

Chairman Resource

From: Bruce Hannon <energy1434@gmail.com>
Sent: Thursday, October 14, 2021 12:35 PM
To: Chairman Resource
Cc: NRCExecSec Resource
Subject: [External_Sender] mini nuclear reactor proposed for the U of I campus

October 13, 2021

Christopher T. Hanson, Chair, U.S. Nuclear Regulatory Commission

Mail Stop O-16 B33
Washington, DC 20555-0001

Re: Project No. 99902094

Letter of Intent dated May 19, 2021, from the University of Illinois at Urbana-Champaign (ADAMS Accession No. ML21153A059)

Dear Mr. Hanson:

In the Letter of Intent referenced above, the University of Illinois at Urbana-Champaign (UIUC) informed NRC of its intent to apply for a construction permit and then an operating permit for a test Micro-Modular Reactor facility. Speaking not only on behalf of ourselves, but also on behalf of various colleagues and friends who share our concerns, we write in opposition to this project and ask that any and all permits be denied.

Our opposition to this project is based on where UIUC would place the test reactor. The proposed site is on the UIUC campus, which encompasses part of the west side of the City of Urbana and the east side of the City of Champaign. Together, Urbana and Champaign have a population of more than 130,000. The Village of Savoy, which borders both Champaign and Urbana on the south and is within two miles of the proposed site, has almost 10,000 residents. UIUC itself has an enrollment of more than 50,000 students, many of whom live on campus or in apartments immediately adjacent to campus. A large UIUC dormitory complex is situated just a few blocks east of where the proposed reactor would be housed.

The reactor site would be within two miles of downtown Champaign, and within one mile of what is known as "Campustown." Both of those areas are thriving with apartments, condominiums, restaurants, bars, and shops.

The reactor would be housed in a building next to the current UIUC power plant and would become part of the power plant. The UIUC power plant sits immediately east of, and adjacent to, the main branch of the Canadian National Railroad (CNR) tracks. U.S. Route 45 runs along the west side of the tracks. Route 45 is four lanes and is one of the major north-south arteries in the City of Champaign.

Numerous freight trains and passenger trains pass over the CNR tracks adjacent to the UIUC power plant daily. The freight traffic on the CNR tracks includes tanker cars with explosive/flammable contents. The train tracks are elevated well above the ground level of the power plant, so any accident could throw train cars and/or contents tumbling down the hill towards the power plant and the reactor. The presence of the reactor near the railroad tracks could make a derailment far more catastrophic than it would otherwise be without a nuclear reactor being in the mix.

In May of this year, a 17 car derailment occurred on this same CNR line near Pesotum, Illinois, which is a small community approximately 15 miles south of Champaign. Seven cars toppled on their side towards the east. As a result, Route 45 was closed for a couple of days. Cleanup time was estimated to be at least two weeks.

The Union of Concerned Scientists recently published an article by Edwin Lyman, its Director of Nuclear Power Safety, entitled “‘Advanced’ Isn’t Always Better.” In that article, Mr. Lyman made two important points germane to UIUC’s proposed reactor. First, the new nuclear reactors akin to the test reactor that UIUC wants to license are not likely to be significantly safer than today’s nuclear plants. Second, the fuel for these test reactors would have to be enriched more than the fuel used by today’s nuclear reactors, thus making the newer breed attractive to terrorists. Mr. Lyman’s article can be found at this website address: <https://www.ucsusa.org/resources/advanced-isnt-always-better>

A recent article by Michael Bernard posted on Medium.com is also instructive. Its title sums up what he has to say: “Small Nuclear Advocates Refuse to Learn the Lessons of the Past.” The article can be found at this website address: <https://medium.com/the-future-is-electric/small-nuclear-reactor-advocates-refuse-to-learn-the-lessons-of-the-past-8ca1af3293c3>

Although it’s not our task as part of our opposition to propose alternative locations for the proposed test nuclear reactor, there may be some viable locations in the area. The Clinton Nuclear Power plant in Clinton, Illinois, is nearby. A location there would offer fuel security. Also, the decommissioned Chanute Air Force Base in nearby Rantoul, Illinois, has a large remote area that could possibly provide a home for this test reactor. These locations would be within easy traveling distance for UIUC students. While the Clinton and Rantoul locations would not allow the test reactor to be used for the dual purpose of producing steam heat for the UIUC campus, the University projects that the reactor would satisfy only 10% of its steam heating needs. Assuming that projection to be true, the 10% loss would be negligible compared to the safety of the UIUC students living on or near campus, the other residents of Urbana, Champaign, and Savoy, and the many visitors who flock to various UIUC events, such as football and basketball games and concerts.

This nuclear test reactor project should not go forward for the reasons outlined above. NRC should deny any construction or operating permits for UIUC’s proposed test reactor project.

It is our understanding that UIUC plans to seek funding for this project through a grant from the U.S. Department of Energy (DOE). We believe it has already submitted a grant application to DOE. We oppose any grant for this project by DOE for the same reasons already discussed.

We have one other concern. Earlier this year, Dr. Kathryn D. Huff, who was then an assistant professor in the UIUC College of Engineering Department of Nuclear, Plasma, and Energy, publicly and vigorously promoted this project. She is now the DOE Acting Assistant Secretary and Principal Deputy Assistant Secretary for the Office of Nuclear Energy. We don’t know how NRC and DOE are tied together or how they interact in a matter of this nature, but it would be a clear conflict of interest for Dr. Huff to be involved in the decision-making process in any way, either directly or indirectly. We trust she won’t be permitted to have any role in, or exert any influence over, NRC’s decisions on UIUC’s license applications.

Thank you for your consideration. If you have any questions, please feel free to contact the first signer below, Bruce Hannon.

Very truly yours,



Dr. Bruce Hannon

1208 Union St.

Champaign, IL 61821

Cell phone: (217) 621-4900

Email: energy1434@gmail.com

Ann Burger

506 W. Washington St.

Urbana, IL 61801

Cell phone: (217) 390-7795

Email: annhburger@gmail.com

Donald Fournier

2910 Cherry Hills Drive

Champaign, IL 61822

Cell phone: (217) 840-1224

Email: Donald.Fournier1@gmail.com

Dr. Jack Paxton

716 S. Broadway Ave.

Urbana, IL 61801

Cell phone: (217) 819-0667

Email: Jax@ucsd.edu

Joe Hooker

1514 Country Lake Dr.

Champaign, IL 61821

Cell phone: (217) 714-9624

Email: jhooker1514@gmail.com

Pamela J. Richart, Co-Director

Eco-Justice Collaborative

919 West University Avenue

Champaign, IL 61821

Cell Phone: (773) 556-3418

Email: prichart@ecojusticecollaborative.org

cc: Annette L. Vietti-Cook, Secretary of the Commission (NRCExecSec@nrc.gov)