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From: Janice Dean [Janice.Dean@oag.state.ny.us]
Sent: Thursday, May 08, 2008 3:59 PM
To: Secy
Cc: Janice Dean
Subject: State of New York's Comments: RIN 3150*AH45, Decommissioning Planning
Attachments: 2008.05.08.NYS.Decom.Comments.pdf

Dear Secretary,

Attached please find comments submitted by the Office of the Attorney General of the State of New York, on behalf of the People of the State of New York, to NRC Docket No. RIN 3150-AH45 (concerning the NRC*s proposed rulemaking to amend 10 C.F.R. parts 20, 30, 40, 50, 70 and 72 to require certain changes in decommissioning planning).

Please notify me if you have any trouble accessing this submission. A hard copy will follow. Thank you very much for your consideration.

Janice A. Dean

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STATE OF NEW YORK
OFFICE OF THE ATTORNEY GENERAL

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Attorney General

DIVISION OF SOCIAL JUSTICE
Environmental Protection Bureau

May 8, 2008

Secretary
U.S. Nuclear Regulatory Commission,
Washington, DC 20555–0001,
ATTN: Rulemakings and Adjudications Staff.

Re: NRC Docket No. RIN 3150-AH45: Comments Submitted by the State of New York Concerning the NRC's Proposed Rulemaking to Amend 10 C.F.R. Parts 20, 30, 40, 50, 70 and 72 to Require Certain Changes in Decommissioning Planning

Dear Secretary:

The Office of the Attorney General of the State of New York on behalf of the People of the State of New York submits the enclosed comments to the above-referenced proposed rulemaking, and notes that the original deadline for filing in this matter was extended to May 8, 2008, as referenced in 74 Fed. Reg. 14946. Thank you for your consideration.

Respectfully submitted,

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UNITED STATES OF AMERICA
NUCLEAR REGULATORY COMMISSION

In the Matter of:

Amending 10 C.F.R. Parts 20, 30, 40, 50, 70 and 72 and Promulgating a Rule Concerning:	NRC Docket No. RIN 3150-AH45
Decommissioning Planning	

COMMENTS SUBMITTED BY THE OFFICE OF THE ATTORNEY GENERAL OF THE STATE OF NEW YORK CONCERNING THE NUCLEAR REGULATORY COMMISSION'S PROPOSED RULEMAKING TO AMEND 10 C.F.R. PARTS 20, 30, 40, 50, 70 AND 72 TO REQUIRE CERTAIN CHANGES IN DECOMMISSIONING PLANNING

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Charlie Donaldson
John Sipos
Assistant Attorneys General

Submitted: May 8, 2008

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Appendix

Exhibit A	Maps: Current Indian Point Units 1 and 2 Activity Isopleths (excerpts from Hydrogeologic Site Investigation Report, GZA GeoEnvironmental, Inc., Jan. 7, 2008)
Exhibit B	April 28 and 30, 2008 Indian Point Condition Reports Nos. CR-IP2-2008-01490, CR-IP2-2008-01533.
Exhibit C	March 29, 2007 letter from John Herron, Entergy Nuclear Operations, Inc., to U.S. Nuclear Regulatory Commission, ENOC-07-00007

UNITED STATES OF AMERICA
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On behalf of the People of the State of New York, the Office of the Attorney General of the State of New York ("State of New York") submits these comments regarding the Nuclear Regulatory Commission's ("NRC") proposed regulatory changes that ostensibly seek to improve planning for the decommissioning of nuclear power reactors and nuclear material facilities, with the goal of reducing the likelihood that such a facility will lack the financial ability to remove radioactive contamination in, around, and below the facility. The State of New York supports the rulemaking's stated goals of reducing contamination, improving decommissioning planning, and preventing licensees from shirking their responsibility to decontaminate nuclear facilities and passing the cleanup of "legacy" sites onto the NRC and taxpayers. Unfortunately, the proposed regulations themselves are both timid and ineffective. The proposal does not impose

meaningful, enforceable operating requirements on the various types of NRC licensees, does not provide public access to decommissioning records, and does not link decommissioning estimates to real-world environmental conditions that must be remediated. With respect to ensuring that there is "money in the bank" for thorough decommissioning, the proposal includes some modest improvements for "materials" and "interim spent fuel storage" licensees, but does nothing to require licensees of operating power reactors to set aside now sufficient funds for this citicial activity. Accordingly, the NRC must substantially revise the proposed rule in order to minimize radiological contamination and prevent sophisticated Enron-like entities from "arranging" their way out of their decontamination responsibilities while saddling the federal government with the obligation to clean up private nuclear facilities around the nation.

As presently drafted, the proposed regulations will not protect the environment or promote safety, will not increase public confidence in the NRC's ability to regulate, and will not make NRC actions more effective, efficient and realistic. The proposals are not consistent with the Atomic Energy Act, the Administrative Procedures Act, and the National Environmental Policy Act.

I. Overview

Published for comment on January 22, 2008, the NRC's *Decommissioning Planning; Proposed Rule*, 73 Fed. Reg. 3812 - 3846, proposes to change or add to 10 C.F.R. Parts 20, 30, 40, 50, 70 and 72 concerning the reporting of radionuclide contamination at nuclear facilities, the planning and preparation for decommissioning and decontamination of nuclear facilities, and the guarantee of ample private financial funds to ensure the thorough decontamination of such facilities and their adjacent groundwater and surface waters. "Decommissioning" generally refers to the process whereby a NRC-licensed facility, such as a power reactor or a dry cask storage facility, ceases its operating activities, cleans up contaminated areas, removes contaminated components, and transports them to an authorized disposal site. The NRC then "releases" the site so that it may be used for other purposes. Depending on the amount and scope of radiological contamination at a site, the release may allow unrestricted use of the property or impose limitations or exclusions on the future access and use of the property.

The State of New York has a keen interest in the promulgation and enforcement of a meaningful rule that actually achieves the proposal's stated goals. Extensive and long-running radionuclide contamination has occurred at the Indian Point nuclear power facilities; this long running contamination must be eliminated by the responsible parties – the entities who built, operated, and profited from the

facilities.[1]

The State of New York submits that the text of the proposed regulations – contrary to their stated intent – actually will encourage licensees to postpone the cleanup of radionuclide leaks until some far off future date, by which time a plume may be more difficult and expensive to decontaminate. For years, licensees and the NRC have ignored and failed to address the increasing number of incidents involving the release of radionuclides leaking from underground systems or components. The NRC's final regulation should compel licensees to (1) prevent such pollution in the future and (2) clean up the existing radionuclide pollution now.

The State of New York also objects to the failure of the proposed regulations to address the urgent need to increase power reactor decommissioning funds to pay for subsurface contamination of reactor sites. The present regulation used for power reactor decommissioning funds was developed 20 years ago and reflects a

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[1]Attorney General Andrew M. Cuomo has taken the lead in opposing the relicensing of the Indian Point nuclear plants. The State of New York has identified serious concerns about the safety and environmental impacts concerning the continued use of Indian Point Units 1, 2, and 3, and has set these concerns out in the State's Petition to Intervene in the United State Nuclear Regulatory Commission's proceeding to consider whether to renew the operating licenses for these plants, which are under review in ASLBP No. 07-858-03-LR-BD01. Among the State's concerns are the threat of terrorist attack, the fact that the Indian Point units are under-designed in light of current knowledge about the risks and consequences of regional earthquakes, the units' aging electrical and piping systems, the units' leaking spent fuel storage pools, and fatigue and embrittlement of reactor components. It is imperative that Entergy or whoever else owns Indian Point now set aside ample, actual, and available cash in a bankruptcy-proof "lockbox" to ensure the thorough decontamination and decommissioning of the Indian Point site so that it may be returned to unrestricted use.

linear mathematic formula based simply on a reactor's power capacity. Given the knowledge gained over the last 20 years, the proposed rule should be revised to require the augmentation of power plant decommissioning funds to pay for the clean up of any subsurface or surface contamination that might still exist when a power reactor and its related systems, structures, and components cease operation.

Furthermore, the State of New York objects to the exclusion of public oversight and accountability that the proposed regulations will enshrine. Under the proposed regulations, when a spill or a leak is found, a licensee will merely write a memo and place it an internal file cabinet. The proposed regulations and the Federal Register preamble make clear that the licensee is not required to send the memo to the NRC regional office or headquarters and, of course, that memo will never come close to being added to the "public side" of the Commission's ADAMS document management system, nor will the Commission ever "possess" the document for purposes of the federal Freedom of Information Act. Under this proposed framework, one thing is sure: the NRC and the industry intend that the public will never see the company's memo documenting the leak, spill, or plume. The final rule must not implement such a "hide-the-ball" arrangement. Rather, the final rule must ensure public knowledge of contamination at power reactor sites – as well as at "materials" license sites and dry cask storage sites. Accordingly, the final rule must require that all licensees submit their reports to the NRC and that the NRC promptly make the reports available to the public.

Likewise, the public must be able to both see and understand the detailed assumptions that go into cost calculations that underlie decommissioning fund guarantees. Thus, the State of New York objects to the proposed rule's failure to require real – and public – reporting of the factors used to estimate decommissioning costs, and its failure to set a specific and responsible deadline for licensee submission of decommissioning funding plans incorporating costs stemming from known subsurface contamination. The State of New York urges the NRC to require power reactor, dry cask storage, and materials licensees to thoroughly survey their facilities for contamination within six months of the final rule's effective date, and submit a survey report and a decommissioning funding plan within a year of that date. The State of New York further urges the NRC to require reactor licensees to submit an updated decommissioning funding plan to the NRC within a year of discovery of site contamination. In short, The State of New York believes the NRC's obligation here is simple: it must make sure that facility owners have the funds – that is, *ample, actual, and available* funds – to fully fund the thorough decontamination and decommissioning whenever a facility ceases operation.

These comments cite to various publicly available documents, all of which are incorporated by reference.

II. Statutory and Regulatory Background

The Atomic Energy Act of 1954, 42 U.S.C. § 2011 *et seq.*, imposes on the NRC the duty to ensure that civilian uses of radioactive materials are secure and do not injure public health, property, or the environment. *See, e.g.*, 42 U.S.C. § 2232(a); *see also id.* § 2133(b). At present, there are 104 operating power reactors, 11 power reactors in a storage mode awaiting future decontamination, and approximately 50 independent spent fuel storage installations (essentially, dry cask storage facilities). *See generally* NRC, 2007-2008 Information Digest, NUREG 1350, vol. 19, at 84-104, 121-124.

The NRC has promulgated, and is now amending, regulations pertaining to the decommissioning of facilities that use, produce, or store nuclear materials and reactors that employ fission for various purposes including the production of electricity. Much, if not most, of the radiation under civilian control in this country is in nuclear power reactors and their spent fuel pools and storage casks. As the nation's nuclear power plants, many of which came online in the 1960s and 1970s, continue to age, contamination from forty-plus years of operation poses decontamination and decommissioning challenges not yet faced on a large scale by the nuclear industry or regulators.

A. The NRC's 1988 Regulatory Changes

In 1988, the NRC amended 10 C.F.R. Parts 30, 40, 50, 51, 70, and 72 to require facilities to begin to provide some assurances that licensees might be able to fund the future decommissioning of their facilities. *See* Final Rule, General Requirements for Decommissioning Nuclear Facilities, 52 Fed. Reg. 34018 (June 27, 1988). The rule applied to the decommissioning of power reactors, nonpower reactors, fuel reprocessing plants, fuel fabrication plants, uranium hexafluoride production plants, independent spent fuel storage installations, and nonfuel-cycle nuclear facilities. The NRC's stated objective with the 1988 rule was "to assure that decommissionings will be carried out with minimal impact on public and occupational health and safety and the environment." 52 Fed. Reg. 34018 at 2.

Specifically, the 1988 rulemaking added the current version of 10 C.F.R. §§ 30.35, 50.75, and 70.25. Those provisions require licensees of certain facilities to either submit a decommissioning funding plan or a certification that financial assurance for decommissioning funding has been provided. The rule provided a straight-line formula to determine the amount of funds for decommissioning based on the number of megawatts that could be produced (§ 50.75) or the quantity of material authorized to be possessed at a site (§ 30.35 and § 70.25). The 1988 version of § 30.35 and § 50.75 set out various ways in which licensees can provide financial assurances. The 1988 version of § 50.75 also established a requirement that power reactor licensees, 5 years before the projected end of operation, submit a

preliminary decommissioning plan containing a cost estimate for decommissioning and an up-to-date assessment of the major technical factors that could affect planning for decommissioning including the decommissioning alternative anticipated to be used, major technical actions necessary to carry out decommissioning safely, the current situation with regard to disposal of high-level and low-level radioactive waste, residual radioactivity criteria, and any other site specific factors which could affect decommissioning planning and cost. The rule required that licensees keep "records of information important to the safe and effective decommissioning of the facility in an identified location" (including records of spills). Notably, however, the 1988 rule did not require submission of this information to the NRC or the public.

The NRC also added a new Appendix A to Part 30 which authorized licensees to submit "reasonable assurances" of the availability of funds for decommissioning based on obtaining a parent company guarantee that funds would be available for decommissioning costs, and on a demonstration that the parent company passes a financial test. The appendix established criteria for passing the financial test and for obtaining the parent company guarantee.

B. The NRC's 1998 Regulatory Amendments

Ten years later, anticipating some deregulation in the power generating industry, the NRC modified its financial assurance regulations to require power reactor licensees to report periodically on the status of their decommissioning funds and on changes to their financial assurance mechanisms. *See* Final Rule on Financial Assurance Requirements for Decommissioning Nuclear Power Reactors, 63 Fed. Reg. 50465 (September 22, 1998). The NRC recognized that the loss of regulatory oversight as a potential consequence of industry restructuring could impact the Commission's decommissioning financial assurance requirements. 63 Fed. Reg. at 50466. That regulatory revision, however, did not take into account the substantial additional costs associated with the clean up and decontamination of subsurface radiological plumes.

