From: Graham, Karriemah [BPU]
To: Espinoza, Emeli [BPU]

Subject: FW: [EXTERNAL] Please support clean energy (DOCKET NO. QO24020126 – 2024 ENERGY MASTER PLAN )

**Date:** Thursday, June 6, 2024 1:49:23 PM

Please upload the email comment and make public.

----Original Message-----

From: Gray, Dawn [BPU] <Dawn.Gray@bpu.nj.gov>

Sent: Thursday, June 6, 2024 1:28 PM

To: Graham, Karriemah [BPU] <karriemah.graham@bpu.nj.gov>

Subject: FW: [EXTERNAL] Please support clean energy (DOCKET NO. QO24020126 - 2024 ENERGY

MASTER PLAN)

See comment

----Original Message-----

From: Bill.leavens@everyactioncustom.com <Bill.leavens@everyactioncustom.com>

Sent: Thursday, June 6, 2024 12:52 PM

To: Secretary, BPUBoard [BPU] <Board.Secretary@bpu.nj.gov>

Subject: [EXTERNAL] Please support clean energy (DOCKET NO. QO24020126 – 2024 ENERGY MASTER

PLAN)

Dear Board Secretary Sherri L. Golden,

As a New Jersey resident, I'm writing to you on Docket Number QO24020126 to urge you to ensure that the updated Energy Master Plan creates the framework for our state to meet the goal of 100% clean energy by 2035 by providing a certainty for utilities, energy suppliers, and businesses.

The principal role of government is to safeguard the citizenry and promote conditions to enable people to improve the quality of their lives - to make their world better. Compared with the private sector, Government has a proven effectiveness in doing some of the things that make society work - like fighting wars, putting out fires, and managing our system of justice.

In my view, the greatest present threat facing humanity (and every other living thing) is global climate change. The next best time to address this threat is right now. We can stop the man-made component of global climate change if we put defeating it on a wartime footing. We now have technology to change the way we make the baseload power that runs our world. We can also significantly reduce the emission of combustion gases that contribute to world-wide atmospheric and ocean warming.

Here is the first step. Working with the industry, the State of New Jersey can issue build-specifications for different sizes of 4th Generation nuclear fission reactors. The focus should be on developing small, modular reactors that can be manufactured on standardized assembly lines and trucked to wherever they need to be. There is precedent - the Navy has been powering ships with small nuclear reactors for more than half a century.

Just as the U.S. government buys aircraft and naval vessels, contracts can be let to purchase reactors that meet specified performance criteria from selected manufacturers. The State can fund any required production engineering. Further, the State can work with educational institutions to train a corps of operators. Navy personnel have been managing small reactors for a few generations.

While all this is being done, the State can contract with power utilities to lease these reactors and provide technical support services to operate them. Note that utilities do not have to create power - their business is selling it.

Reactors can be introduced to replace the fossil fueled plants that now provide energy to the power grid. Reactors can be sited closer to rural communities to minimize new grid construction. Wherever there is greater power

demand, multiple small reactors can be installed, providing redundancy.

The fertile radioactive element thorium can be used in a fission process. More than 95% of the thorium is consumed in a reaction to make heat whereas less than 10% of the uranium is burned in a uranium plant. Because the radioactive effluent from thorium is 'hotter' for a shorter period, it is difficult to weaponize.

Nuclear waste is a real issue. However, that 'waste' from the first generation behemoth powerplants is really unburned fuel. Fourth generation thorium reactors can use stockpiled radioactive waste in their power production process to literally burn up unburned uranium fuel.

All the thorium we will need in our lifetime has already been mined with the production of rare-earth elements for cell phones. Thorium is 3 to 4 times more prevalent than uranium in the earth's crust.

Currently, the real opposition to nuclear power is based on misinformation, public fear and opinion. Education will have to address that as the US DoE is doing right now.

Decisions about where this technology goes from here must be based on public need and science. We don't have a lot of other sensible energy pathways and we don't have much time.

Sincerely,
Bill Leavens
359 W Mill Rd Long Valley, NJ 07853-3629 Bill.leavens@gmail.com