

Comments, Marjorie Aamodt, [REDACTED]

Re: Application submitted by AmerGen Energy Company, LLC to renew operating license for Three Mile Island Nuclear Station, Unit 1 for an addition twenty (20) years past year April, 2014.

Upon reading the U.S. Nuclear Regulatory Commission's preliminary assessment, Draft NUREG-1437, I find that you have not considered or adequately considered the following:

- (1) The five mile area population at the time of the 1979 accident at Unit 2 was identified by the Pennsylvania Department of Health and the Centers for Disease Control to be followed for the following twenty (20) years as their health status which was to be considered as decisive concerning the impact the accident had on human health, if any. The bottom-line is that the life-expectancy of people living within five miles of the TMI accident has been shortened as compared to vital statistics for the three counties adjacent to TMI. During the same time period, national life span increased six years. Incredibly the researcher did not appreciate the significance of her finding of shorter life expectancy for those living closest to the TMI accident whereas it is well-known to radiation biologists that shortened life span of a population is an expected result of exposure to ionizing radiation. (Talbot, Evelyn O. et al. Long Term Follow-Up of the residents of the Three Mile Island Accident Area: 1979-1998, 30 October 2002.
- (2) Clearly, the people living near TMI are continuously impacted by ionizing radiation already released to the environment since limited sampling found tritium in just about everything sampled. To disregard this exposure because the source "could not be directly attributed to TMI-1"* is not a responsible assessment of their environmental impact. (*Draft NUREG-1437, Supp.37, p.4-29)
- (3) Furthermore, the REMP program (Radiological Environmental Monitoring Program) takes far too few samples to disprove far higher concentrations of radioactivity, for instance "21 milk samples collected in 2007" and "26 food product samples". The fact that "11" of those milk samples and "24" of the food product samples contained Strontium-90 should be sufficient to move the NRC to prevent any further exposure due to the repair and continued operation of the TMI-1 reactor. It does not matter if the radiation in those food samples "could be attributed to residual fallout from weapons testing", the concentrations in the food supply of TMI area residents only shows that they are a population already impacted by exposure to ionizing radiation in their food supply and should not be additionally exposed by continued operation of the TMI-1 reactor. (Quotes, Id. 4-30)

- (4) Your analysis of the hazards of radon-222 is informative. This gas decays to “particulate radioactive nuclides that give off high energy alpha particles. These radioactive particles are inhaled and remain lodged in the lungs, causing continued exposure.”* Isn’t that what happens when particulate radioactive nuclides are routinely released from an operating nuclear power plant and are taken in by breathing or by eating food containing these particles which release not only alpha radiation but beta, gamma and X-rays directly to the cell? (* Id. 8-28)
- (5) Lastly, I am amazed by the continued oversight of the inadequacy of a ten-mile emergency planning zone. In or around 1985, a study undertaken by the Three Mile Island Public Health Fund showed that emergency planning around TMI had to be for the twenty mile radius due to the unique topography. I am referring to a study made at Clark University, which was published in book form and was to be placed in the TMI area libraries.
- (6) Whereas, the current owners are apparently addressing the matter of intrusion of terrorists on foot, are you satisfied that the health and safety of TMI area residents are protected from crash of a commercial airline due to terrorists’ activity? Of course, you cannot be.
- (7) My husband and I have great interest in the decision you are making. We have friends and family who have remained in Pennsylvania. We visit them on a regular basis and have considered returning to live in central Pennsylvania. We left our home near Coatesville, Pennsylvania simply due to the insensitivity of the majority of the Commissioners to the suffering of residents we uncovered in three communities in York County where cancer deaths rose to more than six times the expected number during within six years following the accident. We surveyed those neighborhoods after we learned on the occasion of a fifth-anniversary forum in Middletown that many residents had symptoms of acute radiation illnesses during the accident. Whereas correlation does not always indicate causation, in this instance it clearly did as follow-up studies at Columbia University and at the University of North Carolina, both studying the ten mile area population found significant increases in cancer incidence, and the latter study related the incidence to the relative distribution of accident radiation.
- (8) I am heartened by your comprehensive address of the alternative sources for generating electricity. The people of central Pennsylvania can have electricity and jobs without incurring additional exposure to ionizing radiation.

I am hoping that your concern for the people of central Pennsylvania who have been exposed to fallout from weapons testing, routine releases from TMI-1 and TMI-2, the TMI and Chernobyl accident releases of potentially as many as 500 different kinds of radionuclides*, clean-up releases, and work-place clean-up and

daily exposures of workers and of family by worker, will lead both the NRC and AmerGen to deny re-licensing of TMI-1. (*Kocker)

Respectfully submitted,

/s/ _____
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