Events in the last decade, however, have shown that the key assumptions behind the 1988 and 1998 decommissioning regulations no longer hold true. First, the NRC has become aware of a significant number of unpermitted subsurface (and surface) leaks at various atomic facilities around the nation. Second, the deregulation of the power industry has continued, resulting in an increase in the number of "merchant plants" with layers of limited liability affiliates between them and their parent corporation. In recent years, the NRC also has examined decommissioning issues, the interplay between certain types of financial assurances and the Bankruptcy Code, and subsurface and groundwater contamination.

Those events, in turn, led to the present proposed rulemaking. In May 2003, NRC Staff recommended that the requirement to minimize radionuclide contamination contained in 10 C.F.R. § 20.1406 be amended to apply to all licensees (not just future applicants) and that the financial assurance regulations be updated. *See* SECY-03-0069 and Attachments (May 2, 2003), ML030800158. In November 2003, the Commissioners authorized the NRC staff to prepare proposed revisions to operating and decommissioning regulations. *See* SRM-SECY-03-0069 and Attachments (November 17, 2003), ML033210595. In early October 2007, the NRC Staff submitted the proposed rule, environmental assessment, and regulatory analysis to the Commissioners for review. *See* SECY-07-0177 (October 3, 2007) ML072390153. Thereafter, the NRC Staff also presented the draft rule to the Advisory Committee on Nuclear Waste and Materials and discussed improvements to the decommissioning program and regulations. *See* Transcript of October 16, 2007 ACNWM Meeting ML072980802 ; *see also* Transcript of July 19, 2006 ACNWM Meeting, ML062080721.

C. The NRC Advisory Committee's 2007 Comments on the Proposed Rule

On November 20, 2007, the NRC's Advisory Committee on Nuclear Waste and Materials submitted a comment letter to NRC Chairman Dale Klein outlining its position on the proposed rule. *See* Letter, Michael Ryan to Dale Klein, Re:

Proposed Rulemaking to Prevent Legacy Sites (Nov. 20, 2007), ML073170715.[2] Instead of waiting years to retroactively remediate subsurface plumes, the Advisory Committee recommended that the Commission act to prevent the creation of legacy sites and that licensees should "maintain an environment that needs minimal restoration at the time of decommissioning." *Id.* at 1. The Committee submitted that legacy sites can be prevented through prevention of unplanned releases, unplanned release detection, and prompt remediation of unplanned releases rather than delaying remediation until final decommissioning. *Id.*

The Advisory Committee also expressed its concern that the proposed rule does not address the need for prompt remediation or remediation in general, and that as a result, NRC is missing an opportunity to revise the rulemaking to effectively prevent the creation of legacy sites. *Id.* at 2. The Advisory Committee further urged NRC staff to develop criteria specifying the assessments and actions a licensee should take to characterize and mitigate the impacts of unplanned releases, which the Advisory Committee believes should preclude most licensees from deferring remedial action until eventual decommissioning. *Id.*

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[2] As indicated in the letter, the Advisory Committee received a briefing on the proposed rule at its 183rd meeting, prior to the publication of the January 22, 2008 Federal Register notice to which the State of New York responds here.

III. Recent Discoveries Confirm that Leaks Frequently Occur at Nuclear Power Stations Including Indian Point in New York

As the NRC worked on the proposed rule, it became aware of a significant number of leaks at U.S. nuclear power plants. Accordingly, in this rulemaking, the NRC acknowledges that the owners of several plants recently discovered radionuclide contamination that went on for years without being discovered and, in many instances, formed underground plumes that spread to adjacent groundwater and rivers. 73 Fed. Reg. at 3813, 3814.

In addition to the Indian Point leaks, numerous leaks have been detected at U.S. nuclear power plants in the last few years. Indeed, since March 2004 leaks have been detected at at least nine power reactors.[3] In some instances, these leaks

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[3] *See* NRC Office of Nuclear Reactor Regulation, "Spent Fuel Pool Leakage To Onsite Groundwater," NRC Information Notice 2004-05, March 3, 2004 (Salem Nuclear Power Station); NRC Preliminary Notification of Event or Unusual Occurrence PNO-RIII-05-016A, "Potential Off-site Migration of Tritium Contamination (Update)," December 7, 2005 (Braidwood Nuclear Power Plant), ML053410293; NRC Preliminary Notification of Event or Unusual Occurrence, PNO-IV-06-001, "Followup For Tritium Contamination Found In Water Onsite," March 17, 2006 (Palo Verde Nuclear Power Station), ML060760584; NRC Event Notification Report, Event No. 42476, April 6, 2006 (Perry Nuclear Power Station); NRC Preliminary Notification of Event or Unusual Occurrence, PNO-IV-06-010, "Tritium Detected in Water Samples Taken on the Site," August 15, 2006 (San Onofre Nuclear Power Station); NRC Preliminary Notification of Event or Unusual Occurrence, PNO-II-07-012, "Onsite Groundwater Tritium Contamination," October 11, 2007 (Catawba Nuclear Power Station), ML073111396; NRC Preliminary Notification of Event or Unusual Occurrence, PNO-III-08-011, "Tritium Leakage," October 11, 2007 (Quad Cities Nuclear Power Plant) ML 072890262; NRC Preliminary Notification of Event or Unusual Occurrence, PNO-III-07-012, "Both Units at Byron Shut Down Due to a Leak in Pipe," October 23, 2007 (Byron Nuclear Power Plant) ML072960109; NRC Event Notification Report, Event No. 43916, January 22, 2008 (River Bend Nuclear Power Station).

had continued – undetected – for as long as twelve years.[4]

The possibility that numerous nuclear power facilities with significant subsurface contamination will face decommissioning without adequate funds is very real. Connecticut Yankee's owner began the plant's decommissioning in 1996 with $427 million set aside for the job, but found that unforeseen work, in particular the unanticipated need to remove a significant quantity of soil contaminated with radioactivity, *more than doubled* the decommissioning costs.[5] Yet the monitoring of nuclear power plant sites for ground water contamination is still voluntary[6] and the NRC has not required an increase in the decommissioning funds for even the

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[4]United States Nuclear Regulatory Commission, Liquid Radioactive Release Lessons Learned Task Force Final Report (Sept. 1, 2006) (hereinafter "NRC Liquid Radioactive Release Lessons Learned Report"), ML062650312, at 3; NRC, Preliminary Listing of Events Involving Tritium Leaks (Mar. 28, 2006), ML060930382; NRC Office of Nuclear Reactor Regulation, "Ground-Water Contamination Due to Undetected Leakage of Radioactive Water," NRC Information Notice 2006-13, July 10, 2006 (discussing leaks at the Connecticut Yankee Haddam Neck reactor and other nuclear power plants).

[5] *Compare* Connecticut Yankee Post Shutdown Decommissioning Activities Report (August 1997) ("PSDAR") *with* Haddam Neck Plant License Termination Plan, Rev. 4 (November 2006). The License Termination Plan, at page 7-5, states that $752.9 million had been spent on decommissioning Connecticut Yankee through 2006 and estimated that the job would cost an additional $164.7 million (2006 dollars) through 2023. The Connecticut Yankee PSDAR is available at http://www.connyankee.com/assets/pdfs/Document1.pdf and the Haddam Neck Plant License Termination Plan in the NRC's electronic files at ML063390404.

[6] NRC, *Regulatory Analysis for Proposed Rulemaking - Decommissioning Planning - Draft for Comment* (December 2007) at 10. Instead of mandating that nuclear power plant owners monitor their sites for radioactive contaminants entering the ground, the NRC merely asked for a voluntary industry effort. *See, e.g.*, Nuclear Energy Institute, *Industry Ground Water Protection Initiative - Final Guidance Document* (August 2007).

nuclear power plants whose sites are known to have subsurface contamination.[7]

The State of New York is concerned about the risks caused by radiological contamination from various NRC licensed facilities within its borders. The leaks at the Indian Point facilities are of particular concern. Built in the 1950s and 1960s, the three nuclear power facilities located at Indian Point have repeatedly released radionuclides to the environment without authorization.[8] For example, in September 2005, during planned excavation adjacent to the Indian Point Unit 2 spent fuel pool, Entergy discovered cracks in the pool wall caused by shrinkage during the concrete curing process that leaked spent fuel pool water. Upon further investigation, the licensee determined that groundwater underlying portions of the Indian Point Nuclear Power Station site was contaminated with tritium due to

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[7] For example, the licensee at Vermont Yankee nuclear station estimates decommissioning costs at between $700 and $800 million, a figure which excludes decontamination costs which may arise from radioactive contamination, yet currently has only $440 million in its decommissioning trust fund for the facility. *See* Susan Smallheer, *Lawyer Urges Spinoff Review*, Vermont Herald (Apr. 14, 2008), *available at* http://www.rutlandherald.com/apps/pbcs.dll/article?AID=/20080411/NEWS02/804110367.

[8] In May 1956, the Atomic Energy Commission granted Consolidated Edison a construction permit to build Indian Point Unit 1. *See* 21 Fed. Reg. 3,085 (May 9, 1956). In March 1962, the AEC issued a provisional operating license for Unit 1. *See In re Consolidated Edison Company of New York,* AEC No. DPR-5 (March 26, 1962). In October 1966, the AEC issued a construction permit for Indian Point Unit 2. *See* 31 Fed. Reg. 12616 (October 21, 1966). The AEC granted Unit 2 an operating license on September 23, 1973. *See In re Consolidated Edison Company of New York*, LBP-73-33, 6 AEC 751 (1973). The AEC issued a construction permit for Unit 3 on August 13, 1969. *See* 34 Fed. Reg. 13,437 (August 20 1969). In December 1975, the newly-created Nuclear Regulatory Commission issued an operating license to Unit 3. *See* 40 Fed. Reg. 59,263 (Dec. 22, 1975).

possible leakage from the spent fuel pool or other on-site sources. On February 27, 2006, a sample showed tritium contamination levels of 30,000 pCi/L at a location close to the Hudson River.[9]

In addition, another plume of radionuclide contamination at Indian Point has leaked from Unit 1's spent fuel pool.[10] This second plume primarily contains strontium, but also includes cesium, cobalt, and nickel. As Indian Point 1 has been in SAFSTOR (long term "safe" storage) since 1986, it is clear that decommissioning costs can continue to rise even after a nuclear power plant ceases operation (full decommissioning for Unit 1 is contingent upon the decommissioning of Unit 2, which is currently in license renewal proceedings).

At Indian Point, the plume of tritium- and strontium-90-contaminated groundwater has migrated to, and is leaking into, the Hudson River. *See* April 30, 2007 Entergy License Renewal Application, Environmental Report, at 4-87 (stating that Entergy and the NRC have concluded that "...there appears to be some level of contaminated groundwater that discharges into the Hudson River..."). On March 21, 2006, Entergy announced that samples taken from an on-site Indian Point

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[9] *See* Indian Point Nuclear Generating Unit 2 - NRC Special Inspection Report No. 05000247/2005011 (March 16, 2007), ML060750842.

[10] *See* NRC Liquid Radioactive Release Lessons Learned Report, *supra* note 4, at 5-6. While the strontium-90 and cesium 137 originate with Indian Point Unit 1, the tritium originates from Indian Point Unit 2's spent fuel pool. *Id.; see also* Hydrogeologic Site Investigation Report, GZA GeoEnvironmental, Inc., Jan. 7, 2008, at 90.

monitoring well located near the Hudson River showed detectable levels of strontium-90; Entergy also has identified elevated levels of nickel-63 and cesium in groundwater under the facility.[11] Maps of the Indian Point plumes, provided by the licensee's consultant, is annexed hereto as Exhibit A.[12]

In addition to these subsurface plumes flowing from the Unit 1 and Unit 2 spent fuel pools, Indian Point has experienced a number of other leaks. For example, on April 7, 2007, a visible plume of steam escaped from an underground heating pipe connecting Unit 2 and Unit 3 and vented up through the soil and pavement. Although the heating pipe ordinarily would be considered to be on the "non-nuclear side" of the units, analytical tests revealed that the steam contained tritium radionuclides. When Entergy disclosed the steam leak two weeks later, NRC staff observed to government officials that radionuclides could cross through the metal pipe wall and enter the fluid in the pipe. By way of another example, just this past month, during the refueling of Unit 2, two spills of radionuclide contaminated water occurred. *See* April 28 and 30, 2008 Condition Reports Nos. CR-IP2-2008-01490, CR-IP2-2008-01533, annexed hereto as Exhibit B.

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[11] *See* Jim Fitzgerald, *High Levels of Strontium-90 Found in Indian Point Groundwater*, Associated Press, Mar. 21, 2006; Greg Clary, *Indian Point Leak of Radioactive Element Spreads*, Poughkeepsie Journal News, Mar. 22, 2006; E-mail from Donald Croulet of Entergy to James Noggle of USNRC, "regarding H-3 sources IPEC-RL-Comments-1" (attachment, table) (Dec. 12, 2005), ML061000598.

[12] Maps: Current Units 1 and 2 Activity Isopleths (excerpts from Hydrogeologic Site Investigation Report, GZA GeoEnvironmental, Inc., Jan. 7, 2008)

Moreover, the real possibility for future leakage from Indian Point Units 2 and 3 during the remainder of the current licensing term or extended operation, which would result in further contamination and additional decontamination costs, is very real. For that reason it is crucial that NRC require decommissioning funding to be tethered to real environmental conditions, in particular the condition of the ground under a facility.

