

**STATE OF CONNECTICUT
CONNECTICUT SITING COUNCIL**

Doosan Fuel Cell America, Inc. Petition for a)
Declaratory Ruling, Pursuant to Connecticut Conn.) Petitions 1406 and 1406A
Gen. Stat. §4-176 and §16-50k, for the Proposed)
Construction, Maintenance and Operation of a)
Grid-side 9.66-Megawatt Fuel Cell Facility and)
Associated Equipment to be Located at 600) September 23, 2021
Iranistan Avenue, Bridgeport, Connecticut)

**ALLCO RENEWABLE ENERGY LIMITED’S MOTION TO STAY PROCEEDINGS
UNTIL AN ENVIRONMENTAL IMPACT EVALUATION IS PREPARED**

Allco Renewable Energy Limited (“Allco”) hereby moves to stay these proceedings until the Environmental Impact Evaluation required by Conn. Gen. Stat. 22a-1 is prepared.

I. Background.

On May 11, 2020, Doosan Fuel Cell America, Inc. (“Doosan”) filed a petition (the “First Petition”) for a declaratory ruling with the Connecticut Siting Council (“Council”), as agent for NuPower Bridgeport FC, LLC (“NuPower”), requesting a certificate of environmental compatibility and public need is not required for the construction, operation and maintenance of 9.66-megawatts (“MWs”) of natural-gas-fueled fuel cells and associated equipment (together, the “Project”). The Project would be located in an environmental justice community in Bridgeport that has among the highest hospitalizations and emergency room visits for asthma in the State of Connecticut.

On July 27, 2021, Governor Ned Lamont stated:

“If an air quality alert in CT caused by smoke traveling cross country from western wildfires isn’t a sign that we must take climate action now at all levels of government, I don’t know what is.

Let’s address this crisis — for our children, grandchildren, and future generations.”

Governor Lamont's call to action preceded by less than two weeks the most recent warnings from the United Nations Intergovernmental Panel on Climate Change.¹ *See, e.g., Boston Globe, 'If this is not a call to action, what is?': Following alarming climate change report, officials vow resolve,* <https://www.bostonglobe.com/2021/08/09/science/worlds-fire-now-what/>:

Among the report's many sobering takeaways, it showed that no matter what is done, the planet is expected to warm to 1.5 degrees C over preindustrial levels in the next two decades. That threshold — which represents the lower-bound of the goal set forth in the Paris climate accord — is now unavoidable, according to the report. But what comes next, and whether the planet stays at 1.5 degrees C of warming or barrels ahead to more than 4 degrees C of warming by the end of the century, is up to us and the actions we take in the immediate future.

No new natural gas generation projects, including natural gas fuel cells, should be approved anywhere. The time to stop all approvals of natural gas projects is now. Renewable hydrogen fuel cells are readily available, such as Bloom's fuel cells powered by the Bloom Electrolyzer. *See, e.g.,* <https://www.businesswire.com/news/home/20210714005584/en/Bloom-Energy-Unveils-Electrolyzer-to-Supercharge-the-Path-to-Low-Cost-Net-Zero-Hydrogen>.

In addition to the Bloom Electrolyzer, the United Illuminating Company's parent has experience with renewable hydrogen projects. "Iberdrola has begun construction of what will be the largest green hydrogen plant for industrial use in Europe. The Puertollano plant (Ciudad Real) will be made up of a 100 MW photovoltaic solar plant, a lithium-ion battery system with a storage capacity of 20 MWh and one of the largest hydrogen production systems through electrolysis in the world (20 MW). All from 100% renewable sources." *See,*

¹ The full report is available at: https://www.ipcc.ch/report/ar6/wg1/downloads/report/IPCC_AR6_WGI_Full_Report.pdf.

<https://www.iberdrola.com/conocenos/lineas-negocio/proyectos-emblematicos/puertollano-planta-hidrogeno-verde>.

