

P.O. Box 303
South Harwich, MA
02661

capedownwindersinfo@gmail.com

To: Joint Committee on Telecommunications, Utilities, and Energy
Senate Chair Michael Barrett and Senate Committee Members
House Chair Mark J. Cusack and House Committee Members
August 5, 2025

via email: ben.minerva@masenate.gov
phillip.hashey@mahouse.gov

Support: S.2237 [Comerford]

Oppose: S.2258 [Cronin]
H.3571 [Scarsdale]
H.3569 [Saunders]
H.3521 [Jones]

On behalf of Cape Downwinders, a Cape Cod grassroots all-volunteer organization working for decades to protect our communities and environment from the dangers presented by nuclear power production and decommission at the Pilgrim Nuclear Power Station in Plymouth, we respectfully submit the following testimony:

FULL SUPPORT of:

S.2237 [Comerford] An Act defining clean energy

Under Chapter 239 of the Acts of 2024, 'fusion' was added under the 'clean energy' definition, opening the door in our state for new nuclear power. The state must not support untested and unproven nuclear power technology such as fusion energy and small modular nuclear reactors nor rely on any nuclear power from other states. We need clean, green, renewable, and safe energy. Nuclear power does not meet that criteria.

While MIT and Commonwealth Fusion Systems [CFS] promote the favorable use of fusion to combat climate change, it is not a near-term solution to our immediate climate crisis and energy needs. Fusion may be a source in the very far future, if at all, but now is not the time to consider unproven and unavailable energy sources in our efforts to reduce carbon emissions today. CEO of the UK Atomic Energy Authority Ian Chapman speaks in *Scientific American* about the ongoing fusion research and responds to their interview question, "Given this varied landscape of fusion projects, how close is practical fusion energy really?" Chapman is blunt. "There is not today a single project underway to build a fusion power plant that will produce energy."¹ Yet, CFS advertises on their

¹ Scientific American, Philip Ball, "What is the Future of Fusion Energy?" page <https://www.scientificamerican.com/article/what-is-the-future-of-fusion-energy/>

website that they “will deliver clean fusion energy to combat climate change”². To advertise their project as a fix to our existential climate crisis today is yet another nuclear false promise.

Testimony IN OPPOSITION to:

S.2258 [Cronin] and **H.3571** [Scarsdale] A Resolve establishing a commission to consider the inclusion of nuclear energy in Massachusetts future energy planning.

A commission to study the “advantages and advisability of including nuclear power” is not necessary. New nuclear power will not impact the climate crisis because that technology doesn’t exist. [see subject matter experts] Also, the recommended commission members are stacked with nuclear power supporters with only “at least one organization opposed to nuclear power generation”. This appears to be a rubber stamp commission. We understand MIT and UMass Lowell are promoters of small modular reactors and fusion energy. A pro-nuclear group, Eco-Nuclear Solutions, states on their website that “nuclear energy is an ecological, safe, cost-effective, grid-ready solution to eliminate carbon emissions and provide for increasing global energy needs”. However, both SMRs and fusion are not “grid-ready” at all. Nuclear power is not the answer to our energy needs.

H.3569 [Saunders] An act relative to carbon emission reduction and advanced nuclear energy generation. Again, “advanced nuclear energy generation” is not the climate fix and does not exist today. Section 2 should be removed to maintain the current limit on importing nuclear power from other states from existing operating plants.

H.3512 [Jones] An Act establishing a special legislative commission to study small modular reactors.

This commission for this study would not include any subject matter experts nor any public input.

While Governor Healey specifically highlighted SMRs in her energy bill, H.4144, citing saving ratepayers energy costs, an analysis of the impact of SMRs in our energy portfolio must be seriously vetted for costs, safety, security, proliferation, and waste management. When taken into consideration, economies of scale will make SMRs much more expensive. Also, more high level nuclear waste will be produced and remain onsite in current substandard conditions. But again, SMRs are not available to meet energy needs to combat climate change.

“But there is not a single commercial SMR currently operating in the U.S. Because so far they exist only on paper”, David Lochbaum, former director of the nuclear safety program for the Union of Concerned Scientists said in an email to the Independent, “SMRs are the safest reactors ever. Their only hazard involves paper cuts.”³ In fact, a 2018 MIT report stated, “We judge that advanced reactors like LWR-based SMRs (e.g., NuScale) and mature Generation-IV reactor concepts (e.g., high-temperature gas reactors and sodium-cooled fast reactors) also possess such features and are now ready for commercial deployment.”⁴ That NuScale project failed and investors withdrew support. M.V. Ramana reports in *Utility Dive*, “In a rational world, no utility or government would invest another dime on these theoretical reactor concepts.”⁵

A discussion on the issues surrounding SMRs and fusion for informed decision making regarding future policy and law must include subject matter experts such as the following:

²Commonwealth Fusion Systems: <https://cfs.energy>

³ Christine Legere, “Healey’s Energy Bill Opens Door to New Nuclear Reactors’, Provincetown Independent, July 23, 2025. <https://provincetownindependent.org/featured/2025/07/23/healeys-energy-bill-opens-door-to-new-nuclear-reactors/>

