Alliance For A Clean Environment
1189 Foxview Road Pottstown, PA 19465

June 7, 2010

Paul Krohn, NRC Branch Chief
NRC, Region 1
475 Allendale Road
King of Prussia, PA 19406-1415

RE: NRC's 5/25/10 Meeting and Unprotective Fire Safety Policies

Dear Mr. Krohn,

This letter is a follow-up to the NRC meeting at the Limerick Township Building May 25, 2010 regarding fire safety. Many of NRC's responses to our concerns and questions need to be clarified. Since different NRC individuals appear responsible for specific issues, we decided to ask NRC to respond to each issue separately about which we have concerns and questions. ACE will be sending separate letters about several issues discussed with us at NRC's meeting plus issues from our review of NRC fact sheets provided at that meeting.

In this letter we will address our long-term fire safety concerns at Limerick Nuclear Power Plant. ACE first contacted you about Limerick's fire safety January 12, 2009. Your response failed to answer our specific questions. At the May 6, 2010 Exelon public relations event, NRC representatives still failed to answer if Limerick was in full compliance with all fire safety regulations. We were told NRC would be prepared to answer that questions at the 5/25/10 NRC meeting.

The NRC official presented to us at the 5/25/10 meeting as the NRC expert on fire safety was vague and unresponsive to our request for a simple yes or no answer to our question about whether Limerick is in full compliance with fire safety regulations. Most disturbing was his casual attitude about what we view as a crucial issue. Full compliance with fire safety regulations can help to prevent a fire that could cause a meltdown and disaster at Limerick Nuclear Power Plant in our region. After what has happened in the Gulf, and knowing that fires at nuclear plants can lead to a nuclear plant meltdown and disaster, we think NRC should be taking a far more serious and protective approach to strict nuclear plant compliance with fire safety regulation.

NRC's fire safety expert said to get a yes or no we would have to be specific. We object to his assertion that the public is expected to know fire safety regulatory details to get a straight yes or no answer about Limerick's full compliance with fire safety regulations. After repeated requests, he finally claimed Limerick was in full compliance. He handed us NRC fire safety fact sheets, none of which turned out to be anything specific about Limerick's fire safety compliance, which was the point of our question.

After careful review of NRC's fire safety fact sheets we are more concerned than ever. It appears NRC caved in to the nuclear industry, just like MMS with deep sea mining safety. ACE identified the issues below. We are requesting detailed written responses to each comment and question.

Fire-Induced Circuit Faults

These have the potential to cause maloperation of plant equipment important to safe shutdown. In 1998, NRC identified inconsistency between positions of the industry and NRC regarding regulations concerning fire-induced circuit failures.

- To avoid NRC enforcement for industry non-compliance, NRC irresponsibility instituted enforcement discretion, allowing the industry to implement compensatory measures, such as staging fire watches for identified circuit failure.
- When NRC or nuclear plant operators identify a fire-induced circuit failure issue, NRC has irresponsibly allowed nuclear plant owners that can't meet requirements, to apply to NRC for

permission to deviate from regulatory requirements by demonstrating to NRC they can ensure they are safe enough.

ACE believes it is negligent for NRC to allow nuclear plant owners to avoid full compliance with fire safety requirements for fire-induced circuit faults simply by claiming to demonstrate they are "safe enough".

- ✓ "Safe Enough" is an unsubstantiated term that can't be justified. This highly subjective standard is not sufficiently protective, given the potential for a fire to turn into a meltdown with disastrous consequences. What does "safe enough" mean? Something is only "safe enough" until it isn't, as in the Gulf of Mexico.
- ✓ It seems impossible to prove anything is "safe enough", short of starting a fire. Explain with specific details what NRC accepts from nuclear plant owners as proof that their plants are "safe enough" without full compliance with NRC's fire-safety regulatory requirements.

Violations and fines for failing to fully meet fire-induced circuit fault regulations will not be imposed on the nuclear industry by NRC.

- ✓ Where is the incentive for nuclear plant owners to comply with NRC fire safety requirements?

