

STAFF REPORT

SUBJECT: ARCHES (Alliance for Renewable Clean Hydrogen Energy Systems) Grant Letter of Commitment

FROM: Nathan Barreras, Manager, Capital Projects

DATE: March 6, 2023

Action Requested

Staff requests the Board of Directors authorize the Executive Director sign a Letter of Commitment to ARCHES in order to support the State’s application to the Department of Energy to construct a hydrogen fuel hub network in Northern California.

Background

ARCHES is a public-private partnership formed to create a sustainable statewide clean hydrogen hub in California and beyond, utilizing local renewable resources to produce hydrogen with the objective to fully decarbonize the regional economy, while prioritizing environmental justice, equity, economic leadership and workforce development. ARCHES was established to as a statewide alliance to establish a hydrogen hub in California, and to expand the hydrogen market throughout the state. The US Department of Energy (DOE) will award \$8 billion to up to 10 regional hydrogen hubs to build economies of producers, infrastructure, and users. In partnership with the Governor’s Office of Business and Economic Development (GO-Biz), ARCHES unites public and private stakeholders to build the framework for a California renewable, clean hydrogen hub.

LAVTA has committed to achieving zero-emissions status by 2034, six years ahead of the State of California’s mandate, selecting hydrogen fuel cell as the preferred zero-emissions technology. To further that goal, the agency received a \$6.7M TIRCP award in 2022 for a hydrogen fueling station and is actively seeking grant funds to fully construct the agency’s satellite operations and maintenance facility so that the fuel cell fleet can be maintained. Identifying a source or distributor of hydrogen will be a critical milestone as the Agency begins the fuel cell transition beginning in 2025.

Discussion

Because of the Agency’s strong commitment to hydrogen, LAVTA was approached by California Transit Association (CTA) staff to gauge interest in supporting the ARCHES application to the DOE to fund a hydrogen hub in Northern California. CTA is working with up to 10 transit agencies to support the application, selecting those who have adopted fuel cell technology as a key component of their zero emissions plans. If funding is awarded, beginning in 2024, CTA and their contractor will work to develop specific capitalization and workforce development plans annually for eight years, as well as assesses the bus OEMS capability to

manufacture 1,000 fuel cell buses. The end goal is to increase the supply of hydrogen and hydrogen-fueled technologies in California at a competitive or reasonable price compared to existing technologies available in the marketplace.

With LAVTA's support, the application to DOE will be strengthened, and LAVTA we will be supporting fundamental, clean energy infrastructure change. Additionally, supporting the application will allow transitions to hydrogen to be easier and more cost-effective, so that LAVTA and other transit agencies can continue to combat greenhouse gas emissions and the impacts of climate change.

Fiscal Impact

There is no fiscal impact associated with this Action.

Recommendation

Staff recommends the Board authorize the Executive Director to sign a letter of a Letter of Commitment to ARCHES.

Attachments:

1. Draft Letter of Commitment to ARCHES

Approved: _____



March 6, 2023

Department of Energy (DOE): Office of Clean Energy Demonstrations (OCED)
1000 Independence Avenue
Washington, DC 20585

To Whom It May Concern:

The Livermore Amador Valley Transit Authority (LAVTA) has made a commitment to clean-energy and zero-emissions for the fixed route bus fleet, and has selected hydrogen fuel cell as the preferred technology. The LAVTA Board's commitment is to achieve 100% fuel-cell buses by 2034. To further that goal, the agency received a \$6.7M TIRCP award in 2022 for a hydrogen fueling station and is actively seeking grant funds to fully construct the agency's satellite operations and maintenance facility so that the fuel cell fleet can be maintained.

LAVTA is committed to help California reach its zero emission goals by purchasing, operating and maintaining 52 hydrogen buses and one hydrogen refueling station by 2031 as part of the ARCHES Hub for which ARCHES is currently seeking financial assistance under DE-FOA-0002779. Our hydrogen refueling station will be serviced by hydrogen tanker trucks that will deliver hydrogen from nearby hydrogen production sites.

We at LAVTA strongly support the ARCHES Hub and its long-term vision. We believe this hub will build fundamental infrastructure, required to achieve a world-class, clean, and secure hydrogen hub in California. This project will accelerate the establishment of critical hydrogen infrastructure in the most economic and efficient way, support the roadmap to a national clean hydrogen network, and help us achieve our goals of major reductions in greenhouse gas (GHG) emissions, and combating climate change. Combined with the reduction of other emissions such as diesel particulate matter, this project will improve the health and well-being of the communities we serve.

Sincerely,

Christy Wegener
Executive Director
LAVTA