

EDO Principal Correspondence Control

FROM: DUE: 07/24/12

EDO CONTROL: G20120456  
DOC DT: 06/18/12  
FINAL REPLY:

Scott Savett  
Representative Jim Gerlach's Staff

TO:

Belmore, OCA

FOR SIGNATURE OF :

\*\* GRN \*\*

CRC NO: 12-0299

Borchardt, EDO

DESC:

ROUTING:

Operations of Limerick Nuclear Power Plant  
(EDATS: SECY-2012-0332)

Borchardt  
Weber  
Johnson  
Ash  
Mamish  
OGC/GC  
Leeds, NRR  
Dean, RI  
Zobler, OGC  
Schmidt, OCA

DATE: 06/26/12

ASSIGNED TO:

CONTACT:

EDO

Rihm

SPECIAL INSTRUCTIONS OR REMARKS:

Please prepare response to Representative Gerlach for the signature of the EDO. Prepare response in accordance with OEDO Notice 2009-0441-02 (ML093290179). NRR and Region I to provide input to Roger Rihm, OEDO, if required. Roger Rihm will coordinate response with OGC and OCA.

Template: SECY-017

E-RIDS: SECY-01

# EDATS

Electronic Document and Action Tracking System

**EDATS Number:** SECY-2012-0332

**Source:** SECY

## General Information

**Assigned To:** OEDO

**OEDO Due Date:** 7/24/2012 11:00 PM

**Other Assignees:**

**SECY Due Date:** 7/26/2012 11:00 PM

**Subject:** Operations of Limerick Nuclear Power Plant

**Description:**

**CC Routing:** NRR; RegionI; OGC; OCA

**ADAMS Accession Numbers - Incoming:** NONE

**Response/Package:** NONE

## Other Information

**Cross Reference Number:** G20120456, LTR-12-0299

**Staff Initiated:** NO

**Related Task:**

**Recurring Item:** NO

**File Routing:** EDATS

**Agency Lesson Learned:** NO

**OEDO Monthly Report Item:** NO

## Process Information

**Action Type:** Letter

**Priority:** Medium

**Sensitivity:** None

**Signature Level:** EDO

**Urgency:** NO

**Approval Level:** No Approval Required

**OEDO Concurrence:** NO

**OCM Concurrence:** NO

**OCA Concurrence:** NO

**Special Instructions:** Please prepare response in accordance with OEDO Notice 2009-0441-02 (ML093290179). NRR and Region I to provide input to Roger Rihm, OEDO, if required. Roger Rihm will coordinate response with OGC and OCA.

## Document Information

**Originator Name:** Scott Savett of Representative Jim Gerlach Staff

**Date of Incoming:** 6/18/2012

**Originating Organization:** Congress

**Document Received by SECY Date:** 6/26/2012

**Addressee:** Nancy Belmore, OCA

**Date Response Requested by Originator:** NONE

**Incoming Task Received:** E-mail



**Mike, Linda**

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**From:** Belmore, Nancy  
**Sent:** Monday, June 18, 2012 11:40 AM  
**To:** Mike, Linda; Lewis, Antoinette  
**Cc:** Powell, Amy  
**Subject:** FW: From Congressman Gerlach's Office  
**Attachments:** ACE letter received June 18, 2012.pdf

For necessary processing –

Thank you,

*Nancy Belmore*  
*Office of Congressional Affairs*  
*U.S. Nuclear Regulatory Commission*  
[nancy.belmore@nrc.gov](mailto:nancy.belmore@nrc.gov)  
301-415-1776

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**From:** Savett, Scott [<mailto:Scott.Savett@mail.house.gov>]  
**Sent:** Monday, June 18, 2012 11:36 AM  
**To:** Belmore, Nancy; Savett, Scott  
**Subject:** From Congressman Gerlach's Office

Nancy,

We received this letter from Dr. Lewis Cuthbert who is president of a group called ACE which stands for Alliance for a Clean Environment.

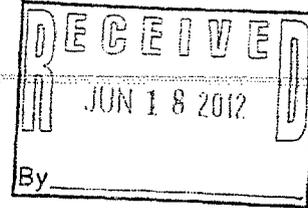
Can the NRC look into the concerns that he expresses in the letter and provide our office with a legislative response?

Thanks for your help!

