

Constellation Energy

Nine Mile Point Nuclear Station

P.O. Box 63
Lycoming, New York 13093

August 6, 2004
NMPE 0419

Mr. Vance A. Barr
Coastal Resources Specialist
Consistency Review and Analysis
New York State Department of State
Division of Coastal Resources
41 State Street
Albany, New York 12231-0001

Subject: Nine Mile Point Nuclear Station, LLC
Application for Renewal of Operating Licenses
Coastal Management Program Consistency Determination

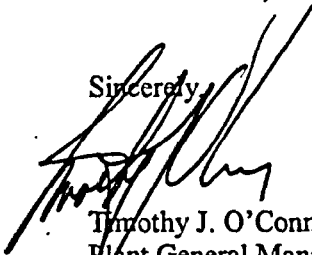
Dear Mr. Barr:

Nine Mile Point Nuclear Station, LLC (NMPNS) is in receipt of your letter dated June 28, 2004. Your letter requested NMPNS to complete and submit a Federal Consistency Assessment Form and to provide copies of the Nuclear Regulatory Commission License Renewal Application in accordance with 15 CFR Part 930 Subpart D. Enclosed please find a completed Federal Consistency Assessment Form, a document entitled *Coastal Management Program Consistency Determination* that provides supporting information and documentation, an electronic copy of NMPNS' application to the U.S. Nuclear Regulatory Commission (NRC) for the license renewal of the Nine Mile Point Nuclear Station (NMP), and a printed copy of the *Environmental Report-Operating License Renewal Stage, Nine Mile Point Nuclear Station*.

NMPNS is requesting review and concurrence with the enclosed Coastal Management Program Consistency Certification. The Consistency Certification presents NMPNS' position that continued operation of NMP would be in compliance with the current New York State Coastal Management Program.

If you have any questions or comments, please call Kent Stoffle, Principal Engineer, Environmental, at (315) 349-1364.

Sincerely,



Timothy J. O'Connor
Plant General Manager

TJO/KES/jm

Enclosures:

- 1- Federal Consistency Assessment Form
- 2- Coastal Management Program Consistency Determination
- 3- Nine Mile Point Nuclear Station License Renewal Application (cd)
- 4- Environmental Report-Operating License Renewal Stage, Nine Mile Point Nuclear Station

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cc: Ms. L.C. Fields, Environmental Project Manager, NRC NRR (with Enclosures 1 and 2)
Mr. N.B. Le, License Renewal Project Manager, NRC NRR (with Enclosures 1 and 2)
Mr. J. Feltman, Regional Permit Administrator, NYSDEC Region 7 (with Enclosures 1 and 2)

Enclosure 1

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 that 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: **Nine Mile Point Nuclear Station, LLC**
2. Address: **P.O. Box 63, Lycoming, NY 13093**
3. Telephone: **Area Code (315) 349-1019**

B. PROPOSED ACTIVITY

1. Brief description of activity:

Nine Mile Point Nuclear Station, LLC has applied to the U. S. Nuclear Regulatory Commission to renew the operating licenses of Nine Mile Point Units 1 and 2 for up to 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:

Oswego County Town of Scriba

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

5. Federal application number, if known: **NRC Operating Licenses DPR-63 and NPF-69**

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 3) that may be affected by the proposed activity.

- | | | | |
|----|--|------------|-----------|
| 1. | Will the proposed activity <u>result</u> in any of the following: | <u>YES</u> | <u>NO</u> |
| | a. Large physical change to a site within the coastal area that will require the preparation of an environmental impact statement? (11, 22, 25, 32, 37, 38, 41, 43)..... | ___ | <u>X</u> |
| | 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)..... | ___ | <u>X</u> |
| | c. Revitalization/redevelopment of a deteriorated or underutilized waterfront site? (1)..... | ___ | <u>X</u> |
| | d. Reduction of existing or potential public access to or along coastal waters? (19, 20)..... | ___ | <u>X</u> |
| | e. Adverse effect upon the commercial or recreational use of coastal fish resources? (9,10)..... | ___ | <u>X</u> |
| | 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)..... | ___ | <u>X</u> |
| | g. Siting of a facility essential to the generation or transmission of energy? (27)..... | ___ | <u>X</u> |
| | h. Mining, excavation, or dredging activities, or the placement of dredged or fill material in coastal waters? (15, 35)..... | ___ | <u>X</u> |
| | i. Discharge of toxics, hazardous substances or other pollutants into coastal waters? (8, 15, 35)..... | <u>X</u> | ___ |
| | j. Draining of stormwater runoff or sewer overflows into coastal waters? (33)..... | <u>X</u> | ___ |
| | k. Transport, storage, treatment, or disposal of solid wastes or hazardous materials? (36, 39)..... | <u>X</u> | ___ |
| | l. Adverse effect upon land or water uses within the State's small harbors? (4)..... | ___ | <u>X</u> |
| 2. | Will the proposed activity <u>affect</u> or be <u>located</u> in, on, or adjacent to any of the following: | <u>YES</u> | <u>NO</u> |
| | a. State designated freshwater or tidal wetland? (44)..... | ___ | <u>X</u> |
| | b. Federally designated flood and/or state designated erosion hazard area? (11, 12, 17,)..... | <u>X</u> | ___ |
| | c. State designated significant fish and/or wildlife habitat? (7)..... | <u>X</u> | ___ |
| | d. State designated significant scenic resource or area? (24)..... | ___ | <u>X</u> |
| | e. State designated important agricultural lands? (26)..... | ___ | <u>X</u> |
| | f. Beach, dune or barrier island? (12)..... | ___ | <u>X</u> |
| | g. Major ports of Albany, Buffalo, Ogdensburg, Oswego or New York? (3)..... | ___ | <u>X</u> |
| | h. State, county, or local park? (19, 20)..... | ___ | <u>X</u> |
| | i. Historic resource listed on the National or State Register of Historic Places? (23)..... | ___ | <u>X</u> |
| 3. | Will the proposed activity <u>require</u> any of the following: | <u>YES</u> | <u>NO</u> |
| | a. Waterfront site? (2, 21, 22)..... | ___ | <u>X</u> |
| | b. Provision of new public services or infrastructure in undeveloped or sparsely populated sections of the coastal area? (5)..... | ___ | <u>X</u> |
| | c. Construction or reconstruction of a flood or erosion control structure? (13, 14, 16)..... | ___ | <u>X</u> |
| | d. State water quality permit or certification? (30, 38, 40)..... | <u>X</u> | ___ |
| | e. State air quality permit or certification? (41, 43)..... | ___ | <u>X</u> |
| 4. | Will the proposed activity <u>occur within</u> and/or <u>affect</u> an area covered by a State approved local waterfront revitalization program? (see policies in local program document)..... | ___ | <u>X</u> |

