Congress of the United States
Washington, DC 20515

March 8, 2006

The Honorable Nils J. Diaz
Chairman
Nuclear Regulatory Commission
Washington, D.C. 20555

Dear Mr. Chairman:

I am writing to request information regarding the recent nuclear reactor safety problems in Illinois, including the revelation that Exelon may have failed to inform the public or the proper authorities when millions of gallons of water containing tritium were released into the surrounding communities on more than one occasion during the past decade.

As you know, I have long been concerned about whether there are any adverse health impacts associated with living near nuclear reactors. In fact, even before Exelon disclosed these leaks, which took place as early as the mid-1990s, I wrote you regarding a situation in Illinois that caused me grave concern (please see http://markey.house.gov/docs/homeland_security/iss_nuclear_ltr050218.pdf).

My January 19, 2005 letter was motivated by the ordeals of the Sauer family, former residents of Minooka, IL, which is located close to the Dresden nuclear power plant. The family has recently relocated because of concerns about the health impacts associated with living near the Dresden plant, which were heightened because of their daughter's brain cancer. In June 2003, the NRC was presented with data obtained from the Illinois Department of Public Health (IDPH) that indicate that in Grundy County, IL between 1995-99, the infant mortality rate has doubled, there has been a nearly 400% increase in pediatric cancer and a 38% increase in cancer among those aged 28-44 years old (while the same statistic for all of IL decreased by 8%). Moreover, other statistics show that the incidence of leukemia was 50% higher in men and 100% higher in women in Grundy County than it was in the rest of the State. In its responses to the Sauers, NRC consistently ignored these statistics and have instead cited a 1990 National Cancer Institute (NCI) study entitled "Cancer in Populations Living Near Nuclear Facilities", which has numerous flaws in design, since, as the authors themselves stated, the limitations in the design were accepted so that "it could be completed in a timeframe that was relatively short for a survey of such magnitude."

I asked you numerous specific questions about the alarming health statistics for Grundy County, the general issue of health impacts associated with living near nuclear reactors, and about your views of the NCI study. You failed to provide me with answers to most of my questions, were unable to explain the health statistics for Grundy County, but also

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continued to maintain your confidence that there is no such health risk even in the face of these statistics. Consequently, during both the House Energy and Commerce Committee markup and conference Committee consideration of last year's Energy Bill, I offered amendments to create a $10 million peer-reviewed competitively selected grant program at the Department of Energy to study the problem. Although the need for my amendment was heightened even further by the June 29, 2005 report by the National Academy of Sciences that there is "no safe level of radiation" (see http://markey.house.gov/index.php?option=com_content&task=view&id=1078&Itemid=132, the amendment was rejected twice, largely along party lines (see, for example, Roll Call Vote on Markey Amendment #35, defeated 16-23, cited in House Report 109-215, Part 1, at P. 187 http://frwebgate.access.gpo.gov/cgi-bin/getdoc.cgi?dbname=109_cong_reports&docid=f:hr215p1.109.pdf).

My concerns have only been heightened with the recent revelations that three nuclear reactors owned by Exelon leaked vast amounts of tritium, in some cases at levels far in excess of federal standards, during the past 10 years. It is simply no longer credible nor acceptable, in the face of these disclosures, to dismiss the health concerns of the communities living near these facilities in the absence of serious and thorough study. And while the Commission has announced that it would inspect all nuclear reactors in Illinois in the wake of these disclosures, it is simply neither credible nor acceptable for the Commission to view this as a local problem when the reality is that nuclear reactors all over the country may be spewing radiation into surrounding communities. Accordingly, I request that the Commission take the following actions:

1) Direct the NRC staff to undertake inspections of all reactors which may be at risk of leaking tritium, instead of focusing on reactors in Illinois alone;
2) provide specific answers to the questions posed in my letter of January 19, 2005;
3) Report on the facts and circumstances surrounding the leak of tritium by Exelon in Illinois, including the nature and amount of tritium leaked into the environment; when and where these leaks occurred, and when Exelon reported each of them to the NRC;
4) Report on whether, in light of the BEIR VII report indicating that there is no safe level of radiation and the revelation that people living near the Illinois reactors may have been exposed to unsafe levels of tritium over the course of a decade, the Commission would support the establishment of a competitively selected, peer-reviewed grant program to study this and other matters related to the potential for adverse health impacts for those living near nuclear reactors. If not, why not?
5) Please provide a detailed description of all laws, regulations, and orders, applicable to NRC licensees with respect to leaks of tritium into the environment and reporting of such leaks to the NRC, and a description of the enforcement remedies and applicable penalties for violations of such regulations;
6) Please provide the NRC's assessment of whether the licensee's actions in this matter may violate any provision of the Atomic Energy Act of 1954 or any rule, order, or requirement prescribed by the NRC thereunder, and if so, a description

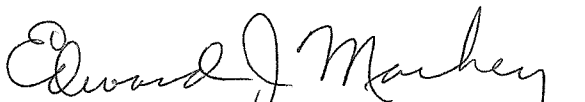
of what actions the NRC has taken (or is taking) in response to any such violations;

7) Please provide a listing of all other leaks of tritium by NRC licensees reported to the NRC over the past 5 years, including date (or dates) of the leak, amount of material leaked, icensee responsible, date upon which the NRC was informed of the leak, date upon which the public was informed of the leak, action taken by licensee in response to the leak, whether tests on groundwater nearby were conducted in order to determine whether safe levels of tritium and/or other radioisotopes (such as radioactive strontium or cesium) have been exceeded (and if so, what the results were), and, action taken by the NRC in response to the leak.

8) When leaks such as those that occurred in Illinois take place, is the licensee required to test groundwater nearby to determine whether safe levels of tritium have been exceeded? What about testing to determine whether other radioisotopes were also leaked at levels in excess of safe standards? If not, would you be supportive of legislation mandating such testing as well as the conveyance of test results to the Commission and members of the public?

Thank you for your assistance and cooperation in this matter. Should you have any questions about this request please have your staff contact Mr. Jeff Duncan or Dr. Michal Freedhoff of my staff at 202-225-2836.

Sincerely,



Edward J. Markey
Member of Congress