The costs of remediating the contaminated groundwater plume are nowhere specified or even contained in Indian Point's decommissioning funding estimates. Indeed, Entergy's 2007 update of the status of the decommissioning funding for the each of the three Indian Point facilities comprises one page, which simply references the megawatt capacity formula contained in 10 C.F.R. § 50.75, two different rates of interest, and the current account balance. *See* March 29, 2007 letter from John Herron to U.S. Nuclear Regulatory Commission, ENOC-07-00007.[13] The likely explanation for this deficiency is that current NRC regulations do not require power reactors to update their decommissioning funding status reports based on newly-discovered contamination, even if that contamination could increase significantly the decommissioning and decontamination cost estimates that were developed before the discovery of contamination.

In any event, it is quite likely that the Indian Point decommissioning funds

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[13] This document does not appear to be available on ADAMS at this time. It is annexed here as Exhibit C.

are inadequate for their intended task. According to Entergy's March 29, 2007 report on its decommissioning funds, the licensee currently has on hand $254 million to clean up Indian Point Unit 1, $303 million to clean up Indian Point Unit 2, and $441 million to clean up Indian Point Unit 3. *See* March 29, 2007 letter from John Herron to U.S. Nuclear Regulatory Commission, ENOC-07-00007. When compared to the clean up costs at the single Connecticut Yankee (Haddam Neck) nuclear power reactor, it is clear that the money in each of the Indian Point accounts is inadequate. Specifically, the Connecticut Yankee License Termination Plan, at page 7-5, states that $752.9 million had been spent on decommissioning Connecticut Yankee through 2006 and estimated that the job would cost an additional $164.7 million (2006 dollars) through 2023. That is, the NRC has information that $ 917 million ultimately will be spent on decommissioning the single Connecticut Yankee reactor. None of the three Indian Pont accounts now are anywhere close to the $752 million already expended on Connecticut Yankee; the Indian Point accounts appear even more paltry when compared to the $917 expected total expenditures for Connecticut Yankee.

IV. Specific Comments and Proposed Additions to the Proposed Rule

With this background in mind, the State of New York offers the following comments on specific aspects of the proposed rule.

Although the NRC has proposed a few modest improvements in limited

aspects of the decommissioning process, the proposed rule does not address in a meaningful way the deficiencies in facility operations that lead to subsurface contamination, the threats posed by delayed remediation, or the risks of unfunded subsurface decontamination at nuclear power plants. As presently drafted, the proposed regulations will not protect the environment or promote safety, will not increase public confidence in the NRC's ability to regulate, and will not make NRC actions more effective, efficient and realistic. Accordingly, the proposals are not consistent with the Atomic Energy Act, the Administrative Procedures Act, and the National Environmental Policy Act.

The final rule should require nuclear power plant owners and other licensees to (1) actively prevent subsurface radionuclide leaks, (2) look for contamination under their sites, (3) publicly report what they find, (4) immediately clean up subsurface radionuclide contamination, and (5) increase their decommissioning funds to cover the costs of historical contamination at their plants.

A. The Proposed Rule Does Not Ensure Adequate Funding For Decommissioning of Operating Power Reactors

1. Additional Revisions Must be Made to 10 C.F.R. § 50.75

The State of New York objects to the NRC's continued reliance on 10 C.F.R. § 50.75(c)'s out-of-date *pro forma* method of estimating nuclear power plant decommissioning costs without any requirement for the creation of an augmented fund for the decontamination and clean up of subsurface radionuclide contamination. The State of New York questions whether a generic methodology

based on data from experience with small plants a generation ago can adequately predict the cost of decommissioning the components of much larger plants today, much less the cost of decommissioning plants that have their licenses renewed for another twenty years.

One flaw with the NRC's current cost estimation methodology is that it was adopted in 1988, and did not take into account any contamination of the water, soil, or other material below the surface of a plant's site.[14] Sufficient information did not then exist about nuclear power plant decommissioning costs or subsurface contamination. Not only were the plants for which decommissioning data was available much smaller then, *e.g.*, Shippingport (65 megawatts), but most of these decommissionings were either in process or in planning at the time of the 1988 rule.[15] Today, there is no such lack of data. Indeed, the NRC acknowledges that the actual cost of decommissioning typically exceeds the estimated cost of decommissioning.

The NRC proposes changes to 10 C.F.R. §§ 30.35, 40.36, 70.25, and 72.30 which would require facilities – other than power reactors – to submit detailed cost estimates for decommissioning reflecting contractor costs, contingency factors, identification of and justification of key assumptions employed in a

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[14] *See, e.g.,* 10 C.F.R. Parts 30, 40, 50, 70 and 72 - General Requirements for Decommissioning Nuclear Facilities, 53 Fed. Reg. 24,018 (June 27, 1988).

[15] *Id.*

decommissioning cost estimate, and perhaps most importantly, the volume of onsite subsurface material containing residual radioactivity that will require remediation. 73 Fed. Reg. at 3830, 3837, 3841, 3843-45.

As the NRC itself states, these factors are important to ensuring the availability of adequate funds and to aiding regulatory efficiency. *See* 73 Fed. Reg. at 3827:

> To assure that funds will be adequate to complete decommissioning in the event the licensee is unable to do so, cost estimates would be required to include contractor overhead and profit. An adequate contingency factor is necessary to cover unanticipated costs that can arise after the decommissioning project begins. The key assumptions underlying the cost estimate would have to be identified to aid the staff in evaluating the adequacy of the estimate. Codification of these recommendations is expected to improve the quality of [decommissioning funding plan] submittals, facilitate the staff's review of these submittals, and result in regulatory efficiencies.

Given the NRC's belief in the importance and effectiveness of this requirement, it is perplexing that the NRC has failed to require such detailed cost estimates of power reactor licensees as well.

The State of New York proposes the following corollary amendment to 10 C.F.R. § 50.75(d)(1)(2)(i):

> (d)(1) Each non-power reactor applicant for or holder of an operating license for a production or utilization facility shall submit a decommissioning report as required by § 50.33(k) of this part.
>
> (2) The report must:
>
> > (i) Contain a cost estimate for decommissioning the facility, which must contain

(A) A detailed cost estimate for decommissioning, in an amount reflecting:

(1) The cost of an independent contractor to perform all decommissioning activities;

(2) The cost of meeting the 10 CFR 20.1402 criteria for unrestricted use, provided that, if the applicant or licensee can demonstrate its ability to meet the provisions of 10 CFR 20.1403, the cost estimate may be based on meeting the 10 CFR 20.1403 criteria;

(3) The volume of onsite subsurface material containing residual radioactivity that will require remediation; and

(4) An adequate contingency factor.

(ii) Identification of and justification for using the key assumptions contained in the decommissioning cost estimate.

These additional details in the cost estimate report proposed here by the State of New York would inform the additional funding requirement that the State proposes below. Existing 10 C.F.R. § 50.75 subsection (d)(2)(ii) and (iii) would then have to be renumbered (iii) and (iv) respectively.

2. The State of New York Proposes an Additional Funding Requirement When Contamination is Discovered

For the reasons discussed in the preceding section, the State of New York also proposes that the rulemaking include an additional funding requirement when contamination is discovered. As witnessed at Connecticut Yankee, remediation costs from unexpected or newly discovered subsurface contamination, in particular groundwater and other subsurface contamination, could add hundreds of millions to the cost of decommissioning a nuclear power plant. Currently, NRC's regulations

do not provide for adequate assurance that a licensee's decommissioning trust fund will be augmented frequently enough to keep pace with changing environmental conditions. The State of New York urges the NRC to require licensees to update decommissioning estimates to keep pace with the actual subsurface and surface contamination conditions at their facilities; that is, require licensees to set aside ample funds to cover decontamination and decommissioning as if decommissioning were occurring now. The State of New York urges the NRC to require licensees to report, in a manner that will be made public, the effect of contamination on decommissioning estimates, via an updated decommissioning funding plan to be submitted to NRC within a year of discovery of site contamination. Given financial uncertainties, changing environmental conditions, and the risk to nuclear facilities from extreme weather conditions or terrorist acts, it is no longer prudent for the NRC to accept anything less than the actual ability of a licensee to cover decommissioning costs in full.

One way to achieve this parity would be to require each licensee to augment its decontamination/decommissioning trust fund with funds above and beyond the requirements for the trust fund already required by the regulations. This fund would be updated in accordance with changing environmental conditions, triggered by the discovery of contamination, which might occur through one of the site surveys required in the NRC's proposed § 20.1501 if not through other means. This would allow the licensee to maintain a trust fund that meets its existing funding

obligations but which also accounts for known subsurface contamination which is certain to increase decontamination costs (costs, which as discussed above, are nowhere captured by current regulatory requirements relating to decommissioning funding assurances). The establishment of this augmented trust fund obligation could be achieved through regulatory changes to 10 C.F.R. § 50.75.

B. The NRC Should Strengthen Its Proposed Changes to 10 C.F.R. § 20.1406 - Minimization of Contamination

The NRC proposes to address site contamination by, for the first time, including in 10 C.F.R. § 20.1406 an obligation for licensees "to the extent practical" to "minimize" radioactive contamination of their facilities, including the ground under their facilities, and by making specific reference to preventing contamination of "the subsurface."[16] Specifically, the NRC proposes that § 20.1406 read as follows:

> (c) Licensees shall, to the extent practical, conduct operations to minimize the introduction of residual radioactivity into the site, including the subsurface, in accordance with the existing radiation protection requirements in Subpart B and radiological criteria for license termination in Subpart E of this part.

73 Fed. Reg. at 3836.

The proposed change is a step in the right direction, but it is timid and ineffective. The phrase "to the extent practical" is so broad as to be meaningless. The loophole perpetuated by that phrase is compounded by the inclusion of the term

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[16] 73 Fed. Reg. at 3813 - 3814, 3819 - 3820, 3829 & 3836. Suprisingly, under the regulation as it exists now, this duty to minimize site contamination, currently applies only to applicants for new licenses.

"minimize," as opposed to "prevent." These words will hamper, if not preclude, effective enforcement actions by the NRC or the Department of Justice against facilities and operators who release radionuclides to the subsurface area. It is doubtful whether such a diluted "regulation" will have any real impact on the day-to-day operation of NRC-licensed facilities.

C. The NRC Needs to Prevent Subsurface Contamination Before it Occurs

As part of this rulemaking, the NRC must require all categories of licensees – on a going forward basis – to undertake all necessary actions to *prevent* subsurface leaks *before* they occur. The Commissioners themselves must (1) announce that henceforth it will no longer be acceptable merely to address the subsurface contamination years after the fact and (2) promulgate a straightforward regulation that compels power reactor, material, and dry cask storage licensees to incorporate proactive measures to inspect, monitor, survey all underground systems, structures, and components at a facility so as to prevent leaks and spills and subsurface radionuclide contamination. Although plainly within the scope of the present rulemaking, the proposed regulations do not include such a straightforward directive and prohibition.

D. The NRC Must Compel the Prompt Removal of Any Subsurface Contamination

As part of this rule making, the NRC should promulgate a straightforward regulation that compels licensees to immediately remediate the contamination resulting from any unplanned or unauthorized release. Such a straightforward regulation would protect the environment and the public and reduce the likelihood that the NRC and the federal taxpayers would be saddled with the responsibility of decontaminating a spreading plume of radionuclides at legacy sites several years down the road.

E. The NRC Must Make Substantial Revisions to Its Proposed Changes to 10 C.F.R. § 20.1501 - General

In its proposed revisions to 10 C.F.R. § 20.1501, the NRC would require all licensees to conduct site surveys, including surveys of the subsurface, that "are reasonable under the circumstances" for, among other purposes, identifying and evaluating the nature and amount of radioactive contamination and the hazard any such contamination poses. The NRC proposes that § 20.1501 read as follows:

> (a) Each licensee shall make or cause to be made, surveys of areas, including the subsurface, that—
> * * * * *
> (2) Are reasonable under the circumstances to evaluate —
> * * * * *
> (ii) Concentrations or quantities of residual radioactivity; and
> (iii) The potential radiological hazards of the radiation levels and residual radioactivity detected.
>
> (b) Records from surveys describing the location and amount of subsurface residual radioactivity identified at the site must be kept with records important for decommissioning.

73 Fed. Reg. at 3836. As an initial matter, the State of New York supports the NRC's inclusion of the broader term "residual radioactivity" in place of "radioactive material" in 10 C.F.R. § 20.1501 to require surveys of subsurface radiation. The proposed rule also makes express reference to the term "subsurface" and thereby includes subsurface contamination within its scope. This change is long overdue. As the NRC has noted,[17] subsurface residual radioactivity can significantly increase the cost of decommissioning and it is therefore crucial to evaluate, on an ongoing basis, the extent of subsurface contamination at every licensed facility in the country.

The proposed inclusion of the phrase "reasonable under the circumstances," however, introduces a loophole that will frustrate the Nuclear Regulatory Commission's enforcement of the regulation. For the same reasons that the State of New York opposes the inclusion of the phrase "to the extent practical" in proposed § 20.1406, the State also opposes the use of the phrase "reasonable under the circumstances" in proposed § 20.1501.

The NRC's proposed rule would also require licensees to make a "record" of the contamination found and keep the record with others "important for decommissioning." 73 Fed. Reg. at 3813 - 14, 20 - 22, 30 & 36. It is entirely appropriate for the NRC to require licensees to make records and surveys of subsurface radiological contamination.

