



**The Alliance For A Clean Environment**

1189 Foxview Road  
Pottstown, PA 19465

April 21, 2010

**Gregory B. Jaczko, Chairman**  
**U.S. Nuclear Regulatory Commission**

Mail Stop O-16G4  
Washington, DC 20555-0001  
Fax: (301) 415-3504  
Email: cmriaczko(anrc.-ov

**RE: Cancer Study Around U.S. Nuclear Power Plants**

Dear Chairman Jaczko,

The Alliance For A Clean Environment is a tri-county grassroots environmental group focused on links between radiation released from Limerick Nuclear Plant since it started operating in 1985 and the alarmingly high rates of cancer in our community, especially in children, (already documented with four cancer studies). Highly elevated infant and neonatal mortality, and other environmentally related diseases and disabilities are also documented with state data.

There is no doubt in our minds that Limerick Nuclear Power Plant's routine radiation emissions are a major factor in all of this. For 25 years Limerick Nuclear Power Plant has routinely released a broad range of radionuclides into our air and water. These radionuclides make their way into the soil, food, and people. The long-term synergistic, additive, and cumulative harmful health impacts from all routes of exposure are unknown, but obviously significant.

If the protocol for this proposed cancer study is not designed to identify and disclose the whole truth, we believe the potential outcome can result in increasing cancers and a broad range of other environmentally related diseases and disabilities in future generations in our region and around other nuclear plants trying to get their licenses extended and approval for uprates. It could also insure increased cancers where new nuclear plants are being proposed.

We are extremely concerned that NRC's involvement in a cancer study around nuclear plants will not lead to full and unbiased disclosure, due to NRC's undeniable preconceived bias. During our 10-year investigation on Limerick Nuclear Plant's links to our health crisis, NRC officials repeatedly and publically made unsubstantiated, indefensible, and illogical public claims that radiation emissions from nuclear plants are too small to cause harm. These unsubstantiated and irresponsible NRC comments (confirmed with video) show NRC's predetermined industry bias in such a study. NRC blindly defends the nuclear industry and their own policies with nothing more than calculations, estimations, and partial monitoring on radiation releases from nuclear plants, which are all reported and controlled by the nuclear industry that has a vested interest in the outcome.

How can NRC be considered objective in a cancer study around nuclear plants? NRC is the agency condoning and defending unknown amounts of routine and accidental radionuclide emissions into the air from the nation's 104 nuclear reactors. The radiation released doesn't magically disappear. Those radionuclides get into the soil, food, and people yet NRC illogically claims there is no harm. With minimal oversight, NRC allows the nuclear industry to monitor and report on only a fraction of the radionuclides that could be in nuclear plant discharges into rivers and other waterways. Without independent data and documentation from all routes of exposures, ranking NRC officials dismiss harms from nuclear plant radiation exposure. NRC never had comprehensive, reliable or defensible data to make any credible conclusion on actual harms from nuclear plant radiation, yet NRC irresponsibly continues to deny harm to this day.

NRC's conflict of interest in this cancer study and motives to deny harm are obvious to many of us.

1. NRC is complicit in the harm, promulgating and overseeing regulations for "permissible" radiation exposures to the public.
2. Many top NRC officials have an industry bias and mentality, since they come from the nuclear industry.
3. 90% of NRC funding comes from nuclear power reactor licensing fees. NRC stands to gain from reactor license extensions and new reactor construction.

**We have no confidence in NRC's objectivity and therefore strongly OPPOSE having NRC fund and oversee a health study, which would clearly be a direct conflict of interest. It is not credible for NRC to assess how well its own regulations and oversight are performing. A reliable cancer study protocol must be comprehensively designed, thoroughly conducted, and fully funded by a completely independent agency and that is clearly not NRC.**

- **NRC should not be directly involved in defining or conducting a health study related to nuclear plants for reasons listed above and many others. Why would anyone believe NRC would sign off on a study conclusion that reveals they have been negligent in their unsubstantiated conclusions about radiation from nuclear plants after all these years?**

The nation cannot afford another "inconclusive by design" study, especially one about the harmful impacts of radiation emissions from nuclear power plants. If NRC controls or remains involved in this study in any way, that will hurt, rather than help, communities already impacted by nuclear plant radiation emissions as well as those where new nuclear plants are proposed. We, and likely many other communities, will consider the study to be industry biased and can have no confidence that it will provide full and accurate disclosure of harms. We believe a study involving NRC will attempt to refute all the previous cancer studies already suggesting obvious links between radiation released from nuclear power plants and cancer.

NRC's objectivity is not only in question. We question NRC's motive for requesting a cancer study at this time. Based on previous experience in this community, we suspect this could be another politically driven cancer study, this time with an objective of muddying the waters to assist efforts for a "nuclear renaissance" and to defend what we think is the obviously dangerous practice of re-licensing old nuclear plants.

