

Department of Energy - Teaming Partner List (DE-FOA-0002740)

SUBMISSION INSTRUCTIONS

Any organization that would like to be included on this list should submit the following information:

Organization Name, Contact Name, Contact Address, Contact Email, Contact Phone, Organization Type, Area of Technical Expertise, Brief Description of Capabilities, and Topic Area(s) of Interest.

Interested parties should complete the Excel file titled DOE-FOA[1]0002740 Teaming Partner List provided as an attachment to this announcement and email it to GDOFOA@hq.doe.gov with the subject line "Teaming Partner Information."

Organization Name	Contact Person Name	Contact Information	Organizational Type	Topic Area(s) of Interest (1, 2, or 3)	Brief Description of Area(s) of Expertise	Brief Description of Capabilit(ies)
CrossCompute Inc.	Roy Hyunjin Han	Contact Address: 445 5th Ave 17F, New York, NY 10016; Contact Email: contact@crosscompute.com; Contact Website: https://crosscompute.com; Contact Phone: +1 917-566-7004	C Corporation, Benefit Corporation	Topic Areas 1, 2, and 3	1. Software development of online decision support tools and map-based dashboards for community engagement, vendor procurement, spatial planning, simulation modeling, cost optimization of hazard mitigation projects such as microgrid site selection, battery placement, line undergrounding. 2. Software development of asset management and maintenance tracking systems to help replace assets before they fail using statistics, probability, benefit cost analysis. 3. Software development of data pipelines integrating feeds from real-time sensors for hourly production/consumption tracking and forecasting.	CrossCompute can build map-based tools and dashboards that help planners communicate the progress of a grid modernization project, win community support, negotiate easements with property owners and coordinate tasks between vendors. CrossCompute can also advise the development of data collection strategies and optimization models for advanced analytics that can extend the longevity of an infrastructure investment by replacing assets like transformers and reclosers before they fail.

