



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

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Chief, Rules Review and Directives Branch  
U.S. Nuclear Regulatory Commission  
Mail Stop T6-D59  
Washington, DC 20555-0001

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Dear Sir or Madam:

In accordance with Section 309 of the Clean Air Act and the National Environmental Policy Act (NEPA), the U.S. Environmental Protection Agency (EPA) has reviewed the Final Generic Environmental Impact Statement for License Renewal of Nuclear Plant, Supplement 24 (SEIS): Nine Mile Point Nuclear Station Units 1 and 2. According to the SEIS, the current operating licenses for Nine Mile Point Units 1 and 2 will expire in August 2009 and October 2026, respectively. The proposed Federal action would renew the current operating licenses for an additional 20 years.

This SEIS was prepared as a supplement to the Nuclear Regulatory Commission's (NRC) 1996 Final Generic Environmental Impact Statement (FGEIS), which was prepared to streamline the license renewal process. That GEIS proposed that NRC would develop facility-specific SEIS documents for individual plants as the facilities apply for license renewal. EPA provided comments on the GEIS during the development process in 1992 and 1996.

The Nine Mile Point Nuclear Station is located in Oswego County, New York, on the shoreline of Lake Ontario. Units 1 and 2 are boiling water reactors. Plant cooling is provided by a once-through circulating water system that draws and discharges to Lake Ontario for Unit 1 and a cooling tower for Unit 2. EPA commented on the draft SEIS in December of 2005, and rated the project and document "Environmental Concerns - insufficient information" (EC-2). In our comment letter we raised concerns with the impacts due to entrainment and impingement of fish and shellfish, heat shock, and environmental justice. Also, we recommended that the final SEIS address opportunities for pollution prevention and waste recycling. Unfortunately, the final SEIS does not adequately address most of these concerns.

Under EPA's new Section 316(b) rules of the Clean Water Act (in 40 C.F.R. § 125), Nine Mile Point Nuclear Station will have to reduce its entrainment of fish and shellfish in early life stages. Although the draft SEIS made mention of the new rules, it did not identify any measures that the facility has taken or will take to mitigate for entrainment and impingement and neither does the final SEIS. In fact, the document claims that future studies for the 316(b) rules may result in additional mitigation measures but that none are required now. We had asked that the final SEIS provide some discussion of the measures the facility expected to undertake to comply with the new 316 (b) rules, such as

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fish deterrent systems or fish return troughs, and provide some quantification of the impact reduction to fish and shellfish as part of this public environmental review process. While the SEIS response is to defer this discussion until the New York State Pollution Discharge Elimination System (SPDES) permit process (which we understand is forthcoming), we maintain our belief that the NEPA process is the appropriate vehicle for addressing potential environmental impacts and mitigation. Accordingly, we recommend that the Record of Decision for the re-licensing include commitments to the mitigation measures that are expected to be required as part of the SPDES permit issuance.

In a related matter we had recommend the final SEIS not include the following statement: "The staff concludes that the potential impacts of entrainment of fish and shellfish in the early life stages into the cooling water intake system are small, and further mitigation measures are not warranted." This conclusion is premature and may prove incorrect since mitigation will most likely be required as part of the SPDES permit. We also disagree with the staff conclusion that these impacts are small. In fact, EPA promulgated the 316 (b) Phase II rule based on information that the impacts to aquatic life from cooling water intakes are substantial and that the mitigation measures offered in the rules are needed to reduce these impacts by anywhere from 80 to 95 percent.

We also expressed concern that the draft SEIS relied upon biological studies dating from 1969 through 1974. This information is too old to accurately understand the current lake conditions, and therefore, support the conclusion that there continues to be no influence or impact to biota in the lake from the thermal discharge and heat shock. We also pointed out that the 1975 study of the thermal plume and mixing zone is also too old to be a reliable determination of current conditions and impacts. EPA Region 2 provided recommendations to the NRC for choosing representative important species for the studies as part of the SPDES permit and we reiterate our recommendation that current studies of the effect of thermal discharges on these representative species should be done and the results presented. We also recommended that the studies address the less conspicuous ability of heat to preclude the use of affected areas by temperature sensitive species, attract and expose organisms to areas of elevated temperature during spawning periods, and expose eggs and larvae to water temperatures far exceeding naturally ambient levels. While immediate mortalities of fish have not been reported this does not indicate that a detrimental impact is not occurring.

