

Congress of the United States
Washington, DC 20515

April 29, 2022

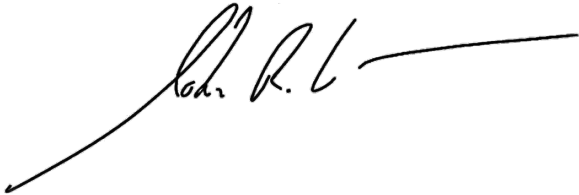
The Honorable Rosa DeLauro
Chairwoman
Committee on Appropriations
H-307, The Capitol
Washington, DC 20515

The Honorable Kay Granger
Ranking Member
Committee on Appropriations
1016 Longworth House Office Building
Washington, DC 20515

Dear Chair DeLauro and Ranking Member Granger:

I am requesting funding for the Integrated Energy Systems – Analytical Equipment for Advanced Energy Laboratory in fiscal year 2023. The entity to receive funding for this project is Emery County, Utah, San Rafael Energy Research Center, located at PO Box 754, Castle Dale, UT 84513. The funding would be used for the purchase of electrolysis equipment and lifetime and performance analysis studies of electrolyzers. I certify that neither I nor my immediate family has any financial interest in this project.

Sincerely,

A handwritten signature in black ink, appearing to read "John R. Curtis", followed by a long horizontal line extending to the right.

John R. Curtis
Member of Congress

April 29, 2022

The Honorable Marcy Kaptur
Chair
Subcommittee on Energy and Water Development, and Related Agencies
U.S. House of Representatives
Washington, DC 20515

The Honorable Michael K. Simpson
Ranking Member
Subcommittee on Energy and Water Development, and Related Agencies
U.S. House of Representatives
Washington, DC 20515

Dear Chair Kaptur and Ranking Member Simpson:

As you begin work on the fiscal year 2023 Energy and Water and Related Agencies Appropriations bill, I urge you to include \$1,865,000 for the San Rafael Energy Research Center (SRERC), operated by the San Rafael Special Service District at PO Box 754 Castle Dale, UT 84513, under the Energy Efficiency and Renewable Energy Account for the purchase of a Scanning Electron Microscope with FIB milling attachment with Computer Controlled SEM software upgrade (\$1,865,000)- Proposed model, Helios 5 Hydra UX Plasma Dual Beam with 3D EDS.

The Dual Beam Electron Microscope is needed for examination of corrosion and stress related fractures in equipment such as hydrogen fuel cells, reactor and radiation exposed components. The microscope can also precision mill components to expose internal damage for analysis .

The harsh conditions and associated degradation that occurs during fuel cell operation, as well as the stress and strain on advanced nuclear reactor designs, can both be assessed with specialized focused ion beam scanning electron microscope equipment. Obtaining this infrastructure and capability will enable the SRERC to perform this advanced hydrogen and nuclear energy research. The microscope is also critical for studying degradation of advanced nuclear power reactors, nuclear thermal rockets, which are also intended to be researched at the SRERC by AlphaTech and USNC-Tech for national defense and commercial applications.

I request the following project language be included in the bill:

“\$1,865,000 is appropriated to the San Rafael Energy Research Center to purchase a Scanning Electron Microscope with FIB milling attachment and Computer Controlled SEM software upgrade for use in advanced energy research, including high temperature

steam electrolysis hydrogen production systems, and their use in hybrid energy systems that facilitate the increased integration of clean energy."

Thank you for your consideration of my request.

I certify that neither I nor my immediate family has any financial interest in this project.

Sincerely,

A handwritten signature in blue ink, appearing to read "J. Curtis", with a long horizontal flourish extending to the right.

John R. Curtis
Member of Congress