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Sent: Monday, March 21, 2016 6:34 PM
To: Rulemaking1CEm Resource
Subject: FW: Docket ID NRC-2015-0070 NYS Comments on Decommissioning Power Reactors ANPR
Attachments: final NYS Decom ANPR compiled comments (3-18-16).pdf

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COMMENT#: 100

From: Peterson, Alyse L (NYSERDA) [mailto:Alyse.Peterson@nyserda.ny.gov]
Sent: Friday, March 18, 2016 1:59 PM
To: RulemakingComments Resource <RulemakingComments.Resource@nrc.gov>
Subject: [External_Sender] Docket ID NRC-2015-0070 NYS Comments on Decommissioning Power Reactors ANPR

Good afternoon,

The attached file contains New York State's comments on the Regulatory Improvements for Decommissioning Power Reactors ANPR.

Sincerely,

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March 18, 2016

Secretary
U.S. Nuclear Regulatory Commission
Washington, DC 20555-0001

ATTN: Rulemakings and Adjudications Staff
Docket ID NRC-2015-0070

Subject: Advance Notice of Proposed Rulemaking

On November 19, 2015, the U.S. Nuclear Regulatory Commission (NRC) published an Advance Notice of Proposed Rulemaking (ANPR) for comment on the Regulatory Improvements for Decommissioning Power Reactors (See Federal Register/Vol. 80, No. 223/Thursday, November 19, 2015).

New York State offers the enclosed comments in response to the ANPR. If you have any questions, you may contact me at (518) 862-1090 x3274 or alyse.peterson@nyserderda.ny.gov.

Sincerely,

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New York State Comments on NRC Advance Notice of Proposed Rulemaking “Regulatory Improvements for Decommissioning Power Reactors”

The State of New York (the “State”) submits this response to the U.S. Nuclear Regulatory Commission recent Advance Notice of Proposed Rulemaking concerning decommissioning of nuclear power plants.

Overview

On November 19, 2015, the U.S. Nuclear Regulatory Commission (NRC) published an Advance Notice of Proposed Rulemaking (ANPR) for comment entitled “Regulatory Improvements for Decommissioning Power Reactors” in the Federal Register. 80 Fed. Reg. 72358 (Nov. 19, 2015). The ANPR was issued at the direction of the Commission, which in SECY-14-0118, “Request by Duke Energy Florida, Inc. for Exemptions from Certain Emergency Planning Requirements” (Dec. 30, 2014), ML14364A111, directed the NRC Staff to issue a rulemaking to address issues related to emergency preparedness; lessons learned from plants that have undergone, or soon will undergo, decommissioning; whether the NRC should approve post-shutdown decommissioning activity reports; whether all three current decommissioning options – DECON, SAFSTOR, and ENTOMB – should be retained; the role of State and local governments in the decommissioning process; and any other issues deemed relevant by NRC Staff. 80 Fed. Reg. at 72360-61. The Commission had previously revised its decommissioning regulations in 1996. 61 Fed. Reg. 39278 (Jul. 29, 1996).

The State of New York is host to numerous facilities which are scheduled to terminate operations in the next 10-20 years. Public safety is paramount to the State, as is the adequacy and protection of the Decommissioning Trust Fund for each of these facilities against non-decommissioning uses or bankruptcy. The State cannot support any lessening of safety or emergency preparedness requirements as long as any risk of accident or unanticipated release remains. Moreover, in these comments the State identifies opportunities for strengthening existing regulations, including those to ensure that the Decommissioning Trust Funds are available and used for their designed purposes – decommissioning and site restoration.

The State responds to the ANPR’s specific requests for feedback below.