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 agent 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: Timothy J. O'Connor

Address: P.O. Box 63, Lycoming, NY 13093

Telephone: Area Code (315) 349-2061

Applicant/Agent's Signature: _____

Date: _____

8-6-04

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 that 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.

*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.

**NINE MILE POINT NUCLEAR STATION 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 Nine Mile Point Units 1 & 2 (NMP). Discussion follows the table, detailing how the proposed activity affects the individual policies. Policies 2, 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 Nine Mile Point License Renewal

Policy 7	Significant coastal fish and wildlife habitats will be protected, preserved, and where practical, restored as to maintain their viability as habitats.
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 21	Water-dependent and water-enhanced recreation will be encouraged and facilitated, and will be given priority over non-water-related uses along the coast.
Policy 22	Development, when located adjacent to the shore, will provide for water-related recreation, whenever such use is compatible with reasonably anticipated demand for such activities, and is compatible with the primary purpose of the development.
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 waters; 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 7, the renewal of the NMP operating licenses would have no additional effect on the coastal fish and wildlife habitat. The height and width of the Unit 2 natural draft cooling tower present a potential hazard to waterfowl in the winter concentration area and to migratory species of birds, particularly at night and during adverse weather condition. However, studies have shown waterfowl can readily avoid large structures such as cooling towers and migrating waterfowl and hawks are most active diurnally when orientation is generally not a problem. Studies indicate that only a small percentage of the birds that collide with towers or other obstructions are waterfowl or hawks. Mortality to passerines has also been found to be low at operating plants and conditions contributing to high avian mortality (low ceilings during migratory periods) are very uncommon in the vicinity of the Unit 2 cooling tower. Consistent with these findings, in a

Cooling Tower Bird study conducted at NMP Unit 2 in 1993, data revealed that during the period of investigation, 1987 through 1993, the majority of species collected were warblers, some 52 percent. Waterfowl species were not represented with the exception of a single Common Gallinule.

With regard to Policy 8, the renewal of the NMP operating licenses 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 that have the potential to bio-accumulate in the food chain that NMP 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 non-radiological effluent discharges are regulated under the New York State Department of Environmental Conservation through the State Pollutant Discharge Elimination System (SPDES) permit program and NMP has been issued a SPDES permit (NY-0001015) 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.). Concentrations of radioactivity in effluents are subject to the requirements of the U.S. Nuclear Regulatory Commission. NMP is in compliance with its licensing requirements as well as the requirements and conditions of its SPDES 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 under 6 NYCRR Part 325. NMP has in place the NYSDEC Pesticide Business Registration, 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 to 614. NMP facilities have the appropriate registrations and procedures 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 to 599. NMP 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. NMP 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. NMP 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. NMP 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 and 373. NMP 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 NMP 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, the shoreline within the NMP protected area has been shielded from storm surge wave action by a dike between Unit 1 and the Lake and a revetment-ditch system, which extends in front of both Units 1 and 2. The front slope of the revetment-ditch system is reinforced with dolos, concrete armor units, in front of Unit 2 and with rock armor in front of Unit 1. The back slope is constructed of rock fill, a layer of rock armor units, and granular filters. The top of the revetment has an elevation of 263 feet. A ditch located immediately south of the revetment collects rainfall runoff flowing north, and conveys it to both ends of the revetment, where it discharges to the Lake. The continued operation of NMP during the license renewal period will not involve any activities that would disturb the shoreline along the NMP property. NMP

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 Policies 21 and 22, water-dependent and water-enhanced recreation cannot be encouraged or facilitated for reasons of national security. In light of the events of September 11, 2001, heightened security concerns preclude encouragement of recreational use of NMP's waterfront and other property by the general public.