⁴ MIT-The Future of Nuclear Energy in a Carbon-Constrained World, 2018, page 12: <https://energy.mit.edu/wp-content/uploads/2018/09/The-Future-of-Nuclear-Energy-in-a-Carbon-Constrained-World-Executive-Summary.pdf>

⁵ M.V. Ramana, The collapse of NuScale’s project should spell the end for small modular nuclear reactors, *Utility Dive*, 1.31.24: <https://www.utilitydive.com/news/nuscale-uamps-project-small-modular-reactor-ramanasmr-/705717/>

Dr. Edwin Lyman, Union of Concerned Scientists, Washington, DC-published nuclear physicist and expert witness on SMRs, elyman@ucsusa.org
<https://blog.ucs.org/edwin-lyman/five-things-the-nuclear-bros-dont-want-you-to-know-about-small-modular-reactors/>

Dr. Allison Macfarlane, former Nuclear Regulatory Commission Chair, US Blue Ribbon Commission on Nuclear Waste, critic of SMRs, Professor at University of British Columbia, allison.macfarlane@ubc.ca



Physicist Amory Lovins, Professor at Stanford University, energy economist, ablovins@rmi.org
<https://climatenow.com/podcast/nuclear-power-does-it-have-a-role-to-play-in-the-clean-energy-future/>

Dr. Gregory Jaczko, former NRC Commissioner and Chair, author, critical of SMRs, Gregoryjaczko@gmail.com
<https://www.ewg.org/news-insights/news-release/2024/06/obama-nrc-chairman-noted-clean-energy-professor-tell-ewg-about>

Dr. Arjun Makhijani, Institute for Energy and Environmental Research, published engineer and outspoken critic of SMRs, arjun@ieer.org <https://www.ewg.org/news-insights/news/why-small-modular-nuclear-reactors-wont-help-counter-climate-crisis>

Professor M.V. Ramana, University of British Columbia, Canada, formally of Princeton University, NJ, physicists, widely published author and expert witness on SMRs, m.v.ramana@ubc.ca
<https://sppga.ubc.ca/news-tag/m-v-ramana/>

Tim Judson, Nuclear Information Resource Service Executive Director, lead work on nuclear reactor and climate change issues, timj@nirs.org www.nirs.org

Arnie Gundersen, Fairewinds Energy Director, nuclear engineer, expert witness, arnie@fairewindsenergy.org
<https://climateandcapitalmedia.com/the-nuclear-mirage-why-small-modular-reactors-won-t-save-nuclear-power/>

Dr. Mark Cooper, Vermont Law School, Senior Fellow for Economic Analysis, Institute for Energy and the Environment, economist, markcphd@gmail.com <https://www.nrc.gov/docs/ML2108/ML21082A534.pdf>

Peter Bradford, Adjunct Professor, Vermont Law School, consultant on energy and utility regulatory policy, former NRC Commissioner and NY PUC, perubrad@aol.com

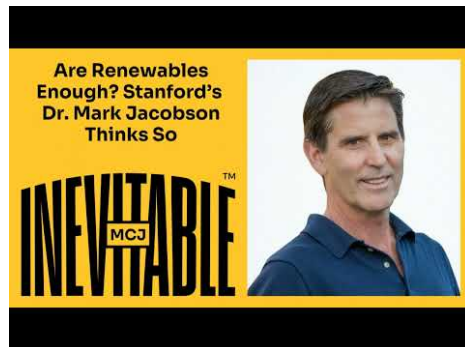
David Schlissel, regulatory attorney and consultant on electric utility rate and resource planning, engineering degrees from MIT and Stanford, expert witness, david@schlissel-technical.com

<https://ieefa.org/resources/small-modular-reactors-still-too-expensive-too-slow-and-too-risky-0>

Johanna Neumann, Environment America Senior Director, national outspoken critic of SMRs, johanna@environmentamerica.org

Erich Pica, Friends of the Earth/Executive Director of National Office, critic and intervenor, epica@foe.org

Prof. Mark Jacobson, Stanford University, Department of Civil and Environmental Engineering, expert witness, critic of SMR, jacobson@stanford.edu



Paul Gunter, Beyond Nuclear Reactor Oversight Project, energy policy analyst, paul@beyondnuclear.org

<https://beyondnuclear.org/small-modular-reactors-will-worsen-climate-change/>

Dr. Joseph Romm, leading expert on solutions to climate change, involved with nuclear energy policy and analysis for over thirty years, PhD in physics from M.I.T. and Senior Research Fellow at the University of Pennsylvania Center for Science, Sustainability, and the Media (PCSSM).

<https://bpb-us-w2.wpmucdn.com/web.sas.upenn.edu/dist/0/896/files/2025/04/SMR-Dead-End-4-14-25-FINAL-1.pdf>

Donna Gilmore, Director, San Onofre Safety donnagilmore@gmail.com <https://sanonofresafety.org>

Thank you for your time and consideration,
Diane Turco, Director
Cape Downwinders/Save Our Bay MA