RAS 14702

UNITED STATES OF AMERICA
BEFORE THE NUCLEAR REGULATORY COMMISSION
OFFICE OF THE SECRETARY

In the Matter of	)	
ENTERGY NUCLEAR OPERATIONS, INC.	)	Docket Nos. 50-247- LR and 50-286-LR
(Indian Point Nuclear Generating Units 2 and 3)	)	November 29, 2007
	)	

REQUEST FOR HEARING
AND
PETITION TO INTERVENE

Now come the Town of Cortlandt ("Cortlandt") and hereby make its REQUEST FOR A HEARING and PETITION TO INTERVENE in the captioned matter, pursuant to the Federal Register Notice of October 1, 2007 [Volume 72, Number 189, Page 55834] and in accordance with the provisions of 10 C.F.R. § 2.309.

In support of its Request and Petition, Cortlandt further states as follows:

The Town of Cortlandt is located on the northwestern corner of Westchester County, bounded on the west by the Hudson River, on the north by Putnam County, on the east by the Town of Yorktown, and on the south by the Towns of New Castle and Ossining. It is comprised of two incorporated villages, Croton-on-Hudson and Buchanan, and several hamlets, including Montrose, Crugers and Verplanck. Cortlandt has a total area of 34.5 square miles and an estimated 1998 population of about 28,672 persons. Indian Point Nuclear Generating Unit Nos. 2 and 3 are located within the Village of Buchanan. The Town of Cortlandt and the Honorable Linda D. Puglisi, Supervisor of Cortlandt, will be represented by Thomas F. Wood, Town Attorney, and Sive, Paget & Riesel, P.C. in its

TEMPLATE = SECY-037

SECY-02

Request and Petition. Cortlandt is a local governmental body, within whose boundaries the Indian Point facility is located. Therefore, standing is established according to 10 C.F.R. § 2.309(d)(2).

Alternatively, Cortlandt seeks Participation by a Person Not a Party before the Nuclear Regulatory Commission in the captioned matter in accordance with the provisions of 10 C.F.R. § 2.315(c). Cortlandt submits that it is entitled to Intervene as a party under 10 C.F.R. § 2.309; but if the Commission finds that Cortlandt is unable to Intervene as a party under 10 C.F.R. § 2.309, Cortlandt respectfully requests the Commission to allow Cortlandt to participate as a non-party under 10 C.F.R. § 2.315(c).

PETITIONER'S CONTENTIONS

Technical / Health / Safety Analysis Contentions

1. The License Renewal Application ("LRA") does not provide sufficient detailed information regarding technical and safety issues as required by 10 C.F.R. Part 54

Applicant's LRA has not met the threshold of providing explicit specific technical information as required under 10 C.F.R. Part 54 – Requirements for Renewal of Operating Licenses for Nuclear Power Plants, specifically with respect to the Equipment Environmental Qualification Program, and the Flow-accelerated Corrosion ("FAC") Program. Applicant's LRA does not include certain threshold technical requirements, but merely makes non-specific conclusory statements. An applicant must "justify the methods used" for performing an "integrated plant assessment." 10 C.F.R. § 54.21. Examples of Applicant's incomplete technical information include, but are not limited to:

Equipment Environmental Qualification Program; and FAC, in which Applicant included a one-paragraph description of its planned Aging Management Program and credited the current FAC program without providing any explanation. Both 10 C.F.R. Part 54 and NUREG-1800 require that a specific and particularized program define component and system scope, inspection criteria, methodology, frequency and remediation commitments when acceptance criteria for FAC inspections are not met.

This contention is fundamentally material to the Indian Point License Renewal Proceedings as a matter of law; Applicant's failure to comply with the rules setting forth Age Related Management Programs precludes the Town from adequately reviewing the legal or technical integrity of the Programs. Therefore, Applicant must address this issue in its LRA before the Nuclear Regulatory Commission ("NRC") issues Applicant a license renewal for an additional 20 years.

2. Leak-before-Break analysis is unreliable for welds associated with high energy line piping containing certain alloys at Indian Point Energy Center ("IPEC")

Applicant's Leak-before-Break ("LBB") analysis in its LRA is unreliable and does not provide an adequate aging management plan. LBB is an analysis procedure with a limited scope of applicability and requires NRC review and approval. It is a concept associated with nuclear power plant design principles regarding pipe failures and their safety implications. Technically, the LBB concept means that dynamic effects associated with postulated pipe ruptures in nuclear power units may be excluded from the design basis when NRC analysis shows that the probability of fluid system piping rupture

is extremely low under conditions consistent with the piping's design basis. (NRC Inspection Manual, Part 9900: 10 C.F.R. Guidance).