However, the State of New York strenuously objects to the NRC's conscious

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[17] 73 Fed. Reg. at 3814

decision to place these reports and surveys inside a cocoon controlled by the facility operator – never to be seen by the public. *Id.* Such reports must be completed, submitted to the NRC – not maintained solely by the facility – and promptly placed in the public record within a specified time. The document "storage" system contained in the proposed rule bespeaks a cozy relationship between licensees and the regulator which excludes citizens. Unfortunately, it is a system with which the State of New York has encountered all too frequently with respect to Indian Point. By way of example, during a conference with NRC inspectors following the April 2007 explosion and fire at the No. 31 main transformer at Indian Point Unit 3, it became apparent that Entergy had photographic and thermal analysis of the transformer as the unit returned to power after a shut down. When asked if the data and analysis could be produced for interested government stakeholders, NRC staff replied that the material belonged to Entergy and would not be produced.

Such "hide-the-ball" stratagems are inconsistent with the NRC's ostensible commitment to openness. Indeed, just a few weeks ago, NRC Chairman Klein stated that the NRC "continue[s] to emphasize the value of regulatory openness by ensuring that our decisions are made in consultation with the public, our Congress, and other stakeholders." He continued, "[w]e view nuclear regulation as the public's business and, as such, we believe it should be transacted as openly and candidly as

possible."[18] Consistent with Chairman Klein's public comments, the NRC must reject the exclusionary process envisioned in the proposed rule by telling licensees to prepare reports, but to hide the documents in their own file cabinets. Instead, the NRC must require licensees to submit all such reports to the NRC Regional Office and Headquarters for inclusion on ADAMS.

It is not enough for the NRC to expect that, if a licensee identifies radioactive contamination and has to record this fact, the licensee immediately will take steps to clean up the contamination so that it does not inflate decommissioning costs. In fact, there is no specific requirement to promptly remediate such contamination; licensees are currently operating under only a "voluntary" obligation to even monitor groundwater contamination. This voluntary obligation may result in no action at

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[18] "*Report to the Convention on Nuclear Safety*": Remarks Prepared for NRC Chairman Dale E. Klein, Vienna, Austria (Apr. 15, 2008), *available at* http://www.nrc.gov/reading-rm/doc-collections/commission/speeches/2008/s-08-015.html (last visited Apr. 27, 2008); *see also* "*Guiding Principles: Culture, Transparency, and Communication*": Prepared Remarks by The Honorable Gregory B. Jaczko, Commissioner, U.S. Nuclear Regulatory Commission before the Regulatory Information Conference, Washington, DC (Mar. 9, 2005), *available at* http://www.nrc.gov/reading-rm/doc-collections/commission/speeches/2005/s-05-006.html (last visited Apr. 27, 2008); "*Openness and Transparency: The Road to Public Confidence*": Prepared Remarks for The Honorable Gregory B. Jaczko, Commissioner, U.S. Nuclear Regulatory Commission at the Organization for Economic Co-operation and Development's Nuclear Energy Agency Workshop on the Transparency of Nuclear Regulatory Activities, Tokyo, Japan (May 22, 2007), *available at* http://www.nrc.gov/reading-rm/doc-collections/commission/speeches/2007/S-07-032.html (last visited Apr. 27, 2008).

all.[19] The NRC must spell out a minimal survey requirement interval – The State of New York proposes every two years. The NRC must also establish how soon after the effective date of the new regulation the initial survey must be completed (The State of New York proposes six months), and specify what, at a minimum, a survey must examine.

While it is true that "[t]o adequately assure that a decommissioning fund will cover the costs of decommissioning, the owner of a facility must have a reasonably accurate estimate of the extent to which residual radioactivity is present at the facility,"[20] the NRC's proposed language in this section requiring licensees to conduct their operations in a manner that will minimize contamination will not prevent the creation of legacy sites unless the NRC also requires a direct correlation between decontamination costs and decommissioning funding assurances. As the State of New York discusses in detail below, the NRC should require bi-annual funding reports and a link between the changes proposed to 10 C.F.R. § 20.1501 and the decommissioning funding plan required by 10 C.F.R. § 50.75(g).

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[19] For example, even given the extensive (and extensively documented) tritium and strontium plume beneath Indian Point, Entergy's consultants merely recommended "monitored natural attenuation" as a remedial measure. *See* Hydrogeologic Site Investigation Report performed by GZA GeoEnvironmental, Inc., Jan. 7, 2008, at 134.

[20] 73 Fed. Reg. at 3814

F. Financial Assurance Mechanisms

1. The Proposed Changes to 10 C.F. R. §§ 30.35, 40.36, 70.25 & 72.30 Should Apply to Power Reactors.

Proposed changes to 10 C.F. R. §§ 30.35, 40.36, 70.25 and 72.30 would require all types of licensees, *except licensees of operating power reactors*, to submit a decommissioning funding plan to the NRC if during the site survey the licensee detects radioactive contamination that would have to be removed during decommissioning. *See generally* 73 Fed. Reg. at 3815, 3816. Under the proposed rule, the licensee would have a year after detection of the contamination to submit the funding plan or update to the NRC.[21] While The State of New York supports this concept, and notes that it may in some instances serve as an incentive to minimize contamination so that the licensee does not have to go to the trouble and expense of preparing or updating a decommissioning funding plan and setting aside additional decommissioning funds, one glaring flaw in the NRC's proposed decommissioning funding adjustment provision is the exemption of power reactor licensees.

A survey of a power reactor site may detect an amount of contamination that materially increases the cost of decommissioning, yet the NRC proposes to give the plant licensee the option of doing nothing more than recording the information in the plant's decommissioning planning records. This is not acceptable, and is not protective of long-term public safety. Contamination that materially increases the

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[21] 73 Fed. Reg. at 3821, 3830 - 3832, 3837, 3841, 3843 & 3845.

cost of decommissioning a nuclear power plant must be factored into the decommissioning planning and funding for power reactors. The NRC should require that the reporting requirements proposed here be integrated into the licensee's ongoing obligations to update decommissioning funding assurances pursuant to 10 C.F.R. § 50.75. Furthermore, the State of New York urges the NRC to revise proposed rule making to amend Part 54 and require the disclosure and identification of the location of all subsurface leaks in License Renewal Applications.

2. The State of New York Supports the Proposed Revisions to 10 C.F.R.§ 72.30

In its proposed changes to 10 C.F.R. § 72.30, the NRC would impose on Independent Spent Nuclear Fuel Storage Facilities (*e.g.*, dry cask facilities) additional reporting requirements for decommissioning fund status, spent fuel management costs, and estimated decommissioning costs. Additional reporting requirements would require each power reactor licensee undergoing decommissioning to thereafter submit an annual financial assurance status report. The State of New York supports the changes to § 72.30 because they address, at least in part, the concern that – depending on future NRC actions – spent fuel could remain in dry cask storage at Indian Point for decades, providing the potential for additional adverse environmental impacts whose remediation costs must be assessed and addressed in the decommissioning plan.

However, the proposed rule appears to require more specific reporting requirements for Independent Spent Nuclear Fuel Storage licensees than would be

required for power reactor licensees. The State of New York believes strongly that proposed § 72.30(b)(2), the requirement to submit detailed cost estimates for decommissioning, reflecting contractor costs, contingency factors, identification of and justification of key assumptions employed in a decommissioning cost estimate, and perhaps most importantly, the volume of onsite subsurface material containing residual radioactivity that will require remediation, should be extended to power reactor licensees. The State of New York observes that no such specificity for the contents of reporting requirements is currently contained in 10 C.F.R. § 50.75, and believes that it should be.

3. The State of New York Supports the Proposed Revisions to 10 C.F.R. § 50.82

Proposed revisions to 10 C.F.R. § 50.82 would require licensees of facilities currently undergoing decommissioning to provide more details regarding their decommissioning cost estimates.[22] Specifically, licensees who have submitted a certification of permanent cessation of operations under 10 C.F.R. § 50.82(a) would be subject to annual financial assurance reporting requirements which would identify yearly decommissioning expenditures, the remaining balance of decommissioning funds, and would contain a cost estimate to complete decommissioning including costs to manage irradiated fuel. Also, the proposed

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[22] *See* 73 Fed. Reg. at 3816. The State of New York understands that, upon their promulgation, these proposed changes to § 50.82 would apply immediately to Indian Point Unit 1.

annual reports which would be required under 10 C.F.R. § 50.82(a)(8) would require a licensee to identify the amount of funds accumulated to manage irradiated fuel, and the projected cost of managing the irradiated fuel including how the licensee will obtain funding for ongoing management if the funds accumulated do not cover the cost.

The State of New York supports the NRC's proposed changes to decommissioning funding assurances under 10 C.F.R. § 50.82 insofar as they require licensees to submit to NRC more specific information concerning decommissioning cost estimates for facilities undergoing decommissioning. Specifically, when the NRC requires a "site-specific decommissioning cost estimate" for such facilities, The State of New York urges the NRC to include detailed cost estimates for subsurface decontamination costs in such estimates, and to alter § 50.82(4)(i) to require such.

4. The NRC Should Require Parent Corporations to Guarantee that Funds will be Provided to Safely Decommission Nuclear Power Plants Owned by their Subsidiary Companies.

The NRC must ensure timely access to funds from the actual owners of merchant nuclear power plants if the subsidiary through which a plant is held is short of decommissioning funds. Directing a subsidiary without income to "obtain additional funds to cover [decommissioning] costs"[23] is an empty gesture if the NRC allows the parent holding company to hide behind corporate formalities. The NRC

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[23] *Id.*

has correctly diagnosed the problem caused by the creation of merchant nuclear power plants unsupported by retail utility revenues[24] but has not proposed any of a number of obvious solutions, among them increasing the funds a licensee must put in the decommissioning trust fund and conditioning an operating license on the real owner's entering into a binding commitment to make up any short fall in decommissioning funds. Again, it is important that this funding be liquid – that is, available when it is needed.

With the exception of the Long Island Power Authority's 18% interest in Nine Mile Point Unit 2, all seven New York nuclear power plants are merchant plants. Entergy Corporation owns Fitzpatrick, Indian Point Unit 2, Indian Point Unit 3 and the permanently shut down but not decommissioned Indian Point Unit 1; Constellation Energy Group owns Ginna, Nine Mile Point Unit 1 and 82% of Nine Mile Point Unit 2. Entergy currently owns assets worth about $33 billion, Constellation's are worth about $22 billion. Power industry deregulation that stripped many utilities of their nuclear power plants and created a new class of free-standing merchant generators without captive customers also ended the NRC's ability to count on ratepayers to make up any shortfall in the decommissioning costs for these plants. When a merchant nuclear power plant shuts down, either the plant's owner pays for decommissioning or the taxpayer does. Entergy currently has put from three to five layers of subsidiary corporations and limited liability

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[24] *Id.*

companies between itself and its New York State nuclear plants.[25] The State of New York's position is that Entergy and Constellation are responsible for the cost of decommissioning their New York State plants regardless of any corporate shells either may try to interpose to resist liability and expects to prevail should this question have to be litigated. However, litigation creates uncertainty and delay, conditions that should be avoided when the issues involve protecting public health, property and the environment from radioactive contamination. For this reason, it is crucial to New York State's interests that NRC require financial commitment from parent companies to cover decommissioning expenses of their subsidiaries.

5. The Proposed Rule Fails to Commit to Ensuring Proper Decommissioning in the Event of Licensee Bankruptcy

The NRC's proposed rule does not protect taxpayers from shouldering the burden of decommissioning costs left by bankrupt licensee, nor can it, because NRC is without statutory authority to require a licensee in bankruptcy to continue to make decommissioning payments.[26] Therefore it is essential that NRC exercise its authority to "protect people and the environment" to ensure that there is a

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[25] *See* New York State Attorney General's Objections to Entergy's Petition for Approval of Corporate Reorganization and Financing, Comments to the New York State Public Service Commission, Docket No. 08-E-0077 (Apr. 7, 2008).

[26] *See* David Schlissel, Paul Peterson, and Bruce Biewald, Financial Insecurity: The Increasing Use of Limited Liability Companies and Multi-Tiered Holding Companies to Own Nuclear Power Plants (Aug. 7, 2002) at 28 (*available at* http://www.riverkeeper.org/dyn-content/documents/9233d4ee9a39c579.pdf)("Financial Insecurity").

bankruptcy-immune financial vehicle that guarantees the thorough remediation of all sites so that no restrictions are placed on their future use (*i.e.*, unrestricted release). Such a requirement has become even more essential in light of the increasing use of multi-tiered holding companies and subsidiaries (including LLCs) through which parent corporations own many nuclear power plants which would make it more difficult for the NRC to require a parent of a bankrupt LLC subsidiary to cover the subsidiary's costs.[27] Bankruptcy in the nuclear industry is also occurring with increasing frequency, and may continue to increase as we enter uncertain financial times. After shutting down its ore processing plant in 1989, Fansteel, Inc. filed for bankruptcy protection and left most of the cost of decontaminating its site to taxpayers.[28] The operators of Seabrook, River Bend, Palo Verde, and Millstone 3 have also all filed for Chapter 11 protection.[29]

Simply stated, if a licensee cannot pay for decommissioning, *the costs shift to the taxpayers*. Yet, NRC's regulations do not protect taxpayers. The State of New York urges the NRC to include financial protection for taxpayers in its proposed rule in the form of a bankruptcy-immune financial vehicle – a separate fund to which all owners are required to participate, perhaps – to ensure thorough decontamination

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[27] *Id.* at 30.

[28] *See, e.g., In re Fansteel Inc, et al.*, Chapter 11 Case No. 02-10109 (JJF) (Bankr. D. De.), July 24, 2003 Disclosure Statement with Respect to Joint Reorganization Plan of Fansteel Inc *et al.*, available at ML032230033.

[29] Schlissel *et al.*, Financial Insecurity, *supra* note 25, at 29.

takes place.