With respect to Policy 30, the effluent discharges from NMP are regulated under the New York State Department of Environmental Conservation through the State Pollutant Discharge Elimination System (SPDES) permit program. NMP has been issued a SPDES permit (NY-0001015) 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.). Concentrations of radioactivity in effluents are subject to the requirements of the U.S. Nuclear Regulatory Commission. NMP is in compliance with its licensing requirements as well as the requirements and conditions of its SPDES permit, and the proposed activity is, therefore, consistent with Policy 30.

With respect to Policy 33, NMP has in place a SPDES permit (NY-0001015) which incorporates best management practices to control storm water runoff as part of the special conditions of the permit. The New York State Department of Environmental Conservation regulates storm water management under 6 NYCRR, Part 750, 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, NMP 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 to 614. NMP facilities have the appropriate registrations and procedures 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 to 599. NMP 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. NMP 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. NMP 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, NMP 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 NMP's SPDES permit so as to minimize the impacts to surface water supplies (Lake Ontario) and minimize water use. A Stormwater Pollution Prevention Plan is in place to protect surface water resources. NMP 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. NMP 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, NMP does not currently dispose of solid waste on site. A historic cap landfill was constructed and permitted and used for disposal of debris during plant construction. 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 and 373. NMP 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 NMP are regulated under the New York State Department of Environmental Conservation through the State Pollutant Discharge Elimination System (SPDES) permit program. NMP has been issued a SPDES permit (NY-0001015) 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.). NMP is in compliance with its SPDES permit and is meeting all requirements and conditions set forth in the permit and so it is minimizing impacts to fish and wildlife. The proposed activity is, therefore, consistent with Policy 40.

Enclosure 2

New York State Department of State

Coastal Management Program

Coastal Management Program Consistency Determination

COASTAL MANAGEMENT PROGRAM CONSISTENCY DETERMINATION

New York State has an approved coastal zone management program documented by the U.S. Nuclear Regulatory Commission (NRC) (Ref. 1). Nine Mile Point Nuclear Station, LLC (NMPNS) has determined that the proposed Nine Mile Point Units 1 & 2 (NMP) license renewal complies with the New York State-approved coastal management program and will be conducted in a manner consistent with such program.

Proposed Activity

NMPNS operates NMP pursuant to NRC Operating Licenses DPR-63 (Unit 1) and NPF-69 (Unit 2). The Unit 1 license will expire August 22, 2009. The Unit 2 license will expire October 31, 2026. NMPNS is applying to the NRC for renewal of both licenses, which would permit NMPNS to operate NMP for an additional 20 years (i.e., until August 22, 2029 and October 31, 2046) respectively. License renewal would give NMPNS the option of relying on NMP to meet a portion of New York State's future needs for electric generation.

NMP is located on the southern shore of Lake Ontario in the Town of Scriba, in the northeastern corner of Oswego County, New York, approximately 36 miles north-northwest of the City of Syracuse and 65 miles east of Rochester (see Figures 1 and 2).

The layout of NMP is shown in Figure 3. The plant consists of two boiling water reactors that produce steam which then turns turbines to generate electricity. Unit 1 is capable of an output of 1,850 megawatts (thermal) [MW(t)], with a corresponding net electrical output of approximately 615 megawatts (electric) [MW(e)]. Unit 2 is capable of an output of 3,467 MW(t), with a corresponding net electrical output of approximately 1,144 MW(e).

Cooling water systems for each Unit include a circulating water system and a service water system. The circulating water system circulates cool water through the main condensers to condense steam after it passes through the turbine. The service water system circulates cooling water through heat exchangers that serve various plant components. Both the circulating water system and the service water system for Unit 1 are once-through systems. The service water system for Unit 2 is also a once-through system. However, the Unit 2 circulating water system is a closed-cycle system that uses a cooling tower. A portion of the discharge from the service water system is added to the circulating water system to make up for losses due to evaporation and drift from the cooling tower. The cooling water systems of both units withdraw water from Lake Ontario and discharge back to the Lake.

NMPNS uses sodium hypochlorite and other oxidants to control biofouling in the circulating and service water systems that discharge to offsite surface waters. NMPNS also treats the systems with molluscicides as specified in the State Pollutant Discharge Elimination System (SPDES) permit to control zebra mussel infestations in these systems. There are nineteen outfalls permitted under the site's SPDES permit and all discharge to Lake Ontario.

NMP Unit 1 uses once-through cooling water from Lake Ontario to remove waste heat from the electrical generation process. Lake water is withdrawn through an offshore intake structure into a concrete-lined tunnel, which directs the water into the screenhouse. This water then passes through trash racks and three parallel traveling screens before it is pumped through the main condenser and back to the screenhouse and out through the discharge canal. The heated water is discharged back to Lake Ontario approximately 335 feet off shore. The cooling water intake structure is located approximately 850 feet offshore at a depth of about 14 feet of water below the lowest anticipated lake level. The intake itself is a hexagonal-shaped structure with a cap, containing screen racks in each of the six 10-foot-wide by 5-foot-high ports located on the sides. The galvanized steel screen racks prevent large objects from entering the system. When Unit 1 is at maximum output, the velocity at the intake is 2 feet per second and the plant requires approximately 268,000 gallons per minute; 250,000 for the circulating water system and 18,000 for the service water system. 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 debris will not plug the intake.