Recently, IPEC experienced serious piping issues, as evidenced by the following 2006-2007 Journal News reports:

a. August 24, 2006: Faulty valves trigger shutdown of Indian Point 2. Drainage problem developed with discharge valves in a 10,000-gallon tank of nonradioactive water.

b. December 1, 2006: A 1-inch steel alloy pipe that leaked non-radiated steam and water in the containment building that houses the nuclear reactor is repaired.

c. March 1, 2007: Control room operators unexpectedly shut down the Indian Point 2 nuclear power plant for the fifth time in 15 months after water levels in its steam generators suddenly dropped below normal.

d. April 4, 2007: A steam generator problem prompted workers to manually shut down the nuclear plant. A problem with one of the two main boiler feed pumps that send water to the plant's steam generators malfunctioned and left water levels too low.

e. April 7, reported on 24, 2007: A new leak of the radioactive isotope tritium was discovered at Indian Point, coming from an underground steam pipe near the Indian Point 3 turbine building.

f. May 14, 2007: Tritium is found in IPEC's sewer pipes.

g. May 30, 2007: Indian Point 2 interrupts power production due to steam generator problems. The broken water valve is part of a system that feeds

water to four generators, producing the steam that turns turbines to make electricity.

h. September 7, 2007: An alleged pinhole sized leak in a conduit is found in a 20-24 inch fuel transfer pipe, leaking radioactive effluent.

Locations of piping systems that are susceptible to stress corrosion may not qualify for LBB relief. Applicant's LRA does not respond to the potential safety threat of stress corrosion of weld alloys. Therefore, NRC must require Applicant to include in its LRA for Indian Point Units 2 and 3 a reliable and adequate Aging Management Plan regarding piping and welds, so that public health and safety are not at risk if NRC renews Applicant's license for an additional 20 years.

3. Applicant's LRA does not specify an Aging Management plan to monitor and maintain all structures, systems, or components associated with the storage, control, and maintenance of spent fuel in a safe condition, in a manner sufficient to provide reasonable assurance that such structures, systems, and components are capable of fulfilling their intended functions.

Applicant's LRA does not specify an Aging Management plan to monitor and maintain all structures, systems, and components associated with the storage, control, and maintenance of spent fuel in a safe condition, in a manner sufficient to provide reasonable assurance that such structures, systems, and components are capable of fulfilling their intended functions, as required in 10 C.F.R. § 50.65.

Tritium contamination has been found in numerous monitoring wells at IPEC. The condition of the spent fuel pool at Indian Point Unit 2 is known to be compromised. Applicant's LRA does not propose an Aging Management plan that adequately addresses the leak or the intended function of the spent fuel pool, which is to safely contain radioactive contamination from leaking into the environment. The spent fuel pool's 30-year old concrete and rebar and steel liner are currently faulty, and likely cannot be maintained for an additional 20 years.

Ongoing and unmonitored leaks of liquid radioactive effluents, including tritium, strontium-90, and cesium-36, are leaking from IPEC into the groundwater and into the Hudson River. The duration, extent, flow paths, and/or source of these leaks are largely unknown. These leaks result from separate and varied onsite systems, structures and components, including, but not limited to: (1) cracks in the spent fuel pools; (2) failed or degraded fuel transfer sleeves; and (3) cracks and fissures. Although Applicant has investigated the source of the leaks, Applicant has not been able to identify or locate such leaks to this date.

Applicant stated in its Environmental Report that "[a]lthough the IP2 spent fuel pool was initially suspected to be the source of the onsite contamination," they did not identify any leaks in the IP2 pool liner. (Indian Point Energy Center Environmental Report 5-67). However, Entergy only examined about 60% of the pool liner during its evaluation because of the high density of spent fuel storage racks and the small clearance between the pool floor and the bottom of the racks. The Environmental Report does not address whether it is feasible to inspect the remaining pool liner for leaks nor does it address any other steps that Entergy could take to determine the source of the leaks.

Applicant's LRA also fails to provide a detailed and workable aging management plan to deal with the known leaks. The only plan set forth at this point is to leave the radioactive effluent in the ground. If this radioactive contamination remains in the soil and groundwater during the 20-year license renewal period, radioactive effluent will leach into the surrounding soil and groundwater, and into the Hudson River.

NRC will violate its mandate to protect public health and safety if it considers Applicant's LRA for an additional 20 years before considering a comprehensive remediation of the leaks. Neither Applicant nor NRC have identified an adequate aging management program for the known and unknown leaks, thus endangering public health and safety by allowing unregulated radioactive waste to continue to be released into the environment during the license renewal period. The spent fuel pools qualify as "systems, structures and components" within the scope of aging management review for the license renewal review. See 10 C.F.R. § 54.21. Therefore, the issue of whether the leak is ongoing and whether Applicant will address it is pertinent to the license renewal process and must be addressed prior to NRC renewing Applicant's license for an additional 20 years.