Scott Savett  
Office of Congressman Jim Gerlach  
Work #: 610-409-2780  
Fax #: 610-409-7988  
Email: [Scott.Savett@mail.house.gov](mailto:Scott.Savett@mail.house.gov)  
[www.gerlach.house.gov](http://www.gerlach.house.gov)

**Alliance For A Clean Environment**

1189 Foxview Road  
Pottstown, PA 19465



June 14, 2012

**Congressman James Gerlach**

308 Cannon House Office Building  
Washington, DC 20515

Dear Congressman Gerlach,

We have repeatedly made you aware, through letters including detailed information and meetings with you and your staff, about unprecedented harms and threats faced by millions in the Greater Philadelphia Region from the operations of Limerick Nuclear Power Plant.

You have previously chosen willful blindness over reality, dismissing documented evidence presented to you from ACE's 12 year investigations, using the same spin we hear from nuclear industry lobbyists and unsubstantiated claims of no harm from NRC.

Limerick Nuclear Plant is ranked 3rd on our nation's earthquake-risk list and considered a high-risk nuclear plant. Yet, NRC is allowing Exelon to wait until 2017 to complete key seismic safety upgrades.

Since we last contacted you we learned about serious threats for meltdowns at Limerick Nuclear Plant due to 5 fault lines within 17 miles of Limerick, including one right under the site. We informed you previously that earthquakes can lead to loss of power, then loss of cooling water, followed by meltdowns, both in the reactors and fuel pools, as happened at Fukushima.

- An earthquake can disrupt the miles of vital, hard to inspect buried pipes and cables under Limerick Nuclear Plant, leading to loss of power and loss of cooling water, then meltdowns.
- Earthquakes can also cause cracks and leaking in the substandard cement holding the cooling water in Limerick's very dangerous, packed, and vulnerable deadly high-level radioactive waste fuel pools. These are Mark II designs, similar to Fukushima.
- Earthquakes are becoming stronger and more frequent, something everyone should anticipate in PA due to fracking. The January, 2012 USGS study confirmed that fracking can cause earthquakes. Over 4,200 natural gas wells were approved in PA since 2007.
- Of similar concern is the blasting that continues at the quarry bordering Limerick, a concern shared by a high-ranking NRC official.
- The 8-23-11 earthquake in Virginia shook Limerick, triggering an investigation. What could happen from an earthquake at a fault within 17 miles or under Limerick?

Local residents discovered from files on Limerick at the Pottstown Library, that Limerick has serious design flaws, known from the beginning, which can shake the generator just like an earthquake. While the design was abandoned at another nuclear plant, it was supposedly fixed during construction at Limerick. However, the "fix" seems vulnerable to earthquake risk.

A key safety mechanism may not work to safely shut Limerick down in the event of an earthquake, fire, accident, or human error that could lead to a meltdown. Problems continue.

Fire is another serious concern, as we expressed to you previously. A Limerick fire could also disrupt power and cooling water, leading to meltdowns. As you are aware, NRC failed to require Exelon to follow the safest fire safety regulations for Limerick, claiming the second set of regulations established to avoid cost for industry, was "SAFE ENOUGH".

While recent evidence reveals that threats from Limerick operations are increasing, recent news and reports show NRC has completely abandoned its mission to protect public health and safety, as well as the truth.

Instead of taking aggressive action for prevention and precaution, NRC is attempting to cover up reality to help the nuclear industry and government avoid astronomical costs for a U.S. nuclear disaster. There is potential for devastation from a Limerick Nuclear Plant disaster to millions living in the greater Philadelphia region as a result of NRC's recent negligent decisions. There have been enormous increases in population. Highways are overcrowded, especially during rush hour. Over 8 million people live within 50 miles.

NRC actually ignored the lessons of Fukushima, denied the devastating harms from the worst disaster in the history of the world, and weakened already unprotective, lax evacuation plans.

**NRC's BIZARRE Response To Fukushima Is Beyond Negligent. Meltdown Risks at Limerick Nuclear Plant Increased Dramatically, Yet NRC Reduced Safeguards.**

**NRC's Actions Are Indefensible:**

- 1. NRC Joined Exelon To Appeal The 3rd Circuit Court Decision In Favor Of NRDC's Request For An Updated Safety Analysis For Limerick**
- 2. NRC Weakened Standards and Requirements For Limerick Operations**
- 3. NRC Hides and Denies Radiation Risks**
- 4. NRC Pared Down Evacuation Plans and Emergency Drills**

We also call your attention to Limerick Nuclear Plant's latest radioactive spill into the Schuylkill River, the drinking water source for almost 2 million people from Pottstown to Philadelphia. While Limerick routinely discharges radioactive wastewater into the Schuylkill River, and there have been 4 accidental spills in recent years, the 3-19-12 spill reveals details on how Exelon, NRC, PA DEP, and elected officials, including you, abandon public health.

