



May 6, 2027

Carson McMullen, PhD, Executive Director
Terrestrial Ecology Society
52674 Shattuck Avenue SW, Ste. 350
Berkeley, CA 94705

Re: Support of nuclear energy to decarbonize the atmosphere and eradicate energy poverty

Dear Dr. McMullen:

We are contacting the Terrestrial Ecology Society (TES) on behalf of the Atomic Garage Movement (AGM). Our mission is to keep current nuclear plants operating and to advocate for updating Nuclear Regulatory Commission (NRC) regulations to accommodate advanced new reactors known as Generation IV reactors. Some 8,367 people signed this letter, including scientists from each of the 17 US National Laboratories, scholars from major universities throughout the US, Europe, South America, and India, nuclear- and infrastructure-related trade association members, and energy and environmental governmental departments from five nations where TES is active. Of those who signed the letter, 763 identified themselves as TES members. People in all 50 of the United States and 14 countries are represented. We have validated the signatures.

When well-known environmentalist and author Elizabeth O'Brian and her friend, cinematographer Jenkins Porter, co-founded TES in 1958, the organization supported nuclear energy. Nuclear plants were considered an alternative to building large dams to produce hydroelectric power. From 1958 to 1964, TES was pronuclear because of nuclear energy's

ability to produce abundant power from a small footprint. At the time, TES's board believed nuclear energy was safer and less damaging to the environment than hydropower and smog-producing coal power¹.

As you know, TES became antinuclear for various reasons. In the early 1960s, a split in the TES membership occurred over the perceived relationship between nuclear energy and nuclear weapons and, in our opinion, an unjustified fear of radiation exposure from operating or potentially damaged nuclear plants. Public debate about these issues caused a split on TES's board; by 1965, TES was committed to protesting and advocating against nuclear energy².

There have been two *major* reactor accidents in the history of civil nuclear power – Chernobyl and Fukushima Daiichi. Chernobyl was not encased in a containment structure and did emit dangerous radiation levels around the site area. Fukushima Daiichi severely tested the containment, allowing some release of radioactivity. As of 2027, Chernobyl and Fukushima Daiichi are the only major accidents in over 20,500 cumulative reactor years of commercial nuclear power operation in 36 countries³.

In nearly 80 years, there have been no deaths at a commercial US-based nuclear plant from radiation exposure. The Three Mile Island, Pennsylvania, accident in 1979 destroyed the number two reactor. No person was injured or killed. The damage was contained to that site, and only a slight increase in background radiation outside the plant was detected. As the emergency unfolded, the containment structure, shielding, and risk mitigation worked as designed.⁴ Admittedly, the communication to the public from the plant owner and the nuclear energy community during that event was abysmal. The nuclear industry has learned from these three accidents.

International cooperation in enhancing nuclear energy safety has been a top priority. We are aware that a nuclear accident anywhere is an accident everywhere. Nuclear industry

¹ McMullen, Carson, *TES, A History of Environmental Warfare 1958 to 2010*, page 187. (2024)

² Ibid, page 341.

³ World Nuclear Organization, *Safety of Nuclear Power Reactors (2022)*

⁴ James, Robert *The Quick Read Nuclear Energy Guide, 21 Easy-toUnderstand Q & A's* pg. 34 (2025).

professionals know safety must be assured if the public is to accept the substantial benefits of the clean, affordable, and reliable energy it can produce.⁵

Regarding TES's concern about used nuclear fuel (radioactive waste), that material is now finding its way to temporary repositories around the United States via a consent-based siting process. Each year, the United States generates approximately 2,000 metric tons of nuclear waste. That amount of waste would fit into one-half the volume of an Olympic-sized swimming pool. And when recycled, that's enough to power 70 million homes and avoid emitting 400 million metric tons of CO₂⁶. In addition, about 6 percent of it contains much-needed isotopes for medical research and treatments, which we can extract from the used fuel⁷. The isotopes alone may provide an economic argument for recycling slightly used nuclear fuel.

Another way nuclear energy can help decarbonize the atmosphere is to produce hydrogen. A nuclear reactor can do so without creating any CO₂ emissions. Nuclear energy can produce hydrogen for various uses via hybrid fuels for industrial thermo use and all types of transportation. We're also successfully using CO₂ as a feedstock in making hydrogen and kerosene for jet fuel with nuclear reactors⁸. Nuclear energy's ability to produce hydrogen (when produced by a nuclear reactor, it is referred to as pink hydrogen) may exceed its importance in generating electricity.

There are also many other applications for tapping directly into the immense heat that new reactors will produce. In your home state of California, Stanford University⁹ and others have recommended its use to desalinate water.

We hope you will join us in believing that our interests may align again. Together, we can work to decarbonize the atmosphere and end energy poverty around the world. We commend TES's

⁵ World Association of Nuclear Operators (WANO), *Performance Analysis: Preventing events by learning from others* (updated 2026).

⁶ Office of Nuclear Energy, *5 Fast Facts About Spent Nuclear Fuel*. (2027)

⁷ ACS Cent. Sci. 2020, 6, 6 827-829

⁸ World Nuclear Association, Austin, Amy, *Hydrogen Production and Uses* (2026)

⁹ Aborn, Justin "et al." *Assessment of the Diablo Canyon Nuclear Plant for Zero-Carbon Electricity, Desalination, and Hydrogen Production* (updated 2026).

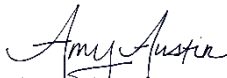
many environmental achievements in water purification, mitigating the overfishing of our oceans, land conservation, eco-friendly tourism, and saving endangered species. As we work together for a net zero carbon future, simple math demonstrates that nuclear energy must be utilized extensively to achieve that. Each year, nuclear-generated electricity prevents enough carbon dioxide emissions to equal taking 100 million passenger cars off the road.¹⁰


We urge the TES board and members to reconsider nuclear energy's role in decarbonizing the Earth's atmosphere and to eradicate energy poverty in developing nations.

Please accept our invitation to come to Algonquin, Michigan, tour the North Rocky Point Nuclear Power Station and the Atomic Garage, and visit with the Chairperson of the University of Michigan's Nuclear Engineering & Radiological Sciences, Maureen Caldwell, PhD. We would be happy to answer any questions and advise on how TES may adopt a strategy to make nuclear energy part of a renewable and sustainable future.

Thank you for your consideration.

Respectfully,


Amy Austin
Sr. Science Advisor


Harshil Varm
Director of Safety & Systems

Attached is an Alphabetical list of signers

¹⁰ Nuclear Energy Institute, *Effects of Nuclear Energy on the Earth's Atmosphere (2025)*