<table>
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<tr>
<th>Organization Name (alphabetical)</th>
<th>Contact Information</th>
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<tr>
<td><strong>Earth Advantage</strong></td>
<td>Anthony Roy</td>
<td>501c3 non-profit organization</td>
<td>Subtopic 2.3 (Quality Installation Training and Certification Programs; Continuing Education for Design and Construction Professionals) Subtopic 1.6 (Field Validation) Subtopic 2.2 (Field Validation)</td>
<td>High performance residential construction</td>
<td>Earth Advantage is an Oregon-based non-profit organization that works to address the environmental impacts of residential buildings in three ways: • Providing technical support to leading regional high performance home builders. • Training the broader residential building industry and the real estate professionals that serve that industry. • Linking available green home data to the residential real estate market. Earth Advantage’s team possesses deep technical field expertise that is shared with leading regional high performance home builders. Earth Advantage’s training team transforms this technical field expertise into accessible curriculum for the broader residential building industry. The Earth Advantage training team has educated over 12,000 professionals across the country on a range of residential energy and green building topics. Earth Advantage also provides several professional designations for the residential building industry, including the Sustainable Homes Professional (SHP) designation.</td>
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<tr>
<td><strong>Houston Advanced Research Center (HARC)</strong></td>
<td>Gavin Dillingham, PhD</td>
<td>Non-profit research institute</td>
<td>Subtopic 1.9: Comprehensive Electric Load Optimization</td>
<td>Plug load optimization; building system controls optimization via algorithm development and deployment; building system integration; power electronics field validation and testing</td>
<td>HARC has significant expertise in developing and deploying building control systems and algorithms to optimize building performance. Our team has developed multi building system optimization models that allow for the testing of a variety of power systems in different load conditions, as well as incorporate load flexibility in management strategies to optimize load shaping and shedding opportunities. HARC owns and works in a 20,000 square foot LEED Platinum, Net Zero commercial building that it uses as a test bed to validate the latest building system components, control system and strategies, including the latest plug load technologies. The outcome is a optimized energy management systems and building performance.</td>
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<tr>
<td><strong>Neothermal Energy Storage Inc.</strong></td>
<td>Louis Desgrosseillers</td>
<td>Foreign Incorporated Entity</td>
<td>Subtopic 1.2: Thermal Storage Research, Development and Field Validation</td>
<td>R&amp;D and engineering design expertise in the areas of thermal energy storage using salt hydrates, especially in the utilisation of supercooling, and high capacity heat exchanger design for use with phase change heat storage materials. Also thermodynamic and heat transfer modelling of thermal energy storage systems using PCMs.</td>
<td>Neothermal has specialized in-house phase change thermal storage IP and possesses engineering design expertise for lab evaluation, prototype development, and field evaluation of thermal energy storage systems (namely using salt hydrates), specifically, for electric thermal storage systems (ETS) for use in residential central heating and hot water heating systems. Neothermal has achieved TRI 7 in the development and evaluation of its ETS system and has also been developing a suitable supply chain and relationships with contract manufacturers. Neothermal has also developed numerical modelling tools (Matlab and TRNSYS) for the evaluation of energy performance of the ETS system and the resulting indoor comfort in building energy simulations.</td>
</tr>
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</table>
* On-road and off-road application
* Power generation
* Engines, combustion, emissions, propulsion | PERC provides leading propane safety and training programs and invests in R&D of new propane-powered technologies. PERC is operated and funded by the propane industry. PERC programs benefit a variety of markets including transportation, agriculture, commercial landscaping, residential, and commercial building. PERC partners with a variety of trade associations, advocacy groups, and government agencies to promote safety and the adoption of propane as a clean, American fuel source. PERC works with manufacturers, researchers, and government partners to strengthen technical knowledge and investments in developing new propane products. We encourage proposals for projects that align with the Council’s strategic goals. |
## Teaming Partner List

**Buildings Energy Efficiency Frontiers & Innovation Technologies (BENEFIT) – 2020**  
(DE-FOA-0002196)

9/29/2020

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| Verdigris Technologies, Inc.     | Thomas Chung  
NASA Ames Research Park, Building 19,  
RM 1073, Moffett Field, CA 94035  
thomas@verdigris.co  
512-784-6431 | Small business | Subtopic 1.1: Advancing Innovative Manufacturing and End-of-Life Processing of Efficient Building Energy Technologies  
Subtopic 1.2: Thermal Storage Research, Development and Field Validation  
Subtopic 1.3: Heating, Ventilation and Air Conditioning Research, Development and Field Validation  
Subtopic 1.5: Integrated HVAC, Refrigeration and Water Heating Research, Development and Field Validation  
Subtopic 1.9: Comprehensive Electric Load Optimization | Design and manufacturing of advanced energy monitoring equipment.  
Specialty in AI and Machine Learning software focused on energy applications. | Verdigris designs and manufactures advanced energy monitoring equipment.  
Verdigris energy data is available via BMS integration or API. Its proprietary hardware design enables AI-enriched data streams for forecasting and predictive analytics.  
Verdigris has developed an adaptive and autonomous building controls solution called Adaptive Automation. Verdigris Adaptive Automation optimizes a building’s energy usage based on changing operating conditions.  
Adaptive Automation can make hundreds of control changes each month. This makes it more responsive to dynamic conditions than traditional approaches. These dynamic conditions include weather, utility rate schedules, occupancy and more.  
Adaptive Automation can coordinate a BMS with other connected equipment for efficient building energy consumption. This equipment may include:  
- connected in-room thermostats  
- electrical vehicle charging stations  
- solar and battery energy storage systems |