G. NRC's Specific Request for Comments

In addition to soliciting comment on its proposed rule, the NRC also requested comment on five specific questions.[30] At this time, the State of New York hereby responds to two questions NRC posed, the first concerning the use of a secure web site for use by licensees to submit and update decommissioning reporting requirements, information in the financial tests for parent guarantees and self-guarantees, and other information,[31] and the second concerning the adequacy of the draft environmental assessment.[32]

1. Significant Concerns Exist About the Use of a Secure Website for Decommissioning Reports

Subject to the State of New York's comments above, which would include expanding the application of the proposed rule change to apply more broadly to power reactor as well as materials licensees, the State of New York supports the NRC's proposal to make a website available to licensees for submission of

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[30] 73 Fed. Reg. at 3828-9.

[31] The NRC asked: "Should NRC investigate the use of a secure Web site for use by licensees to submit and update decommissioning reporting requirements, information in the financial tests for parent guarantees and self-guarantees, and other information that licensees believe will improve the efficiency of the decommissioning planning and reporting process?" 73 Fed. Reg. at 3829.

[32] The NRC asked: "Is the conclusion in the draft Environmental Assessment correct of no significant environmental impact from the proposed rule?" 73 Fed. Reg. at 3829.

decommissioning updates, and other decommissioning documents. The State of New York believes that any steps that will increase the likelihood of timely compliance by licensees with these new reporting requirements will be beneficial. However, if by the use of the word "secure," 73 Fed. Reg. at 3829, the NRC intends that the information submitted would not be publicly available, the State of New York opposes the implementation of such a site and would instead support the traditional means of making such information available on the Agencywide Documents Access and Management System (ADAMS). The State incorporates by reference its comments regarding the critical importance of ensuring that decommissioning documents and subsurface contamination reports are publicly available. *See* discussion above at pp. 5-6.

2. The Suggested Finding that the Proposed Rule Making Would Not Result in a Significant Environmental Impact Violates the National Environmental Policy Act

The State of New York respectfully submits that the NRC's Finding of No Significant Impact ("FONSI"), 73 Fed. Reg. at 3833-34, violates the National Environmental Policy Act ("NEPA"), and that the NRC must conduct additional environmental analyses of the proposed rule.

NEPA "places upon an agency the obligation to consider every significant aspect of the environmental impact of a proposed action," and "ensures that the agency will inform the public that it has indeed considered environmental concerns in its decisionmaking process." *Baltimore Gas & Elec. Co. v. Natural Res. Def.*

Counsel, Inc., 462 U.S. 87, 97 (1983); *see also San Luis Obispo Mothers for Peace v. NRC,* 449 F.3d 1016, 1020 (9th Cir. 2006), *cert. denied,* 127 S.Ct. 1124 (2007).

Federal agencies must prepare an Environmental Impact Statement ("EIS") for "all major Federal actions significantly affecting the . . . environment." 42 U.S.C. § 4332(2)(C). An EIS is a detailed statement by which the agency describes the environmental impact of the project, including direct, indirect, and cumulative impacts. 42 U.S.C. § 4332(2)(C)(i). It must also consider any unavoidable adverse environmental effects of the proposed action and alternatives to the proposed action. *Id.* (C)(ii), (iii). In so doing, the EIS insures the integrity of the decision making process by ensuring that stubborn problems or serious criticisms have not been "swept under the rug." *Sierra Club v. United States Army Corps of Engineers*, 701 F.2d 1011, 1029 (2d Cir. 1983).

Where the impacts of an agency action are unclear, an agency must first prepare an Environmental Assessment ("EA") to determine whether the proposed action may have a significant environmental effect. *See Nat'l Parks & Conservation Ass'n v. Babbitt*, 241 F.3d 722, 730 (9th Cir. 2001) (citing 40 C.F.R. § 1501.4). The EA must include brief discussions of the environmental impacts of the proposed action and alternatives, and the evidence and analysis required for determining whether the agency must prepare an EIS. *Save the Yaak Comm. v. Block*, 840 F.2d 714, 717-18 (9th Cir. 1988). "If [the EA] establishes that an agency's 'action may have a significant effect upon the . . . environment,' an EIS must be prepared." *Nat'l*

Parks & Conservation Ass'n, 241 F.3d at 730 (quoting *Found. for N. Am. Wild Sheep v. U.S. Dep't of Agric.*, 681 F.2d 1172, 1178 (9th Cir. 1982)). If — and only if — an agency determines that the proposed action will not have any significant impact on the environment, the agency may prepare a more limited environmental assessment to support a "Finding of No Significant Impact" instead of a comprehensive EIS. 40 C.F.R. §§ 1501.4(e), 1508.13; *see San Luis Obispo Mothers for Peace*, 449 F.3d at 1020.

NEPA establishes "a relatively low threshold for the preparation of an EIS." *Natural Resources Def. Council v. Duvall*, 777 F. Supp. 1533, 1537 (E.D. Cal. 1991). An agency must prepare an EIS "not only when the challenged agency action will in fact cause significant effects on the human environment, but also when an agency action may have significant effects on the human environment." *No GWEN Alliance of Lane Co. v. Aldridge*, 855 F.2d 1380, 1385 (9th Cir. 1988).

If unchanged, the proposed rulemaking could well postpone or delay the decontamination of subsurface radionuclide plumes which can pollute the groundwater and nearby surface waters. Postponing the clean up of subsurface contamination could also cause the contamination to spread and have a larger impact on environmental resources, nearby properties, and public health. The proposed Finding of No Significant Impact fails to take these impacts into account, and therefore violates the NRC's obligations under NEPA. *See, e.g., Calvert Cliffs Coordinating Comm., Inc. v. U.S. Atomic Energy Comm'n*, 449 F.2d 1109 (D.C. Cir.

1971) (holding that NEPA applies to NRC's predecessor).

V. Conclusion

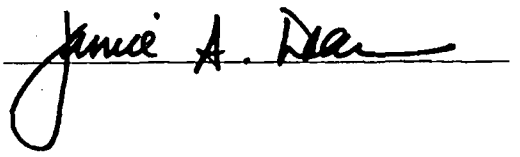
New York agrees with the NRC that "the cost to States or the Federal Government to enforce and then fully decommission a single legacy site is much higher than the cost to prevent the occurrence of a legacy site through amended regulations."[33] For that reason, the State of New York urges the NRC to amend its proposed rule to prohibit future subsurface releases or radionuclides and to require the immediate remediation of existing subsurface contamination. The State of New York also urges the NRC to put substance into the survey requirements, to require reporting and publication of the results, and to require the reconciliation of existing environmental conditions and available funds to ensure that licensees are fully capable, at all times, of covering decontamination costs in the face of financially uncertain times and changing environmental conditions. Moreover, given the varying corporate structures, the NRC's final regulations should ensure that the owners of merchant nuclear power plants provide ample, actual, and available funds to pay for decommissioning these plants so that there will be no restrictions on the future use of such sites.

---

[33] 73 Fed. Reg. at 3815.

Dated: May 8, 2008

Respectfully submitted,

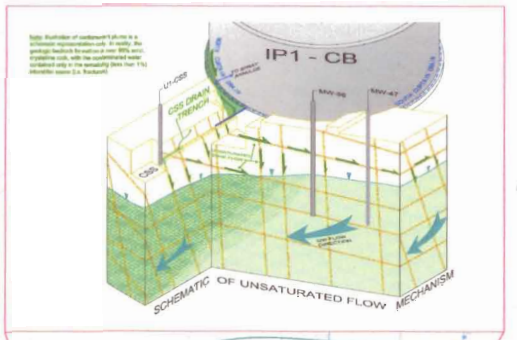


Janice A. Dean
Charlie Donaldson
John Sipos
Assistant Attorneys General

Exhibit A

CURRENT UNIT 1 ACTIVITY ISOPLETHS[1]

Well ID	Date Sample Collected	Current Strontium 90 Concentration pCi/L	Well ID	Date Sample Collected	Current Strontium 90 Concentration pCi/L
I-2	8/13/08	ND	MW-34-37	7/31/07	8.3
MW-30-69	7/29/07	ND	MW-34-68	7/31/07	1.8
MW-30-84	7/29/07	ND	MW-34-123	7/31/07	13.6
MW-31-69	8/2/07	ND	MW-34-144	7/31/07	19.0
MW-31-83	8/2/07	ND	MW-34-173	7/31/07	14.8
MW-31-85	8/2/07	ND	MW-34-190	7/31/07	17.9
MW-32-62	8/1/07	ND	MW-35-24	8/2/07	23.1
MW-32-92	8/1/07	ND	MW-35-35	8/2/07	34.0
MW-32-140	8/1/07	ND	MW-35-54	8/2/07	22.2
MW-32-199	8/1/07	ND	MW-36-63	8/10/07	ND
MW-32-197	8/1/07	ND	MW-36-83	8/10/07	2.4
MW-33	8/2/07	ND	MW-37-11	8/6/07	27.8
MW-34	8/3/07	ND	MW-37-20	8/6/07	1.3
MW-35	8/3/07	ND	MW-37-42	8/6/07	2.6
MW-36-24	8/8/07	ND	MW-38-26	7/31/07	1.8
MW-36-47	8/7/07	2.2	MW-38-65	7/31/07	ND
MW-36-52	8/8/07	2.3	MW-39-32	7/31/07	ND
MW-37-22	8/7/07	16.1	MW-39-43	7/31/07	ND
MW-37-32	8/7/07	19.1	MW-39-69	7/31/07	ND
MW-37-40	8/7/07	8.9	MW-50-35	7/27/07	ND
MW-37-57	8/7/07	23.3	MW-50-53	7/27/07	ND
MW-38	8/16/07	ND	MW-50-72	7/27/07	ND
MW-38-67	8/7/07	1.4	MW-50-138	7/27/07	ND
MW-38-84	8/7/07	1.8	MW-50-154	7/27/07	ND
MW-39-102	8/7/07	ND	MW-50-176	7/27/07	ND
MW-39-124	8/7/07	ND	MW-51	No Sample	
MW-39-193	8/7/07	ND	MW-52-19	7/26/07	ND
MW-39-195	8/7/07	ND	MW-52-37	7/26/07	ND
MW-40-27	7/23/07	ND	MW-52-53	7/26/07	ND
MW-40-48	7/23/07	ND	MW-52-71	7/26/07	ND
MW-40-87	7/23/07	ND	MW-53-57	7/26/07	ND
MW-40-109	7/23/07	ND	MW-53-138	7/26/07	ND
MW-40-127	7/23/07	ND	MW-53-182	7/26/07	ND
MW-40-162	7/23/07	ND	MW-53-18	7/30/07	ND
MW-41-10	No Sample		MW-53-29	7/30/07	ND
MW-41-40	8/14/07	6.5	MW-53-53	7/25/07	ND
MW-41-63	8/14/07	3.6	MW-53-83	7/25/07	ND
MW-42-49	8/17/07	26.1	MW-53-112	7/25/07	ND
MW-42-78	8/17/07	ND	MW-53-121	7/25/07	ND
MW-43-28	8/13/07	ND	MW-53-163	7/25/07	ND
MW-43-62	8/13/07	ND	MW-53-174	7/25/07	ND
MW-44-67	8/14/07	ND	MW-55-48	7/6/07	ND
MW-44-102	8/14/07	ND	MW-55-80	7/6/07	ND
MW-45-42	8/16/07	ND	MW-56-21	7/30/07	1.8
MW-45-61	8/15/07	ND	MW-56-38	7/30/07	6.7
MW-46	8/1/07	ND	MW-58	No Sample	
MW-47-58	8/10/07	ND	MW-67-39	8/31/2007	15.5
MW-47-80	8/10/07	3.6	MW-67-105	8/31/2007	1.1
MW-48-23	8/16/07	ND	MW-67-175	8/31/2007	ND
MW-48-57	8/16/07	ND	MW-67-216	8/31/2007	ND
MW-49-26	8/9/07	14.3	MW-67-276	8/31/2007	ND
MW-49-42	8/9/07	25.6	MW-67-333	8/31/2007	ND
MW-49-63	8/9/07	20.6	MW-67-380	8/31/2007	ND
MW-50-42	7/26/07	19.4	MW-101	8/8/08	ND
MW-50-69	7/26/07	31.0	MW-105	8/8/08	ND
MW-51-40	7/24/07	ND	MW-107	7/23/07	ND
MW-51-79	7/24/07	ND	MW-108	9/13/08	ND
MW-51-102	7/24/07	ND	MW-109	9/13/08	ND
MW-51-135	7/24/07	ND	MW-110	8/8/08	ND
MW-51-153	7/24/07	ND	MW-111	8/3/07	1.0
MW-51-189	7/24/07	ND	RW-1	11/3/06	ND
MW-52-11	8/6/07	ND	U1-CSS	8/6/07	26.8
MW-52-18	8/6/07	ND	U3-1	8/23/06	ND
MW-52-48	8/6/07	ND	U3-2	8/23/06	1.4
MW-52-64	8/6/07	ND	U3-3	8/23/06	ND
MW-52-118	8/6/07	ND	U3-4/5	8/23/06	ND
MW-52-152	8/6/07	ND	U3-4/5	No Sample	
MW-52-181	8/6/07	ND	U3-T1	8/1/07	ND
MW-53-82	8/6/07	ND	U3-T2	8/1/07	ND
MW-53-128	8/6/07	17.0			



UNIT 1

UNIT 2

UNIT 3

TUNNEL

UTILITY

CSS TRENCH

Turbine Generator Building 2

Turbine Generator Building 1

Turbine Generator Building 3

Transformer Yard

DISCHARGE CANAL

HUDSON RIVER

Plant North

LEGEND

Probable Legacy Release Locations

- Terminated Connection To Storm Drain
- Footing / Storm Drain Exfiltration
- Inter-Structure Joint / Mud Mat
- Containment Spray Sump Trench
- Unit 1 West Fuel Pool
- Unit 2 Fuel Pool

Boring / Monitoring Installation Designation

Boring / Monitoring Installation

Depth-Specific Data

Activity of Sr90 (pCi/L) for each screened interval

Multiple Screened Intervals w/ Depth

Screened in Soil

Screened in Bedrock

Average Tidal Response for each screened interval (measured between 10/1/2006 and 11/30/2006)

Groundwater elevation at the time of low river tide for each screened interval. 6/1/2007 (MW-67 waterloo system was started on 8/27/2007. The given piezometric heads for MW-67 are responses to 8/28/2007 tides.)

