

Communication from Public

Name: Jasmin Vargas

Date Submitted: 11/08/2022 12:32 PM

Council File No: 22-0932

Comments for Public Posting: The Attached File is to show the opposition to council file 22-0932. The organizations represented are calling on the city council to stop this projects approval. The council file is on the agenda for Wednesday council meeting after is was waived through the ECCJR committee. The council president moving this along with no public comment and little public notice is unacceptable for such a consequential decision. This decision should a community supported process not pushed through with little outreach and a vote the day after an election.



November 8, 2022

Dear Los Angeles City Council members and Honorable Mayor Eric Garcetti,

The 10 organizations on this letter are calling on you to reject the proposed Scattergood Hydrogen Modernization Project and vote no on council file 22-0932. The undersigned are Climate, Water and Social Justice organizations that believe climate justice for LA is possible but only if the City Council and LADWP commit to uphold climate justice and environmental justice as a practice. The proposed project and LADWP's plans to expand hydrogen power across LA are not aligned with community demands for a real community driven solution to the climate crisis or Environmental Justice principles.

The LADWP has thus far refused to model alternative plans that do not include hydrogen combustion in-basin even though the LA100 study outlined possible alternatives that would yield higher community pollution reduction benefits. Without a full picture of the options available, the people of LA can't be expected to sign off on this project. Outlined below are just a few of the obvious issues with LADWP's plans for the Scattergood Hydrogen Modernization Project, all of which are enough to withhold your support. Furthermore, until LADWP addresses the real dangers and challenges of hydrogen, we demand more time for community engagement, data collection and the development of community supported alternatives.

Very few people know about this project, but its impact on the climate, rates, and local pollution will be felt by all. There is no good reason to rush any hydrogen projects through the LA City Council unless the goal is to keep people out of the decision making process. In the end, the decision before you is not about a mere hydrogen plant on the westside but a test to show the people the kind of climate leader you wish to be.

Burning green hydrogen blended with gas will contribute to pollution, climate change and worsen health impacts in environmental justice communities

LADWP's plan to burn blended natural gas and hydrogen at the Scattergood Generating Station will produce more air pollution in the form of NOx and PM2.5 than burning natural gas, and worsening health impacts for L.A.'s neighboring environmental justice communities of Inglewood, Hawthorne and Lennox. Studies show combusting blended natural gas and hydrogen can increase NOx emissions by six times.¹ When released into the air, NOx reacts with volatile organic compounds (VOCs) and sunlight to form smog. Smog leads to increased health risks and can cause serious damage to human health including asthma and respiratory disease. Scattergood Generating Station is also along a pollution corridor containing LAX, the Chevron Refinery, and multiple peaker gas-fired power plants that have been poisoning LA County communities for decades. Federal data shows the communities of Inglewood, Hawthorne, and Lennox, communities downwind of this pollution corridor, have respiratory risks higher than 90 percent of the rest of the state.²

The cost for this project is much higher than \$800,000,000

We can't afford the massive water required to produce hydrogen — whether it's going to burn in a power plant or charge an electrolyzer — particularly in the middle of the worst megadrought our region has seen in over 1,000 years. Requiring significantly more water and energy than wind and solar power alone, total hydrogen production for all four plants as outlined by LADWP's Strategic Long-Term Resource Plan could reach over 67,000 tonnes of hydrogen production annually by 2045, and would require over 1.7 billion gallons of freshwater or 8.5 billion gallons of seawater annually by 2045.³ The amount of water available will be difficult to predict in a world of climate change. Therefore, it is safe to say water prices and the ultimate cost of hydrogen power will be volatile and unpredictable at best. At worst, they will be too expensive for the most vulnerable among us.

Hydrogen leaks and explosions are worse than natural gas

Hydrogen molecules (H₂) are very small and notoriously difficult to contain. Hydrogen leaks are inevitable and can happen at any point of the refining or combustion process. The production, transportation, incineration and storage of hydrogen are all costly, but prove even more expensive when the additional pipelines, storage and production infrastructure are calculated. Monitoring of hydrogen is non-existent. And even if we had monitoring, the track record of the State in regulating and tracking leaks of toxic substances like methane has been woefully inadequate. Venting and purging operations are common across the hydrogen life cycle. They occur during electrolysis, compression, and refueling. Current electrolysis procedures using venting and purging are assumed to lose between 3.3-9.2 percent of all hydrogen produced.⁴ Leaks and explosions from the current gas system are already a huge threat to public safety,

¹Source: <https://doi.org/10.1016/j.ijhydene.2017.05.107>

² <https://abc7.com/lax-air-pollution-respiratory-illness-inequities-los-angeles/11174361/>

³ Source: Data for these calculations come from: Kondash, Andrew J. et al. "Quantification of the water-use reduction associated with the transition from coal to natural gas in the US electricity sector."

⁴ Source: Atmospheric implications of increased Hydrogen use Nicola Warwick, Paul Griffiths, James Keeble, Alexander Archibald, John Pyle, University of Cambridge and NCAS and Keith Shine, University of Reading
https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/1067144/atmospheric-implications-of-increased-hydrogen-use.pdf

causing major damage, injury, or deaths once every two days.⁵ Blending hydrogen into the system is likely to increase these risks. Once it's out, it can ignite more easily⁶ than gas.