A. Questions Related to Emergency Preparedness Requirements for Decommissioning Power Reactor Licensees

In Section A, the Staff poses a series of questions to stakeholders related to emergency preparedness. The State offers the following feedback. Throughout the ANPR, the NRC references a series of security-sensitive reports, collectively described as the “Sandia studies,” which are used to validate the assumption that there will be a “significant amount of time between initiating event ... and the spent fuel assemblies becoming partially or completely uncovered.” See 80 Fed. Reg. at 72360. Since these studies are purported to support less conservative assumptions than those used in the material accessible to the public, the State strongly encourages the NRC to make these studies available to State personnel so all assumptions and methodologies can be reviewed. Without access to the specific

assumptions on which the NRC relies, the methods and findings from such studies are unknown, and the State cannot determine if proposed rules ensure that a study's findings match future conditions.

The Commission's request for an ANPR on decommissioning rulemaking comes after sporadic reviews of nuclear power plant decommissioning requirements over the last 20 years. During that time perhaps the most relevant development was SECY-00-0145 (June 28, 2000, ML003721626). SECY-00-0145 acknowledged, as the ANPR does, that the risk of a zirconium fire in the spent fuel pool at a power reactor leading to a radiological release, even "several years" after the reactor has shut down, is not zero. SECY-00-0145 at 1. Staff stated that "[u]nder certain circumstances when the spent fuel decay heat level is high, uncovering may result in cladding heatup to the point where rapid oxidation could create an exothermic zirconium reaction (commonly referred to as a zirconium fire) with the potential to propagate to a large number of fuel assemblies in the SFP," and that "the offsite consequences of a zirconium fire would be severe." *Id.* at 1. Staff proposed a number of regulations addressing safeguards, insurance, and emergency preparedness that were never issued because of additional research undertaken in response to the events of September 11, 2001, and because, between 1998 and 2013, no power reactors ceased operation.

A recent spate of plant closures without significant advance warning has prompted the NRC to revisit the decommissioning regulations, and the State is in general concurrence that a holistic approach to decommissioning requirements through comprehensive and sensible decommissioning regulations, rather than through the numerous exemptions that plants and host communities have wrestled with in recent years, makes sense.

While consensus and timing may be ripe for generic action, the Staff's observation in SECY 0145 remains true today – a zirconium fire at the spent fuel pool of an operating reactor is still possible even years after the reactor has shut down, and the consequences of such an event would be catastrophic -- especially at a multi-unit site like Indian Point in New York State, housing more than 17 million people, as well as a global financial center, within its 50-mile radius. As such, the State opposes any regulatory regime that results in reduced emergency preparedness, insurance, or other safeguard protections during decommissioning while spent nuclear fuel remains in pools. While the Staff has taken some steps over the last two decades to assess the real risk from a zirconium fire, and that it has identified mitigation measures (for example, a dispersed configuration of spent fuel rods in pools) that would arguably reduce that risk, the State remains concerned that the Staff has not required many of the safety measures advocated by the State. For example, the NRC has explicitly declined to require the expedited removal of fuel rods from densely packed spent fuel pools, over the State's objection. *See* Letter, Alyse Peterson to Secretary, U.S. Nuclear Regulatory Commission, Re: NRC Docket ID NRC-2012-0246 (Dec. 20, 2013), ML13365A336 (recommending that the NRC require nuclear licensees to remove spent fuel from on-site storage pools to dry cask storage as soon as possible); *see also* NUREG 2161, *Consequence Study of a Beyond-Design-Basis Earthquake Affecting the Spent Fuel Pool for a U.S. Mark I Boiling Water Reactor* (Sept. 2014), ML14255A365 at vi (concluding that "[t]he Office of Nuclear Reactor Regulation's regulatory analysis for this study indicates that expediting movement of spent fuel from the pool does not provide a substantial safety enhancement for the reference plant."). In considering lesser-protective regulations during decommissioning, the NRC relies here on studies which identify mitigation measures that it says reduce the risk of spent fuel pool fires, but without an unambiguous and enforceable requirement to place

spent fuel in a dispersed configuration, or to expeditiously remove spent fuel from pools, the NRC's identification of potential – but not required – mitigation measures is not relevant here.