The configuration of the thermal plume from Unit 1 has been found to vary with wind-induced currents, wave action, and upwelling. However, no relationship between the size and the extent of the plume and either wind speed or station heat load has been demonstrated, reflecting the stochastic nature of the plume as influenced by lake hydrodynamics. In 25 surveys, the size of the plume, defined as the area or volume within the 2°C (35.6°F) above ambient isotherm, has varied between 34 and 370 surface acres and 54 and 1,229 acre-feet. A frequency analysis determined that the median plume size (50th percentile) is approximately 120 surface acres; the plume exceeded 160 surface acres 30 percent or more of the time. The 160 surface-acre plume was estimated to extend approximately 1,875 feet on each side of the discharge point along the shore, and a maximum distance of nearly 2,400 feet offshore. Temperature of the discharged cooling water and extent of the thermal plume is limited by the SPDES permit for NMP.

The closed-loop circulating water system for Unit 2 employs a wet-evaporative, 541 foot-high natural draft cooling tower with a counter-flow design. Two identical submerged intake structures are located approximately 950 feet and 1,050 feet from the existing shoreline in Lake Ontario. Each Intake Structure is hexagonal, with a 7.5-foot wide by 3 foot high intake opening on each side, and a 1.6 foot-thick roof or velocity cap. The openings are equipped with vertical bar racks that have 10 inches of clear spacing between the bars to prevent large debris from entering the intake system. Each bar rack consists of nine vertical bars for each opening, of which seven are electronically heated to eliminate the potential for frazil ice adhesion. Each Intake Structure is independently connected to the onshore screenwell by a 4.5-foot diameter concrete intake tunnel. At the onshore screenwell, each intake tunnel connects to a separate vertical shaft. Intake water travels at a velocity of approximately three fps in the intake tunnel and approximately one fps in the vertical shafts. After passing through the two vertical shafts, the water enters the onshore Screenwell Building where the shafts merge into a common Intake Forebay, which has two four-foot-wide screenbays at the downstream end. Each screenbay has an angled, flush-mounted traveling screen with up and downstream trash racks. Unit 2

is equipped with a fish diversion system which transports fish from the forebay to the Lake, minimizing the number of fish impinged upon the traveling screens. During normal operation, an average total flow of 53,600 gallons per minute is withdrawn from the lake: 38,675 gallons per minute for the service water system and 14,925 gallons per minute for the fish diversion system. The closed-loop circulating water system uses discharge from the service water system for its makeup requirements. The circulating water system is designed to convey 580,000 gallons per minute of cooling water between the main condenser and the cooling tower. Meteorological conditions affect makeup flow to the circulating water system and blowdown rates. The cooling tower blowdown flow design rate ranges from 8,445 to 20,440 gallons per minute. The estimated cooling tower evaporation rate ranges from 4,560 to 13,800 gallons per minute.

The Unit 2 combined plant discharge flow ranges from a minimum of 23,055 gallons per minute to a maximum of 35,040 gallons per minute during normal operation. The discharge flow consists of that portion of service water not used for makeup to the circulating water system and a portion of the circulating water flow that is discharged to maintain dissolved solids at an appropriate equilibrium in the system. The Unit 2 discharge system consists of an onshore discharge bay, a discharge tunnel extending 1,500 feet from the existing shoreline into the Lake, and a two-port diffuser located about three feet from the lake bottom. Discharge velocity at the diffuser nozzles is approximately 18 feet per second. The current SPDES permit allows a maximum daily discharge temperature of 110°F and a maximum allowable intake-discharge temperature difference of 30°F. The initial discharge temperature rise is diluted in excess of 10:1 for all discharge conditions and is achieved in the near-field. The maximum surface temperature rise meets the New York State surface temperature criteria for Lake Ontario of 3°F; therefore no surface-mixing zone is required.

NMPNS estimates municipal water use at approximately 172,000 gallons of water per day from the Port of Oswego Authority. This municipal water is the source of supply for the plant's water treatment facility, potable, and sanitary water systems. NMP discharges treated waste process water from each unit into the respective discharge canals. Sanitary wastewater is treated at the wastewater treatment system and discharged to the Lake at a separate outfall. These discharges are regulated under the plant's SPDES permit.

NMPNS employs a permanent workforce of approximately 1,281 employees at NMP. Approximately 73 percent of the workforce live in Oswego County and 23 percent live in Onondaga County. The site workforce increases by as many as 1,000 to 1,250 workers for temporary (30 to 40 days) duty during staggered refueling outages that occur about every 24 months for each unit.

