

BURLINGTON
BOARD OF ELECTRIC COMMISSIONERS
585 Pine Street
Burlington, Vermont 05401

SCOTT MOODY, CHAIR
BETHANY WHITAKER, VICE CHAIR
LARA BONN
JIM CHAGNON
ROBERT HERENDEEN

March 8, 2023

DE-FOA-0002740 Team
National Energy Technology Laboratory
United States Department of Energy

RE: Funding Opportunity Announcement (FOA) no. DE-FOA-0002740, titled "BIL – Grid Resilience and Innovation Partnerships (GRIP)," **Concept Paper Identification Code: TA2-380-E**

Dear Department of Energy FOA 0002740 Team,

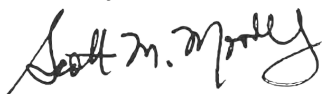
Please accept this enthusiastic letter of commitment for Burlington Electric Department (BED)'s application for funding under the above-titled FOA, on behalf of the citizen-led Burlington Electric Commission, which helps to oversee the Department's work on behalf of customers and the community.

BED's Building Grid-edge Integration and Aggregation Network of Thermal Storage (Building GIANTS) proposal will enable critical peak load reductions and cost savings for all ratepayers and participating customers as part of BED's move towards strategic electrification in buildings. The Commission has supported implementation of an end-use rate for off-peak electric vehicle charging, and is interested in making similar programs and rates available for technologies such as heat pumps in the residential context as well as peak reduction programs that apply in the commercial sector.

The projects proposed for funding will support the climate goal and policies adopted by this Commission and the Burlington City Council by supporting efficient use of our electric system as we move towards Burlington's ambitious target of achieving Net Zero Energy by 2030. As more customers rely on the grid for heating and thermal applications, the ability to offer end-use rates that incentivize peak demand reduction will help realize cost savings for all customers relative to BED's capacity obligations, and could offer participating customers appropriate incentives to reduce usage during peak times. These efforts could also yield a reduction in the need for grid upgrades to accommodate additional electric use, and a reduction in the energy generation needed to serve that use.

We appreciate very much the opportunity for BED to apply for federal funding to support the implementation of the End Use Metering and Flexible Load Management project. We offer our unreserved support for the BED proposal and commit to supporting BED in implementing the project if its application is successful. Please let us know if we can provide more information or answer any questions.

Thank you,



Scott Moody, Chair
On behalf of the Burlington Electric Commission



International Brotherhood of Electrical Workers – Local 300

3 Gregory Drive South Burlington, VT 05403

Telephone (802) 864-5864

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March 15, 2023

DE-FOA-0002740 Team
National Energy Technology Laboratory
United States Department of Energy

RE: Funding Opportunity Announcement (FOA) no. DE-FOA-0002740, titled "BIL – Grid Resilience and Innovation Partnerships (GRIP)," Concept Paper Identification Code: TA2-380-E

Dear Department of Energy FOA 0002740 Team,

Please accept this letter of commitment for Burlington Electric Department (BED)'s application for funding under the above-titled FOA, on behalf of the International Brotherhood of Electrical Workers (IBEW) Local 300, which represents the unionized workforce at BED.

IBEW Local Union #300 was founded in September of 1939 and serves 1,200-plus working Vermonters, at utility companies and telecommunications, municipal, manufacturing, and construction businesses. Our mission is to serve and represent our members fairly. IBEW Local 300 enjoys a positive and constructive working relationship with BED, and recently negotiated a 4-year collective bargaining agreement that began on July 1, 2022, that covers union employees at BED.

BED's Building Grid-edge Integration and Aggregation Network of Thermal Storage (Building GIANTS) proposal will provide new tools to support peak reduction efforts for heat pumps as well as commercial thermal energy use in Burlington. IBEW members who would be involved with implementation of this project include staff in the Policy & Planning Division who help design programs and manage regulatory requirements at BED; Energy Services specialists who work with residential and commercial building owners to increase their energy efficiency and reduce their energy costs; and Customer Care representatives who provide customers with information on our programs.

IBEW Local 300 is committed to supporting Vermont's renewable energy goals, and our members are proud to be a part of helping Vermont and Burlington navigate the clean energy transition. We have been involved with and are supportive of Burlington's goal of achieving Net Zero Energy by 2030 and understand the importance of innovation and new programs in helping to advance BED's efforts to use more renewable energy in Burlington. With that in mind, IBEW Local 300 is committed to supporting BED's application for federal funds for the Building GIANTS project. If I can provide more information that would be helpful in evaluating this application, please let me know.

Thank you,

A handwritten signature in blue ink that reads "Jeffrey Wimette".

