

June 12, 2023

Via e-mail (board.secretary@bpu.nj.gov)

Sherri L. Golden
Secretary of the Board
44 South Clinton Ave, 1st Floor
PO Box 350
Trenton, NJ 08625-0350

Re: Docket No.s QO23040235; QO23040236

Dear Secretary Golden,

FuelCell Energy, Inc. submits these comments in support of the NJCEP FY24 Proposed Comprehensive Resource Analysis, Budgets, and Programs. FuelCell Energy thanks the Board for this opportunity to provide comments.

FuelCell Energy Overview

FuelCell Energy is proud to be among the companies that have been dedicated to clean energy innovations since our inception five decades ago. The company was founded in the United States in 1969, by two scientists devoted to pursuing technological innovations that address a wide variety of energy priorities through patent-protected U.S. innovation, compound combinations that produce and use energy in ways that are smarter and cleaner.

Our current product portfolio includes two dynamic electrochemical platforms: molten carbonate and solid oxide. Both platforms can support power generation and combined heat and power applications from a variety of fuels, including natural gas, renewable biogas, or hydrogen. These fuel cells react with fuel electrochemically, without combusting the fuel, which avoids emissions produced by fuel combustion such as oxides of nitrogen, oxides of sulfur, and particulate emissions. In the electrochemical process, fuel and air are reacted in separate chambers in the fuel cell stack. As a result, the reactions producing CO₂ occur without mixing fuel and air. Thus, CO₂ remains concentrated and easy to remove. Both molten carbonate and solid oxide fuel cell systems can benefit from this unique feature, with modifications enabling the capture of their own CO₂ for use or sequestration before it is emitted into the air.


FuelCell Energy's molten carbonate fuel cell is unique in its ability to also capture CO₂ from an external source, such as a power plant or an industrial boiler. Our solid oxide fuel cell can operate on pure hydrogen as a feedstock, emitting zero CO₂, which will become increasingly important as the uses of hydrogen for fuel become more widely adopted, and which complements the nation's current emphasis on deploying technology that enables hydrogen-based energy storage. We are also currently

commercializing a solid oxide electrolyzer that will produce hydrogen from power and water, which will be well suited to partner with renewable energy projects and/or hydrogen storage infrastructure.

Simply put, our multi-featured platforms can be configured to provide multiple value streams, including electricity, hydrogen, high grade heat including steam, water, and CO₂ for sequestration and or utilization. The graphic below illustrates some of our key successes to date.


FuelCell Energy overview

Demand for clean, reliable electricity driving adoption of fuel cell technology



**Headquarters
Danbury, CT**

- Corporate Headquarters
- Research labs
- Engineering design
- Global Service center



**Manufacturing
Torrington, CT**

- Module assembly & stacking
- 167,000 sq. ft.


**Other facilities
Taufkirchen, Germany**

- Final assembly for SubMW carbonate stack modules
- Carbonate SubMW power plant sales and service
- Sales and service for carbonate MW scale platforms made in US

Calgary, Canada

- Solid oxide R&D for power generation, electrolysis, and energy storage
- Solid oxide cell and stack manufacturing


Global customers



Company Highlights¹

HQ Danbury, Connecticut	>500 Employees	95 Platforms in commercial operation ²	3 Continents
FCEL Listing: NASDAQ	>220 MW Capacity in field	>13 Million MWh's generated with patented technology	

¹As of the year ended October 31, 2022.
²Note that certain sites have multiple platforms. As an example, our 14.9 MW Bridgeport project site has five 2.8MW platforms. As of 10/31/22, there were 33 sites with the Company's carbonate fuel cell platforms.

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Comments

At the outset, FuelCell Energy wishes to express its support for the BPU's approach to funding clean energy solutions as outlined in the FY24 Comprehensive Energy Efficiency & Renewable Energy Resource Analysis ("CRA"). By allocating resources towards the proposed investments, the BPU is paving the way for further integration of the types of solutions that will bring New Jersey even closer to its clean energy goals. The BPU's apt recognition of the need to continue the grid modernization proceeding is just one example of how this this proposal has been carefully crafted towards the goal of catalyzing investment in the clean energy economy, as well as in New Jersey's future. The importance of the Board's proposal to continue the grid modernization proceeding cannot be overstated. By "conduct[ing] a study of the potential to use renewable natural gas and/or green hydrogen as a means to reduce greenhouse gas emissions, and for additional new clean energy technology initiatives," as the CRA proposes, the Board will obtain valuable insight into key

technologies, while simultaneously establishing a framework for its own further actions to implement these technologies at scale. With the help of industry leaders, this investment is sure to deliver a long lasting and worthwhile return to the Board and the State as a whole.

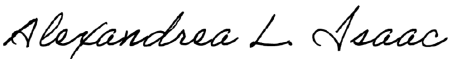
To further ensure that the Board's investments provide direct and measurable returns, FuelCell Energy respectfully suggests that the Board consider separately budgeting funds for fuel cells and CHP resources. Although CHP resources are similar to fuel cells in that they capture heat, both areas of technology have advanced considerably, such that they provide distinct benefits and require unique considerations. We welcome the opportunity to elaborate on this topic if the Board is interested, and we appreciate your willingness to consider our recommendations.

Conclusion

At FuelCell Energy, we are particularly proud of our history as an energy technology innovator and we celebrate the men and women on our team who have, for decades, been driven to create and share new technologies that produce multiple value streams for our customers worldwide. We are proud to source the vast majority of our technical manufacturing equipment (i.e., the equipment we use daily that we have not invented) almost exclusively from U.S. based manufacturers across the country. We are also proud that we have an opportunity to demonstrate our commitment to empower a world with clean energy by partnering with the Department of State to deliver our differentiated highly efficient electrolysis platform to Ukraine for the production of hydrogen and ammonia, demonstrating America's energy technology leadership around the world.

We thank you for the opportunity to submit these comments and appreciate your willingness to consider our recommendations. Should you need any additional information, please contact the undersigned.

Sincerely,



Alexandrea L. Isaac
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