In response to EP-2.a, which inquires about a tiered approach to emergency preparedness requirements (and also in response to the concept of reducing emergency planning resources and insurance in general), while there is potential for a zirconium fire and the affiliated dire offsite consequences, all offsite emergency planning and preparedness functions should remain as they are. Moreover, NRC and the licensee should cover all financial costs associated with off-site emergency planning and preparation. This burden should not be placed on local communities, counties, or States.

Likewise, in response to EP-3.a, which inquires about onsite emergency preparedness and response capabilities that should be maintained once formal offsite emergency preparedness is discontinued, the State submits that some aspects of onsite emergency preparedness, including training and drills with offsite response organizations need to be maintained once a site is in decommissioning. The scope of this training should be based on the accident scenarios that do not have a possibility of zero, expecting that these scenarios would change over time as decommissioning progresses. Staffing requirements should be concomitantly maintained to adequately address each potential accident scenario.

B. Questions Related to the Physical Security Requirements for Decommissioning Power Reactor

In Section B, Staff pose questions related to the physical security requirements for decommissioning power reactors. The State begins by noting that Indian Point was considered as a target on September 11, 2001, indicating that nuclear facilities require strong protections, and cautions the NRC against relaxing or exempting facilities – not only Indian Point – from any requirement under Part 73 or 26 with respect to decommissioning. As long as waste is in spent fuel pools and during the time of zirconium fire risk, as the Staff itself has acknowledged (*see* SECY-00-0145 at 1), the potential for a release may still be significant. The NRC should require robust security measures until all spent fuel is removed from the spent fuel pool and stored in dry casks.

The State submits that the same principle applies to PSR-2.c, which inquires whether the design basis threat for radiological sabotage should continue to apply in the decommissioning process, or if it should, when it should end. For the reasons stated above, the State's position is that the design basis threat should continue as long as there is fuel in spent fuel pools. While time may be a relevant factor for spent fuel pool cooling and minimize the risk of a zirconium fire, hostile actions that may lead to damaged fuel should remain a consideration until all spent radioactive fuel is moved to dry cask storage.

In PSR-5, Staff inquires if, for a decommissioning power reactor, both the central alarm station and a secondary alarm station are necessary. The State submits that since potential security events and natural disasters continue to support plausible emergency scenarios, redundancy in alarm stations and other critical functions should be maintained; both a central and secondary alarm station should be maintained. It is recommended that the secondary location be on site and be suitable as a "safe refuge" for plausible beyond design-basis events.

D. Questions Related to Training Requirements of Certified Fuel Handlers for Decommissioning Power Reactor Licensees

In Section D, the Staff poses a series of questions related to training requirements for certified fuel handlers for decommissioning power reactor licensees. The State recommends that the NRC develop a

regulation for the licensing of fuel handlers. The site should always be under the control of individuals who have been specifically licensed and regulated by the NRC for the task. Therefore, a licensed fuel handler should not be required for a reactor plant which still maintains licensed operators. However, a licensed fuel handler program must be established and personnel licensed by the NRC prior to abolishing the requirement to maintain licensed operators. This would ensure that individuals with overall responsibility for site safety have been objectively examined for competency by the NRC. All other fitness-for-duty requirements for licensed operators should be applicable to licensed fuel handlers.

E. Questions Related to the Current Regulatory Approach for Decommissioning Power Reactor Licensees

In Section E, the NRC seeks feedback, as the Commission directed, on the three existing options for decommissioning – DECON, SAFSTOR, and ENTOMB. Specifically, in question REG-1.a, Staff inquire whether the current options should be explicitly addressed in regulations instead of solely in guidance documents. Discussion of the options in a publicly noticed rulemaking would allow interested States and other stakeholders to explore the strengths and weaknesses of each option, given operating history and current environmental conditions at facilities around the Nation, roughly 75% of which have subsurface contamination. See NBC News, Radioactive Contamination Found at 48 US Nuke Sites, available at http://www.nbcnews.com/id/43475479/ns/us_news-environment/t/radioactive-tritium-leaks-found-us-nyke-sites/#.Vt76HfkrKJA (last visited Mar. 8, 2016).

