Selectee	Location (city, state)	Project Title	Federal Share
Topic 1 ElectroCat			
Northeastern University	Boston, MA	Developing Platinum Group Metal-Free Catalysts for Oxygen Reduction Reaction in Acid: Beyond the Single Metal Site	$1,000,000
Indiana University Purdue University	Purdue, IN	Mesoporous Carbon-based PGM-free Catalyst Cathodes	$1,002,789
Vanderbilt University	Nashville, TN	Fuel Cell Membrane-Electrode-Assemblies with PGM-free Nanofiber Cathodes	$880,034
Pajarito Powder	Albuquerque, NM	Active and Durable PGM-free Cathodic Electrocatalysts for Fuel Cell Application	$999,814
United Technologies Research Center	Hartford, CT	High Performance Non-PGM Transition Metal Oxide Oxygen Reduction Catalysts for Polymer Electrolyte Membrane Fuel Cells	$999,982
Topic 2A – Energy Production and Hydrogen Fueling			
Plug Power	Latham, NY	Autonomous Hydrogen Fueling Station	$1,997,216
Equilon Enterprises LLC (dba Shell Oil Products US)	Houston, TX	Integrated Control & Dispatch of Renewable Hydrogen Generation At Scale	$1,999,553
Skyre, Inc.	Hartford, CT	Electrolyzer Integrated Modular Nano-Array Monolithic Catalytic Reactors for Low Pressure/Temperature and High Flux Synthetic Fuel Production	$2,000,000
Giner, ELX Inc.	Newton, MA	Anode-Boosted Electrolysis	$1,744,728
Topic 2B – Electrolyzer Manufacturing			
3M Company	Maplewood, MN	Low-cost, High Performance Catalyst Coated Membranes for PEM Water Electrolyzers	$1,860,026
University of Tennessee Space Institute	Tullahoma, TN	Developing novel electrodes with ultralow catalyst loading for high-efficiency hydrogen production in proton exchange membrane electrolyzer cells	$2,000,000
University of Connecticut	Storrs, CT	Catalyst Layer Design, Manufacturing and In-line Quality Control	$2,000,000
Clemson University	Clemson, SC	Laser 3D Printing of Highly Compacted Protonic Ceramic Electrolyzer Stack	$1,600,000
Topic 2C – Infrastructure Station Footprint			
National Renewable Energy Laboratory	Golden, CO	Direct Cooling of Hydrogen to Decrease Energy Consumption in Hydrogen Vehicle Fueling Infrastructure	$1,200,000
Washington State University	Pullman, WA	Optimizing the Heisenberg Vortex Tube for Hydrogen Cooling	$1,657,757

Greenway Energy	Aiken, SC	Novel Metal Hydride Material Development for High Efficiency and Low-Cost Hydrogen Compressors	$2,404,600
Gas Technology Institute	Des Plaines, IL	Free-Piston Expander for Hydrogen Cooling	$2,500,000
Topic 3A – Fuel Cell Membranes			
Rensselaer Polytechnic Institute	Troy, NY	Ethylene-Norbornene based Alkaline Exchange Polymers and Reinforced Membranes	$1,000,000
Pennsylvania State University	State College, PA	Advanced Anion Exchange Membranes with Tunable Water Transport for High Performance, Long Lifetime and PGM-Free AEMFCs	$997,944
Drexel University	Philadelphia, PA	PILBCP-IL Composite Ionomers for High Current Density Performance	$993,735
Vanderbilt University	Nashville, TN	Composite PEMs from Electrospun Crosslinkable Poly(Phenylene Sulfonic Acid)s	$600,000
Xergy, Inc.	Harrington, DE	Novel non-PFSA Proton Exchange Membrane for Fuel Cell Application	$1,000,000
Lawrence Livermore National Laboratory	Berkeley, CA	Molten Hydroxide Dual-Phase Membranes for Intermediate Temperature Anion Exchange Membrane Fuel Cells	$1,000,000
Topic 3B – Reversible and Liquid Fuel Cells			
Lawrence Berkeley National Laboratory	Berkeley, CA	Novel Bifunctional Electrocatalysts, Supports and Membranes for High Performing and Durable Unitized Regenerative Fuel Cells	$1,000,000
Northwestern University	Evanston, IL	Efficient Reversible Operation and Stability of Novel Solid Oxide Cells	$974,694
Giner, Inc.	Newton, MA	High-Efficiency Reversible Alkaline Membrane Fuel Cells	$999,503
Georgia Institute of Technology	Atlanta, GA	Durable, High-Performance Unitized Reversible Fuel Cells Based on Proton Conductors	$750,000
University of Kansas Center for Research, Inc.	Lawrence, KS	Stationary Direct Methanol Fuel Cells Using Pure Methanol	$999,399