a final rule and the results of the studies are submitted, the Department will determine whether additional mitigation measures are required.

#### **Heat Shock (Section 4.1.3)**

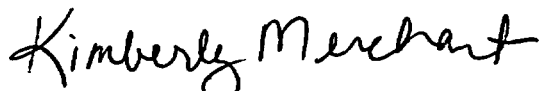
Upon review of the Ginna Station 316(a) demonstration, the Department has not found any assessment of the effects of discharge temperatures on impinged fish, referred to on page 4-13 of the Draft Supplement 14. The 316(a) demonstration looked at thermal impacts to fish within the waterbody, however, it did not evaluate the effects upon impinged fish returned through the cooling water discharge canal. The Department is concerned that exposure of fish to the increased temperatures in the discharge canal (up to 28 degrees F) could have adverse effects on some species, particularly in combination with the physical stresses due to the impingement process. Therefore, the Department is requiring this study to determine whether a dedicated fish return line is needed to mitigate additional impacts to impinged fish. RGE has agreed to conduct a literature review of the subject. Depending on what is found in the literature search, RG&E has agreed in principle to conduct an additional study. The Department therefore considers the assessment that "no new mitigation measures are warranted", made on GEIS page 4-14, to be premature.

#### **Issuance of the 401 Water Quality Certification:**

In accordance with the Clean Water Act, the 401 WQC will be issued within a year of the receipt of the application from RG&E, or by October 7, 2003. The Department has issued a public notice for the 401 Water Quality Certification (see attached). The Department has made the decision that the comments raised in this letter do not affect our ability to issue the 401 Water Quality Certification. Therefore, we have made a tentative determination to issue this certification by October 7, 2003.

Please contact me directly if you have any questions regarding the regulatory discussion above or the attached comments.

Sincerely,



Kimberly A. Merchant  
Environmental Analyst 1

Enclosures:

Public Notice for 401 Water Quality Certification

Letter from Barbara Youngberg, NYSDEC to the Chief, Rules and Directives Branch, September 18, 2003

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cc: M. Calaban, Bureau of Habitat, NYSDEC, C.O.  
W. Pearsall, Fisheries, NYSDEC, Region 8  
J. Nasca, Environmental Permits, NYSDEC, C.O.  
F. Ricotta, Regional Engineer, NYSDEC, Region 8  
J. Kelleher, Division of Water, NYSDEC, C.O.  
D. Persson, Division of Water, NYSDEC, Region 8  
W. Little, Legal Division, NYSDEC, C.O.  
J. Zeh, Bureau of Hazardous Waste & Radiation Mgt.  
B. Youngberg, Radiation Section, NYSDEC, C.O.  
D. Rollins, Regional Water Engineer, Division of Water, NYSDEC, R8  
L. Vail, Batelle National Laboratory  
A. Peterson, NYSERTA  
G. Wrobel, RG&E  
J. Prill, RG&E  
V. Barr, NYSDOS  
S. Ressler, NYSDOS  
U.S. Fish and Wildlife Service  
U.S. Environmental Protection Agency  
NYS OPRHP

New York State Department of Environmental Conservation  
Division of Environmental Permits  
NYSDEC REGION 8 HEADQUARTERS  
6274 EAST AVON-LIMA RD  
AVON, NY 14414  
(585) 226-2466



September 19, 2003

ROCHESTER GAS & ELECTRIC CORP  
89 EAST AVE  
ROCHESTER, NY 14649

Re: DEC ID # 8-5434-00010/00010  
ROCHESTER GAS GINNA NUCLEAR POWER PLT

Dear Applicant:

Please be advised that your application for a DEC permit(s) is complete and a technical review has commenced. Notice and the opportunity for public comment is required for this application. Enclosed is a Notice of Complete Application for your project. Please have the Notice published in the newspaper identified below once during the week of 09/22/2003 on any day Monday through Friday.