The State submits that ENTOMB is inconsistent with the State policy and is not an option that New York can support for any of the facilities within its borders. As between DECON and SAFSTOR, the State expresses a preference for the use of DECON. The State expresses concern that under the current regulatory scheme, NRC has allowed licensees to decide on their own how they would like to approach decommissioning while maximizing their current revenues and delaying site decontamination for 60 years. As a result, Staff has allowed various licensees to be without adequate funding to achieve the DECON option in the short term. The State believes that further notice and comment is needed on the elimination of ENTOMB and SAFSTOR, leaving DECON as the best option that protects State and local interests.

In question REG–1.b, Staff inquire whether other options for decommissioning should be explored. The State supports the immediate removal of radioactive materials from the sites within its borders, and an expeditious path to full site restoration. The State also believes that options for partial site release should be considered for appropriate redevelopment with utility infrastructure.

In addition to this specific feedback, the State offers the following comment regarding SAFSTOR. Currently, all New York State nuclear plant owners have expressed their own preference of using the SAFSTOR method of decommissioning, which was intended to permit radiological decay of isotopes over time; however, licensees are primarily using this method to capture the time value of money to allow currently underfunded decommissioning funds to grow in value. In the case of the Vermont Yankee, an agreement was reached between Entergy and the State of Vermont that the decommissioning process should occur without reasonable delay, as soon as there are sufficient funds in the facility’s Nuclear Decommissioning Trust Fund. The State supports this approach and submits that action should be taken to ensure sufficient funds are accumulated during operation to allow for prompt radiological and non-radiological decommissioning and site restoration at the end of licensed life, as was originally planned. Whether this consideration is consistent with maintaining SAFSTOR as an option or whether it supplants SAFSTOR should be addressed in the rulemaking called for in REG-1.b above.

In REG-2, the Staff explain the current practice regarding submissions of Post-Shutdown Decommissioning Activity Reports (PSDARs): (1) the licensee submits the PSDAR to the NRC that informs the public of the licensee's planned decommissioning activities; (2) assists in the scheduling of NRC resources necessary to ensure appropriate oversight; (3) ensures that the licensee has considered the costs of the planned decommissioning activities and has appropriate funding; (4) ensures that the environmental impacts of the planned decommissioning activities are bounded by those considered in existing environmental impact statements. 80 Fed. Reg. at 72367. Although the NRC submits the PSDAR for public comments, it does not have an approval role over the decommissioning activities, though it may notify the licensee of shortcoming in its approach. *Id.* The State strongly opposes this passive approach and practice.

In REG-2.b, Staff inquires whether the NRC should approve PSDARs. The State wholeheartedly supports NRC approval of PSDARs, which would be federal actions subject to environmental and judicial review. The length of the public comment period should be sufficient to review the pertinent documents and guidance and provide input to NRC for consideration prior to the document's approval. With the pre-approval of the PSDAR, the licensee, NRC, and stakeholders have been informed and are aware of the process and activities that will occur during decommissioning. The pre-approval will pre-empt any future discrepancies between the regulators, the licensees and stakeholders which could result in excessive delays and additional costs.

Additional Comments on Section E:

Also, provisions should be included that provide financial disincentives for excessively long timeframes for development of decommissioning plans. Non-compliance with decommissioning plans should carry a financial penalty and/or NRC should take over the decommissioning process with the ability to expend funds directly from the decommissioning fund and require new deposits into the fund should a licensee delay its decommissioning planning. Regulations should provide a procedure for instances where a decommissioning plan cannot be approved by the NRC for non-compliance with relevant laws (i.e. WQC, CZMA, Section 106) to prevent extended periods of inaction at the facility site.