Miscellaneous Contentions

1. Impacts to the local economy if Indian Point Units 2 and 3 are not re-licensed

Cortlandt asserts that Applicant must consider the potential effect on the economy if Indian Point Units 2 and 3 are not renewed for an additional 20 years. Applicant employs over 1,000 people and distributes approximately $356 million in payroll and local purchases, with more than $50 million paid in local taxes, including sales tax, payroll tax,

property tax, and state and local income tax. Additionally, Applicant contributes services and money to local nonprofit programs and projects. The effect on the community will be severe if NRC does not renew Applicant's license. Therefore, NRC must strongly consider the economics at IPEC if it does decide not to grant Applicant re-licensing.

2. The Decommissioning Trust Fund is inadequate

Cortlandt asserts that Applicant's decommissioning trust fund balances are inadequate and insufficient to properly decommission the site, as required by 10 C.F.R. § 50.75. Before NRC can renew the license for Indian Point Units 2 and 3, Applicant must demonstrate that it will have sufficient decommissioning trust funds, including funds to remove underground radioactive contamination in the bedrock under IPEC. The costs for complete decommissioning and cleanup of IPEC must be adjusted to reflect significant changes in the contamination streams including the large underground radioactive leaks. Applicant has not evaluated, calculated or considered the actual decommissioning funds required to decontaminate the site in light of the ongoing massive underground radioactive effluent and leaks. A licensee must report to the NRC "the amount of decommissioning funds estimated to be required . . .; [and] any modifications occurring to a licensee's current method of providing financial assurance since the last submitted report." U.S.C. § 50.75(f)(2).

NRC has acknowledged that systems, structures, and components can experience undetected radioactive leaks over a prolonged period of time that lead to "relatively large volumes of contamination above the decommissioning release limits [which result] in

notable increases in remediation time and costs." (NRC; Liquid Radiation Release Lessons Learned Task Force Final Report; ML062650312 2006-09-01 (3.5.3)). Past and present leaks at IPEC will likely lead to relatively large volumes of contamination well above the decommissioning release limits provided for in Applicant's LRA.

Storage of an additional twenty years of waste, in either spent fuel pools or dry cask storage, increases the risk to human health and safety beyond the original Plant's design. NRC has stated that it plans to store both low level radioactive waste and high level radioactive waste on site at reactor facilities for periods of more than 100 years. However, Applicant's LRA does not adequately address protection standards for long term citing of hazardous waste.

Applicant's LRA fails to address an adequate decommissioning and cleanup plan in light of the large amounts of underground radioactive waste, which were discovered in 2005. Because the source of this contamination has yet to be discovered, the extent of the contamination is unknown. NRC must hold a full hearing on the costs and decommissioning funds required to address the above issues. During such a hearing, Applicant must clearly define and allocate decommissioning funds for an aging management program regarding the adequacy of decommissioning funds or methodology of decommissioning, in light of the underground radioactive leaks. NRC cannot grant or deny Applicant's request for license renewal for an additional twenty years prior to such a hearing and revision of Applicant's LRA.

3. Applicant's LRA Fails to Address the Catastrophic Consequences of a Potential Terrorist Attack on the Aging Indian Point Nuclear Reactors

Subsequent to the disaster of September 11, 2001, the 9/11 Commission learned that the terrorists originally planned to strike nuclear power plants. One of the hijacked planes flew directly over IPEC before striking the Twin Towers. National Research Counsel analysis and post 9/11 intelligence indicate that terrorist organizations still view the United States' nuclear infrastructure as an alluring potential target. Rather than require an applicant to consider the potential environmental and public health and safety effects of a potential terrorist attack in its LRA, NRC states that the risks of an attack on a nuclear reactor are too remote to warrant inclusion in an applicant's LRA. However, the Ninth Circuit Court of Appeals recently held that NRC's refusal to consider the environmental impacts of a terrorist attack under the National Environmental Policy Act ("NEPA") failed to satisfy the reasonableness standard. San Luis Obispo Mothers for Peace v. Nuclear Regulatory Commission, Nuclear Reg. Rep. P 20,669, 449 F.3d 1016, 1035 (9th Cir. 2006) ("Mothers for Peace").