Storage and Transportation is challenging to scale without being an imminent threat

Most gas pipelines are not built to transport hydrogen at high pressures and concentrations. Although there are a lot of factors involved, a hydrogen blend of 10 percent is enough to start eroding the pipeline, making leaks and explosions more likely the higher the concentration.⁷ Currently hydrogen is most commonly transported as *ammonia* in pipelines, trucks, ships and trains. Any fuel blending or ammonia production will increase with demand for hydrogen at the gas plants. While fossil fuel companies tout ammonia's potential as a hydrogen storage vehicle for combustion and fuel cell applications, such a move would put communities at risk from exposure and serious physical harm. Ammonia is very corrosive, and when burned releases H₂, N₂, and NH₃. Ammonia is "cracked" (burned) to 500-600 degrees Fahrenheit and will use as much as 15 percent or more of the hydrogen being produced, which makes it inefficient.⁸ Finally, storage facilities for hydrogen or ammonia are always at risk of failing due to the corrosive nature of the chemicals. The current storage facilities used for natural gas like Playa Del Rey Gas Storage and Aliso Canyon Gas Storage Facilities are already leaking and updating the facilities for ammonia or hydrogen storage will most definitely increase the cost to ratepayers.

Alternative energy sources and solutions are available to meet peak demand

An independent LA100 Study completed by National Renewable Energy Lab (NREL) in 2021 initially showed pathways for achieving 100% renewable energy by 2035 without hydrogen. In the last year of the five year study, LADWP directed a major shift within the LA100 study by requesting NREL to exclusively study hydrogen combustion at all of LADWP's power plants in all scenarios. This was without any consideration of community or environmental justice impacts and LADWP has been criticized for lack of legitimate engagement. Within the LA100 Study, NREL noted that alternatives were available to energy demand without repowering gas plants with hydrogen.⁹ These solutions include long-term duration storage, microgrids, community based solar and storage projects, energy efficiency, and demand response. Additionally, electric cars and trucks can improve grid reliability¹⁰ during peak demand. These community driven solutions have already shown they can make a significant contribution to our resiliency and reliability. The latest heat wave that strained California's grid shows the role *demand response* and *energy efficiency* can play in reducing demand in key moments. During the multi-week heat wave, on September 6 California saved 2,100 MW of power within five minutes¹¹ after receiving a text alert to conserve energy. Current LADWP goals for energy efficiency and energy savings are woefully inadequate but they don't have to be. Current goals to decarbonize and electrify

⁵ <https://climatenexus.shinyapps.io/GasExplorer/>

⁶ <https://www.energy.gov/eere/fuelcells/safe-use-hydrogen>

⁷ <https://www.osti.gov/servlets/purl/1646101>

⁸ Potential Roles of Ammonia in a Hydrogen Economy A Study of Issues Related to the Use Ammonia for On-Board Vehicular Hydrogen Storage U.S. Department of Energy
https://www.energy.gov/sites/prod/files/2015/01/f19/fcto_nh3_h2_storage_white_paper_2006.pdf

⁹ <https://knock-la.com/la100-ladwp-renewable-energy/>

¹⁰ <https://www.nrdc.org/experts/max-baumhefner/how-electric-cars-and-trucks-improve-grid-reliability>

¹¹ https://www.eia.gov/todayinenergy/detail.php?id=54039&utm_medium=email

homes must be ambitious and coupled with measures that save people money on their bills and free them of utility debt.

Thank you for considering our comments and for your willingness to work with communities to reach the best path forward. You have shown throughout the last few years that when communities and City Council work together, we can win. Together, we set a goal of 100 percent carbon-free energy by 2035. In 2019 there was a commitment to shut down the gas plants LADWP is now planning on spending billions of dollars to upgrade. Working together, Los Angeles is closer to passing groundbreaking policy that will set us on a path to phase out oil drilling and electrify our homes and businesses. We wouldn't be here without the support of the communities on this letter. Now is your chance to show your support for a just and equitable transition by rejecting the proposed Scattergood Hydrogen Modernization Project and voting no on council file 22-0932.

Sincerely,

Jasmin Vargas, Senior Organizer **Food & Water Watch**

Aura Vasquez, Co-Chair **Democratic Socialist of America- LA**

Jack Eidt, Co-Founder **So Cal 350 Climate Action**

Cheryl Auger, President **Ban SUP (Single Use Plastic)**

Faith Mhyra, Founder **Protect Playa Now & Member of Mar Vista Voice**

David Diaz MPH, Executive Director **Active San Gabriel Valley**

Connor Everts, Executive Director **Southern CA Watershed Alliance**

Bill Przulucki, Executive Director **Ground Game LA**

Melanie Winters, Founder & Director **The River Project**

Communication from Public

Name: Alexander Fierro-Clarke

Date Submitted: 11/08/2022 02:16 PM

Council File No: 22-0932

Comments for Public Posting: I am opposed. This proposal should not have been rushed out of committee without proper public input