F. Questions Related to the Application of Backfitting Protection to Decommissioning Power Reactor Licensees

In Section F, the Staff discuss the application of the Backfit Rule to decommissioning. The State submits that the premise underlying Staff's discussion is incorrect. At the industry's request, NRC promulgated a regulation establishing a framework for the modification of systems, structures, or components that affect the design, construction, or operation of a facility. 10 C.F.R. § 50.109. However, by its terms, § 50.109 does not apply to the decommissioning and decontamination of a reactor site and cannot be an impediment to prompt decommissioning and decontamination of a site. For example, at the Indian Point site, years of radionuclide leaks have contaminated the soil and bedrock as well as the groundwater resources. It is imperative that sites which have hosted power plants be promptly decommissioned and decontaminated and returned to host communities for unrestricted use. NRC, its staff, and licensees may not use § 50.109 to avoid, minimize or delay decommissioning and decontamination of affected sites. Accordingly, the State opposes any effort to apply § 50.109 or expand the backfit concept to the decommissioning and decontamination of power plant sites. Power reactor sites are not exclusive federal enclaves where thinly-capitalized shell corporations can leave subsurface contamination for generations to come.

G. Questions Related to Decommissioning Trust Funds

In Section G, the Staff pose a number of questions related to use of the decommissioning trust funds, beginning with reference to 10 C.F.R. 50.75, which requires a licensee to report to the NRC its reasonable assurance that sufficient funds will be available for decommissioning, and 50.82, which contains, in part, requirements on the use of decommissioning funds. 80 Fed. Reg. 72368. "The NRC currently allows commingling of funds in a single trust fund account to address radiological decommissioning, spent fuel management, and site restoration, as long as the licensee is able to identify and account for these specific funds." *Id.*

As an initial matter, the State does not agree that the NRC's pro forma cost estimate formula is an accurate way of determining accurately the decommissioning costs. Indian Point's subsurface contamination is more extensive than the contamination encountered at other closed reactors, exacerbated in recent months by yet another unanticipated release (or releases to groundwater) from yet-unidentified sources. See Event Report, Event No. 51724 (Feb. 10, 2016), available at <http://www.nrc.gov/reading-rm/doc-collections/event-status/event/2016/20160211en.html>. The presence of subsurface contamination greatly increases the cost of decommissioning and site restoration. For example, the decommissioning cost for the Connecticut Yankee plant originally had been estimated at \$410 million. After site contamination was discovered, however, more than \$1.2 billion (an increase of nearly 200%) was needed for full decommissioning. See U.S. NRC, *Briefing on Decommissioning Funding*, at 25 (Testimony of Paul Gunter) (Feb. 23, 2010) (ML100610257). Similarly, decommissioning costs at the Yankee Rowe plant in western Massachusetts ballooned from an "initial estimate of \$120 million to more than \$750 million, in large part, the result of the spread of groundwater contamination, some readings of elevated tritium in aquifer systems as deep as 300 feet." *Id.* Clearly, the presence of contamination can render NRC's current *pro forma* decommissioning estimates inadequate.

The State encourages the development of a site-specific decommissioning formula, particularly at plants with subsurface contamination, such as the Indian Point site.

Decommissioning Trust Funds should be set up and maintained in a manner providing maximum protection of the fund in a bankruptcy scenario involving the trustee of the funds, whether that be the operator or another entity. The NRC should require public access to the documents creating the trust, if indeed the Trust Fund is a formal trust, including information on who controls the trust. If a provision of federal law protects the trust funds from allocation to creditors in a bankruptcy, the NRC should make clear its position on the applicability of that law to the Decommissioning Trust Funds.