The design of the cancer study protocol will determine the outcome. If those paying for the study and designing the protocol have a preconceived political and biased agenda, the study outcome can be manipulated in many ways to reflect preconceived conclusions, in spite of the facts. A previous politically driven cancer study in our community has taught us a great deal about the politics of cancer studies. An elected state official attempted to defend her denial of harm to protect polluters, by wasting \$295,000 of taxpayer money on a 5th cancer study on our community, even though four previous studies already documented alarming elevated cancers. The PA Health Department's politically driven cancer study on behalf of a biased state official, violated ethical breaches toward this community under the International Guidelines for Ethical Review of Epidemiological Studies (IGERES). The PA Health Department manipulated data to hide results and made inaccurate and misleading conclusions.

Many studies already show elevated cancers around nuclear plants. We suspect NRC's request to do a cancer study is an attempt to refute cancer studies in Europe and the U.S. already showing high rates of cancer around nuclear plants, especially in children. Germany decided to close their nuclear plants by the early 2020s to protect their children as a result of a cancer study around German nuclear plants. Yet, despite so many cancer studies showing elevations of cancer around nuclear plants, U.S. politicians are attempting to build as many as 100 more. We believe NRC's cancer study could be a planned tactic to be used as a tool in the arsenal of the nuclear industry and politicians to deny harm and to achieve their agenda for public support on approval for new nuclear plants and re-licensing.

The only way to use limited funding wisely to credibly address the link between nuclear power plant radiation releases and elevated cancers is to delegate and award complete control of the study protocol

and funding to a totally unbiased agency, with the agreement that there be a process totally open to the public with full and fair public participation. Our suggestion is the National Institute of Environmental Health Sciences (NIEHS), that we believe is capable of producing an independent peer reviewed study. We believe an independent study should be comprehensive and expanded to include all health effects associated with living near nuclear power plants. The mission should be "to reduce the burden of environmentally associated diseases and disabilities by defining how environmental exposures affect health, how individuals differ in their susceptibility to these exposures, and how these susceptibilities change over time. That would begin to assess nuclear plant radiation impacts on health.

The NCI 1990 study's methodology was broadly and professionally criticized as significantly flawed. We, like others, are opposed to the NRC study being replicated. A new health study should not incorporate the same NCI mistakes.

Without comprehensive, independent, continuous year-long monitoring data from routine air and water releases of all radionuclides, it is impossible to know how much health harm is done by the synergistic, additive, and cumulative radiation exposures resulting from the routine and accidental radiation releases from nuclear plants. Without this data routine and accidental spikes go unaddressed. This lead to inaccurate conclusions about risks. Risk cannot accurately be determined without including synergistic, additive, and cumulative harmful impacts from all routes of nuclear plant radiation exposures, including air, water, soil, and food. To accurately draw a conclusion about links, you first need to determine exactly how much of each radionuclide was released into the air and water over an extended period of time.

NRC has never required comprehensive, independent, continuous monitoring data for each of over 100 radionuclides from each source that nuclear plants can be releasing into the air around nuclear plants.

- To accurately assess related health risks, one year of continuous, comprehensive monitoring needs to be done for each radionuclide associated with nuclear power production from each source at the nuclear plant. Risks cannot be determined by calculations or estimations, especially when done by the nuclear industry, with a vested interest in the outcome.

There is no comprehensive, independent, continuous monitoring data for all radionuclides likely to be in the radioactive discharges to river or other waterways.

- Accurate risks cannot be accurately determined with all monitoring, testing, and reporting controlled by the nuclear industry, with a vested interest in the outcome. Monitoring results can easily be manipulated with use of arbitrary detection limits being set at high levels, then only reporting on radionuclide levels above the high arbitrary limits. All monitoring data should be reported with limits starting at zero. Given the extreme threat from any level of radiation exposure, all detection limits should be based on any level above zero, whether air or water monitoring.

We believe testing should be expanded on milk, fish, and food grown in fields for all released radionuclides and their decay products.

To accurately determine risk, we also urge in-body testing for all released radionuclides and their decay products. Testing should include the breast milk of mothers and the baby teeth for strontium-90.

There is a lot at stake with a politically charged study on nuclear power plants. If conclusions are to be made about nuclear power plants, they must be based on an unbiased scientific collection of all the evidence for the most complete and accurate picture. The nation needs and deserves full and accurate disclosure of the whole truth. It is not enough to collect cancer registry data. If money is to be spent on determining harms from radiation emissions from nuclear power plants, infant and neonatal mortality, birth defects, thyroid disease, and all other diseases and disabilities associated with nuclear plants need to be collected and evaluated. At nuclear plants like Limerick with cooling towers, the harmful impacts from the massive amounts of particulate matter, all respiratory diseases, heart attacks, and strokes should also be included.

Our community, and we suspect most others impacted by nuclear power's pollution, can't afford to have more baseless, manipulated, and biased conclusions which lead to making things worse. We remind NRC, that since Limerick started operating in 1985, childhood cancer rates soared from 30% higher than the national average in the late 1980s to 92.5% higher than the national average in the late 1990s. Thyroid cancer rates increased by 128% from the mid 1980s to the mid 1990s and are far higher than the national average. Anecdotal evidence suggests that thyroid diseases are widespread and alarming. Many other cancers are documented to have increased dramatically and skyrocketed to rates far higher than national and state averages. Infant and neonatal mortality rates are documented to be far higher than the state average and even higher than Philadelphia and Reading. Learning disabilities increased by 94% (1990 to 2000), double the state average increases. Autism rose in that same time period by 310%. Other health problems are also far higher than the state average or Philadelphia.