Activity Data[1]

Bar Graphs; Current Sr-90, pCi/L	Isopleths; Current Sr-90, pCi/L
No Sample	
Not Detected (ND)	2 - 4
ND - 1	4 - 8
1.6 - 2.0	8 - 25
2.0 - 4.0	> 25
4.0 - 8.0	
8.0 - 25	
> 25	

Note: Illustration of contaminant plume is a schematic representation only. In reality, the geologic bedrock formation is over 99% solid, crystalline rock, with the contaminated water contained only in the remaining (less than 1%) interstitial space (i.e. fractures).

Groundwater Elevation Contours

- Ambient "Watertable" Contours 6/1/2007 (10' Interval)
- Contours Other Than 10' Interval
- Vadose Zone Contaminant Transport

Note:
Contours developed from limited data available on 6/1/2007. Actual elevations may vary from conditions shown and the actual distribution of piezometric heads is likely more complex than indicated.

Data Notes:
1. Current Sr-90 isopleths represent the most recent activity measured over depth through 8/28/2007.
2. Sr-90 activity at MW-111 may be due to desorption of residual Sr-90 from backfill used in the Transformer Yard.
3. Two discrete isopleths have been drawn around MW-39 and MW-41 given measured concentrations greater than 2 pCi/L. It is expected that similar concentrations exist at other locations along the legacy piping alignment in addition to the locations shown.
4. The low Sr-90 concentrations measured in these wells are consistent with that expected due to rainfall levels remaining as the legacy plume has attenuated over time.

General Notes:
1. Base map was developed from an untitled electronic file provided by Bedley & Watson Surveying and Engineering, P.C., Dated 2/3/06; CAD file name : "GZA.dwg"
2. Additional legend on Figure 1-3

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One Edgewater Drive
Norwood, MA 02062
Phone: (781) 278-5700 Fax: (781) 278-5701

INDIAN POINT ENERGY CENTER
BUCHANAN, NEW YORK

CURRENT UNIT 1
ACTIVITY ISOPLETHS[1]

Proj. Mgr. MJB
Designed By MJB
Reviewed By MJB
Operator GAS

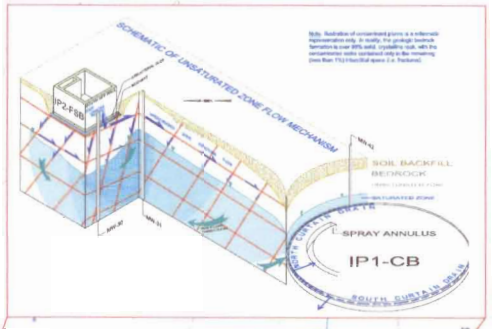
Proj. Date: 01-04-2008

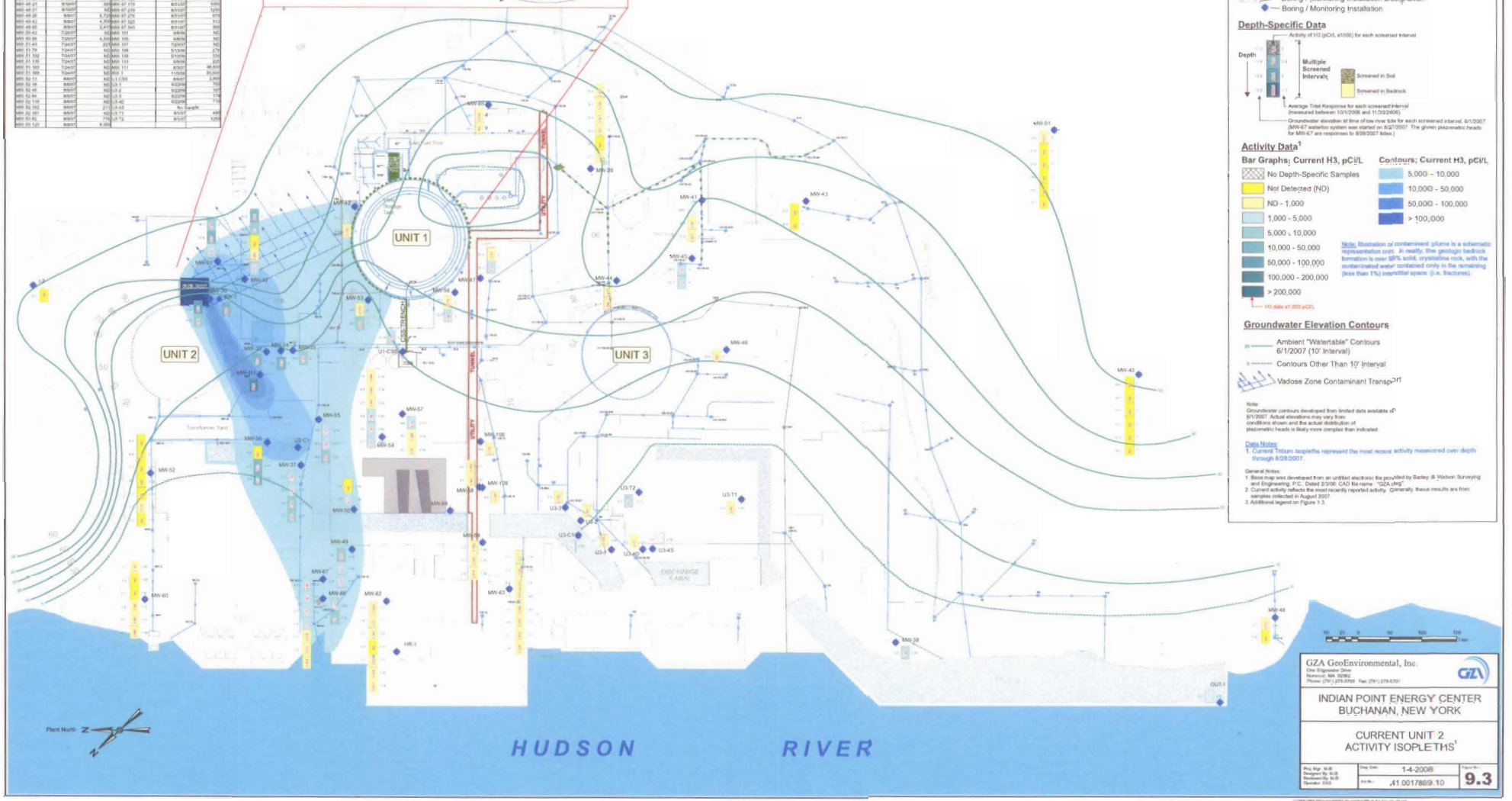
Job No.: 41.0017869.10

Figure No.: 9.4

CURRENT UNIT 2 ACTIVITY ISOPLETHS[1]

Well ID	Date Sample Collected	Current Tritium Concentration pCi/L	Well ID	Date Sample Collected	Current Tritium Concentration pCi/L
1	5/13/08	NC	MW-54 37	7/31/07	550
MW-30-88	8/16/07	82,100	MW-54 58	7/31/07	607
MW-30-84	7/26/07	8,570	MW-54 123	7/31/07	603
MW-31-49	8/11/07	6,360	MW-54 144	7/31/07	1,640
MW-31-83	8/11/07	97,700	MW-54 173	7/31/07	2,360
MW-31-80	8/11/07	4,700	MW-54 190	7/31/07	2,200
MW-32-42	8/13/07	14,200	MW-55 84	8/2/07	3,710
MW-32-92	8/13/07	9,700	MW-55 98	8/2/07	3,580
MW-32-140	8/13/07	NC	MW-55 154	8/2/07	8,310
MW-32-165	8/13/07	40	MW-55 83	8/10/07	170
MW-32-197	8/13/07	1,710	MW-55 83	8/10/07	1,480
MW-33	8/3/07	23,300	MW-37 11	8/6/07	4,190
MW-34	8/3/07	22,200	MW-37 28	8/6/07	760
MW-35	8/3/07	5,490	MW-37 40	8/6/07	740
MW-36-24	8/8/07	NC	MW-38 26	7/31/07	850
MW-36-41	8/27/07	8,110	MW-38 46	7/31/07	942
MW-36-52	8/8/07	12,700	MW-38 52	7/31/07	1,020
MW-37-22	8/7/07	3,790	MW-39 45	7/31/07	243
MW-37-32	8/7/07	7,810	MW-54 68	7/27/07	8,130
MW-37-43	8/7/07	1,850	MW-45 20	7/27/07	764
MW-37-57	8/7/07	6,660	MW-45 33	7/27/07	1,420
MW-38	8/16/07	800	MW-45 49	7/27/07	425
MW-39-87	8/7/07	320	MW-45 135	7/27/07	352
MW-39-94	8/7/07	270	MW-45 154	7/27/07	402
MW-39-102	8/7/07	310	MW-45 179	7/27/07	840
MW-39-124	8/7/07	No Sample	MW-41	No Sample	
MW-39-183	8/7/07	NC	MW-42 18	7/26/07	536
MW-39-198	8/7/07	20	MW-42 37	7/26/07	255
MW-40-24	7/25/07	NC	MW-42 53	7/26/07	540
MW-40-48	7/25/07	NC	MW-42 71	7/26/07	422
MW-40-81	7/25/07	NC	MW-42 92	7/26/07	435
MW-40-100	7/25/07	NC	MW-42 108	7/26/07	556
MW-40-127	7/25/07	NC	MW-42 162	7/26/07	415
MW-40-162	7/25/07	NC	MW-53 34	7/30/07	259
MW-41-13	No Sample		MW-49 28	7/30/07	289
MW-41-68	8/14/07	38,600	MW-53 59	7/25/07	2,270
MW-41-83	8/14/07	54	MW-53 89	7/25/07	277
MW-42-48	8/17/07	1,830	MW-53 112	7/25/07	268
MW-42-78	8/13/07	48	MW-53 121	7/25/07	256
MW-43-28	8/13/07	NC	MW-53 163	7/25/07	474
MW-43-62	8/13/07	NC	MW-53 174	7/25/07	526
MW-44-67	8/14/07	411	MW-46 48	7/27/07	238
MW-44-102	8/14/07	26	MW-46 60	7/27/07	333
MW-45-42	8/15/07	1,100	MW-46 21	7/26/07	3,370
MW-45-81	8/15/07	1,040	MW-46 38	7/26/07	5,100
MW-46	8/1/07	86	MW-49	No Sample	
MW-47-35	8/15/07	27,800	MW-47 39	8/31/07	4860
MW-47-80	8/15/07	3,510	MW-47 100	8/31/07	1660
MW-48-21	8/16/07	39	MW-47 179	8/31/07	1050
MW-48-37	8/16/07	ND	MW-47 219	8/31/07	1250
MW-49-26	8/9/07	6,720	MW-47 279	8/31/07	670
MW-49-42	8/9/07	4,350	MW-47 323	8/31/07	513
MW-49-65	8/9/07	2,410	MW-47 341	8/31/07	365
MW-51-42	7/25/07	ND	MW-101	8/6/08	NC
MW-51-66	7/25/07	4,500	MW-103	8/6/08	NC
MW-51-93	7/24/07	22,000	MW-107	7/24/07	NC
MW-51-79	7/24/07	NC	MW-108	5/13/08	278
MW-51-102	7/24/07	NC	MW-109	5/13/08	330
MW-51-135	7/24/07	NC	MW-110	8/6/08	220
MW-51-163	7/24/07	NC	MW-111	8/5/08	38,400
MW-51-189	7/24/07	NC	RW-1	11/5/08	30,000
MW-52-11	8/8/07	ND	U1-CS5	8/6/07	2,900
MW-52-18	8/8/07	ND	U1-1	8/22/08	700
MW-52-48	8/8/07	ND	U1-2	8/22/08	597
MW-52-84	8/8/07	ND	U1-3	8/22/08	1,170
MW-52-119	8/8/07	ND	U1-4D	8/22/08	715
MW-52-162	8/8/07	21,300	U1-4S	No Sample	
MW-52-181	8/8/07	ND	U1-5 T1	8/1/07	485
MW-53-82	8/9/07	1,210	U1-5 T2	8/1/07	1,250
MW-53-120	8/9/07	8,350			





LEGEND

Probable Legacy Release Locations

- Terminated Connection To Storm Drain
- Footing /Storm Drain Exfiltration
- Inter-Structure Joint / Mud Mat
- Containment Spray Sump Pipe Trench
- Unit 1 West Fuel Pool
- Unit 2 Fuel Pool

Boring / Monitoring Installation Designation
Boring / Monitoring Installation

Depth-Specific Data

Activity of H3 (pCi/L x1000) for each screened interval

Depth

Multiple Screened Intervals

Screened in Soil

Screened in Bedrock

Average Total Response for each screened interval (measured between 10/1/2006 and 11/30/2006)

Groundwater elevation at time of low river tide for each screened interval, 6/1/2007 (MW-67 waterloo system was started on 8/27/2007. The given piezometric heads for MW-67 are responses to 8/28/2007 tides.)

