SIERRA CLUB

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On behalf of the Sierra Club and our more than 40,000 members and supporters in Connecticut, thank you for the opportunity to comment on Scoping for Capitol Area System (CAS) Central Plant Upgrades.

Background
The Sierra Club is committed to defending everyone's right to a healthy world by tackling the serious challenges of a warming climate and unprecedented levels of pollution. Since it began operations in 1988, the Capitol Area System Central Plant, formerly CDECCA, has a history of polluting Hartford's air and water. In the 33 years it operated as an electric generating facility, from 1988 to 2021, CDECCA was a major source of CO2 and NOx. In 2018, for example, it emitted over 35,000 tons of CO2 and over 35,000 lbs of NOx in 2018.[1] When the facility was a fully operational power plant, it used hundreds of thousands of gallons of water a day, and was cited for releasing toxins into local waterways, and for having faulty pollution detection equipment. The facility is located in Hartford, a state designated Environmental Justice Community. Hartford is a city overburdened with polluting energy infrastructure and with high rates of asthma. The neighborhoods adjacent to this facility, which have been subjected to decades of pollution, are majority Black and Hispanic and low-income.

Only 100% Clean and Renewable Must Be Considered
The Sierra Club is urging - for environmental justice, clean air, and climate - that you transition the entire Capitol Area System, including the Central Plant, from fossil fuels to 100% clean and renewable energy.

Residential and commercial buildings in Connecticut are a major source of emissions due to the use of fossil fuels.[2] Reducing emissions from buildings is critical to meeting the challenge of the climate crisis, and to achieving the mandated emission reduction targets of Connecticut's climate law, the Global Warming Solutions Act. Governor Lamont recognized that state buildings must be part of the solution in Executive Order 21-3[3] which requires that "By 2023, DEEP and DAS shall develop a plan to retrofit existing fossil fuel-based heating and cooling systems at state buildings to systems capable of being operated without carbon emitting fuels." To follow this Executive Order, scoping for this project must

[1] EIA emissions data, https://www.eia.gov/electricity/data/emissions/.
[2] https://portal.ct.gov/-/media/DEEP/climatechange/1990-2021-GHG-Inventory/DEEP_GHG_Report_90-21_Final.pdf
[3]https://portal.ct.gov/-/media/Office-of-the-Governor/Executive-Orders/Lamont-Executive-Orders/Executive-Order-No-21-3.pdf

only consider non-carbon systems such as networked geothermal, heat pumps, solar thermal technology, thermal storage technology or other 100% clean and renewable options. The scoping notice included some of these in its supply side possibilities: hybrid of heat pumps and electric boilers; 100% electric boilers; and 100% heat pumps (ground source or air source). The Sierra Club urges that only 100% clean and renewable options be considered for this project; electrification is the most efficient and cost-effective strategy to decarbonize the Capitol Area System.

With this approach, Connecticut would be in good company. Around the country, and in our region, 100% all-electric, clean and renewable buildings are being chosen for the climate, health, and economic benefits they bring. For example, the federal General Services Administration (GSA) will achieve net-zero emission in twenty-seven federal buildings across the country and 100 buildings will become all-electric, including the Ronald Reagan Building, which at 3.1 million square feet of space is the fourth-largest federal building in the country and the second-largest in the D.C. area after the Pentagon.[4]

Fossil Fuel or So-Called "Cleaner Fuel" Options Must be Rejected

We are deeply concerned that the Notice of Scoping includes fossil fuels as two of the supply side options. We urge you to reject any upgrades that continue the use of fossil fuels or so-called "cleaner fuels." Continuing to build new gas infrastructure is fundamentally at odds with clean air and climate action because it will lock in decades of additional gas use—and the associated greenhouse gas emissions that contribute to climate change. So-called "cleaner fuels" - such as renewable natural gas (RNG) and hydrogen - named in the Notice of Scoping are not a viable decarbonization pathway, are limited in supply, and are extraordinarily expensive. These fuels do not make sense for end uses - such as building heating - that can be easily and efficiently electrified.

RNG is extremely limited in supply, very expensive, and leaks from the pipeline distribution system as methane, contributing to climate change. Green hydrogen is similarly costly and limited in supply and is inefficient to produce, especially for end uses that can be electrified directly. Hydrogen can only be blended into the gas distribution system at small percentages (5%) without safety concerns and costly system upgrades to accommodate the gas. Further, hydrogen leaks from pipelines and is an indirect greenhouse gas that contributes to climate change. Biofuels are also limited in supply with a growing demand. All of these fuels require continued investments in fossil fuel infrastructure, including pipelines, and will result in local air pollution impacts in an Environmental Justice community already overburdened with pollution.

A coalition of public interest organizations made up of Conservation Law Foundation, Save the Sound, Sierra Club, the Nature Conservancy in Connecticut, Eastern CT Green Action, and People's Action for Clean Energy, submitted technical comments to DEEP in November 2021 providing detailed information about the limited decarbonization potential and availability of alternative fuels, as well as the high cost associated with them. These comments also outline why electrification is the most efficient and cost-effective strategy for buildings.[5]

Financial calculations

[4] https://www.gsa.gov/about-us/newsroom/news-releases/bidenharris-administration-announces-nearly-1-bi-06202023

[5] https://www.dpuc.state.ct.us/DEEPEnergy.nsf/c6c6d525f7cdd1168525797d0047c5bf/d9806903423cef368525894e0075ee53/$FILE/Coalition%20of%20environmental%20advocates%20%202022-11-21.pdf

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The cost of the transition to a 100% clean renewable Capitol Area System must be considered holistically. The upfront investment in a new system is just one part of the equation. Lifetime operating costs, avoided cost of compliance with the state's Global Warming Solutions Act, and the social cost of carbon are a few other factors that should be considered.

DAS should investigate all possible federal funding available for this project including but not limited to the IRA Energy Infrastructure Reinvestment Financing and the IRA Greenhouse Gas Reduction Fund. With both public and private buildings being served, this is a unique opportunity to partner with the private buildings and the community and work together to drive down demand through energy efficiency, and to deploy 100% clean renewable solutions.

Community Engagement, Jobs and Other Benefits Must Be Prioritized

We urge DAS to increase opportunities for meaningful public engagement. The Capitol Area System Central Plant is located adjacent to a residential neighborhood in an Environmental Justice community. The Notice of Scoping and the notice of the June 27 public meeting was minimally distributed. We encourage DAS to work on an outreach strategy to engage the broader public, particularly the residents of the community, in the process of upgrading the Capitol Area System.

DAS has indicated that the Capitol Area System could expand to include other buildings, specifically noting that State buildings on Washington Street could be added to the loop. The Sierra Club aligns itself with verbal comments made by Dr. Mark Mitchell at the public scoping meeting: buildings in the community should be considered for the expansion. The Hartford community has absorbed the harm of the Capitol Area System - the pollution as well as the loss of tax revenue from the state buildings on the system - and it should have access to the benefits of a new system.

Finally, a 100% clean and renewable Capitol Area System will create a lot of jobs, and we urge you to ensure that Hartford residents are prioritized for job training and the employment opportunities that will come with this project, and that the jobs provide family-sustaining wages. We urge DAS to analyze the requirements for local hiring and job training, and to make recommendations about local hiring and training.

Thank you for your attention to and consideration of our comments.

Sincerely,

Samantha Dynowski, State Director
Sierra Club Connecticut