Attached are letters published in the Mercury recently with some of the details on the 3-19-12 radioactive spill and new information on our extraordinary earthquake risks from Limerick. We are also sending a copy of our latest TV show on these issues to your Collegeville office.

**ACE urges you to stop protecting the financial interests of Exelon, a company that failed to provide full, accurate, and timely disclosure on risks and one that doesn't pay a large percentage of its costs of doing business or its fair share of taxes.**

**We ask that you send Scott Savatt to meet with us at 1189 Foxview Road to discuss the dangerous new NRC policies that abandon public health and safety, as well as the most recent information we have on earthquake risks and radioactive spills on any of the following dates: July 17, 18, 19, 20, 26, or 27. Please respond with a date and time as soon as possible, to [aceactivists@comcast.net](mailto:aceactivists@comcast.net).**

Thank you,



Dr. Lewis Cuthbert  
ACE President

Attachments



# OPINION

Thursday, June 7, 2012

**ANOTHER VIEW****Nuclear plant safety should be top concern**

Staff writer Evan Brandt did a great job of presenting new issues in "On the Fault Line" in The Mercury on May 20. The Mercury laid the groundwork for what should be the starting point for a comprehensive, updated safety analysis of the Limerick nuclear plant. Although the Nuclear Regulatory Commission should be our watchdog, it stands squarely in the way of crucial new scrutiny.

NRC's stance is not surprising. In 1981, before Unit 1 was completed, LEA (the predecessors of ACE) filed a suit on behalf of the public against the Atomic Energy Commission, predecessor of NRC. Even back then, it had too cozy a relationship with PECO (now Exelon). The Mercury aptly titled the report of that story, "David Against Federal Goliath" (Sept. 28, 1997). In it, LEA charged Limerick with: 1) violating the National Environmental Policy Act and 2) not considering safety-enhancing nuclear design alternatives for Limerick. The suit dragged on for nine years, but LEA won its fact-based case in federal court. The judge's ruling was a major embarrassment for the ABC, but it was too late for real safety. Limerick was already constructed.

We are very concerned about the design flaws of Limerick's aging GE Mark II Boiling Water Reactors. Ordinary reactor operations can produce an internal seismic reaction similar to a major earthquake, causing possible catastrophic containment failure. An accident in 1972 at a West German plant was the first sign of that trouble: the forces ruptured the wall of the wet well.

GE notified PECO of the reactor problems in 1974. Other nuclear plants sued GE, or were scrapped, but not Limerick. PECO braced the reactors with expensive engineering and construction work, passing the new costs onto their ratepayers. So, after being promised that Limerick's energy would be too cheap to meter, rate-

payers were burdened with monumental increased costs while PECO raked in huge profits (Phila. Inquirer August 13, 1984). We worry about why a safety test for Limerick's GE Mark II reactor and NRC's response to it are both missing from one of PECO's Final Analysis Safety Report volumes in the library.

We know that an earthquake triggered Fukushima's multiple meltdowns by causing loss of power and loss of cooling water. The Aug. 23, 2011 Virginia earthquake caused tremors at Limerick. Limerick is ranked third on our nation's earthquake risk list. Despite all these facts coupled with quarry blasting on the border of Limerick's property and possible earthquake risks from fracking in Pennsylvania, the NRC still resists updating its safety analysis for the Limerick Nuclear plant.

When a concerned mother requested information about the nearest faults to the nuclear plant, NRC sent her one of the maps shown on The Mercury's front page on May 20, highlighting the Ramapo and Chalfont Faults. Following that, our own research at the Pottstown Library, led us to PECO's 1974 Geological Survey map. It highlighted the Sanatoga Fault right under the plant site. That map was also featured on the Mercury's front page.

We showed the 1974 map to NRC officials at their public meeting on April 18. Each of them denied ever having seen it before. NRC says that earthquake risks were assessed before Limerick construction began. However, Limerick's first reactor was rolled onto the site in 1972, but the seismic study was not completed until 1974.