Activity Data[1]

Bar Graphs; Current H3, pCi/L

- No Depth-Specific Samples
- Not Detected (ND)
- ND - 1,000
- 1,000 - 5,000
- 5,000 - 10,000
- 10,000 - 50,000
- 50,000 - 100,000
- 100,000 - 200,000
- > 200,000

H3 data x1,000 pCi/L

Contours; Current H3, pCi/L

- 5,000 - 10,000
- 10,000 - 50,000
- 50,000 - 100,000
- > 100,000

Note: Illustration of contaminant plume is a schematic representation only. In reality, the geologic bedrock formation is over 99% solid, crystalline rock, with the contaminated water contained only in the remaining (less than 1%) interstitial space (i.e. fractures).

Groundwater Elevation Contours

- Ambient "Watertable" Contours 6/1/2007 (10' Interval)
- Contours Other Than 10' Interval
- Vadose Zone Contaminant Transport

Note:
Groundwater contours developed from limited data available on 6/1/2007. Actual elevations may vary from conditions shown and the actual distribution of piezometric heads is likely more complex than indicated.

Data Notes:
1. Current Tritium Isopleths represent the most recent activity measured over depth through 8/28/2007.

General Notes:
1. Base map was developed from an untitled electronic file provided by Badey & Watson Surveying and Engineering, P.C., Dated 2/3/06. CAD file name : "GZA.dwg".
2. Current activity reflects the most recently reported activity. Generally these results are from samples collected in August 2007.
3. Additional legend on Figure 1.3.

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INDIAN POINT ENERGY CENTER
BUCHANAN, NEW YORK

CURRENT UNIT 2
ACTIVITY ISOPLETHS[1]

Proj. Mgr: MJB
Designed By: BJB
Reviewed By: BJB
Operator: DAS

Proj. Date: 1-4-2008
Job No.: .41.0017869.10

Figure No.: 9.3

Exhibit B

Entergy	CONDITION REPORT	CR-IP2-2008-01490

Originator: Lucas V,William J
Originator Group: Operations Watch Staff
Supervisor Name: Alexander Jr,Richard
Discovered Date: 03/28/2008 21:37

Originator Phone: 5901
Operability Required: N
Reportability Required: Y
Initiated Date: 03/28/2008 21:48

Condition Description:

While placing the Backup Spent Fuel Cooling System secondary side into service, the pressure and flow was oscillating with the backpressure regulator unable to maintain constant pressure or flow. Over the course of two (2) hours adjustments were made to the backpressure regulator with little success. At approximately 2200, a coupling on the regulator line failed, breaching the secondary side to the dry cask trench outside the MOB. Operators immediately secured the in service pump (B). Approximately 350 gallons of water from the secondary side of the system flowed to the trench with the majority of which draining to the area under the stop plate for the Dry Cask removal system. The calculation of water loss was made from having approximately 1500 gallons of water in 300 foot hose, with about 50-70 feet of hose being evacuated.

Immediate Action Description:

Stopped in service pump and notified CRS, NSSS window Manager, Chemistry and Health Physics.

Suggested Action Description:

Work with Westinghouse personnel to make necessary adjustments on the regulating back pressure valve.

EQUIPMENT:

Tag Name	Tag Suffix Name	Component Code	Process System Code
V-100			SFPC

REFERENCE ITEMS:

Type Code	Description
CR	IP2-2008-01533
DOC	2-SOP-4.3.1
WON	00145038 Y
WRN	00124541

TRENDING (For Reference Purposes Only):

Trend Type	Trend Code
INPO BINNING	CM4
REPORT WEIGHT	1
HEP FACTOR	E
KEYWORDS	KW-LEAKS-WATER
KEYWORDS	KW-ENVIRONMENTAL DISCHARGE
KEYWORDS	KW-REFUEL EQUIPMENT
KEYWORDS	KW-SPENT FUEL STORAGE
ET	ESSE

Entergy	ADMIN	CR-IP2-2008-01490

Initiated Date: 3/28/2008 21:48 **Owner Group :** System Eng Primary System Mgmt

Current Contact:

Current Significance: C

Closed by:

Summary Description:

While placing the Backup Spent Fuel Cooling System secondary side into service, the pressure and flow was oscillating with the backpressure regulator unable to maintain constant pressure or flow. Over the course of two (2) hours adjustments were made to the backpressure regulator with little success. At approximately 2200, a coupling on the regulator line failed, breaching the secondary side to the dry cask trench outside the MOB. Operators immediately secured the in service pump (B). Approximately 350 gallons of water from the secondary side of the system flowed to the trench with the majority of which draining to the area under the stop plate for the Dry Cask removal system. The calculation of water loss was made from having approximately 1500 gallons of water in 300 foot hose, with about 50-70 feet of hose being evacuated.

Remarks Description:

Closure Description:

Entergy	ASSIGNMENTS	CR-IP2-2008-01490

Version: 1

Significance Code: C

Classification Code: CORRECT/ADDRESS

Owner Group: System Eng Primary System Mgmt

Performed By: Harrison,Christine B 03/29/2008 08:36

Assignment Description:

3/29/08: Per AM CRG, a Category C Review is being assigned to System Engineering-Primary with a two-day due date.

Entergy	REPORTABILITY	CR-IP2-2008-01490

Reportability Version: 1

Report Number:

Report Code: NOT REPORTABLE

Boilerplate Code:

Performed By : Rokes,Charles B 04/02/2008 09:45

Reportability Description:

Based on the reporting criteria of SMM-LI-108, which for this type of event is covered by EN-RP-113,"Response to Contaminated Spills/Leaks," Licensing, Chemistry, Radation Protection, Senior Management provided a stakeholder conference call. The event was not reported. Radioactivity limits were not exceeded and there was no public notification to an offsite government agency of an item of significance to public health and safety or protection of the environment (10CFR50.72(b)(2)(xi). Basis was: The water entered the discharge canal via the storm drain system contained a concentration of tritium (as a frame of reference) that was less than ? of the EPA drinking water limit. In accordance with the industry NEI initiative to communicate very low level spills that are not required to be reported by NRC regulations, IPEC adopted and proceduralized requirements to provide voluntary notifications of such events to outside agencies/stakeholders (i.e., EN-RP-113). The tritium concentration of the spills that occurred during startup testing of the auxiliary cooling system are below the threshold of the NEI guidance and the IPEC procedure that implements this guidance. The Tritium activity concentrations identified was 4700 pCi/l. This is below the threshold of the NEI guidance and the IPEC procedure that implements this guidance for making voluntary notifications of spills/leaks to outside agencies/stakeholders. The 4700 pCi/l tritium concentration is below the lower limit of detection required for radioactive liquid effluents and is well below the federal drinking water standard of 20,000 pCi/l; no drinking water supplies are affected by the subject spills. Limits are: document all spills or leaks of contaminated liquids greater than 100 gallons. Contaminated is detectable radioactivity as measured by specific activity, tritium analysis or gamma isotopic analysis which is typically ODCM effluent release detection limits. The leak was nota scheduled batch effluent release via a normal monitored release pathway. Release was also not to ground/soil but to storm drain to discharge canal.

20,000 picoCi/L - NRC Bulletin 80-10 limits per ODCM,
10,000 picoCi/L - (RETS limits per ODCM),
5,000 picoCi/L - REMP limits per ODCM

The OFFSITE DOSE CALCULATION MANUAL (ODCM) is maintained per Technical Specifications Section 5.5. The IPEC ODCM consists of two
parts: 1) Part I. Radiological Effluent Controls, (RECS) ? previously, referred to as the Radiological Effluent Technical Specifications, or RETS (Section 3.9 of original Unit 2 Technical Specifications, and Appendix B or original Unit 3 Technical Specifications). 2) Part II, Calculational Methodologies (previously often referred to as simply the ?ODCM?). Table D 3.5.1-2, Reporting Levels for Radioactivity in Environmental Samples, H-3, 20,000 pCi/L; H-3 Values provided are for drinking water pathways. If no drinking water pathway exists, higher values are allowed, as follows: H-3 - 30,000 pCi/L (This is a 40 CFR 141 value). Table D 3.5.1-3; Detection Capabilities for Environmental Sample Analysis (a) (e), H-3, water - 2,000 pCi/L. ODCM D.3.1.1, This specification is provided to ensure that the concentration of radioactive materials released in liquid waste effluents to UNRESTRICTED AREAS will be less than ten times the EFFLUENT CONCENTRATIONS specified in 10 CFR Part 20. Per the ODCM, releases to Storm Drain to discharge canal are monitored per the IPEC 80-10 compliance program.

Entergy	CORRECTIVE ACTION	CR-IP2-2008-01490

CA Number:

	Group	Name
Assigned By:	CRG/CARB/OSRC	Harrison,Christine B
Assigned To:	System Eng Support Mgmt	Lafferty,Joseph A
Subassigned To :		

Originated By:	Harrison,Christine B	3/29/2008 08:37:51
Performed By:		
Subperformed By:		
Approved By:		
Closed By:	Harrison,Christine B	3/29/2008 09:27:41

Current Due Date: 03/31/2008 **Initial Due Date:** 03/31/2008

CA Type: DISP - CA

Plant Constraint: #NONE

CA Description:

NOTE TWO-DAY DUE DATE. (Assign to K. Curley.) Please ensure condition is corrected.

Response:

Subresponse :

Closure Comments:

3/29/08: This CA assigned in error and has been replaced by CA-00002.

Entergy	CORRECTIVE ACTION	CR-IP2-2008-01490

CA Number: 2

	Group	Name
Assigned By:	CRG/CARB/OSRC	Harrison,Christine B
Assigned To:	System Eng Primary System Mgmt	Tesoriero,Michael V
Subassigned To :		

Originated By:	Harrison,Christine B	3/29/2008 09:27:02
Performed By:	Chan,Tat	3/31/2008 09:52:46
Subperformed By:		
Approved By:		
Closed By:	Chan,Tat	3/31/2008 09:52:46

Current Due Date: 03/31/2008 **Initial Due Date:** 03/31/2008

CA Type: DISP - CA

Plant Constraint: #NONE

CA Description:

NOTE TWO-DAY DUE DATE. (Assign to K. Curley.) Please ensure condition is corrected.

Response:

Backup spent fuel pool cooling system is placed in service at 3/31/08 09:49. Therefore, it is recommended that this CA be taken to closure.

Subresponse :

Closure Comments:

Entergy	CORRECTIVE ACTION	CR-IP2-2008-01490

CA Number: 3

	Group	Name
Assigned By:	CA&A Staff	Reynolds,Joseph A
Assigned To:	System Eng Primary System Mgmt	Tesoriero,Michael V
Subassigned To :		

Originated By: Jowitt,Roseann 3/31/2008 11:15:00

Performed By:

Subperformed By:

Approved By:

Closed By:

Current Due Date: 04/08/2008 **Initial Due Date:** 04/09/2008

CA Type: CR CLOSURE REVIEW

Plant Constraint: #NONE

CA Description:

CAT-C, ALL CORRECTIVE ACTIONS ARE CLOSED FOR THIS CR, THEREFORE THIS CR MAY BE READY TO CLOSE. REVIEW CR AND APPROVE / DISAPPROVE CLOSURE IN ACCORDANCE WITH EN-LI-102, SECTION 5.9.

Response:

Subresponse :

Closure Comments:

Entergy	CONDITION REPORT	CR-IP2-2008-01533

Originator: Johnson,Matthew R
Originator Group: System Eng Secondary System Staff
Supervisor Name: Vasely,Michael J
Discovered Date: 03/30/2008 05:01

Originator Phone: 6878
Operability Required: N
Reportability Required: Y
Initiated Date: 03/30/2008 05:15

Condition Description:

During fill/vent and pressure test of Temporary SFPC system secondary side a hose disconnected from the hose nipple. Pressure was at approx 70 psi of the 80-110 psi called for in the test procedure. Connection was located in the concrete alleyway to the FSB. All water was released directry to stormdrain in the alleyway, no water was released to ground soil.

Immediate Action Description:

Notified OCC. Located heavy duty hose clamps to replace the banding on the nipple. Added heavy duty hose clamps to other nipples as available. More hose clamps will be recieved on day shift and added to all other hose connections.

Suggested Action Description:

REFERENCE ITEMS:

Type Code	Description
CR	IP2-2008-01490

TRENDING (For Reference Purposes Only):

Trend Type	Trend Code
EM	MAMM
KEYWORDS	KW-FUEL POOL COOLING
HEP FACTOR	E
INPO BINNING	ER1
REPORT WEIGHT	1

Entergy	ADMIN	CR-IP2-2008-01533

Initiated Date: 3/30/2008 5:15 **Owner Group :** System Eng Primary System Mgmt

Current Contact:

Current Significance: D

Closed by: Harrison,Christine B 4/3/2008 4:52

Summary Description:

During fill/vent and pressure test of Temporary SFPC system secondary side a hose disconnected from the hose nipple. Pressure was at approx 70 psi of the 80-110 psi called for in the test procedure. Connection was located in the concrete alleyway to the FSB. All water was released directry to stormdrain in the alleyway, no water was released to ground soil.

Remarks Description:

Closure Description:

3/30/08: Per PM CRG, close to Track/Trend (reference CR-IP2-2008-01490).

Entergy	**ASSIGNMENTS**	**CR-IP2-2008-01533**

Version: 1

Significance Code: D

Classification Code: REVIEW EMERG TRENDS

Owner Group: System Eng Primary System Mgmt

Performed By: Harrison,Christine B 03/31/2008 11:05

Assignment Description:

3/30/08: Per PM CRG, close to Track/Trend (reference CR-IP2-2008-01490).