Smarter Grid Solutions	Mary Jo Nye	Contact Email: mnye@smartergrid dsolutions.com; Contact Phone: 612-859-1821	Vendor of DERMS Software	Topic Areas 1, 2, and 3	Smarter Grid Solutions (SGS) is an industry leader and trusted provider of real-time DERMS and advanced distribution application/solutions to energy providers across the world. We use DERMS as a catch-all description, as we look at DER from all angles to ensure utilities and developers unlock the value of the DER, and that our solutions can scale with the enterprise. Our suite of products is autonomous and technology vendor agnostic, which makes it easy to aggregate, monitor and forecast, and address different distribution system use cases.	At a very high level, we are a system of systems company addressing real-time DERMS applications and use cases. Some of the use cases we address (not an all-inclusive list) include flexible interconnections, EVs, aggregation and monitoring of resources, integrations, real-time control, and curtailment, and monetization.
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Whisker Labs	James E Anderson, VP Business Development	Contact Person: James E Anderson; Contact Address: 12410 Milestone Center Dr., Germantown, MD 20876; Contact Email: janderson@whisk erlabs.com; Contact Phone: (202) 302-7008; Contact Website: https://www.whiskerlabs.com/	Private Company	Topic Areas 2 and 3	Whisker Labs (WL) is the maker of Ting, a sensor device that monitors the home to help prevent electrical fires. The Ting sensor network monitors the utility grid, documents power quality and reliability, and detects grid faults that can cause wildfire ignitions. The Ting network and its data are growing rapidly through significant investments by WL and insurance company partners that provide Ting to their customers. WL Ting data includes high resolution information on voltage sags and swells, frequency, and harmonic disturbances. This data is valuable for a variety of use cases including wildfire prevention, the integration of DER assets, enhancing reliability and resilience of the grid, improving power quality and other applications, either for a utility or a third-party utility software and data service provider. https://www.whiskerlabs.com/	Whisker Labs has invested tens of millions of dollars in deployment of the network of Ting power quality sensors and digital signal processing, data collection, analysis and delivery mechanisms that may qualify as matching expenses under the grant program. WL specializes in home electrical system and grid scale network monitoring for the prevention of fires caused by arcing, and power quality problems associated with voltage, frequency and harmonic anomalies, and can provide utilities or utility software and data service providers a constant, high-quality data stream to integrate into utility operations.
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<p>Fend Inc</p>	<p>Chris Escamilla</p>	<p>Contact Address: 4600 Fairfax Dr, Suite 410 Arlington, VA 22203; Contact Email: cescamilla@fend.tech; Contact Phone: (571) 970-1382 x707</p>	<p>Operational Technology (OT)/Industrial Control System (ICS) cybersecurity hardware and operational intelligence/data monitoring and analytics company</p>	<p>Topic Areas 2 and 3</p>	<p>Fend has proven expertise in meeting the Operational Technology (OT)/Industrial Control System (ICS) cybersecurity hardware needs of utilities. Additionally, our product line also incorporates operational intelligence/data monitoring and sends the relevant data to on- or off-premise servers for storage and analytics. This enables customers to visualize time-series data/custom displays on Fend's portal or other cloud platforms.</p>	<p>Through the DoE Small Business Innovation Research (SBIR) program, Fend has developed a low-cost data diode to serve the Operational Technology (OT) and Industrial Control Systems (ICS) space. Our devices use light as the medium to transmit data from one side to the other, physically isolating the equipment from lower-security networks. On-board processors enable the data diode to communicate with protected equipment using common protocols and communicate this information to an on-site network or cloud service. Access to the protected equipment's information enables workforce and maintenance efficiencies. Tested by the Army, Navy, and National Cyber Range, Fend's data diodes are 1/20th the cost of those associated with nuclear power plants. They are currently being used by water districts, utilities, manufacturers, and various government entities to protect critical infrastructure.</p>
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DRG Technical Solutions	Kevin Hodge	Contact Address: 8312 Neuse Rapids Rd Raleigh, NC 27616; Contact Email: khodge@drgsolutions.com; Contact Phone: 919-539-5561	Electric Utility Infrastructure and Research	Topic Areas 1, 2, and 3	<ul style="list-style-type: none"> - Electric Power System Research - Electric Distribution Engineering Design - Electrical Substation Design - Electric Grid Automation - Advanced sensing and fault detection for Electric Power systems - Situational awareness for Electric Power systems - HPC high-performance computing Electric Power supply - Electrical protection and controls - Artificial Intelligence and Machine Learning for Electric Power systems - Renewable generation pv, wind, hydro, nuclear, energy storage, Electric vehicle charging stations - Electrical Power Quality and Monitoring 	DRG is a full-service engineering and research firm, focused on the electric utility and infrastructure, inclusive of but not limited to, transmission and distribution planning, grid automation, reliability, and resiliency.
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VEIR Inc.	Max Luke	Contact Address: 3 Gill Street, Suite D, Woburn MA 01801; Contact Email: max@veir.com; Contact Phone: (857) 210 5828	Technology vendor (pre-commercial/early stage)	Topic Areas 1, 2, and 3	VEIR is an early-stage company (TRL 3-4) developing the next generation of cost-effective long-distance high-temperature superconducting (“HTS”) electric transmission lines that operate with negligible resistive losses. VEIR’s breakthrough innovation is a passive, distributed evaporative liquid nitrogen-based cryogenic cooling system that delivers 20 times the cooling power per kilogram of nitrogen flow compared to the active mechanical sub-cooling systems deployed in earlier generations of HTS electric transmission facilities. VEIR’s innovative cooling method is the first to enable reliable, cost-effective overhead deployment of HTS transmission lines. In addition to overhead transmission lines, VEIR is developing on-ground and underground transmission lines that utilize similar cooling approaches.	Negligible losses enable VEIR’s transmission lines to operate at levels of electrical current that are much higher than conventional lines. Very high current enables VEIR’s lines to transmit much more power than conventional lines at a given voltage level and to transmit the same amounts of power as conventional transmission lines but at much lower voltage levels. Those characteristics mean that VEIR transmission lines can greatly increase the capacities of existing corridors and greatly reduce the space required for new transmission corridors.
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University of Houston	Xingpeng Li (PhD, Assistant Professor)	Contact Email: lxli82@uh.edu; 713-743-9881; Contact Address: 4226 Martin Luther King Boulevard N317, Houston, TX 77204-4005; Contact Website: website: https://rpplab.github.io/people/Xingpeng-Li/	University	Topic Areas 1, 2, and 3	Power system network topology optimization, network reconfiguration, power system inertia estimation and frequency stability, usage-based battery degradation, graph neural network, learning-assisted optimization algorithms.	R&D: Power system/microgrid operations and planning, day-ahead scheduling, real-time dispatching, frequency regulation, contingency analysis, grid ancillary service, optimization, machine learning, inertia estimation, inertia-constrained grid operations, electricity pricing in wholesale power energy markets, electric network congestion analysis, cost-benefit analysis, operation and planning of hydrogen-embedded power systems, modeling and simulation, software development, novel experience combining deep learning and optimization methods, and extensive experience with various power system software including commercial software that we own multiple licenses. For more of our publications, check: https://rpplab.github.io/papers/
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<p>LineVision, Inc.</p>	<p>Hilary Pearson</p>	<p>Contact Address: 529 Main Street, Suite 307, Boston, MA 02129</p>	<p>C-Corporation</p>	<p>Topic Areas 1, 2, and 3</p>	<p>LineVision is a Grid-Enhancing Technology (GET) company founded in 2018 that has developed an advanced non-contact sensor and analytics platform that continuously monitors the behavior of overhead transmission line conductors, detecting anomalies and issuing real-time alerts on risks, while unlocking as much as 40% additional capacity on existing lines through Dynamic Line Ratings (DLR).</p>	<p>LineVision provides utilities with three applications which are all enabled by the company’s non-contact LiDAR sensor system which is mounted to transmission tower structures, requiring no outages and no live line working techniques. The three solutions are:</p> <p>LineRate provides Dynamic Line Ratings (DLR) and Ambient Adjusted Ratings (AAR) which increase the capacity on transmission lines</p> <p>LineAware provides utility and grid operators with situational awareness, which helps to inform operators with sag and horizontal motion data, triggering alerts on exceedances</p> <p>LineHealth provides planners and risk management teams with Asset Health Monitoring, which improves maintenance strategies by creating a digital twin to determine conductor health</p>
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Franklin Energy	Lloyd Kass	Contact Email: lkass@franklinenergy.com; Contact Phone: 646.522.4070	Utility Energy Services Provider, 3rd Party Customer Program Designer & Implementer	Topic Area 2	Turnkey implementation services provider of demand management programs serving large commercial and industrial facilities and mass market consumers, including disadvantaged (J40) communities	Customer marketing, outreach and education; enrollment and engagement in demand response, managed charging and other grid optimization programs; facility energy audits and assessments of all kinds; home and other building retrofits including installation of grid-enabled equipment and devices; and contractor engagement and oversight.
Beneficial Electrification	Alex Hofmann	Contact Name: Alex Hofmann; Contact Address: 3625 N Potomac St Arlington, VA 22213; Contact Email: info@be-league.org	Type: 501 (c)(3) non-profit	Topic Areas 1, 2, and 3	Area of Technical Expertise (bulleted list): - Convening key stakeholders and utilities to discuss electrification and related projects - Electrification and weatherization together programs - Grant program management and small utility consortiums - R&D program management - System design for reliability, resilience, and safety support programs at utilities - Electric bus programs - Community geothermal - Green ammonia	The beneficial electrification league (BEL) excels at bringing utilities and stakeholders together to develop programs in collaboration with manufacturers and research organizations. This means BEL can help organizations with the identification and development of pilot programs for demonstration, field validation, and that are inclusive of energy burdened, low-income, and rural communities.

