UNIVERSITY OF CALIFORNIA

BERKELEY • DAVIS • IRVINE • LOS ANGELES • MERCED • RIVERSIDE • SAN DIEGO • SAN FRANCISCO



OFFICE OF THE VICE PRESIDENT - RESEARCH AND INNOVATION

OFFICE OF THE PRESIDENT 1111 Franklin Street, 11th Floor Oakland, California 94607-5200

March 27, 2023

Regional Clean Hydrogen Hubs Program Office of Clean Energy Demonstrations U.S. Department of Energy 1000 Independence Ave SW Washington, DC 20585

RE: ARCHES – State of California Hydrogen Hub Phase 1 Submission

To Whom It May Concern:

The University of California (UC) is a proud foundational partner of the statewide Alliance for Renewable Clean Hydrogen Energy Systems (ARCHES). Since the inception of ARCHES, the Office of Research and Innovation (R&I), in the UC Office of the President (UCOP), has worked closely with three other foundational partners: the California Governor's Office of Business and Economic Development (GO-Biz), Renewables 100 Policy Institute, and the State Building and Construction Trades Council of California. As the research arm of the state, the University of California is committed to being a neutral partner with state and federal government, industry, non-profit organizations, environmental justice groups, and community leaders to achieve our shared clean energy objectives.

The participation of UC in ARCHES is wholly aligned with the public service, teaching, and research missions of the University. Climate action and healthcare-for-all, with particular attention to impacts on vulnerable communities, are two cross-cutting, interrelated priorities of UC President Michael Drake. UC has a long track record in climate action research and education. For decades, and specific to this proposal, UC faculty and research scientists have worked to advance clean hydrogen (H2) as an alternative energy source to fossil fuels. Today, UC continues to advance and scale renewable clean H2 solutions, policy innovations, and workforce development strategies informed by science, discovery, and community empowerment.

UC's ten campuses, three UC-managed DOE national labs, UC Agricultural and Natural Resources division, and countless research laboratories and educational programs, provide a wealth of experience in clean H2 and related sectors. With R&I leadership, UC served in a foundational role to ARCHES in the following manner:

- Founding ARCHES, LLC through UC Regental and UC Presidential approval,
- Serving as financial backstop for ARCHES until State funding was secured,
- Deploying UCOP employees (R&I and UC Legal) to co-manage ARCHES,
- Deploying UCOP employees (R&I, UC Irvine, and Lawrence Berkeley National Lab) to lead the framing for the technical direction of ARCHES,
- Handling legal, financial, analytical, and communications services during its formation, and

• Leveraging UC Irvine's long-standing relationship with McAllister & Quinn to secure the firm as the DOE Clean Hydrogen Hub proposal manager.

UC's ongoing and future commitments, in partnership with founding member partners and stakeholders, include the following:

- Providing cost-share (including in terms of in kind work by UC staff) in the order of \$3M over the course of the DOE proposal timeframe
- Finalizing the establishment of an ARCHES governance structure that has representation from all stakeholder group types, including community and tribal groups.
- Overseeing carefully designed studies necessary to assess the potential impact of ARCHES projects on life cycle analysis, socio-techno-economic goals, community engagement, health, equity, and other areas of importance.
- Helping staff ARCHES until permanent officers and staff are appointed.
- Partnering in workforce development to support a H2 economy:
 - With our campuses and other institutions of higher education to prepare students for a variety of H2-related careers, and
 - With labor and trade organizations to prepare trainees with new skills.
- Advancing thought leadership in H2 as a viable energy solution in CA and the nation.

The University of California pledges to continue to play a pivotal role in ARCHES's establishment and maturation for California. UC is committed to ensure ARCHES serves as an integral partner in the national network of clean hydrogen hubs. UC will continue to marshal its available resources and talent and to offer thought-partnership in support of the ARCHES core mission. Finally, UC shares the goal of scaling clean hydrogen solutions and creating a viable hydrogen marketplace, thereby driving down greenhouse gas emissions and realizing an equitable, 100% zero-carbon economy for all.

I am enthusiastic in my support of ARCHES and this phase 1 proposal.

Sincerely,

Theresa Maldonado, Ph.D., P.E.

Vice President for Research & Innovation

Theresa a Maldonado