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

Power output from NMP is connected to the grid by three single-circuit 345-kilovolt (kV) lines. Two of these lines connect to the Unit 1 345kV Switchyard (Nine Mile 1 – Clay Line 8 and Nine Mile 1 – Scriba Line 9), and the remaining line connects to the Unit 2 345kV Switchyard (Nine Mile – Scriba Line 23). Two of these lines (Line 9 and Line 23) connect to the grid at the Scriba Substation, located approximately 2,000 feet southeast of the NMP Switchyards. Line 8 extends approximately 26 miles southeast on a 500-foot-wide corridor owned by Niagara Mohawk Power Corporation, a National Grid Company (Niagara Mohawk) and connects to the grid at the Clay Substation. NMPNS owns the area between the Unit 1 Switchyard and the Unit 2 Switchyard up to the northern boundary of Lake Road and maintains it as a low-growing vegetative community. Niagara Mohawk maintains its right-of-way in low-growing vegetation with selected management techniques under a New York State Public Service Commission-approved long-range vegetation management plan.

NMP provided approximately 13.3 billion kilowatt-hours of electricity in 2002. This power was enough to supply the electric power needs of approximately 2 million households based on average use statistics for New York State.

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 NMP continued operation and license renewal, respectively.

Enclosure 1 provides the completed Federal Consistency Assessment Form and includes discussion relative to the applicable policies of the program.

NMPNS consulted with the Federal and State regulator agencies listed below to inform them of plans to seek license renewal for NMP. NMPNS 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
- Postulated Accidents
- Uranium fuel cycle and waste management
- Decommissioning

For plants such as NMP that are located within the coastal zone, many of these issues involve impact to the coastal zone. NMPNS 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.¹ There are 17 Category 2 issues that are applicable to NMP.² The applicable issues and conclusions for these issues are as follows:

Aquatic ecology – NMPNS has a current State Pollutant Discharge Elimination System permit. Unit 2 has a closed-cycle cooling system that represents best available technology for minimizing entrainment and impingement impact. For Unit 1, NYSDEC issued a contingent CWA Section 316 (b) approval, pending additional entrainment and impingement monitoring. Those additional studies support the conclusion that intake impacts from NMP Unit 1 are small. Thermal plume studies indicated the thermal discharge from NMP Unit 2 complies with New York Water Quality Standards. NMP Unit 1 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.

Groundwater use and quality – The cone of depression created by dewatering at Unit 2 does not extend off site; therefore, impacts to groundwater use and quality are small.

Terrestrial resources – NMPNS has no plans to perform major refurbishment activities as a result of license renewal; therefore, impacts due to refurbishment are not expected.

Threatened and endangered species – NMPNS has no plans to perform major refurbishment activities as a result of license renewal; therefore, impacts due to refurbishment are not expected and impacts to these species through license renewal would be small.

Air quality – NMPNS has no plans to perform major refurbishment activities as a result of license renewal; therefore, impacts to air quality due to refurbishment are not expected.

Human Health – NMP 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 – NMPNS has no plans for refurbishment activities as a result of license renewal; therefore, impacts to the local education system and transportation due to refurbishment are not expected. NMPNS'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 – NMPNS has no plans to perform major refurbishment activities as a result of license renewal; therefore, offsite land use impacts due to changes in the tax base resulting from refurbishment are not expected. The tax-related impacts of continued operations would be small.

¹ 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. NMPNS 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)].

² Some Category 2 issues are applicable to plants having features that are not present at NMP (e.g., cooling ponds).

Historic and archeological resources – NMPNS 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 – NMPNS identified three potentially cost-beneficial modifications for Unit 1 and 10 for Unit 2 that would reduce the impacts of a severe accident. None of these are related to plant aging effects and therefore will be addressed as part of normal plant activities and are not related to license renewal.

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)

NMPNS has adopted by reference the NRC findings for Category 1 issues.

2. For applicable Category 2 issues, NMPNS 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, NMPNS is in compliance with New York State licenses, permits, approvals, and other requirements as they apply to NMP impacts on the New York State coastal zone.
4. NMP license renewal and continued operation of NMP facilities, and their effects, are all consistent with the enforceable policies of the New York State Coastal Management Program.

State Notification

By this certification, the State of New York is notified that the NMP license renewal is consistent with the New York Coastal Management Program. The State's concurrence, objections, or notification of review status shall be sent to the following contacts:

Leslie C. Fields
Environmental Program Manager
Office of Nuclear Reactor Regulation
United States Nuclear Regulatory Commission
Mail Stop: 001-F1
Washington, DC 20555-0001
(301) 415-1186

Peter A. Mazzaferro, License Renewal Project Manager
Nine Mile Point Nuclear Station
P.O. Box 63
Lycoming, NY 13093
(315) 349-1019

References

- Ref. 1 U.S. Nuclear Regulatory Commission. *Procedural Guidance for Preparing Environmental Assessments and Considering Environmental Issues*. NRR Office Instruction LIC-203. Office of Nuclear Reactor Regulation. Washington, D.C. June 21, 2001.
- 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.