<p>Electrical Consultants, Inc.</p>	<p>Crystal Kuntz</p>	<p>Contact Address: 3521 Gabel Road, Billings, MT 59101; Contact Email: crystal.kuntz@eci usa.com; Contact Phone: 406-259-9933</p>	<p>Electrical Engineering</p>	<p>Topic Areas 1, 2, and 3</p>	<p>All services for utility scale, UHV, HV & HVDC electric transmission & distribution planning, engineering design & construction. Smart Grid technologies, Metering, System Modeling, Protection & Control.</p>	<p>ECI provides high voltage, utility scale engineering design for transmission & distribution facilities including underground transmission design. Expertise includes system monitoring, protection & control design for high voltage utility scale projects, utility scale battery energy storage, microgrid design, adaptive protection design, advanced modeling, system hardening, smart grid technology design & implementation, renewable energy grid integration, line rating, advanced power control, system planning, project management & execution.</p>
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Jupiter Intelligence	Jeff Ward, Global Federal Climate Account Executive	Contact Address: C/o Jupiter Intelligence; 181 2 nd Avenue, Suite 300; San Mateo, CA 94401; Contact Email: jeff.ward@jupiterintel.com; Contact Phone: 434-242-3479	Private sector company	Topic Area 1	Jupiter Intelligence™ has created a world-class ClimateScore™ risk platform that predicts extreme weather and climate impacts on infrastructure at exceptionally-high spatial resolutions from a very granular, i.e., asset or building, level to total portfolios or at the community, state, regional, national, or global levels, over time horizons ranging from a few hours to several decades into the future. Jupiter provides physical climate data analytics that can facilitate infrastructure resilience planning and implementation. The analytics also can be used for risk management and risk disclosure. Jupiter’s ClimateScore™ framework is founded upon current and future-looking, rather than solely historic, data.	Jupiter’s ClimateScore™ risk platform delivers best-in-science physical climate risk modeling, forecasting, and analysis of multiple weather or climate impacts, or perils, including but not limited to floods, hurricanes, wildfires, and extreme heat/cold, domestically and globally, across multiple climate scenarios. Jupiter develops asset-level data, identifies exposures and vulnerabilities, and then evaluates how those exposures and vulnerabilities change over time under various climate change scenarios. Jupiter’s tools enable public and private sector entities to make decisions about where and how to locate planned, new infrastructure assets, as well as how much hardening will be required for existing assets or whether consideration should be given to relocating assets.
UtilityAPI	Heather Williams, Sr. VP Business Development and Marketing	Contact Address: 1212 Broadway, Suite 1600, Oakland, CA 94612; Contact Phone: (503) 453-2053	Energy Data Provider	Topic Areas 1, 2, and 3	UtilityAPI provides data exchange tools that are used to accelerate deployment and monitoring of distributed energy resources and energy efficiency technologies.	Utility API enables seamless data access and behind the meter insights through our safe, secure, and standardized data exchange platform. We also work with regulators and local governments to shape effective utility data access policies.

