CHESAPEAKE PSR PHYSICIANS FOR SOCIAL RESPONSIBILITY

SB53 Clean Energy Attribute Credits and Procurement Finance Committee January 26, 2021 -UNFAVORABLE

My name is Dr. Gwen DuBois and I am the President of Chesapeake Physicians for Social Responsibility which vigorously opposes SB 53. This bill would spend taxpayer money subsidizing an aging and potentially increasingly dangerous form of energy, nuclear power, thereby squandering money that could be spent on efficiency and truly renewable solar, and wind as well as other changes to reduce greenhouse gas emissions. This represents a lost opportunity to spend our dollars where it will do the most good to get us to zero greenhouse gas emissions by 2045. The health costs of unmitigated climate crisis: with floods, fires and droughts, will be considerable making SB890 a poor investment and bad policy.

Chesapeake Physicians for Social Responsibility is a statewide organization of physicians and other health professions with over 800 e-activists who support evidenced-based public health policy regarding prevention of nuclear war, toxic exposures and mitigation of climate crises. WE are the state affiliate of Physicians for Social Responsibility which in turn is the US affiliate of two Nobel peace winning international organizations, International Physicians for the Prevention of Nuclear war and International Campaign for the Abolition of Nuclear Weapons.

Clean energy must be compatible with healthy environments and healthy people not just zero emissions. We have opposed nuclear power initially because of risks of proliferation of nuclear weapons: 1) nuclear power requires enriched uranium 235 which can be further enriched to make nuclear weapons; 2) plutonium, which is found in nuclear waste, is the very fissile bomb making element used over Nagasaki. Over time, the amount of bomb grade plutonium in nuclear waste becomes more accessible as the shorter-lived isotopes disappear. The world is awash in plutonium. In addition to proliferative risks, uranium mining is a deadly occupation as documented in studies on Navajo Nation communities. Mine workers have a high risk of developing lung cancer and the pneumoconiosis that destroys lungs known as silicosis.¹

There is also the problem of nuclear waste as our nation has found no long-term safe way to store it though it will require safe storage in perpetuity. Presently, Calvert Cliffs Nuclear Power Plant (CCNPP) has on site 1500 metric tons of high-level waste which grows yearly. As of 2013, there were 1340 tons of high-level nuclear waste including the single high density Spent Fuel Pool (SFP) which contained an equivalent of 6.55 x

1 https://ajph.aphapublications.org/doi/full/10.2105/AJPH.92.9.1410

reactor cores, 82% of which was the high burn up fuel² the reactor core and the SPF requires continuous cooling and loss of coolant could lead to a fire and explosive release of radioactive I131 and Cs 137 among other radionuclides causing widespread contamination, requiring a massive evacuation and creating significant increases in thyroid cancer and solid cancers over time.³

The reason to consider the possibility of an accident despite the good safety record of nuclear power is because of the combination that Calvert Cliffs is an aging nuclear power plant, older than the most (40 and 42 years), at a time when Nuclear Regulatory Commission (NRC) is reducing its oversight.⁴ Even older are the 45-year-old reactors at Peachbottom, incidentally Mark I GE models, the same as the Fukushima Daiichi plants. NRC commissioners rejected staff recommendations for protections against flooding and seismic disasters on the scale of the Fukushima disaster.¹ Current proposals likely to be approved by NRC commissioners include reducing hours and sample sizes of fire protection and other safety inspections, reducing the frequency of such inspections and reducing the time a previous violation has to stay on the books. This combination of changes will make it harder to notice a pattern of unsafe practices before there are consequences.² Nuclear power plants are most likely to fail at the beginning and end of life, a phenomenon known as the "bathtub effect" because of the shape of a graph where events occur at both ends.⁷

Instead of wasting taxpayer money subsidizing aging nuclear power plants, we should be planning for their eventual retirement and replacement with efficiency, solar, wind, expansion of public transportation, investing in forests, and a smart grid.

Chesapeake Physicians for Social Responsibility opposes S890, a wrong-headed way to address the climate crisis.

For further information, please contact Dr. Gwen DuBois, President, CPSR, bikenotbomb@gmail.com.

Email Robert Alvarez based on snf data reported to DOE in 2013(DOE GC859)

² https://www.nytimes.com/2011/04/05/health/05primer.html

³ <u>https://en.wikipedia.org/wiki/Peach_Bottom_Nuclear_Generating_Station</u>

¹ https://thebulletin.org/2019/08/aging-nuclear-plants-industry-cost-cutting-and-reduced-safety-oversightadangerous-mix/#

² https://thebulletin.org/2019/08/aging-nuclear-plants-industry-cost-cutting-and-reduced-safety-oversightadangerous-mix/#

⁷ https://allthingsnuclear.org/dlochbaum/nuclear-bathtub-safety