NRC caved in to the industry. NRC failed to hold licensees fully accountable, allowing the nuclear industry to avoid full compliance with regulations and enforcement for violations.

- ✓ This is yet another example of why the public believes NRC is more interested in protecting nuclear industry profits over public safely.

Questions about Limerick:

1) **Is Exelon fully in compliance with NRC's fire-induced circuit fault regulations at Limerick Nuclear Power Plant?**
2) **OR, is Exelon claiming Limerick Nuclear Plant is "safe enough" to avoid meeting the most protective fire-induced circuit fault regulations and what credible specific evidence of "safe enough" at Limerick has Exelon provided to NRC?**

Given what is at stake for our region, there is no acceptable excuse for Exelon to avoid full compliance with fire-induced circuit faults.

"Enforcement Discretion" is NOT PROTECTIVE

With much at stake with fire safety regulations, NRC, the agency responsible for protecting public safety, should end any nuclear industry "enforcement discretion". NRC is playing with fire. After what happened in the Gulf of Mexico, it is time for NRC to stop blindly dismissing the potential for disastrous consequences from a fire at a nuclear plant.

Facts show cause for concern.

- June 3, 1999 NRC documented additional problems and issued an Information Notice (IN) 99-17, "*Problems Associated with Post-Fire Safe-Shutdown Circuit Analyses*".
- December 2005, NRC issued a Regulatory Issue Summary, "*Clarification of Post-Fire Safe- Shutdown Circuit Regulatory Requirements.*"
- April 2009, NRC Proposed Revision 2 of Regulatory Guide (RG) 1.189, "Fire Protection for Nuclear Power Plants" – Guidance of analyzing and addressing fire-induced circuit failures.

- ✓ **From 1998 to date (12 years) NRC has failed to require full compliance with its fire-induced circuit fault regulations, in spite of the potential for disastrous consequences.**
- ✓ **NRC claims "enforcement discretion" is not permanent, yet NRC allowed "enforcement discretion" continues to this day. That is both unprotective and unacceptable.**

➢ **It's long past time for NRC to stop caving in to the demands of the nuclear industry to protect their bottom line, and instead demand that the nuclear industry get in full compliance with the most stringent fire safety regulations.**

Alternative Fire Protection Rule

In 2001, in lieu of NRC's existing fire protection licensing basis, NRC modified its fire protection regulations to allow nuclear owners to adopt, on a voluntary basis, National Fire Protection Association (NFPA) Standard 805.

- For NRC to reduce so-called "unnecessary regulatory burdens" and "industry exemption requests" associated with the current deterministic approaches was clearly to accommodate the nuclear industry, not for public safety. NRC should not have provided a "voluntary" alternative to NRC's more protective fire protection rule.

Troubling Issues

NRC abandoned more stringent original requirements to endorse the NEI and industry suggested "flexibility", reduced regulatory burdens, and weakened regulations to avoid exemptions.

➢ **NRC put nuclear industry profits ahead of public safety. NRC acquiesced to nuclear industry convenience over public safety.**
- With a vested interest in the outcome, the Nuclear Energy Institute (NEI) and the nuclear industry developed the guidance accepted by NRC for implementing this new fire safety program involving more nuclear industry flexibility and reducing the regulatory burden associated with fire protection requirements, and reducing the need for licensee exemptions to current requirements.

➢ **"Flexibility" for nuclear plant owners should be a far lower priority to NRC than insuring public safety.**
- "Flexibility" provides convenience for the nuclear industry and likely improves their bottom line, but it clearly does not provide increased protection against fires.

➢ **Original fire safety regulations were established to prevent a nuclear disaster as a result of a nuclear plant fire. Allowing less stringent fire safety regulations increases risks. NRC reduced regulatory requirements to accommodate the wishes of NEI and the nuclear industry to save time and money. NRC clearly valued nuclear industry profits over safety.**
- NRC admits rules, developed by NEI and the nuclear industry, are expected to reduce regulatory burdens and the need for license exemptions and amendments, yet NRC approved these rules.