Cornell University	Jacob Mays	Contact Email: jacobmays@cornell.edu	Institution of Higher Education	Topic Area 3	Transmission system applications: Planning, modeling, cost allocation, or other approaches that enable a transition to innovative financial and/or regulatory constructs that accelerate transmission expansion	Expertise in optimization and simulation modeling with applications in electricity system planning, operations, and market design
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<p>Vega MX Inc</p>	<p>Vivek Mital</p>	<p>Contact Address: 11 Broadway, #420, New York, NY 10002; Website: www.vegamx.net; Contact Phone: 347 702 1659</p>	<p>Pvt. Company Deleware Corp.</p>	<p>Topic Area 2 primarily, but open to being a sub for Topic Areas 1 and 3</p>	<p>1. Climate Modeling including Wildfire across the life cycle (pre fire/ active phase / post fire). We have been selected by NASA i Tech Cycle II 2021 for the same and the pitch is included here https://www.youtube.com/watch?v=t7goxOOJSdU</p> <p>2. Space Technology and applications - Earth Observation, change detection, wide area monitoring. Sensors : Microwave (SAR), Optical, HSI, Weather (radiometry) etc</p> <p>3. Sensor Fusion, AI/ ML, Physics modeling, Autonomy etc</p> <p>4. Software Engineering, Big DataSystems Engineering, Business Analysis</p> <p>5. Financial Engineering & Capital Markets</p>	<p>VegaMX is a US based AI Insights, New Space Technology firm that uses earth observation with model and data driven approaches for addressing food, energy and national security challenges. We are a multinational consortium of experts with professional experience in disaster & wildfire management, aviation and space systems, agroforestry, capital markets and banking, physics, and data science across commercial government, and scientific domains. The company has strengths in space sensor technology such as microwave and optical, designing and operating complex airborne platforms, atmospheric physics and weather / climate modeling, AI / ML and massive data management, as well as fielding commercially successful engineering solutions deployed at leading commercial and government entities world wide. We are also operating in the in-space segment for predictive maintenance, SHM, CBM with in situ on board sensors and data fusion as the unifying theme with EO.</p>
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Fermata Energy	Melissa Chan	Contact Email: melissa@fermataenergy.com	Vehicle-to-grid technology platform	Topic Areas 1, 2, and 3	We transform bidirectional EVs into inverter-based DERs, providing grid edge visibility and control for our utility partners. By aggregating the batteries onboard EVs, we provide grid scale energy storage for every day peak management and for emergency resilience.	As a partner we can provide: managed charging and discharging of EVs and battery energy storage systems secure backhaul and storage of EV and EVSE operational data load management predictive loads for buildings and homes using our technology integration with utility ADMS and DERMS access to subcontractors who will install and maintain EVSE
Enel X North America, Inc.	David Rodriguez Yulia Buynova	Contact Phone: 978-989-5413 and 351-228-1787; Contact Email: enelxteaminglist@enel.com	Provider of demand flexibility solutions and digital platforms	Topic Areas 1, 2, and 3	<ul style="list-style-type: none"> • Demand Response, Demand Management and Flexibility Solutions • Battery Energy Storage Systems and Microgrid Deployment • Energy Supply Management • Utility-Scale Energy Storage Solutions • Energy Efficiency • Utility Bill Management • Renewable Energy • Sustainability • Smart EV Charging • Energy Services • Distributed Energy Solutions (including resilience/backup provisions) • Digital Platforms • Smart/connected devices 	Enel X holds a leading position in C&I demand response programs globally. In North America, we manage over 4.7 GW in demand response capacity across 4,000 customers. Enel's portfolio includes 8 GW of utility-scale renewable capacity, 606 MW / 882 MWh of utility-scale energy storage, 63 MW / 145 MWh of distributed energy storage capacity, and 110,000 EV charging points. Our goal is to connect "any asset to any market and any value stream" to enable a more sustainable energy future. We're ranked #1 in Vehicle Grid Integration Solutions and #2 C&I Energy Storage System Integrator globally by Guidehouse Insights.

GE Renewable Energy	Matthew Clifton	Contact Email: matthew.clifton@ge.com	For profit enterprise	Topic Areas 1, 2, and 3	Reliable, affordable and sustainable energy.	Combining onshore and offshore wind, hydro and innovative grid and digital technologies, GE Renewable Energy has installed more than 400 GW capacity globally
Wells Rural Electric Coop	Layla Murphy	Contact Address: 1451 Humboldt Avenue, P.O. Box 365, Wells, NV 89835; Contact Email: lmurphy@wrec.coop; ph: 775-752-1581	non-profit electric cooperative	Topic Areas 1 and 2	Rural electric service; power purchaser and supplier	Central power station for rural areas surrounding Wells, NV

