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Commissioner

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May 12, 2006

Chief, Rules and Directives Branch,  
Division of Administration,  
U.S. Nuclear Regulatory Commission  
Mail Stop T-6D59  
Washington, DC  
20555-0001

Re: Department Comment  
R.E. Ginna Nuclear Power Plant  
Draft Environmental Assessment and Findings of No Significant Impact Related to Proposed  
Extended Power Uprate (TAC No. MC7382)  
Ontario (T), Wayne (C)

4/12/06  
71 FR 18779  
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RULES AND DIRECTIVES  
BRANCH  
USNRC

Dear Sir or Madam:

Thank you for the opportunity to review and provide comments on the Draft Environmental Assessment and Findings of No Significant Impact Related to Proposed Extended Power Uprate. We respectfully provide the following comments.

a. Page 5 - Under Water Use Impacts: The last sentence of the first paragraph indicated that "Total nominal flow of water for turbine condenser cooling and most secondary systems (i.e., service water and fire protection) is approximately 356,000 gallons per minutes (GPM)."

Department comment - The flow of 354,000 gpm calculates to 510.63 MGD. The current SPDES permit was modified and issued on 4/18/05 to reflect the actual flow of 520 MGD for turbine condenser cooling water and secondary systems.

b. Page 6 - Under Discharge Impacts: The last sentence of the first paragraph stated that "It is expected that the EPU would increase the temperature of the water discharged to Lake Ontario as well as the thermal discharge plume, which would require modifications to the current SPDES permit."

Department comment - Between "Ontario" and "as well as" should insert "increase the temperature difference ( $\Delta T$ ) between discharge temperature and intake temperature"

SISP Review Complete  
Template - ADM-013

E-RIDS = ADM-03  
Add = P. Milano (PDM)

c. Page 6 - Under Discharge Impacts: The last sentence of this page stated that "Under proposed EPU operating conditions, the difference in temperature would be approximately 28 ° F and 35 ° F in summer and winter months, respectively. In addition, the discharge temperature would at times exceed the current SPDES permit limits (102 ° F)."

Department comment - The 28 ° F should be 25 ° F. Insert "(i.e., intake temp > 45 ° F)" after summer and insert "(i.e., intake temp < or = 45 ° F)" after winter. Insert "to an upper limit of 106 ° F" after "permit limits (102 ° F)."

d. Page 7 - Seventh line from the top stated, "An increased mixing zone of 360 acres would be . . ."

Department comment - revise to read, "An increased mixing zone of 360 acres from the point of discharge on a daily basis (24 hours) would be . . ." To be consistent with the SPDES permit.

e. Page 7 - 2nd paragraph: The first sentence stated that "By letters dated March 8, April, and July 29, 2005, Ginna LLC submitted . . ."

Department comment - From our file, there are additional submissions in addition to those indicated. That sentence should read, "By letters dated March 8, April 2, July 29, Oct. 18, Nov. 18, 2005, Jan 12, 2006 and March 15, 2006, Ginna LLC submitted . . ."

f. Page 8, last paragraph: Second sentence stated, "Based on historical data and requirements of the SPDES Permit, impingement and entrainment rates at Ginna are minimal, and according to the ER no significant adverse impact on the RIS populations would result due to the increased discharge temperatures."

Department comment - Based on review of historical data, staff would not characterize impingement and entrainment rates as "minimal." Staff would describe them as "lower than most similar sized electrical generating facilities in New York State."

g. Page 9, first paragraph: Item six stated, "Any impinged fish exposed to elevated temperatures (above their thermal preferenda) in the fish return system will be exposed only for a short duration (20-50 seconds). After reviewing the information presented in the ER, the NYSDEC SPDES permit modification submittal, and NUREG-1437 Supplement 14, the NRC staff concludes that the impact of the proposed EPU on aquatic biota would not be significant."