WAYNE COUNTY MAIL  
2010 EMPIRE BOULEVARD  
WEBSTER, NY 14580

Only the Notice of Complete Application, that information presented between the horizontal lines, on the enclosed pages(s) should be published. Do not print this letter or the information contained below the second bold horizontal line. Please request the newspaper publisher to provide you with a Proof of Publication for the Notice. Upon receipt of the Proof of Publication promptly forward it to this office. You must provide the Proof of Publication before a final decision can be rendered on your application. You are responsible for paying the cost of publishing the Notice in the newspaper.

Notification of this complete application is also being provided by this Department in the NYSDEC Environmental Notice Bulletin.

This notification does not signify approval of your application for permit. Additional information may be requested from you at a future date, if deemed necessary to reach a decision on your application. Your project is classified minor under the Uniform Procedures Act. Accordingly, a decision is due within 45 days of the date of this notice unless a public hearing is held, which may extend this time frame. If a public hearing is necessary, you will be notified.

If you have any questions please contact me at the above address or phone number above.

Sincerely,

KIMBERLY A MERCHANT  
Division of Environmental Permits

**THIS IS NOT A PERMIT**

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**New York State Department of Environmental Conservation  
Notice of Complete Application**

*Date:* 09/19/2003

*Applicant:* ROCHESTER GAS & ELECTRIC CORP  
89 EAST AVE  
ROCHESTER, NY 14649

*Facility:* ROCHESTER GAS GINNA NUCLEAR POWER PLT  
1503 LAKE RD  
ONTARIO, NY 14519

*Application ID:* 8-5434-00010/00010

*Permits(s) Applied for:* 1 - Section 401 - Clean Water Act Water Quality Certification

*Project is located:* in ONTARIO in WAYNE COUNTY

*Project Description:*

RG&E submitted a 401 Water Quality Certification Application to the Department in October 2002 in association with the federal relicensing of the Ginna Nuclear Power Plant by the U.S. Nuclear Regulatory Commission (NRC) for a twenty-year period. The Department has made a tentative determination to issue the 401 Water Quality Certification for the proposed additional twenty-year term. The Department will reevaluate the facility on a five-year basis for renewal of the SPDES permit. The file is available for review and comment at the NYSDEC Region 8 Office.

*State Environmental Quality Review (SEQR) Determination*

Project is not subject to SEQR because it is a Type II action.

*SEQR Lead Agency* None Designated

*State Historic Preservation Act (SHPA) Determination*

The proposed activity is not subject to review in accordance with SHPA. The permit type is exempt or the activity is being reviewed in accordance with federal historic preservation regulations.

*Coastal Management*

This project is located in a Coastal Management area and is subject to the Waterfront Revitalization and Coastal Resources Act.

*Availability For Public Comment*

Comments on this project must be  
submitted in writing to the Contact  
Person no later than 10/06/2003

*Contact Person*

KIMBERLY A MERCHANT  
NYSDEC  
6274 EAST AVON-LIMA RD  
AVON, NY 14414  
(585) 226-2466

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**CC List for Complete Notice**

Chief Executive Officer

W. LITTLE, LEGAL DIVISION, NYSDEC, C.O.

B. YOUNGBERG, RADIATION SECTION, NYSDEC, C.O.

G. WROBEL, RG&E

J. PRILL, RG&E

V. BARR, NYSDOS

S. RESSLER, NYSDOS

T. SULLIVAN, U.S. FISH AND WILDLIFE SERVICE

USEPA

R. SCHAAF, NRC

D. NEITZEL, BATTELLE

A. PETERSON, NYSERTA

J. NASCA, NYSDEC, C.O.

ENB

File



**New York State Department of Environmental Conservation**  
**Division of Solid and Hazardous Materials**  
**Bureau of Hazardous Waste & Radiation Management, 8th Floor**  
**Radiation Section**  
625 Broadway, Albany, New York 12233-7255  
Phone: (518) 402-8579 FAX: (518) 402-8646  
Website: [www.dec.state.ny.us](http://www.dec.state.ny.us)



September 18, 2003

Chief, Rules and Directives Branch  
Division of Administrative Services  
Office of Administration  
Mailstop T-6 D 59  
U.S. Nuclear Regulatory Commission  
Washington, DC 20555-0001

