From: Puco ContactOPSB
To: Puco Docketing
Subject: public comment 19-1641

Date: Tuesday, August 4, 2020 12:37:05 PM
Attachments: GasPlant Testimony BEVIS-08-03-2020.pdf

From: Ogle, Crichton <ogle.1@osu.edu> Sent: Tuesday, August 4, 2020 12:11 PM

To: Puco ContactOPSB <contactopsb@puco.ohio.gov>

Cc: Ogle, Crichton <ogle.1@osu.edu>; Becca Pollard <becca.pollard@sierraclub.org>; Carolina Lopez-Ruiz <lopezruiz.academic@gmail.com>

Subject: Written submission for the Aug. 4th Siting Committee hearing on OSU's proposed gas plant

Dear Siting Committee members,

Attached please find the written statement of Prof. M. Bevis, which briefly discusses the serious financial risk associated with building this plant (he was not able to attend the meeting, and asked for me to present or submit in his stead. Unfortunately I missed the deadline to present in person).

sincerely,

Crichton Ogle
Professor, Mathematics (OSU)
University Senator
Member, University Fiscal Committee

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Presentation by Mike Bevis

The supports of the gas plant argue that a natural gas plant is both cheaper to operate than a coal plant, and produces much less CO2 per unit energy. Both those statements are true—but also misleading. The extraction and distribution of natural gas is now known to involve extensive leaks of methane into the atmosphere, and since methane is a far more powerful greenhouse gas than CO2, this largely offsets the carbon footprint advantage of natural gas over coal. And the competition for gas, in terms of pricing, is renewable energy (**RE**), not coal.

The 'fuels' for solar and wind energy are free, so the cost of RE is very largely the cost of manufacturing the energy capture and storage technologies. Solar panels, wind turbines, and lithium-ion battery manufacturing all follow Wright's law, meaning that their price steadily drops as cumulative production increases. Think computer chips—as the price drops, new applications become viable, demand increases, production increases, and the price drops even further. This is the 'virtuous cycle' of technology development.

Not only is RE cheaper than natural gas now, the price of RE will keep dropping, relentlessly, so its price advantage over natural gas will keep growing, relentlessly. Indeed, as more shale gas companies go bankrupt because they cannot compete with RE pricing *and* make a profit, the price of natural gas is likely to rise in the long term. This is why it does not make sense to make a multidecadal commitment to natural gas right now. It will become a major money loser.

RE already generates more jobs than the fossil fuel industry, and that direct employment advantage is steadily growing too. RE energy prices are predictable, which is a major advantage for manufacturing industries, and this fact could drive additional, indirect job growth in Ohio, and promote industrial recovery.

Last but not least, a very rapid transition to RE is the only clearly viable route to saving our climate system. Climate change, unchecked, will destroy our agriculture and communities with super-charged storms, floods, droughts, wildfires, and scorching heat waves. Climate change is now the single biggest threat to the US and the global economy. As climate change damage accumulates, the pressures on governments, including state governments, to promote RE will become irresistible. That pressure will come from citizens worried for themselves and their children, and from the business community—which will become increasingly unwilling to allow the narrow, short-term interests of the fossil fuel industry to destroy the long-term prospects of the far wider economy. The future establishment of carbon emission taxes is all but inevitable. These taxes will cause a gas plant to be an even bigger money loser.

OSU should embrace and promote RE, to protect Ohio's environment and economy, create large numbers of well paying, non-outsourceable jobs, drive technological innovation, form new viable business ecosystems and opportunities, and make investments that make good business sense, given the strong and inescapable price trends?

Of course, OSU has been operating in a state political framework that systematically obstructs RE and promotes nuclear energy and fossil fuels. The advocates of RE have long pointed to what amounts to legal bribery of the Ohio legislature by the fossil fuel and power companies. Now we are aware of criminal corruption as well. Clean energy industries do not need to corrupt state or national governance, because they can win on their business merits, and because climate change requires us to decarbonize if our economies are going to survive and prosper. The vital and unresolved question is, can we decarbonize fast enough to avoid tremendous human and economic damage?

OSU should position itself on the right side of history. It should also avoid making a predictably disastrous long-term investment.

Michael Bevis

Bevis is a OSU geophysicist who studies the energy industry, technology transitions and climate change. He has taught a course on energy technologies in the Fisher College of Business, and given an invited talks at Shell in Houston and elsewhere on Wright's law and technology transitions.

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Summary: Public Comment of Crichton Ogle, with written statement of Prof. M. Bevis, via website, electronically filed by Docketing Staff on behalf of Docketing