The severe adverse health effects in Connecticut from fossil fuel generators such as natural gas fuel cells are also acknowledged in DEEP's draft IRP at p.107: "Connecticut experiences some of the worst ozone pollution in the United States. Exposure to unhealthy levels of air pollution contributes to acute and chronic respiratory problems such as asthma, Chronic Obstructive Pulmonary Disease, and other lung diseases. A recent national report, Asthma Capitals 2019, ranked New Haven (#11) and Hartford (#13) among the 100 largest U.S. cities where it is most challenging to live with asthma." There is no doubt that 30MWs of natural gas fuel cells would be reasonably likely to have the effect of unreasonably polluting, impairing or destroying the public trust in the air, water or other natural resources of the state. In addition to VOC emissions and the creation of hazardous wastes, natural gas fuel cells on a per mega-watt-hour basis add as much CO2 emissions as a natural gas power plant, and like such power plants, create more demand for fracking and the methane that is released from such activities, which is 80 times more destructive than ordinary CO2. See, *Fracking boom tied to methane spike in Earth's atmosphere* (August 15, 2019), <https://www.nationalgeographic.com/environment/article/fracking-boom-tied-to-methane-spike-in-earths-atmosphere>.

The continuing poisoning of ratepayers and the continued destruction of the environment by natural gas fueled generators must no longer be tolerated. Approving this project would increase the amount of fossil fuel use than there otherwise would be, accelerating climate change, jeopardizing the continued existence of any threatened or endangered species and resulting in the acceleration of the destruction or adverse modification of the critical habitat of such species.

DEEP has stated that bringing natural gas fuel cells online “would increase carbon dioxide emissions when compared with the expected emissions from the grid over the next 20 years, causing Connecticut to backslide on its climate goals.” *See, PURA review of the combined heat and power project solicitation pursuant to Conn. Gen. Stat. § 16-258e*, docket 18-08-14, *Brief of the Department of Energy and Environmental Protection*, June 7, 2019 at 12.

Natural gas fuel cells do not contribute to the requirements to reduce greenhouse gas emissions in accordance with section 22a-200a. Natural gas fuel cells do the exact opposite—they displace true renewable energy projects, such as solar or, as here, renewable hydrogen fuel cells. The petitioner has submitted an analysis that “cooks the books” under assumptions divorced from reality purporting to show that natural gas fuel cells reduce GHG emissions. But their analysis will be easily disproven.

The Sierra Club has called State support of natural gas fuel cells “irresponsible,” and a “perverse practice of providing handouts to polluting fossil-fuel dependent technologies.”² Natural gas fuel cells are not “green” nor are they “clean.”

The United Illuminating Company’s parent company recently call fossil fuel plants “dirty.” *See, “Feud between energy giants puts state’s climate goals at risk,”* Boston Globe, July 21, 2021 (“NextEra is more concerned about preserving its bottom line and dirty fossil fuel plants than it is about replacing a critical, 30-year-old breaker,” said Susan Millerick, a spokeswoman for Avangrid.”), available at <https://www.bostonglobe.com/2021/07/21/science/feud-between-energy-giants-puts-states-climate-goals-risk/>. And that is exactly what natural gas fuel cell are—dirty.

² *See, “Sierra Club slams California commission for making gas-fired choices,”* <https://www.transmissionhub.com/articles/2015/11/sierra-club-slams-california-commission-for-making-gas-fired-choices.html>.

According to the natural gas fuel cell companies, their fuel cells produce in the range of 1,000 lbs of CO2 per megawatt hour of electricity produced. In recent filings with the Council, fuel cell companies pretend that their natural gas fuel cells reduce CO2 emissions by using old and irrelevant data. ISO-New England reported in March 2021 that the average CO2 footprint of utility grid power was 633 lbs CO2 per MWh for 2019 and has been steadily declining.³

**Table 1-1
2018 and 2019 ISO New England System Emissions (ktons)
and Emission Rates (lbs/MWh)**

Annual System ^(a) Emissions						
	2018 Emissions (ktons)	2019 Emissions (ktons)	Change in Emissions (%)	2018 Emission Rate (lbs/MWh)	2019 Emission Rate (lbs/MWh)	Change in Emission Rate (%)
NO_x	15.61	12.87	-17.6	0.30	0.26	-13.3
SO₂	4.96	2.34	-52.8	0.10	0.05	-50.0
CO₂	34,096	30,997	-9.1	658	633	-3.8

(a) The term “system” refers to native generation here and throughout the report.