Re: Notice of Intent To Prepare an Environmental Impact Statement for the License  
Renewal of Nuclear Power Plants and To Conduct Scoping Process  
(August 22, 2003, FR33209)  
(Comment period extension published September 10, 2003, FR50811)

The New York State Department of Environmental Conservation has reviewed the Generic Environmental Impact Statement For License Renewal Of Nuclear Power Plants (NUREG-1437), Addendum 1, and Table B-1 of Appendix B to Subpart A of Part 51 in response to the above-referenced notice. We offer the following comments for the United States Nuclear Regulatory Commission's (NRC) consideration:

### **Storage of Spent Fuel**

Section 6.4.6.7 of the Generic EIS (GEIS) concludes, "On-site storage of spent fuel during the term of a renewed operating license is a Category 1 issue." Therefore, site-specific information on spent fuel storage is not provided in the Supplemental EIS for individual plants. While there are generic aspects to on-site fuel storage that are adequately discussed in the GEIS, we recommend that certain issues associated with the on-site storage of spent fuels be addressed in the Supplemental EIS prepared for each facility. These include the current status of storage capacity at a facility and the plans for storage of the additional spent fuel to be generated during the term of the renewed license. These are clearly impacts of continued operation and will vary from facility to facility. The GEIS should not preclude the disclosure of this information during the license renewal process by deeming all discussion of on-site storage as a Category 1 issue.

### **On-Site Storage of Low-Level Radioactive Waste**

Regarding the potential for on-site storage of low-level radioactive waste (LLRW), on page 6-44 of Volume 1 the NRC states,

However, recognizing that the 5-year limit has not influenced the development of new waste disposal facilities and that the states continue to make slow progress, NRC has eliminated in its guidance any language that the 5-year term is a limit beyond which storage would not be allowed.

The NRC also states on page 6-54,

If compact and unaffiliated states are able to site disposal facilities and accept waste in normal increments (i.e., in accordance with the assigned allocations for each plant in the compact or unaffiliated state), there should be no significant issues or environmental impacts associated with interim storage of LLW generated by nuclear power plants with renewed licenses. . . . If off-site disposal facilities are unavailable to accept waste in normal increments, then on-site interim storage may have to take place longer than the 5-year time frame once envisioned by NRC, and additional on-site storage capacity may be needed.

The NRC has recognized in this document (page 6-56) that access to off-site disposal facilities may be uncertain for nuclear power plants during the period for which renewed licenses are granted, but states on page 6-55, "However, for most nuclear power plants, new LLW disposal facilities are scheduled to open well before the expiration date for current licenses."

Since the date of the GEIS finalization (1996), the situation regarding future capacity for LLRW disposal has changed. It can no longer be assumed that additional disposal facilities will be developed during the term of the renewed licenses. We recommend that the NRC update the discussion of on-site LLRW storage in the GEIS.

## Security

NUREG-1437, Volume 1, Addendum 1 states the following on page A1-17:

On June 22, 1999, the Nevada Attorney General filed a petition with the Commission which requested the NRC to amend regulations governing safeguards for shipments of spent nuclear fuel against sabotage and terrorism and to initiate a comprehensive assessment. In particular, the petition indicated that NRC should factor into its regulations the changing

nature of threats posed by domestic terrorists, the increased availability of advanced weaponry and the greater vulnerability of larger shipping casks traveling across the country. If, as a result of reviewing this petition, the NRC reaches conclusions that are inconsistent with the results or assumptions in the present rulemaking, the Commission will need to revisit the analysis presented here.

This is the only reference to terrorists or terrorism in the document.

In the past two years, there has been a significant change in the potential for, and public concerns about, terrorist activities. We recommend that the GEIS acknowledge this change and address the implications for license renewal, as these issues are very likely to be raised in license renewal proceedings for individual plants. This should include not only spent fuel shipments, but also nuclear reactors and any storage facilities for on-site spent fuel and LLRW.

Thank you for the opportunity to comment.

Sincerely,

/s/

Barbara Youngberg  
Chief, Radiation Section

cc: J. Spath, NYSERDA  
A. Salame-Alfie, NYSDOH  
G. Miskin, NYSDOL  
D. White, NRC Reg. 1