Figures and Tables

Figure 1
50-Mile Vicinity

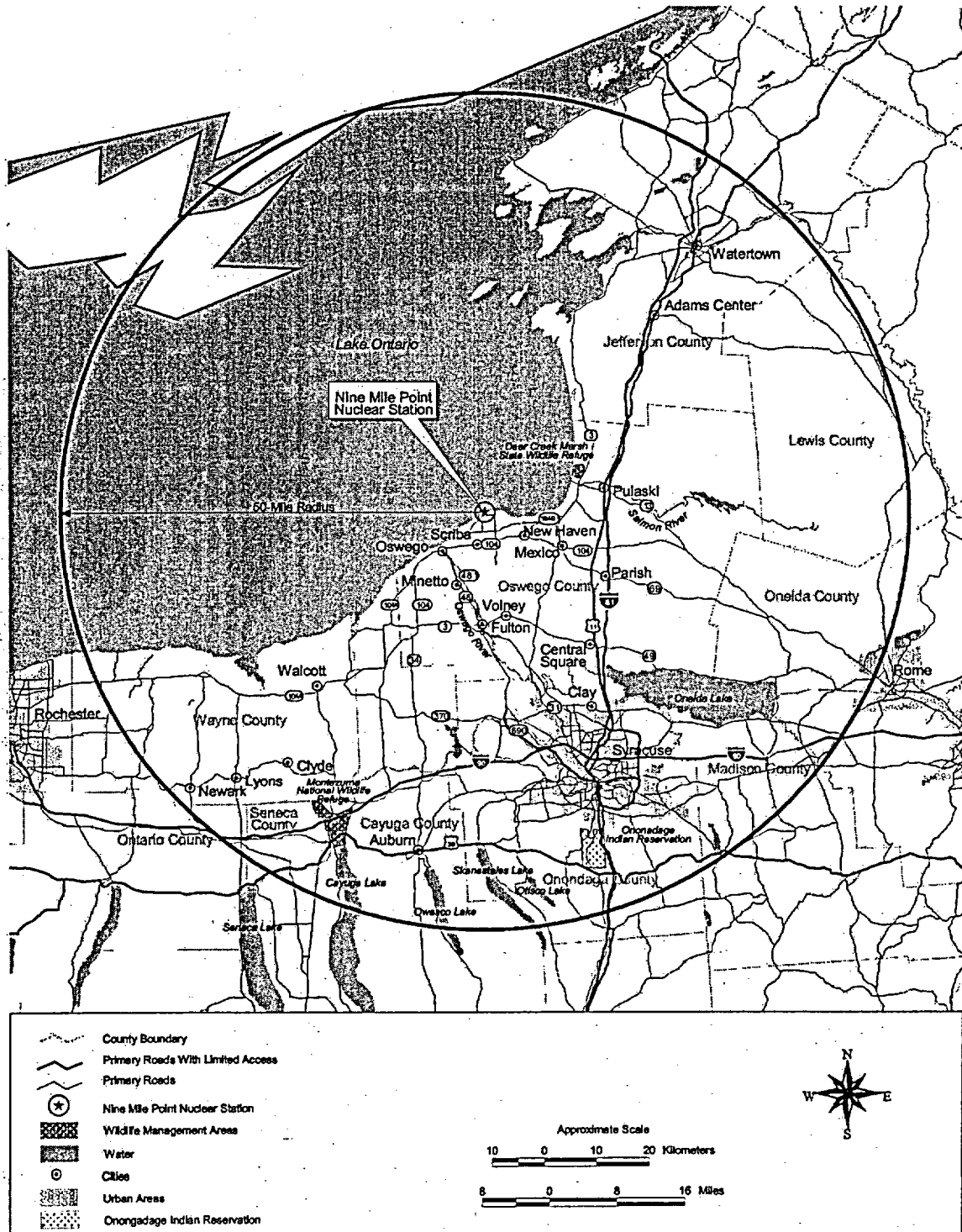
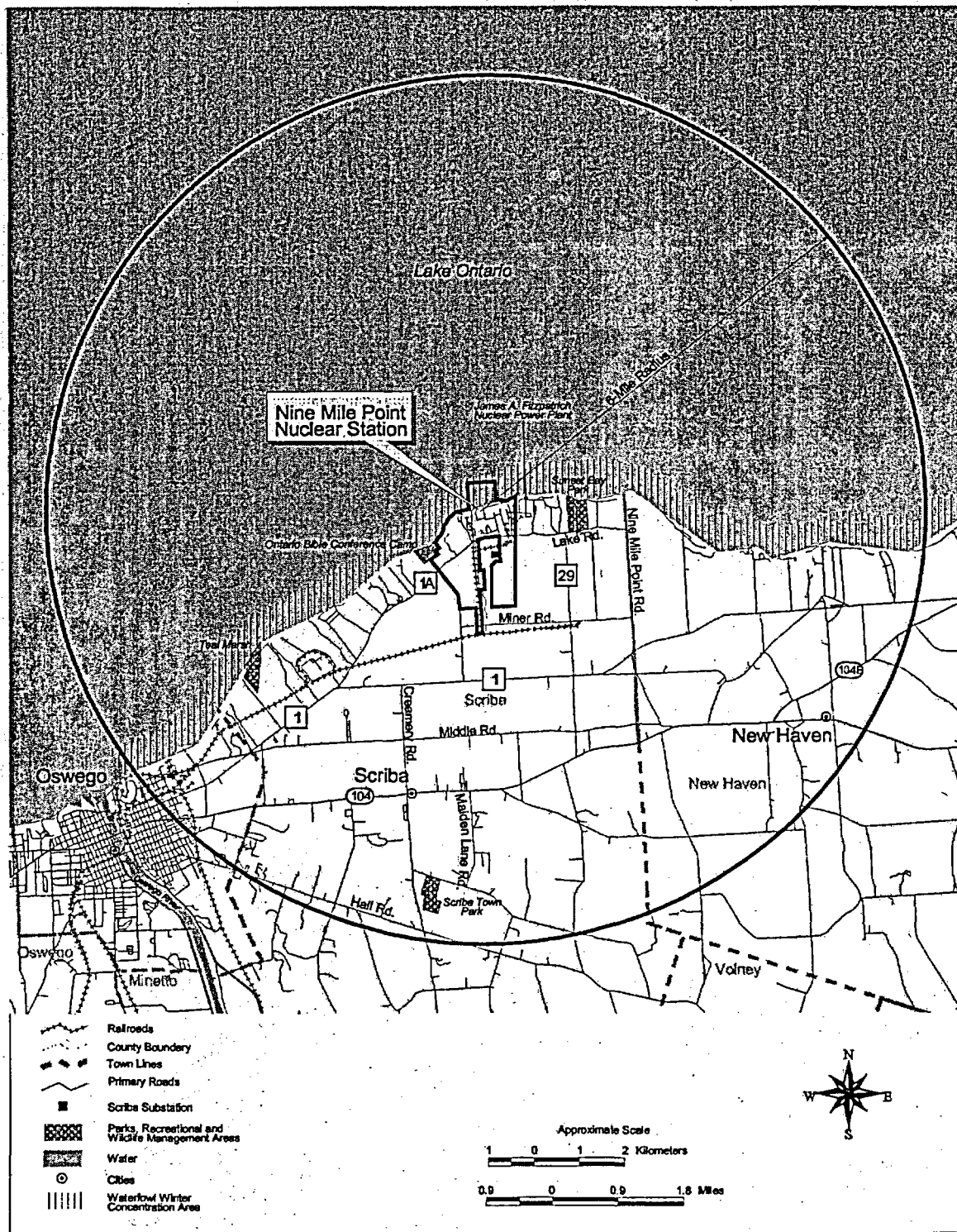