Thus, the addition of natural gas fuel cells in Connecticut would, in DEEP’s words, not only cause Connecticut to “backslide on its climate goals,”⁴ *but would result in a 50% increase in CO2 emissions over utility power in ISO-New England.*

II. An Environmental Impact Evaluation Must Be Prepared.

Conn. Gen. Stat. §22a-15 *et seq.* codified the public trust doctrine in Connecticut. (“Declaration of policy. It is hereby found and declared that there is a public trust in the air, water and other natural resources of the state of Connecticut and that each person is entitled to the protection, preservation and enhancement of the same. It is further found and declared that it is

³ https://www.iso-ne.com/static-assets/documents/2021/03/2019_air_emissions_report.pdf

⁴ See, *PURA review of the combined heat and power project solicitation pursuant to Conn. Gen. Stat. § 16-258e*, docket 18-08-14, *Brief of the Department of Energy and Environmental Protection*, June 7, 2019 at 12.

in the public interest to provide all persons with an adequate remedy to protect the air, water and other natural resources from unreasonable pollution, impairment or destruction.”)

The Council has a legal responsibility to consider the unreasonable pollution, impairment or destruction of the public trust in the air, water or other natural resources that would result from building more electric generators fueled by climate-destroying natural gas. *See, Mystic Marineline Aquarium, Inc. v. Gill*, 175 Conn. 483 (1978):

Where the activity challenged may have an environmental impact, [an agency] has the additional responsibility under General Statutes § 22a-19 (b) to consider that impact. Under that statute the agency “shall consider the alleged unreasonable pollution, impairment or destruction of the public trust in the air, water or other natural resources . . . and no conduct shall be authorized or approved which does, or is reasonably likely to, have such effect”

The preparation of an environmental impact evaluation is required pursuant to Conn. Gen. Stat. § 22a-1b(c) for “actions which may significantly affect the environment,” as that term is defined in Conn. Gen. Stat. § 22a-1c. Conn. Gen. Stat. § 22a-1c defines “actions which may significantly affect the environment” as

individual activities or a sequence of planned activities proposed to be undertaken by state departments, institutions or agencies, or funded in whole or in part by the state, which could have a major impact on the state's land, water, air, historic structures and landmarks as defined in section 10-410, existing housing, or other environmental resources, or could serve short term to the disadvantage of long term environmental goals. Such actions shall include but not be limited to new projects and programs of state agencies and new projects supported by state contracts and grants, but shall not include (1) emergency measures undertaken in response to an immediate threat to public health or safety; or (2) activities in which state agency participation is ministerial in nature, involving no exercise of discretion on the part of the state department, institution or agency.

Approving the Project and its use of climate destroying natural gas, which displaces true renewable resources, “could have a major impact on the state's land, water, air, historic structures and landmarks as defined in section 10-410, existing housing, or other environmental resources.”

Approving the Project and its use of climate destroying natural gas, which displace true

renewable resources, without a doubt “could serve short term to the disadvantage of long term environmental goals.” Indeed, DEEP has already stated that is the case with respect to this Project as discussed above. Thus, the first prong of the requirement for an environmental impact evaluation is met.

Here, the second prong is also met because the Project’s activities are “funded in whole or in part by the state.” §16-258e(b). The costs of this Project, which are the net costs of the offtake agreement, will be paid for by a *specific* charge to all ratepayers. *See*, Conn. Gen. Stat. §16-258e(b) (“The net costs of any such agreement, including costs incurred by the electric distribution company under the agreement and reasonable costs incurred by the electric distribution company in connection with the agreement, shall be recovered on a timely basis through a reconciling component of electric rates as determined by the authority that is nonbypassable when switching electric suppliers.”)

Those customers include state agencies, the State of Connecticut, state departments and state educational institutions. Each and every state agency, state department and state educational institution that uses electricity supplied by UI will be assessed a specific, directly traceable charge for the cost of this Project, regardless of whether their energy supplier is UI. As a result, the costs are funded *in part* by the State under Conn. Gen. Stat. § 22a-1c, requiring the preparation of an environmental impact evaluation pursuant to Conn. Gen. Stat. § 22a-1b(c).

CONCLUSION

An Environmental Impact Evaluation is required to be prepared for this Project. That evaluation must be prepared before any final approval could be provided for the Project. Because the Environmental Impact Evaluation is a critical aspect of the review of the Project, further

proceedings should be stayed until the Environmental Impact Evaluation is finalized because it will inform how the remainder of these proceedings are conducted.

Respectfully submitted,

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