We feel that, because of Limerick's troubled history, plus evolving understanding of earthquake risks and their relationship to catastrophic events, the plant should shut down before it melts down.

**CHARLIE and BETTY SHANK**  
Pottstown

Guest  
Columnist

# OPINION

## Limerick nuke plant should be shut down

Limerick Nuclear Plant's latest March 19 radioactive spill is the tip of the iceberg. Since 1985, Limerick routinely and accidentally released radioactive wastewater into the Schuylkill River. There's never been independent radiation monitoring for all radionuclides released, including spikes from spills. NRC, the lax oversight agency, never tested. Exelon, Limerick's owner, controls all monitoring, testing, and reporting.

Guest  
Columnist

Truth is, without an alert Limerick guard and the April 13 Mercury article by Evan Brandt, it's likely you wouldn't know about the March 19 radioactive spill. You can't see, smell, or taste radiation.

Limerick's March 19 radioactive spill provides another example of why we can't trust Exelon for full, accurate, timely disclosure, and why we can't depend on agency or elected officials for protection.

- Exelon's delayed notification (23 days late) denied people the opportunity to protect themselves. It was too late for independent testing or reducing exposure from elevated radiation levels in water for drinking, cooking, bathing, etc.

- Water companies didn't test or stop intake from the Schuylkill River during the entire spill. Only Exelon tested.

- 16 hours after the spill, Exelon told NRC. NRC failed to test or immediately inform the public.

- 40 hours after the spill, Exelon informed Governor Corbett, state and local officials. Not one secured independent testing or informed the public.

- NRC Rules were violated, yet NRC failed to require meaningful penalties.

Exelon and NRC's absurd claims of "no risk" defy logic and reality.

- The March 19 spill blew off a man-hole cover, lasted for hours, and caused visible erosion, yet the size of the spill was understated, using terms like "overflowed briefly" and "puddle."

- Approximately 15,000 gallons of radioactive reactor water spilled with toxic cooling tower water estimated from 3,000 to 10,000 gallons per minute.

- Cooling tower water is not clean as claimed. Hundreds of pounds of toxic, corrosive chemicals are added daily to Limerick's cooling towers.

- Only tritium? A shameful scam! Over 100 radionuclides are associated with operating Limerick. Limerick's own radiological monitoring reports identify many radionuclides in water, including Iodine-131, Strontium-90, and Cesium 137.

Limerick's radioactive discharges,

both routine and spills, are not just tritium. Even if they were, Limerick's spill threatened human health.

- Research shows the smallest tritium dose can lead to cancer, tumors, cell damage, mutations, developmental abnormalities, and genetic reproductive effects. One Limerick tritium sample was five times the U.S. limit.

- Tritium's "so-called safe" U.S. limit is 20,000 pCi/L. Safe? Hardly! It's seven times the European limit.

Drinking water for almost two million people from Pottstown to Philadelphia is at risk from Limerick Nuclear Plant operations. For details on unprecedented threats and harms to the Schuylkill River, a vital drinking water source for so many people, and for radioactive threats to groundwater, [www.acereport.org](http://www.acereport.org).

1. Limerick cannot operate without poisoning the Schuylkill River with many radionuclides and other toxics, or depleting this vital drinking water source. Every year Limerick operates threats increase. A permit doesn't make it safe.

2. Groundwater under Limerick is already radioactive. Monitoring required to determine actual direction and distance of radioactive contamination has not been done. Fifteen monitoring wells on 600 acres, placed by Exelon, are unreliable and inadequate in a fractured bedrock aquifer.

Limerick's radioactive threats can go undetected, unreported, and unaddressed. Water companies are not required to do the monitoring, testing, and reporting, or filtration that could better protect your water from all the radionuclides in Limerick's discharges into the Schuylkill River. While that would be very costly, the ultimate costs for ignoring Limerick's radioactive discharges are astronomical. Exelon should pay for radiation filtration at water treatment plants.

If your water comes from the Schuylkill River or a well within several miles of Limerick Nuclear Plant, you could minimize Limerick's radioactive threats to your drinking water with a reverse osmosis filter, including pre and post carbon filters. Exelon should pay!

The only way to stop Limerick's radioactive and other toxic threats to vital water resources is to close Limerick now. Ask elected officials and candidates if they will speak up to protect our water by calling for Limerick Nuclear Plant to close now.

DR. LEWIS CUTHBERT  
ACE President