



# United States Department of the Interior

## FISH AND WILDLIFE SERVICE

3817 Luker Road  
Cortland, NY 13045



January 6, 2003

Mr. Pao-Tsin Kuo  
Program Director  
License Renewal and Environmental Impacts Program  
U.S. Nuclear Regulatory Commission  
Washington, DC 20555-0001

Attention: Mr. Robert Schaaff

Dear Mr. Kuo:

The U.S. Fish and Wildlife Service (Service) has reviewed your letter dated November 27, 2002, regarding the relicensing of the R.E. Ginna Nuclear Power Plant. The applicant, Rochester Gas and Electric (RG&E), proposes to renew the operating license for this facility which will expire December 18, 2009. This project is located in the Town of Ontario, Wayne County, New York.

Your letter requested the Service's comments on aspects of the license renewal that may affect fish and wildlife resources. However, the letter did not indicate when the comment period terminated for this scoping effort. Mr. Robert Schaff of your office stated comments should be submitted in early January 2003. The applicant and the Nuclear Regulatory Commission (NRC) will review comments and incorporate them into a Supplemental Environmental Impact Statement (SEIS).

It is our understanding from reviewing project documents located on the NRC internet site, that no physical modifications are anticipated to the Ginna facility during the 20-year term of the next license. In addition, no operating changes are proposed at this time. The facility currently generates electricity for sale and distribution in Western New York State.

This report of the Service and the Department of the Interior is submitted for project planning purposes. Comments pursuant to the Endangered Species Act of 1973 (87 Stat. 884, as amended; 16 U.S.C. 1531 et seq.) were previously submitted in a letter dated February 25, 2002. We may provide additional comments pursuant to, and in accordance with, provisions of the Fish and Wildlife Coordination Act (48 Stat. 401, as amended; 16 U.S.C. 661 et seq.) in the future, particularly during the SEIS review period.

Fish entrainment and impingement occurring from power plant water intake systems kill millions of fish every year in New York. The Environmental Report prepared for this project indicates that fish, fish eggs, and larvae entrainment and impingement have been evaluated by the

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applicant and that the problem is not significant. However, the existing entrainment study was completed in 1977 and is too old to accurately reflect current conditions. Considerable changes may have occurred to the lake ecosystem during the 25 years since the study was completed. Additional information is required to reflect the current biological conditions of Lake Ontario. The applicant should conduct a multi-seasonal study which involves the collection of representative ichthyoplankton data from the water intake system. This study should focus on the collection of all fish life stages which are susceptible to entrainment and impingement. Details of the study should be coordinated with this office and the New York State Department of Environmental Conservation (NYSDEC).

To mitigate the effects of impingement and entrainment, the applicant should evaluate measures to reduce fish injury and mortality such as the feasibility of installing a boom which will minimize fish impingement and entrainment of fish eggs and larvae in the cooling water intake structures. A filter boom, such as the Gunderboom System, can prevent fish larvae and eggs from entering the water intake pipes. Fish larvae, eggs, and debris are removed and released downstream of the boom with small bursts of air along the length of the filter. This system is currently being used at three other major power plants in New York and has been determined to be the Best Technology Available, where its use is feasible. We recommend the applicant fully evaluate this system for this facility and document this evaluation in the SEIS .

It is our understanding that erosion is progressing at both ends of the project shoreline. Existing protection measures are not completely effective. The NYSDEC has indicated that a survey is needed to determine the extent of the problem and that remedial action may be necessary. Rochester Gas and Electric should consider the use of measures other than hard structures (i.e. riprap) to control the erosion problem. Instead of hard structures, we recommend that biotechnical erosion controls be used for this project, if feasible. We believe that biotechnical erosion controls are the most effective means to limit erosion and also provide habitat for fish, wildlife, and invertebrates. This technique uses vegetation to control erosion in a buffer between the water and upland (Fuller, 1997). The buffer should extend from the water as far inland as possible. If hard structures are necessary, we believe the applicant could use articulated concrete block or riprap in combination with planting erosion controlling vegetation. This vegetation should include native plant species which will benefit wildlife such as dwarf willow (*Salix cottetii*), grey dogwood (*Cornus racemosa*), silky dogwood (*Cornus amomum*), arrowwood viburnum (*Viburnum dentatum*), and other appropriate species. The use of vegetation will be more beneficial for wildlife and be more aesthetic than bare riprap.

The Service appreciates the opportunity to comment on this project during the scoping process. We hope these comments are useful during your project review. We will continue to work with your agency during the relicensing process and review of the SEIS.

Please contact Timothy Sullivan at 607-753-9334 if there are any questions regarding this letter.

Sincerely,



David A. Stilwell  
Field Supervisor

cc: NYSDEC, Avon, NY (Environmental Permits)  
EPA, Water Programs Division, New York, NY

Literature Cited:

Fuller, D.R. 1997. Understanding, Living with, & Controlling Shoreline Erosion: A Guidebook for Shoreline Property Owners. Tip of the Mitt Watershed Council, Conway, MI.

Nuclear Regulatory Commission Internet Site at [www.nrc.gov](http://www.nrc.gov)

Gunderboom, Inc. Internet Site at [www.gunderboom.com](http://www.gunderboom.com)