Figure 2
6-Mile Vicinity



**Figure 3
Site Boundary**

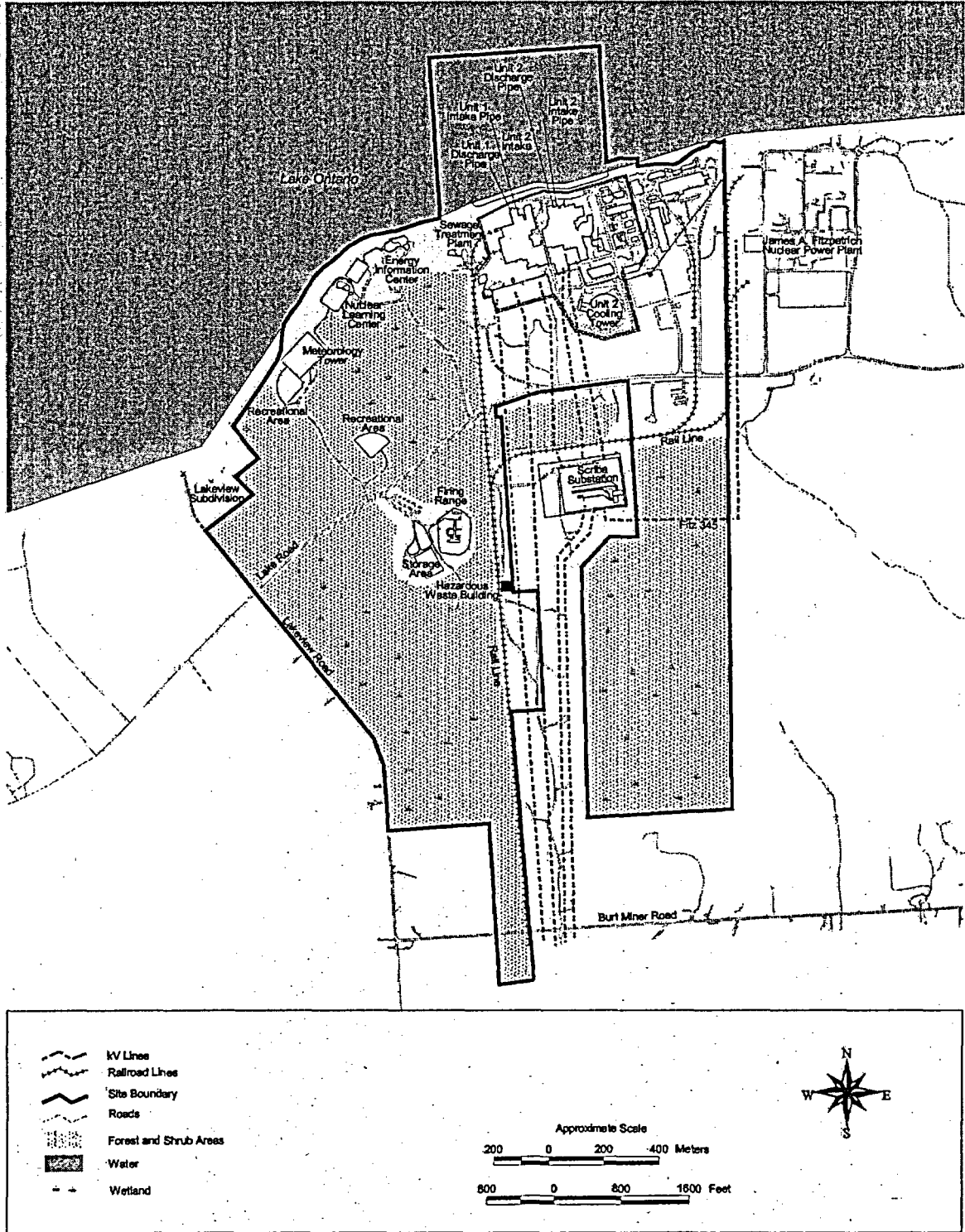


Table 1
Environmental Authorizations for Current Operations
Nine Mile Point Units 1 & 2

Agency	Authority	Requirement	Number	Expiration Date	Authorized Activity
New York State Department of Environmental Conservation	6 NYCRR Part 675	Water Withdrawal Registration	NYGLWWR-3811	11/07/05	Withdraw water from Lake Ontario
New York State Department of Environmental Conservation	6 NYCRR Part 175	New York State Fish and Wildlife License	LCP03-506	07/31/04	Collection and possession of fish and wildlife ¹
New York State Department of Environmental Conservation	6 NYCRR Part 596	Hazardous Substance Bulk Storage Registration Certificate	7-000058	11/07/05	Onsite bulk storage of hazardous substances
New York State Department of Environmental Conservation	6 NYCRR Part 750	State Pollutant Discharge Elimination System (SPDES) Permit	NY-0001015	12/01/04	Discharge of wastewaters to waters of the State
New York State Department of Environmental Conservation	6 NYCRR Part 613	Petroleum Bulk Storage Registration Certificate	7-429880	11/07/06	Onsite bulk storage of petroleum products
New York State Department of Environmental Conservation	6 NYCRR Part 373-3	Hazardous Waste Interim Status Authorization	NYD00073042	NA	Allows for accumulation and temporary storage onsite of mixed waste for greater than 90 days

¹ Permit held by EA Engineering, Science, and Technology, Inc.

**Table 1 (continued)
Environmental Authorizations for Current Operations
Nine Mile Point Units 1 & 2**

Agency	Authority	Requirement	Number	Expiration Date	Authorized Activity
New York State Department of Environmental Conservation	6 NYCRR Part 325	Pesticide Application Business Registration	79634	07/31/05	Pesticide application
State of Tennessee Department of Environment and Conservation	Tennessee Code Annotated 68-202-206	Radioactive Shipment License	T-NY002-L04	12/31/04	Shipment of radioactive material to a licensed disposal/processing facility within Tennessee