Cancer threats from Limerick Nuclear Plant's radiation emissions will keep increasing as long as Limerick continues to operate. We even face increased threats from Limerick Nuclear Power Plant's "uprates". We also face Limerick relicensing that would ensure radiation emissions into our air, water, soil, food, and people for another 20 years.

We are convinced, with good cause, that a biased and unsubstantiated cancer study conclusion that attempts to dismiss nuclear plant radiation emissions as a major factor in our already elevated cancer rates will ensure still higher rates of cancer and more suffering in future generations.

Unfortunately, through our ten-year investigation on Limerick Nuclear Plant's threats to our region, ACE has lost all confidence and trust in NRC's conclusions and objectivity. NRC's industry-biased comments, conclusions, and inaction on many issues were difficult for us to understand, until we realized that those making major NRC decisions had been long-time nuclear industry employees. Letters and videos document many examples of NRC's unsubstantiated claims, inconsistent and illogical conclusions, failure to take timely action on reported risks, failure to require compliance with regulations, and unprotective positions, such as NRC's failure to require protection against a 9/11 type terrorist attack even though terrorists have stated their intent to attack nuclear plants. NRC has shown repeatedly that they value the profits of the nuclear industry more than public health and safety.

Clearly, we believe there is good cause to ask NRC to step away from this study and to support the most independent, comprehensive health study possible. This community and the nation deserves nothing less. We are at a turning point both in this community and in the nation.

We request that this letter be entered as part of the official record for this planned study.

Respectfully,



Dr. Lewis Cuthbert  
ACE President

CC: President Obama  
Senator Casey  
Senator Specter  
Congressman Dent  
Congressman Gerlach  
Congressman Sestak  
Energy Secretary Chu  
Health and Human Services Secretary Sebelius

**McKelvin, Sheila**

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**From:** ExtensionRequest, EDO  
**Sent:** Thursday, May 13, 2010 12:39 PM  
**To:** ExtensionRequest, EDO; McKelvin, Sheila  
**Cc:** Mike, Linda; Champ, Billie  
**Subject:** RE: Transfer Request for G20100255/LTR-10-0170/EDATS: SECY-2010-0232

RES is requesting transfer to OPA.

Kathy

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**From:** ExtensionRequest, EDO  
**Sent:** Thursday, May 13, 2010 12:34 PM  
**To:** McKelvin, Sheila  
**Cc:** Mike, Linda; Champ, Billie  
**Subject:** RE: Transfer Request for G20100255/EDATS:SECY-2010-0232

Sheila,

I am checking with RES.

Kathy

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**From:** McKelvin, Sheila  
**Sent:** Thursday, May 13, 2010 12:25 PM  
**To:** ExtensionRequest, EDO  
**Cc:** Mike, Linda; Champ, Billie  
**Subject:** RE: Transfer Request for G20100255/EDATS:SECY-2010-0232

I'm confused – the incoming is not from Congress, so why is it being reassigned to OCA. The staff's e-mail indicated that Scott Burnell will take the action – Scott is in OPA. Are we reassigning to OPA?

Sheila

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**From:** ExtensionRequest, EDO  
**Sent:** Thursday, May 13, 2010 12:19 PM  
**To:** McKelvin, Sheila  
**Subject:** RE: Transfer Request for G20100255/EDATS:SECY-2010-0232

Sheila,

I'm sorry I forgot to add.

It is LTR-10-0170.

Kathy

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**From:** McKelvin, Sheila  
**Sent:** Thursday, May 13, 2010 12:01 PM  
**To:** ExtensionRequest, EDO; Mike, Linda  
**Subject:** RE: Transfer Request for G20100255/EDATS:SECY-2010-0232

What is the LTR number associated with the ticket?

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**From:** ExtensionRequest, EDO  
**Sent:** Thursday, May 13, 2010 11:35 AM  
**To:** McKelvin, Sheila; Mike, Linda  
**Subject:** FW: Transfer Request for G20100255/EDATS:SECY-2010-0232  
**Importance:** High

Sheila/Linda,

Please see the transfer request below. Let me know if you will be transferring to OCA. I will then cancel our green ticket.

Thanks,  
Kathy

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**From:** Johnson, Kevin  
**Sent:** Thursday, May 13, 2010 11:27 AM  
**To:** ExtensionRequest, EDO  
**Cc:** Williams, Kevin  
**Subject:** Transfer Request for G20100255/EDATS:SECY-2010-0232

Tasking No. G20100255/EDATS:SECY-2010-0232

Current EDO Due Date: Appropriate Action

Current Office Assigned (RES) Office of Nuclear Regulatory Research

Proposed Office of Reassignment: OPA

Basis for reassignment: Scott Burnell, has agreed to take the action item. OPA is developing the response.

Approved by Jennifer Uhle, RES/DSA

Thank you

Kevin D. Johnson  
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RES/PMDA/HCCB  
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