Entergy	REPORTABILITY	CR-IP2-2008-01533

Reportability Version: 1

Report Number:

Report Code: NOT REPORTABLE

Boilerplate Code:

Performed By : Prussman.Stephen G 03/31/2008 16:30

Reportability Description:

Falls below reportability requirenments. Advised stakeholders, state and residents.

Exhibit C

Entergy Nuclear Operations, Inc.
Entergy Nuclear Northeast
440 Hamilton Avenue
White Plains, NY 10601
Tel 914 272 3204
Fax 914 272 3205
jherron@entergy.com

John T. Herron
Senior Vice President and
Chief Operating Officer

March 29, 2007
ENOC-07-00007

U. S. Nuclear Regulatory Commission
ATTN: Document Control Desk
Washington, DC 20555

SUBJECT: Entergy Nuclear Operations, Inc.
Indian Point Nuclear Generating Stations 1, 2 and 3
Docket Nos. 50-3, 50-247 and 50-286
Vermont Yankee Nuclear Power Station
Docket No. 50-271
Pilgrim Nuclear Power Station
Docket No. 50-293
James A. FitzPatrick Nuclear Power Plant
Docket No. 50-333
Status of Decommissioning Funding for
Plants Operated by Entergy Nuclear Operations, Inc.
For Year Ending December 31, 2006 – 10 CFR 50.75(f)(1)

References:
1. NUREG-1307, "Report on Waste Burial Charges," Revision 12, dated February 2007.
2. NRC Regulatory Issue Summary 2001-07, "10 CFR 50.75(f)(1) Reports on the Status of Decommissioning Funds (Due March 31, 2001)."

Dear Sir or Madam:

10 CFR 50.75(f)(1) requires each power reactor licensee to report to the NRC by March 31, 1999, and every two years thereafter, on the status of its decommissioning funding for each reactor, or share of a reactor, that it owns. On behalf of Entergy Nuclear Indian Point 2 LLC, Entergy Nuclear Indian Point 3 LLC, Entergy Nuclear Vermont Yankee LLC, Entergy Nuclear Generation Company (Pilgrim Station), and Entergy Nuclear FitzPatrick LLC, Entergy Nuclear Operations, Inc. hereby submits the information requested for power reactors operated by Entergy Nuclear Operations, Inc.

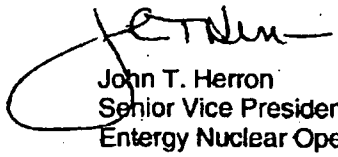
The estimated minimum decommissioning fund values were determined using the NRC's methodology in NUREG-1307 (Reference 1).

NMSS01
A001

The information provided in Attachment 1 is based on NRC Regulatory Issue Summary 2001-07 (Reference 2).

There are no new commitments made in this letter. If you have any questions, please contact Ms. Charlene Faison at 914-272-3378.

Very truly yours,



John T. Herron
Senior Vice President
Entergy Nuclear Operations

Attachments:

1. Status of Decommissioning Funding for Plants Operated by Entergy Nuclear Operations, Inc. (Indian Point 1, Indian Point 2, Indian Point 3, Vermont Yankee, Pilgrim, and FitzPatrick) for Year Ending December 31, 2006 – 10 CFR 50.75(f)(1) - (7 sheets)

cc: Next page.

cc: all w/attachments

USNRC Regional Administrator, Region I
USNRC Project Manager, Indian Point 1
USNRC Project Manager, Indian Point 2
USNRC Project Manager, Indian Point 3
USNRC Project Manager, FitzPatrick
USNRC Project Manager, Vermont Yankee
USNRC Project Manager, Pilgrim
USNRC Resident Inspector, Indian Point 2
USNRC Resident Inspector, Indian Point 3
USNRC Resident Inspector, FitzPatrick
USNRC Resident Inspector, Vermont Yankee
USNRC Resident Inspector, Pilgrim

Mr. David O'Brien, Commissioner
Department of Public Service
120 State Street – Drawer 20
Montpelier, VT 05602

Mr. Paul Eddy
NYS Department of Public Service
3 Empire State Plaza
Albany, NY 12223

Ms. Victoria J. Brown, Esq.
Primmer Piper Eggleston & Cramer PC
150 S. Champlain Street
P.O. Box 1489
Burlington, VT 05402

Attachment 1 to ENOC-07-00007

Status of Decommissioning Funding for Plants Operated by Entergy Nuclear Operations, Inc. (Indian Point 1, Indian Point 2, Indian Point 3, Vermont Yankee, Pilgrim, and FitzPatrick)
for Year Ending December 31, 2006 – 10 CFR 50.75(f)(1)

Plant Name: **Indian Point Nuclear Generating Unit No. 1**

1.	Amount of decommissioning funds estimated to be required pursuant to 10 CFR 50.75 (b) and (c).	$ 308.44million [1]
	Decommissioning cost estimate escalated at 3.0% per year to the midpoint of decommissioning (December 2016).	$ 414.52 million
2.	Amount accumulated to the end of the calendar year preceding the date of the report (December 31, 2006).	$ 254.24 million [2]
	Fund balance with 5.0% annual growth to the midpoint of decommissioning (December 2016).	$ 414.13 million
3.	A schedule of the annual amounts remaining to be collected.	None.
4.	Assumptions used in determining rates of escalation in decommissioning costs, rates of earnings on decommissioning funds, and rates of other factors used in funding projections.	Escalation rate: 3.0% Rate of earnings: 5.0%
5.	Any contracts upon which the licensee is relying pursuant to 10 CFR 50.75(e)(1)(v).	None.
6.	Modifications occurring to a licensee's current method of providing financial assurance since the last submitted report.	None.
7.	Any material changes to trust agreements.	None.

Attachment 1 to ENOC-07-00007

Status of Decommissioning Funding for Plants Operated by Entergy Nuclear Operations, Inc. (Indian Point 1, Indian Point 2, Indian Point 3, Vermont Yankee, Pilgrim, and FitzPatrick)
for Year Ending December 31, 2006 – 10 CFR 50.75(f)(1)

Plant Name: **Indian Point Nuclear Generating Unit No. 2**

1.	Amount of decommissioning funds estimated to be required pursuant to 10 CFR 50.75 (b) and (c).	$ 372.40 million
	Decommissioning cost estimate escalated at 3.0% per year to the midpoint of decommissioning (December 2016).	$ 500.47 million
2.	Amount accumulated to the end of the calendar year preceding the date of the report (December 31, 2006).	$ 303.01 million [2]
	Fund balance with 5.0% annual growth to the midpoint of decommissioning (December 2016).	$ 493.57 million
3.	A schedule of the annual amounts remaining to be collected.	None.
4.	Assumptions used in determining rates of escalation in decommissioning costs, rates of earnings on decommissioning funds, and rates of other factors used in funding projections.	Escalation rate: 3.0% Rate of earnings: 5.0%
5.	Any contracts upon which the licensee is relying pursuant to 10 CFR 50.75(e)(1)(v).	None.
6.	Modifications occurring to a licensee's current method of providing financial assurance since the last submitted report.	None.
7.	Any material changes to trust agreements.	None.

Status of Decommissioning Funding for Plants Operated by Entergy Nuclear Operations, Inc. (Indian Point 1, Indian Point 2, Indian Point 3, Vermont Yankee, Pilgrim, and FitzPatrick)
for Year Ending December 31, 2006 – 10 CFR 50.75(f)(1)

Plant Name: **Indian Point Nuclear Generating Unit No. 3**

1.	Amount of decommissioning funds estimated to be required pursuant to 10 CFR 50.75 (b) and (c).	$ 367.69 million
	Decommissioning cost estimate escalated at 3.0% per year to the midpoint of decommissioning (December 2018).	$ 524.24 million
2.	Amount accumulated to the end of the calendar year preceding the date of the report (December 31, 2006).	$ 441.30 million
	Fund balance with 5.0% annual growth to the midpoint of decommissioning (December 2018).	$ 792.51 million
3.	A schedule of the annual amounts remaining to be collected.	None.
4.	Assumptions used in determining rates of escalation in decommissioning costs, rates of earnings on decommissioning funds, and rates of other factors used in funding projections.	Escalation rate: 3.0% Rate of earnings: 5.0%
5.	Any contracts upon which the licensee is relying pursuant to 10 CFR 50.75(e)(1)(v).	None.
6.	Modifications occurring to a licensee's current method of providing financial assurance since the last submitted report.	None.
7.	Any material changes to trust agreements.	None.

Attachment 1 to ENOC-07-00007

Status of Decommissioning Funding for Plants Operated by Entergy Nuclear Operations, Inc. (Indian Point 1, Indian Point 2, Indian Point 3, Vermont Yankee, Pilgrim, and FitzPatrick)
for Year Ending December 31, 2006 – 10 CFR 50.75(f)(1)

Plant Name: **Vermont Yankee Nuclear Power Station**

1.	Amount of decommissioning funds estimated to be required pursuant to 10 CFR 50.75 (b) and (c).	$ 478.17 million
	Decommissioning cost estimate escalated at 3.0% per year to the midpoint of decommissioning (December 2015).	$ 623.90 million
2.	Amount accumulated to the end of the calendar year preceding the date of the report (December 31, 2006).	$ 416.54 million
	Fund balance with 5.0% annual growth to the midpoint of decommissioning (December 2015).	$ 646.19 million
3.	A schedule of the annual amounts remaining to be collected.	None.
4.	Assumptions used in determining rates of escalation in decommissioning costs, rates of earnings on decommissioning funds, and rates of other factors used in funding projections.	Escalation rate: 3.0% Rate of earnings: 5.0%
5.	Any contracts upon which the licensee is relying pursuant to 10 CFR 50.75(e)(1)(v).	None.
6.	Modifications occurring to a licensee's current method of providing financial assurance since the last submitted report.	None.
7.	Any material changes to trust agreements.	None.

Attachment 1 to ENOC-07-00007

Status of Decommissioning Funding for Plants Operated by Entergy Nuclear Operations, Inc. (Indian Point 1, Indian Point 2, Indian Point 3, Vermont Yankee, Pilgrim, and FitzPatrick)
for Year Ending December 31, 2006 – 10 CFR 50.75(f)(1)

Plant Name: **Pilgrim Nuclear Power Station**

1.	Amount of decommissioning funds estimated to be required pursuant to 10 CFR 50.75 (b) and (c).	$ 482.28 million
	Decommissioning cost estimate escalated at 3.0% per year to the midpoint of decommissioning (December 2015).	$ 629.27 million
2.	Amount accumulated to the end of the calendar year preceding the date of the report (December 31, 2006).	$ 582.63 million
	Fund balance with 5.0% annual growth to the midpoint of decommissioning (December 2015).	$ 903.85 million
3.	A schedule of the annual amounts remaining to be collected.	None.
4.	Assumptions used in determining rates of escalation in decommissioning costs, rates of earnings on decommissioning funds, and rates of other factors used in funding projections.	Escalation rate: 3.0% Rate of earnings: 5.0%
5.	Any contracts upon which the licensee is relying pursuant to 10 CFR 50.75(e)(1)(v).	None.
6.	Modifications occurring to a licensee's current method of providing financial assurance since the last submitted report.	None.
7.	Any material changes to trust agreements.	Effective December 16, 2005 the Entergy Nuclear Generation Company Master Decommissioning Trust Agreement for the Pilgrim Nuclear Power Station was amended to reflect the changing of the Entergy Nuclear Generation Company from a Delaware corporation to a Massachusetts corporation.

Attachment 1 to ENOC-07-00007

Status of Decommissioning Funding for Plants Operated by Entergy Nuclear Operations, Inc. (Indian Point 1, Indian Point 2, Indian Point 3, Vermont Yankee, Pilgrim, and FitzPatrick)
for Year Ending December 31, 2006 – 10 CFR 50.75(f)(1)

Plant Name: **James A. Fitzpatrick Nuclear Power Plant**

1.	Amount of decommissioning funds estimated to be required pursuant to 10 CFR 50.75 (b) and (c).	$ 500.32 million
	Decommissioning cost estimate escalated at 3.0% per year to the midpoint of decommissioning (December 2017).	$ 692.56 million
2.	Amount accumulated to the end of the calendar year preceding the date of the report (December 31, 2006).	$ 481.50 million
	Fund balance with 5.0% annual growth to the midpoint of decommissioning (December 2017).	$ 823.53 million
3.	A schedule of the annual amounts remaining to be collected.	None.
4.	Assumptions used in determining rates of escalation in decommissioning costs, rates of earnings on decommissioning funds, and rates of other factors used in funding projections.	Escalation rate: 3.0% Rate of earnings: 5.0%
5.	Any contracts upon which the licensee is relying pursuant to 10 CFR 50.75(e)(1)(v).	None.
6.	Modifications occurring to a licensee's current method of providing financial assurance since the last submitted report.	None.
7.	Any material changes to trust agreements.	None.

Status of Decommissioning Funding for Plants Operated by Entergy Nuclear Operations, Inc. (Indian Point 1, Indian Point 2, Indian Point 3, Vermont Yankee, Pilgrim, and FitzPatrick)
for Year Ending December 31, 2006 – 10 CFR 50.75(f)(1)

Notes:

[1] In accordance with 10 CFR 50.75(c)(i)(1) PWR reactors below 1200 MWt are to use this minimum value. Indian Point 1 had a thermal power level of 615 MWt. (Refer to Attachment 3, pg. 15, of June 8, 2001 letter, M. R. Kansler to USNRC regarding "Response to June 5, 2001 Letter, Indian Point Nuclear Generating Unit Nos. 1 and 2, Transfer of Facility Operating License (TAC Nos. MB0743 and MB0744).")

[2] The current fund balances for Indian Point 1 and 2 do not include an additional $27.43 million available in the provisional fund.