In DTF-1, Staff inquire whether the regulations in 10 C.F.R. §§ 50.75 and 50.82 should be revised to clarify the collection, reporting, and accounting of commingled funds in the decommissioning trust fund that is in excess of the amount required for radiological decommissioning and that has been designated for other purposes, in order to preclude the need to obtain exemptions for access to the excess monies. The State submits that the regulations in §§ 50.75 and 50.82 should be revised to clarify the collection, reporting, and accounting of commingled funds in the decommissioning trust fund. Clarification would provide better understanding of dedicated funding and the projects that would be covered with that specific funding. It would also ensure that funds dedicated to decommissioning activities are not used for other purposes that could jeopardize long term activities and final decommissioning. Moreover, the State submits that spent fuel management should not be funded by decommissioning funds regardless of any excesses that are reported. To the extent that exemptions from trust fund requirements allows the continuation of the generation of nuclear waste without appropriate federal action in siting and

establishing a long term repository for spent nuclear fuel, these exemptions should be eliminated, and responsible federal agencies required to meet the mandates of the Atomic Energy Act.

The State also supports the establishment of entirely separate trust funds for radiological decommissioning, fuel management, and site restoration. Currently, the lack of separate trust funds for non-radiological decommissioning costs allows for confusion and mis-use of decommissioning funds, which are to be used first to pay for radiological decommissioning costs. The State does not believe that the NRC can guarantee of the availability of trust fund monies for nuclear site restoration when funding for radiological and non-radiological cleanup and site restoration is commingled. Without separation of decommissioning funds, overruns in radiological decommissioning could reduce or eliminate available funding for site restoration. Moreover, the State is concerned that lack of federal planning has allowed, and will continue to allow, hundreds of tons of highly radioactive nuclear spent fuel to remain indefinitely on reactor sites, the spent fuel management costs for which were not accounted for in the establishment of decommissioning trust fund requirements. Nuclear licensees currently plan to keep fuel storage pools at maximum capacity until a means for federal transport and disposal is available, with increasing frequency petitioning the NRC – successfully -- to use decommissioning trust funds to pay for long term on-site spent fuel storage during SAFSTOR. Using decommissioning funding for spent fuel storage will further reduce available funding for site restoration and should be prohibited. The State supports a requirement for an independent audit of all relevant trust funds, aligned with realistic decommissioning planning including site restoration costs for subsurface contamination, during the PSDAR approval process.

H and I. Questions Related to Offsite and Onsite Liability Protection Insurance Requirements for Decommissioning Power Reactor Licensees

In Sections H and I, Staff inquire whether requirements for offsite and onsite liability protection insurance should be reduced once a facility enters decommissioning. Staff state that “[w]ith the permanent cessation of reactor operations and the permanent removal of the fuel from the reactor core, operating reactor accidents are no longer possible. Therefore, the need for onsite insurance at a decommissioning reactor to stabilize accident conditions or decontaminate the site following an accident, should be significantly lower compared to the need for insurance at an operating reactor.” 80 Fed. Reg. at 72370. Staff states that the NRC has determined that \$50 million bounds the worst radioactive waste contamination event (caused by a liquid radioactive waste storage tank rupture) once the heat generated by the spent fuel pool in the [spent fuel pool] has decayed to the point where the possibility of a zirconium fire in any beyond design-basis event accident is highly unlikely.” *Id.*

The State submits that an ambiguous threshold like the one Staff proposes here (the point where a zirconium fire is “highly unlikely”) is unacceptable, and that insurance requirements, for either onsite or offsite insurance, must be fully maintained until the possibility of a zirconium fire in a spent fuel pool is zero – that is, until all spent fuel has been removed from pools.

J. General Questions Related to Decommissioning Power Reactor Regulations

In Section J, NRC Staff ask a number of general questions related to existing decommissioning regulations. In GEN-3, Staff seeks feedback on decommissioning plant operator staffing levels in the control room and notes precedent supporting the establishment of alternate-location control rooms, independent of the operating control room. 80 Fed. Reg. at 72371. The State recommends that the shift control function be tied to a physical location. When communications problems occur, it is easier to resolve the condition if the physical location of the individual controlling shift operation is known to all

on site and emergency responders from off site. Since the time needed to respond to emergency conditions is a key factor in safety determinations, any decision which may complicate communications during an emergency should be avoided. Even if the original control room is no longer appropriate due to decommissioning activities, a physical location for the shift control function that has access to all critical controls and instrumentation should be required. A back-up location should also be available if for some reason the original location becomes uninhabitable or otherwise compromised.