Department comment - Staff agree with (6) that impinged fish will be exposed to elevated temperatures for a short duration. However, data supplied by the applicant does indicate some thermal stress could occur in the summer period for cold water species and for alewife and three-spine stickleback. Short exposure time and behavior of these fish (most being offshore during the summer period) will reduce potential impacts. However, the synergistic effects of physical stress due to impingement and thermal stress are unknown and could exacerbate impacts. We recommend that this discussion include some references to the Department's 316(b) review which will address both the existing facility impacts and any potential small increases in impact due to the extended power uprate. Please see the discussion on the 316(b) below.

**h. 316(b) Phase II Regulations and 6NYCRR Part 704.5**

**Department Comment -** Although any adverse impacts due to the extended power uprate are expected to be small, uncertainties still exist, and the Department considers it prudent to adopt a conservative approach in order to protect resources. Implementation of the federal 316(b) Phase II Regulations and 6NYCRR Part 704.5 will minimize the impingement mortality and entrainment of fish at the station. This process is underway now, and the resulting application of technologies and/or operational procedures will also serve to minimize the number of fish that will be exposed to elevated discharge temperatures.

**i. Early life stages of fish entrained**

**Department Comment -** The EA did not address any potential impacts to early life stages of fish entrained into the discharge plume. Data supplied by the applicant indicate that alewife eggs are by far the most abundant species and life stage present in the nearby water column. However, only a relatively small area of the discharge plume (the hottest part near the mouth of the discharge canal) contains temperatures that may be injurious to alewife eggs. Therefore, adverse impacts are expected to be minimal.

**j. Page 11, First paragraph:** Second sentence states, "The nearest bald eagle nesting site is approximately 55 miles southeast of the Ginna site, near Montezuma National Wildlife Refuge. It is not likely that the bald eagles would be impacted by the EPU because the birds are transient and do not nest at the Ginna site."

**Department Comment:** While there are currently no "known" nesting bald eagles in the vicinity of the Ginna plant, numerous sightings of birds in that general area have been received over the past 3-4 years. Several of those reports have been of 1st year immature birds that are believed, because of the timing of the observations, to be what we would consider local birds. These observations took place in the Wayne County area. Therefore, the Department is confident that there are bald eagle nests in Wayne County that have not yet been documented. While none of the three young eagles that the Department has observed personally were near the plant (Closest Distance = approx. 10 miles) the potential that they could nest there does exist. Therefore, it is likely that a bald eagle nest is located approximately 10 miles from Ginna. At present, the closest verified nest is approximately 30 miles away on the Northern Montezuma Wildlife Management Area (WMA). The Department had a report within the past week of an active nest near the Port Bay Unit of the Lake Shore Marshes WMA (approximately 22 miles away) that is yet to be verified.

Additionally, since a warm water discharge from the plant does exist, it is conceivable that both fish and waterfowl may be attracted to that source which does increase the potential for attracting bald eagles and/or osprey. In turn, which will increase the likelihood that either species may attempt to establish territories nearby.

If any new information regarding nesting sites develops over the coming weeks, the Department will pass that information along to the NRC.

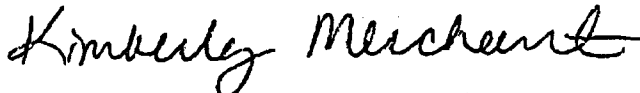
The Department's review of impacts on threatened and endangered species pertaining to the

extended power Uprate application has been limited to non-radiological impacts including the potential for disturbance to the habitat of said species and the potential for the water use and plant discharge to impact aquatic biota. We cannot comment as to whether as to whether any radiological impacts may occur to threatened and endangered species such as the bald eagle as a result of the proposed extended power uprate. We therefore request that this updated information pertaining to the bald eagle be considered in NRC's potential impact determination.

Please contact me directly if you have any questions regarding these comments at 585-226-5392. Thank you for your consideration in allowing us to fax these comments.

We will be preparing a Draft SPDES permit, Draft 401 Water Quality Certification, Public Notice of Complete Application, and State Environmental Quality Review (SEQR) documentation for the proposed extended power uprate. We will forward a copy of all documents to your attention.

Sincerely,



Kimberly A. Merchant  
Deputy Permit Administrator

cc: M. Calaban, Bureau of Habitat, NYSDEC, C.O.  
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