Jeffrey Wimette
Business Manager, IBEW Local 300



Letter of Commitment

Patricia A. Hoffman
Principal Deputy Director,
Grid Deployment Office
U.S. Department of Energy
100 Independence Ave SW,
Washington, DC 20585

Dear Ms. Hoffman:

Sensibo, a climate control company dedicated to reducing energy load, saving customers money and reducing climate impacts through smart technology, is pleased to commit to working with BED on its efforts to advance its Net Zero Energy (NZE) vision through support from the DOE's Grid Deployment Office.

Sensibo understands that BED will need to deploy technologies to permit both the end-use metering and active load control of heat pumps if it is going to reach its NZE goals and reduce building load. Sensibo offers the necessary technology to support this work, enabling BED customers to control, monitor, and automate their residential and commercial heat pumps. Our technology will also allow BED to work with heat pumps currently installed, as well as new heat pumps as they are installed.

Sensibo looks forward to the prospect of partnering with BED on its load control efforts and wishes BED the best in its application process. Should the Grid Deployment Office require more information about Sensibo, how Sensibo will collaborate on this work, or about our commitment to the project, please have them email me directly at omer@sensibo.com.

Sincerely,

Omer Enbar,
COO
Sensibo

A handwritten signature in black ink, appearing to read 'Omer', followed by a long horizontal flourish.



Letter of Commitment

Patricia A. Hoffman
Principal Deputy Director,
Grid Deployment Office
U.S. Department of Energy
100 Independence Ave SW,
Washington, DC 20585

Dear Ms. Hoffman:

On behalf of the Emporia team, I am pleased to submit this letter of commitment, expressing our full intent to work with BED should BED's proposed *Building Grid-edge Integration and Aggregation Network of Thermal Storage (Building GIANTS)* project be accepted by the Grid Deployment Office of the Department of Energy.

Launched in 2018, Emporia reduces customer energy bills and carbon footprint by 30-50% through the automatization of energy use through smart plugs, EV chargers, home batteries, thermostats, and other technologies. We partner with over 40 energy-related companies to help their customers avoid costly repairs, save money and conserve energy. BED's End Use Meter and Flexible Load efforts very much aligns with our technology; together we will enable BED to permit both end-use metering and active load control of heat pumps -- with the goals of minimizing the system impacts and permitting better alignment of load and generation.

If you have any questions on Emporia's mission, vision, goals and experience, and our ability to support BED in its end use metering and flexible load work, please do not hesitate to contact me at bthacker@emporiaenergy.com . We look forward to partnering with BED and wish you all the best with your GRIP application.

Sincerely,

Benjamin Thacker
EVP, Business Development
7901 Shaffer Pkwy
Littleton, Colorado 80127
www.emporiaenergy.com

Dynamic Organics

104 East Putney Falls Rd.
Putney, VT 05346

Patricia A. Hoffman
Principal Deputy Director,
Grid Deployment Office
U.S. Department of Energy
100 Independence Ave SW,
Washington, DC 20585

RE: Dynamic Organics Letter of Commitment for BED's Building GIANTS Project

Dear Ms. Hoffman:

Dynamic Organics, LLC is pleased to provide this letter of commitment to partner with BED should BED's proposed *Building Grid-edge Integration and Aggregation Network of Thermal Storage* ("Building GIANTS") project be accepted by the Grid Deployment Office of the Department of Energy. As a Vermont based company, we are especially interested in continuing to work with our colleagues at BED to not only help Vermont's largest city reach its Net Zero Energy goals, but to advance the State of Vermont's carbon reduction emission efforts.

Dynamic Organics (DO), headquartered in Putney, Vermont, is a renewable energy services company that supports the development of commercial grid-interactive and efficient buildings (GEBs). Founded in 2013, DO staff have significant experience in sustainable energy design, construction, mechanical engineering, and have developed the Flexible Load Management (FLM) software platform being piloted with Vermont distribution utilities (Green Mountain Power, Vermont Electric Coop, and Burlington Electric Department). DO has developed and deployed our integrated software controls at over 35 commercial buildings in Vermont, including the ice energy thermal storage project at the Brattleboro Retreat hospital. DO is currently partnering with Burlington Electric by enabling GEBs for three commercial buildings as part of an ongoing pilot program.

As Vermont's largest city with building controls contractors headquartered locally, Burlington is well positioned to enable GEBs and further the development of an integrated smart city. Provided the upfront capital, BED and DO would be able to continue their partnership and work with local building controls contractors to deliver significant grid and customer benefits.

If you have any questions on Dynamic Organic's commitment to partnering with BED and supporting BED's end use metering and FLM work, please email me at mcasella@dynorganics.com.

Sincerely, 

Morgan Casella
Managing Partner
Dynamic Organics, LLC