➢ **NRC can't even get the industry to comply with weaker regulations. NRC is giving the nuclear industry incentives and/or a 6 month extension to follow weaker regulations with which nuclear plant owners should gladly have complied in the past nine years.**
- NRC provided certain enforcement discretion as an incentive for nuclear plant owners to adopt weaker NFPA 805 requirements than those required under licensing, yet nuclear plant owners are still resisting the weaker requirements.
  - ✓ 2006 NRC endorsed the nuclear industry proposal to provide timely clarification of issues emerging at plants transitioning to NFPA 805.
  - ✓ March 2009, 51 reactor units had sent letters of intent, indicating commitment to adopt NFPA 805. NRC issued Revision 1 of RG. 1.205 December, 2009.
  - ✓ 47 reactor units can request an extension of enforcement discretion time to 6 months after the 2nd pilot plant safety evaluation is issued.

Questions about Limerick:

1) **Is Limerick Nuclear Power Plant in full compliance with the most stringent fire regulations?**
2) **Or is Limerick one of the 47 reactors that won't even commit to immediately adopting the weaker standards?**
3) **Specifically, as of June 2010, has Limerick adopted NFPA 805 and is Limerick in full compliance with that?**

Fire Barriers

Even after review of fact sheets, it is still unclear if NRC caved in to the nuclear industry regarding regulations and guidelines to ensure that nuclear plants can be safety shut down in the event of a fire.

Tests indicated the material used by the nuclear industry for fire barriers may not provide their designed fire rating. 1-hour and 3-hour rated Thermo-Lag fire barrier material failed to consistently provide its intended protective function.

There is widespread use of this questionable effective Thermo-Lag fire barrier material by the nuclear industry.

NRC issued numerous generic communications to inform licensees of Thermo-Lag failures and requested nuclear plant owners to develop plans to resolve any noncompliances with fire protection regulations.

- ✓ In 1999 inspectors discovered the fire endurance tests at Shearon-Harris did not satisfy the Generic Letter.
- ✓ NRC publicized conclusions that the fire barrier was indeterminate and began NEGOTIATIONS with the industry for an industry-led resolution.
- ✓ The industry declined to lead this initiative for a fire barrier resolution.
- ✓ NRC backed down and concluded corrective actions would not be required
- ✓ NRC fire tests from 2001 to 2005 indicated that the material used by the nuclear industry did not achieve the fire endurance consistent with its rating.
- ✓ In 2006, NRC issued Generic Letter 2006-03, "Potentially Nonconforming Hemyc and MT Fire Barrier Configurations".

September 2009, NRC published "Draft NUREG-1924, Electric Raceway Fire Barrier Systems in US Nuclear Power Plants" for public comment.

Questions about Limerick:

1. What is the current state of fire barrier use at Limerick Nuclear Power Plant?
2. Is Limerick still using Thermo-Lag or Hemyc anywhere on the site? If so, in what areas?
3. Please provide the complete review done on Limerick's individual use of ERFBS.
4. Has Limerick applied for exemptions?
5. Has Limerick received any exemptions?

Since fires can trigger meltdowns and since fire barriers are designed and constructed to achieve specific fire resistance ratings, and to limit the spread of heat and fire and restrict the movement of smoke, we believe the public deserves clear, easy to understand answers, with full disclosure.

We were told by NRC's "fire expert" in order to get specific answers, we needed to ask specific questions. We spent much time carefully reviewing NRC fact sheets and we have attempted to do that in this letter. Given the potential for an unthinkable disaster at Limerick Nuclear Power Plant, ACE believes NRC now has a responsibility to answer all our specific questions and concerns in this letter, clearly and specifically. Please don't yet again send us more websites, more generic fact sheets, and more non-answer responses. We await your timely response.

Thank You,

Lewis Cuthbert

Dr. Lewis Cuthbert
ACE President

Cc: Senator Casey
Senator Specter
Congressman Sestak
Congressman Gerlach
Congressman Dent
Governor Rendell
Senator Rafferty
Senator Dinniman
Representative Quigley
Representative Hennessey
Representative Vereb