<p>encoord</p>	<p>Wallace Kenyon</p>	<p>Contact Email: wallace@encoord.com; Contact Address: 1525 Raleigh Street, Suite 500, Denver, CO, USA 80204</p>	<p>Energy System Modeling Software Company</p>	<p>Topic 1 is focused on grid resilience, particularly in the context of extreme weather events. With the coupled energy network capabilities of SAInt, encoord is uniquely positioned to aid transmission system operators and planners in assessing the interdependencies of electricity and gas networks, particularly during periods of extreme weather when the systems may be under stress.</p>	<p>The encoord team has experts in the electricity and gas network spaces. The electricity modeling team has extensive expertise in performing capacity expansion modeling, production cost modeling with DC optimal power flow, and AC power flow for steady state analysis and quasi-steadystate time series analysis. There is in-house expertise with transmission and distribution modeling, including familiarity and conversion capabilities with certain power system modeling tools such as PSSE, DigSILENT, CYME, and OpenDSS.</p>	<p>encoord curates SAInt, which is a coupled energy network software platform that permits the simultaneous modeling of electricity and gas networks to assess the interdependencies and internetwork impacts. Beyond the coupled simulation capabilities, SAInt is able to do varied timescale modeling of electricity networks, including capacity expansion, production cost, and power flow modeling, with larger timescale modeling informing the initial states of the shorter timescale modeling. Certain members of the team are mathematical modelers who are also experts in power systems operations, which allows the development of novel simulation capabilities within the existing platform to meet the rapidly changing requirements associated with power system planning.</p>
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			<p>Topic 2 is focused on technology solutions to increase the flexibility, efficiency, reliability, and resilience of the electric power system. The time-scale integrated approach for power system modeling with SAInt means that the team is able to offer a streamlined analysis of proposed system changes to achieve the specified goals.</p>		
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<p>EnerNex</p>	<p>Michel Pastore</p>	<p>Contact Address: 620 Mabry Hood Road, Suite 300, Knoxville, TN 37932; Contact Name: Michele Pastore; Contact Email: mpastore@enern ex.com; Contact Phone: 865-770- 4892</p>	<p>LLC</p>	<p>Topic Areas 1 and 2</p>	<p>EnerNex is a power systems engineering firm that provides smart grid consulting services to help utilities identify, specify, procure, implement, and utilize modern grid technologies and systems. We address the complex challenges of the electric utility industry by offering services that span from detailed engineering analyses to strategic guidance. Our wide range of utility industry specific technical services enables us to provide broad contextual perspective to best resolve the specific needs of our utility clients. EnerNex helps clients explore the efficacy of modern utility technologies and systems (e.g. advanced metering, MDMS, ADMS, DERMS), the adoption of distributed energy resources (e.g., PV, energy storage, DR and, NWA), and modeled utility scale solar and wind energy integration and various microgrid topologies to explore the system impacts of integrating these resources on the grid.</p>	<p>EnerNex is a leader in providing engineering, consulting, and research services to the electric power industry worldwide. Founded in 2003, EnerNex offers a cross-cutting blend of expertise in grid modernization planning and implementation; renewable energy engineering, design, and integration; and electric power systems planning and engineering. Services include, but are not limited to: Electric Energy System Engineering and Analysis Transmission and Distribution Studies Bulk Power System Studies / Analysis Power Quality / Power Disturbance Troubleshooting Renewable and Distributed Energy Integration and Interconnection Solar converter and wind turbine modeling Wind and solar integration studies Renewable plant interconnection studies Energy Storage Integration Grid Modernization Smart Metering / AMI Demand Response Energy Assurance Planning –Resilient Energy Systems Microgrid</p>
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Emera Technologies	Louise Anne Comeau, Vice President Government Relations	Email : la.comeau@emera.com Tel : 902 266 9728	Manufacturer, Integrator	Topic Area 1, 2	Emera Technnologies is the developer and manufacturer of BlockEnergy Smart Platform, the world’s first utility-focused, distributed renewable energy platform . Scalable, storm-resilient and able to interoperate seamlessly with the grid, BlockEnergy manages rooftop solar, energy storage and smart distributed controls in communities.	The distributed nature of the design, including the smart distributed controls , that operate autonomously to allocate energy as required amongst homes in a community.The BlockEnergy Smart Platform data architecture provides detailed second-by-second “live” data to grid operators, providing very high-level visibility of energy flows that can be used to improve the efficiency, reliability and safety of the grid.
TRC Companies (https://www.trccompanies.com/)	Col Smart	Col Smart Senior Director - Grid Modernization One Gateway Center Suite 2600 Newark, NJ 07102 col.smart@trccompanies.com Ph 1201 780 4230	Engineering, Environmental and Technology Consulting	Topics 1, 2 and 3	ESG Strategy and Implementation Operating Technology (OT) and Information Technology (IT) Strategy and Integration, Geospatial Information Systems Design and Implementation Transmission, Distribution and Substation Design and Construction Environmental Permitting Testing and Commissioning Power System Studies Distribution Automation Telecom/Joint Use Storage and Microgrids Energy Efficiency Renewable Energy Electrification and EVs Market Research Customer Programs Advanced Data Analytics	TRC Companies is a global engineering, environmental and technology consulting firm with over 50 years of operation and a staff of 6,600. TRC Companies has resources at 140 strategic locations across the US. TRC Companies is able to support every aspects of energy projects on an end to end basis from generation through to end customer delivery, and from those end customers back to the grid! TRC Companies skills cover such as project strategy, research and analytics, design and inception; project management and execution; testing; comissioning and on-going operations.