We remain concerned that the overall biomass of the lake has decreased from levels reported in the late 1970's and early 1980's. As an example, the documents indicated that there was a significant decline in the numbers of rainbow smelt entrained or impinged in the 1997 count, from second most abundant to .01 percent of the count. The SEIS states that the change in abundance is due to predation pressure and the presence of zebra and quagga mussels. The fact that these invasive species were introduced in the lake and have proliferated since the late 1980s is inconsistent with the claim elsewhere in the final SEIS that new studies were unnecessary since the conditions in the lake are currently similar to the late 1970's. EPA recognizes that Nine Mile Point is only one contributor to ecological conditions in Lake Ontario and is not responsible for the introduction of invasive species, but the current condition of aquatic life may make the

impacts for both heat shock and impingement relatively more significant than they were when the original studies were done.

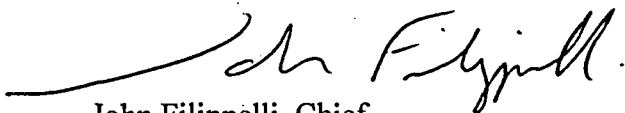
Both the draft SEIS and the final SEIS stated that, besides the old studies, other unnamed or referenced sources were relied upon to come to the conclusions that the effects from both heat shock and entrainment and impingement were small. For example, the final SEIS states that staff has determined that the combined effects of entrainment and impingement are minor and not noticeably affecting local or lake-wide populations, yet there is no indication that any new studies to support this conclusion. Without identifying information sources or performing new evaluations similar to those done upon the start-up of the facility, it is difficult for the public and regulatory agencies to confirm that these conclusions are correct.

Also, in our draft SEIS comment letter we pointed out that one of the Department of Energy's (DOE) goals in its 2005 budget was to identify opportunities for recycling spent fuel, and that DOE labs were testing processes to make reprocessing spent fuel more viable. However, we noted that the draft SEIS did not address the issue of spent uranium fuel recycling in its discussion of the Uranium Fuel Cycle. The final SEIS states that recycling of spent fuel is addressed in section 6.1, however that section is unchanged from the draft and we can find no reference to recycling of spent fuel in the document.

The draft SEIS was also silent on the issue and options for pollution prevention for non-radioactive materials. The final SEIS stated in the response to our suggestions that pollution prevention and waste minimization activities are on-going at Nine Mile Point, however, those activities are not identified. The final SEIS also claims that environmental releases and quantities of waste sent offsite are minimized as part of these activities without discussing how this is achieved or how much minimization and reduction is occurring. We suggested that the internal and external processes and the waste streams that would be candidates for pollution prevention technologies should be examined and the appropriate techniques identified and quantified. Therefore, we again encourage consultation with the DOE's Pollution Prevention office to obtain recommendations that would fit with the processes at Nine Mile Point.

In summary, most of the concerns that we raised on the draft SEIS about need for current aquatic information, minimization and mitigation for impacts to aquatic life, pollution prevention and waste minimization remain unresolved. We recognize that some of these issues may be resolved through other avenues, such as the SPDES permit process, but encourage NRC to address these concerns prior to completion of the NEPA process. Please feel free to contact David Carlson, at (212) 637-3502 if you have any questions.

Sincerely yours,

A handwritten signature in dark ink, appearing to read "John Filippelli", is written over a horizontal line.

John Filippelli, Chief  
Strategic Planning and Multi-Media Programs Branch

cc: Ann Secord, Fish and Wildlife Service  
Mike Calaban, NYSDEC