South Carolina Department of Health and Environmental Control	SC ADC 61-83	South Carolina Radioactive Waste Transport Permit	0408-31-04-X	12/31/04	Transport of radioactive waste into South Carolina
Virginia Department of Emergency Management	9 VAC 20-110-121	Registration for Transport Radioactive Material	CE-043006	04/30/06	Registration to transport radioactive materials in Virginia
U.S. Department of Transportation	49 CFR Part 107, Subpart G	Certificate of Registration for Transportation of Hazardous Materials	062104 700 026MO	06/30/07	Transportation of hazardous materials
U.S. Nuclear Regulatory Commission	Atomic Energy Act (42 USC 2011 et seq.), 10 CFR 50.10	Facility Operating License	Unit 1 - DPR-63	08/22/09	License to operate a nuclear power plant
U.S. Nuclear Regulatory Commission	Atomic Energy Act (42 USC 2011 et seq.), 10 CFR 50.10	Facility Operating License	Unit 2 - NPF-69	10/31/26	License to operate a nuclear power plant

**Table 2
Environmental Authorizations for
Nine Mile Point Units 1 & 2 License Renewal^a**

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 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
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 Environmental Conservation	Clean Water Act, Section 401 (33 USC 1341)	Certification	Application submitted to NYSDEC using Joint Application for Permit form

^a. No renewal-related requirements identified for local or other agencies.
ER = Environmental Report
FWS = U.S. Fish and Wildlife Service
SPDES = State Pollutant Discharge Elimination System

LICENSING WORD PROCESSING FORM

Name of Requestor: Kent Stepp

Date: 7-30-04

Letter	<input type="checkbox"/>
Memo	<input type="checkbox"/>
TS Amendment	<input type="checkbox"/>
LER	<input type="checkbox"/>

Final Copy on
Letterhead Needed by
Date: _____

Title: CZMA

Document Name: ~~Stoffe / R 457~~ E0419
(steno assigns)

	Date/Time Submitted	Date Needed By	Time Needed By	Steno Signoff
First Draft	7/30/04	8/2/04	See e-mail	
Revision 1	8/4/04	8/5/04	RUSH AM	
Revision 2	8/6/04	8/6/04	RUSH	
Revision 3				
Revision 4				
Revision 5				
Revision 6				
Revision 7				
Revision 8				
Revision 9				
Revision 10				

Additional Comments: _____