NEPA authorizes NRC to require an environmental study of the environmental impact of a proposed action if such action would significantly affect the quality of the human environment. 42 U.S.C. § 4332(2)(C). Applicant's LRA for an additional 20-year period is a significant and major action under NEPA. According to the Mothers for Peace holding, NRC should require Applicant to include in its LRA the potential significant impacts on the human environment from a successful terrorist attack at IPEC. Additionally, 10 C.F.R. § 51.53(c)(3)(iv) requires Applicant's environmental report to

include "any new and significant information regarding the environmental impacts of license renewal of which the applicant is aware." The potential for a terrorist attack on IPEC is "new and significant information" of which Applicant is aware. Applicant's LRA study should include, but not be limited to, the effect of an attack on: the nuclear reactor units, the control room, the spent fuel pools, and the water intake and/or discharge channel.

NRC's failure to require Applicant to consider the environmental and safety effects of a potential terrorist attack on IPEC is unreasonable. If IPEC were attacked and a major release of radioactive contaminants resulted, the ensuing harm to the public and the environment would be catastrophic. Cortlandt has an estimated 1998 population of approximately 28,672 people. Cortlandt includes the incorporated villages of Croton-on-Hudson and Buchanan, where IPEC is located, and unincorporated hamlets including Montrose, Crugers and Verplanck. However, Cortlandt is not the only area that would be impacted. Cortlandt is located approximately 24 miles north of New York City, which has an estimated 2000 population of over 8 million people. Over 50 million people live and/or work within a 50-mile radius of IPEC.

The Ninth Circuit Court of Appeals recently held that NRC must consider the environmental impacts of a terrorist attack under NEPA. NRC's regulations require an applicant for a license renewal to include new and significant information in its LRA. Therefore, the issue of whether a terrorist attack on IPEC would have a significant impact on the human environment is pertinent to this license renewal process and Applicant must address this issue in its LRA prior to NRC issuing Applicant a license renewal for an additional 20 years.

CONCLUSION

NRC must carefully review Entergy's LRA and address the above Contentions, before it renews or denies Entergy's request for license renewal of Indian Point Nuclear Operating Units 2 and 3 for an additional 20 years.

On Behalf of Linda D. Puglisi, Supervisor of the Town of Cortlandt, and the Town of Cortlandt

Dated:

November 29, 2007
New York, New York

Respectfully Submitted,

Thomas F. Wood
Town Attorney
Town of Cortlandt
And
Sive, Paget & Riesel, P.C.

By: Daniel Riesel
Daniel Riesel
460 Park Avenue
New York, New York 10022

Phone: (212) 421-2150
Facsimile: (212) 421-1891
Email: driesel@sprlaw.com

UNITED STATES OF AMERICA
BEFORE THE NUCLEAR REGULATORY COMMISSION
OFFICE OF THE SECRETARY

In the Matter of	)	
ENTERGY NUCLEAR OPERATIONS, INC.	)	Docket Nos. 50-247- LR and 50-286-LR
(Indian Point Nuclear Generating Units 2 and 3)	)	November 29, 2007
	)	

Sirs\Madams:

PLEASE TAKE NOTICE, that the Honorable Linda D. Puglisi as the Supervisor for the Town of Cortlandt, and the Town of Cortlandt hereby appear through its Attorneys, Thomas F. Wood and Daniel Riesel of Sive, Paget & Riesel, P.C.; the aforesaid attorneys being admitted to practice in the State of New York and members in good standing of that bar.

PLEASE TAKE FURTHER NOTICE that all papers in these proceedings are to be served on the undersigned at the address set forth below.

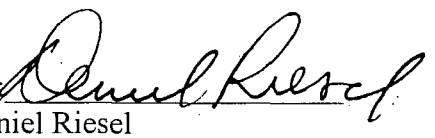
Dated: November 29, 2007
New York, New York

Yours, etc.,

Thomas F. Wood
Town Attorney
Town of Cortlandt

And

Sive, Paget & Riesel, P.C.

By 
Daniel Riesel
460 Park Avenue
New York, New York 10022

Phone: (212) 421-2150
Facsimile: (212) 421-1891
Email: driesel@sprlaw.com

Docket Nos. 50-247-LR and 50-286-LR

UNITED STATE OF AMERICA
BEFORE THE NUCLEAR REGULATORY COMMISSION
OFFICE OF THE SECRETARY

In the Matter of

ENTERGY NUCLEAR OPERATIONS, INC.

(Indian Point Nuclear Generating
Unites 2 and 3)

COPY

REQUEST FOR HEARING
AND
PETITION TO INTERVENE

SIVE, PAGET & RIESEL, P.C.
Attorneys for The Town of Cortlandt
Office and Post Office Address, Telephone
460 Park Avenue
New York, New York 10022
(212)421-2150