Vermont Public Power Supply Authority (VPPSA)	Kenneth Nolan	Contact Email: knolan@vppsa.com Contact Phone: (802) 882-8500 Contact Address: P.O. Box 126 5195 Waterbury-Stowe Road Waterbury Center, VT 05677 Contact Website: www.vppsa.com	Electricity Generator, Joint Action Agency for (11) Distribution Providers	Topic Areas 1 and 2	Vermont Public Power Supply Authority (VPPSA) is a joint action agency established by act of the Vermont General Assembly to provide services to its municipal and community owned electric utility members. VPPSA's eleven (11) municipal member utilities serve all or part of 50 rural communities and over 30,000 customers in the State of Vermont, several of which are designated as Disadvantaged Communities (DACs). VPPSA has deep experience developing, managing, and deploying energy projects, technology solutions, planning support, and regulatory and legislative representation.	The Vermont Public Power Supply Authority (VPPSA) has broad statutory powers that enable it to provide such services as may be required in support of the activities of its member municipal utilities and to market its services to non-member utilities as it deems appropriate. VPPSA provides its members with a broad spectrum of joint action services and utility operations support such as: power aggregation, power generation, financial support, IT support, rate planning support and legislative and regulatory representation.
Oracle Energy & Water	Mary Sprayregen	2300 Oracle Way Austin, TX 78741 mary.sprayregen@oracle.com 802-578-3189	Technology Vendor	Topic Areas 1, 2, 3	Global provider of SaaS solutions to help utilities increase reliability and resiliency & accelerate equitable decarbonization efforts. Providing scalable solutions that can integrate with other platforms and vendors.	DERMS, NMS, ADMS, MDM provider. Customer care & billing. Opower solutions: customer engagement platform, residential behavioral energy efficiency and behavioral demand response, TOU rates modeling and outbound load shifting coaching, and energy & appliance disaggregation. A suite of affordability solutions (customer identification and analytics, outbound alerts, and a one-stop shop programmatic savings platform) are available to support Community Benefit Plans and the Justice40 initiative.