General Comments

The Commission's request for an ANPR on decommissioning rulemaking comes after sporadic reviews of nuclear power plant decommissioning requirements over the last 20 years. During that time perhaps the most relevant development was SECY-00-0145 (June 28, 2000, ML003721626). SECY-00-0145 acknowledged, as the ANPR does, that the risk of a zirconium fire in the spent fuel pool at a power reactor leading to a radiological release, even "several years" after the reactor has shut down, is not zero. SECY-00-0145 at 1. Staff stated that "[u]nder certain circumstances when the spent fuel decay heat level is high, uncovering may result in cladding heatup to the point where rapid oxidation could create an exothermic zirconium reaction (commonly referred to as a zirconium fire) with the potential to propagate to a large number of fuel assemblies in the SFP," and that "the offsite consequences of a zirconium fire would be severe." *Id.* at 1. Staff proposed a number of regulations addressing safeguards, insurance, and emergency preparedness that were never issued because of additional research undertaken in response to the events of September 11, 2001, and because, between 1998 and 2013, no power reactors ceased operation.

A recent spate of plant closures without significant advance warning has prompted the NRC to revisit the decommissioning regulations, and the State is in general concurrence that a holistic approach to decommissioning requirements through comprehensive and sensible decommissioning regulations, rather than through the numerous exemptions that plants and host communities have wrestled with in recent years, makes sense.

While consensus and timing may be ripe for generic action, the Staff's observation in SECY 0145 remains true today – a zirconium fire at the spent fuel pool of an operating reactor is still possible even years after the reactor has shut down, and the consequences of such an event would be catastrophic -- especially at a multi-unit site like Indian Point in New York State, housing more than 17 million people, as well as a global financial center, within its 50-mile radius. As such, the State opposes any regulatory regime that results in reduced emergency preparedness, insurance, or other safeguard protections during decommissioning while spent nuclear fuel remains in pools. While the Staff has taken some steps over the last two decades to assess the real risk from a zirconium fire, and that it has identified mitigation measures (for example, a dispersed configuration of spent fuel rods in pools) that would arguably reduce that risk, the State remains concerned that the Staff has not required many of the safety measures advocated by the State. For example, the NRC has explicitly declined to require the expedited removal of fuel rods from densely packed spent fuel pools, over the State's objection. *See* Letter, Alyse Peterson to Secretary, U.S. Nuclear Regulatory Commission, Re: NRC Docket ID NRC-2012-0246 (Dec. 20, 2013), ML13365A336 (recommending that the NRC require nuclear licensees to remove spent fuel from on-site storage pools to dry cask storage as soon as possible); *see also* NUREG 2161, *Consequence Study of a Beyond-Design-Basis Earthquake Affecting the Spent Fuel Pool for a U.S. Mark I Boiling Water Reactor* (Sept. 2014), ML14255A365 at vi (concluding that "[t]he Office of Nuclear Reactor Regulation's regulatory analysis for

this study indicates that expediting movement of spent fuel from the pool does not provide a substantial safety enhancement for the reference plant.”). In considering lesser-protective regulations during decommissioning, the NRC relies here on studies which identify mitigation measures that it says reduce the risk of spent fuel pool fires, but without an unambiguous and enforceable requirement to place spent fuel in a dispersed configuration, or to expeditiously remove spent fuel from pools, the NRC’s identification of potential – but not required – mitigation measures are not relevant here.

The State notes also that to the extent Staff cites “precedent” for the generic actions proposed in this ANPR in the form of license exemptions, these exemptions were facility- or site-specific and not open to public scrutiny or participation in contrast to license amendments or generally applicable federal Administrative Procedure Act rulemaking proceedings. Those exemptions frequently resulted from bi-lateral communications between a licensee and the Staff. Therefore, the use of previously-granted facility-specific exemptions do not provide any precedent for national policy.