GZA GeoEnvironmental, Inc. (GZA)	Wayne Cobleigh	249 Vanderbilt Avenue Norwood, MA 02062; (781) 278-3848; wayne.cobleigh@gza.com	Employee-owned company	Topic areas 1, 2, and 3	GZA provides Geotechnical, Environmental, Ecological, Water, and Construction Management services. GZA's more than 700 professionals are based in 30 offices in New England, the Mid-Atlantic, and the Great Lakes States. GZA supports clients in the reliability, resilience, beneficial re-use and decarbonization of energy assets with a full breadth of resiliency planning, grant support, siting and permitting, engineering, and construction support services.	Microgrid planning, siting, feasibility, design for climate adaptation and resiliency, environmental permitting, benefit cost analysis and technical consultant to support federal and state grant and loan funding.
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<p>Sense Labs, Inc.</p>	<p>Brandon Dyer</p>	<p>Contact Address: 485 Massachusetts Ave, Ste. 4, Cambridge, MA, 02139 ; Contact Email: brandon.dyer@se nse.com; Contact Website: sense.com; Contact Phone: 303-489-9101</p>	<p>Technology Vendor</p>	<p>Topic Areas 1, 2, and 3</p>	<p>Founded in 2013, Sense uses machine learning applied to high resolution, waveform data to analyze energy usage in the home, providing real-time insights on device behavior and enabling a wide range of customer applications and grid services to make home smarter and more efficient and the grid more reliable.</p>	<p>Sense has partnered with leading meter manufacturers to integrate our technology directly into the next generation of smart meters. Sense connects to the home's Wi-Fi and reports this information through the cloud to the Sense apps for iOS, Android, and the web. This allows homeowners to remotely monitor their home's energy in real time right down to the second. Sense is developing behavioral energy efficiency and demand response programs based on actual usage reductions realized at the meter, delivering for DSM portfolios and targeted peak reduction. Sense is also developing real-time grid analytics capabilities, including DER forecasting, outage and fault detection, voltage optimization and grid modernization services.</p>
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MPR Associates	Nathan Mitchell	320 King Street, Alexandria VA 22314 / 703-519- 0200 / info@mpr.com / Website: www.mpr.com	Power Engineering Services Firm	Topic Areas 1, 2 or 3	<ul style="list-style-type: none"> • Risk Based Maintenance and Capital Investment Planning • Reliability and Resiliency Solutions • Asset Management Strategy • Operations Optimization • Grid Modernization • Energy Storage Technology Development and Deployment • Transmission, Substation and Distribution System Project Contracting, Management and Controls • Reliability, Resiliency and Microgrid Solutions • Risk Informed Investment and Maintenance Prioritization • Power System Planning and Analysis • Power Systems Equipment Reliability, Qualification and Standards • Renewable Energy Integration 	<ul style="list-style-type: none"> • Concept Development • Strategy and Program Management • Data Governance and Analytics • Project Development and Delivery • Owners Engineer • Asset and Risk Management • Advanced Technology Development and Deployment
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Transmission & Distribution Services, LLC	Harry Barnes, Jr., Managing Member	Contact Address: 9550 San Mateo Blvd. NE, Suite G Albuquerque, NM 87113 Contact Email: hbarnesjr@t-d-services.com Contact Website: https://www.t-d-services.com Contact Phone: (505)344-4234	Employee Owned	Topic Area 1, 2 and 3	Transmission and distribution lines, substations, protective relaying and system protection, SCADA, testing and commissioning, construction administration and management, power delivery, power generation (including wind and solar), surveying, GIS mapping and LIDAR scanning, and consulting for support on project development, licensing and permitting, contract development and negotiating, project financing, site selection and environmental assessments, conceptual and preliminary engineering studies, plant performance modeling, procurement services, value engineering studies, risk and condition assessments, financial proforma development and analysis, project implementation and compliance reviews, project capital and lifecycle cost estimates, and grant writing and administration.	Located in Albuquerque, New Mexico, T&D has served IOUs, electric cooperatives, municipal and tribal utilities for over 15 years. Our qualified engineering and surveying personnel work together to provide effective solutions and support to our clients with regard to system upgrades, maintenance, and planning. We have extensive experience navigating RUS, BLM, BIA, FERC, NESC, and RUS regulations, working with client-specific standards, and acting in compliance with the cultural concerns of tribal entities.
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<p>Idaho Falls Power</p>	<p>Josh Roos</p>	<p>Josh Roos 140 S. Capital Ave, Idaho Falls, ID 83402/jroos@ifpower.org/208-612-81203</p>	<p>Municipal electric utility</p>	<p>Topic Area 1, 2 & 3</p>	<p>IFP, in partnership with the Idaho National Lab (INL), has tested our own hydro-electric project for black start and islanding potential which provided the reassurance that needs can be met. IFP was also partner to the Pacific Northwest Smart Grid Demonstration Project from 2010 - 2014. The projects IFP participated in include; automated power factor control, distribution automation, voltage reduction, plug-in hybrid electric vehicles, and battery incorporation into the grid. These efforts garnered invaluable experience and education for the IFP staff and demonstrates a successful history of partnering with other utilities and entities for successful outcomes.</p>	<p>IFP owns and operates two FERC licensed hydroelectric projects with four impoundments powering six hydroelectric generators, having a combined name plate capacity of 50.2 MW of generation. IFP also owns three MW of total generation from the Horse Butte Wind project and is currently in negotiations to expand this project. Also, IFP operates a small solar installation located at 140 S. Capital Avenue. Together, these projects produce enough electricity to meet 35% of the City's annual electricity requirements. Additional assets include 12 substations, 27 miles of 161 kV transmission, 25 miles of 46 kV sub-transmission, 524 miles of distribution, and 703 miles of fiber to-the-home.</p>
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<p>Sentient Energy</p>	<p>Bob Karschnia, Chief Executive Officer</p>	<p>15815, Executive Drive, Suite 300, Frisco, TX 75035, bob.karschnia@sentient-energy.com, Phone: 46-296-1122</p>	<p>Technology Solution Provider</p>	<p>Grid Reliability</p>	<p>Network Topology Optimization, Advanced Power Flow Analysis, real-time Grid Monitoring, Situational Awareness, Outage frequency and customer minutes interrupted time reduction , wildfire risk mitigation</p>	<p>Sentient Energy provides a comprehensive solution for both overhead and underground distribution circuit grid monitoring and grid edge control sensors, smart devices, grid management software and analytics. We also offer IT and technical services to improve overall situational awareness quickly and are a critical part of the Grid Enhancing Technologies (GET) that improve Advanced Power Flow Analysis and Control as well as Network Topology Optimization. The average customer should see a 10% reduction in Customer Minutes Interrupted (CMI) within a year</p>
<p>Sentient Energy</p>	<p>Giri Iyer, Vice President, Corporate Development</p>	<p>15815, Executive Drive, Suite 300, Frisco, TX 75035, giyer@sentient-energy.com, Phone: 469-636-2732</p>	<p>Technology Solution Provider</p>	<p>Grid Resiliency</p>	<p>Network Topology Optimization, Advanced Power Flow Analysis, real-time Grid Monitoring, Situational Awareness, Outage frequency and customer minutes interrupted time reduction, momentary outages and pre-outage incipient fault anomaly detection, current direction change, wildfire/weather event risk mitigation</p>	<p>Sentient Energy provides a comprehensive solution for both overhead and underground distribution circuit grid monitoring and grid edge control sensors, smart devices, grid management software and analytics. We also offer IT and technical services to improve Advanced Power Flow Analysis and Control as well as Network Topology Optimization. The average customer should expect their grid to rebound back at least one day faster than before with a \$25-\$50 per capita economic impact</p>

Sentient Energy	John Costello, Senior Vice President, Global Sales	<u>15815, Executive Drive, Suite 300, Frisco, TX 75035,</u> <u>john.costello@sentient-energy.com,</u> Phone : 469-389-8908	Technology Solution Provider	Grid Flexibility	Network Topology Optimization, Advanced Power Flow Analysis, real-time Grid Monitoring, Situational Awareness, Outage frequency and customer minutes interrupted time reduction, momentary outages and pre-outage incipient fault anomaly detection, current direction change, load change detection, grid edge voltage stabilization, power quality improvements, wildfire/weather event risk mitigation, DER/microgrid interconnect acceleration	Sentient Energy provides a comprehensive solution for both overhead and underground distribution circuit grid monitoring and grid edge control sensors, smart devices, grid management software and analytics. We also offer IT and technical services to improve Advanced Power Flow Analysis and Control as well as Network Topology Optimization. Customers should be able to facilitate interconnect of DER/EV and Microgrid buildout at the grid edge with confidence using our grid edge voltage stabilization and power quality improvements. The average customer should expect to see savings of \$50K-\$200K/year.
Oracle Energy & Water	Mary Sprayregen	2300 Oracle Way Austin, TX 78741 mary.sprayregen@oracle.com 802-578-3189	Technology Vendor	Topic Areas 1, 2, 3	Global provider of SaaS solutions to help utilities increase reliability and resiliency & accelerate equitable decarbonization efforts. Providing scalable solutions that can integrate with other platforms and vendors.	DERMS, NMS, ADMS, MDM provider. Customer care & billing. Opower solutions: customer engagement platform, residential behavioral energy efficiency and behavioral demand response, TOU rates modeling and outbound load shifting coaching, and energy & appliance disaggregation. A suite of affordability solutions (customer identification and analytics, outbound alerts, and a one-stop shop programmatic savings platform) are available to support Community Benefit Plans and the Justice40 initiative.

<p>GDS Associates, Inc.</p>	<p>Julio Rovi</p>	<p>Contact email: julio.rovi@gdsassociates.com. Main 770-799-2385. Cell 407-851-9886.</p>	<p>C-type Consulting firm founded in 1986</p>	<p>Areas 1, 2, and 3</p>	<p>GDS covers a broad spectrum of utility services, particularly cooperatives and municipal utilities. We provide support and technical assistance to governments and public service commission nationwide. For utilities, GDS serves as their engineering department for electricity generation, transmission, and distribution. Areas of expertise include:</p> <ul style="list-style-type: none"> •Cost of service studies •Demand Response, Demand-side management •Distributed Energy applications • Battery Energy Storage and Microgrid design •Energy Supply Management •Utility-Scale Energy Storage Solutions •Energy Efficiency •Renewable Energy •Sustainability and climate studies •Smart EV Charging •Energy studies 	<p>GDS provides program design, grant preparation assistance, group facilitation, program implementation, and evaluation services. For GRIP, we serve state agencies and utilities and aim to assist in the success of this funding opportunity.</p> <ul style="list-style-type: none"> •Full range of energy engineering services. •Stakeholder engagement, marketing, and recruitment. •Facilitation, capacity-building, and technical support. •Facility energy audits, hardening, sustainability, and design for viability. •Project conceptualization, design, estimating costs, and administrative arrangements. •Program and project administration, reporting, and documentation. •Smart city applications, EV charging, electrification of transportation.
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<p>Smart Wires Inc.</p>	<p>Ted Bloch-Rubin</p>	<p>Address: 1035 Swabia Ct., Suite 130, Durham, NC 27703 Email: ted.blochrubin@smartwires.com</p>	<p>C-Corporation</p>	<p>Topic Area 1, 2, and 3</p>	<p>Smart Wires delivers high-impact technology and services that create a digital, secure and accessible power system – accelerating renewable energy adoption and wide-scale electrification. To this end, SmartWires collaborates with leading global utilities across 4 continents to deliver three key service offerings: advanced power flow control (APFC) devices, system rating software, and advanced analytics services. Smart Wires is based in Raleigh, NC and the APFC devices are manufactured in Florida.</p>	<p>Smart Wires' APFC device, the SmartValve, is an innovative, digital power flow control technology. These devices rapidly unlock network capacity by pushing power off overloaded lines or pulling power onto underutilized lines. SmartValve installations historically unlock between 170GW and 1.5GW of latent transmission capacity for our customers. Smart Wires also offers FERC Order 881-compliant, sensor-based AAR and DLR technology, SUMO. SUMO insights can be used to increase grid capacity and improve operational security. This hardware-free technology can also be deployed faster and at a lower cost compared to traditional rating technologies. From an analytics perspective, Smart Wires' team of power system experts use advanced software and modeling to develop solutions for generation and load connections, and power system operation and planning constraints to optimize technology installations.</p>
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