|                        |  |   | Department of Energy - 1 | eaming Partner List (DE-FOA-0002740)   |  |  |
|------------------------|--|---|--------------------------|--|--|--|
| 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  |                          | 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 cos analysis.  3. Software development of data pipelines integrating   | 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 st transformers and reclosers before they fail.  |
| Smarter Grid Solutions | Mary Jo Nye                                  | Contact Email: mnye@smartergridsolutions.com; Contact Phone: 612-859-1821   | Vendor of DERMS Software | Topic Areas 1, 2, and 3                | feeds from real-time sensors for hourly production/consumption tracking and forecasting.  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 differen distribution system use cases.  |  |
| Whisker Labs           | James E Anderson, VP<br>Business Development | Contact Person: James E Anderson; Contact Address: 12410 Milestone Center Dr., Germantown, MD 20876; Contact Email: janderson@whiskerlabs.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 an digital signal processing, data collection, analysis and deliver 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 wire voltage, frequency and harmonic anomalies, and can provide utilities or utility software and data service providers a disconstant, high-quality data stream to integrate into utility operations. |

| Fend Inc                | Chris Escamilla | Contact Address: 4600 Fairfax Dr, Suite 410 Arlington, VA 22203; Contact Email: cescamilla@fend.tech; Contact Phone: (571) 970-1382 x707 | Operational Technology (OT)/Industrial Control System (ICS) cybersecurity hardware and operational intelligence/data monitoring and analytics company | Topic Areas 2 and 3     | 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 timeseries data/custom displays on Fend's portal or other cloud platforms.  | 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. |
|-------------------------|-----------------|--|---|-------------------------|--|--|
| 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 | - 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 resilency.   |
| VEIR Inc.               | Max Luke        | Contact Address: 3 Gill Street, Suite D, Woburn MA 01801;<br>Contact Email: max@veir.com;<br>Contact Phone: (857) 210 5828               | Technology vendor (pre-<br>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.   |

| University of Houston      | Xingpeng Li (PhD, Assistant<br>Professor) | Contact Email: Ixli82@uh.edu; 713-743-9881; Contact Address: 4226 Martin Luther King Boulevard N317, Houston, TX 77204-4005; Contact Website: website: https://rpglab.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, dayahead 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 hydrogenembedded 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://rpglab.github.io/papers/                |
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| LineVision, Inc.           | Hilary Pearson                            | Contact Address: 529 Main Street, Suite 307, Boston, MA 02129   | C-Corporation   | Topic Areas 1, 2, and 3 | LineVision is a <b>Grid-Enhancing Technology (GET)</b> 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).                 | 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:  LineRate provides Dynamic Line Ratings (DLR) and Ambient Adjusted Ratings (AAR) which increase the capacity on transmission lines  LineAware provides utility and grid operators with situational awareness, which helps to inform operators with sag and horizontal motion data, triggering alerts on exceedances  LineHealth provides planners and risk management teams with Asset Health Monitoring, which improves maintenance strategies by creating a digital twin to determine conductor health |
| Franklin Energy            | Lloyd Kass                                | Contact Email: lkass@franklinenergy.com;<br>Contact Phone: 646.522.4070   | Utility Energy Services Provider, 3rd<br>Party Customer Program Designer &<br>Implementer | 1                       | 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<br>Potomac St Arlington, VA 22213;<br>Contact Email: info@be-league.org   | Type: 501 (c)(3) non-profit   | Topic Areas 1, 2, and 3 | Area of Technical Expertise (bulleted list): -@onvening key stakeholders and utilities to discuss electrification and related projects -Electrification and weatherization together programs -@rant program management and small utility consortiums -B&D program management -System design for reliability, resilience, and safety support programs at utilities -Electric bus programs -@ommunity geothermal -@reen 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.   |

| Electrical Consultants, Inc. | Crystal Kuntz   | Contact Address: 3521 Gabel Road, Billings, MT 59101;<br>Contact Email: crystal.kuntz@eciusa.com;<br>Contact Phone: 406-259-9933  | Electrical Engineering          | Topic Areas 1, 2, and 3 | All services for utility scale, UHV, HV & HVDC electric transmission & distribution planning, engineering design & construction. Smart Grid technologies, Metering, System Modeling, Protection & Control.   | 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, projet management & execution.   |
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| Jupiter Intelligence         | Jeff Ward, Global Federal<br>Climate Account Executive            | Contact Address: C/o Jupiter Intelligence; 181 2 <sup>nd</sup> 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 ClimateScoreTM framework is founded upon current and future-looking, rather than solely historic, data. | Jupiter's ClimateScore™ risk platform delivers best-inscience 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<br>Business Development and<br>Marketing | Contact Address: 1212 Broadway, Suite 1600, Oakland, CA 94612;<br>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  |

| Vega MX Inc                  | Vivek Mital                      | Contact Address: 11 Broadway, #420, New York, NY 10002;  | Dut Company Dolowara Com                                       | Tania Auga 2 mimanih, hut aman ta baira a                               | 1.@limate Modeling including Wildfire across the  | VegaMX is a US based AI Insights, New Space Technology firm   |
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| vega MX Inc                  | viver iviital                    | Website: www.vegamx.net; Contact Phone: 347 702 1659   | PVI. Company Deleware Corp.                                    | Topic Area 2 primarily, but open to being a sub for Topic Areas 1 and 3 | 1. Limate Modeling Including Wildlife 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=t7goxOQJSd U 2. Space Technology and applications - Earth Observation, change detection, wide area monitoring. Sensors: Microwave (SAR), Optical, HSI, Weather (radiometry) etc 3. Sensor Fusion, Al/ ML, Physics modeling, Autonomy etc 4. Software Engineering, Big DataSystems Engineering, Business Analysis 5. Einancial Engineering & Capital Markets | 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. |
| 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,        | David Rodriguez<br>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   | 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<br>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   |

|                    | Take III 12   |  | Is a contract                              | I  | I <del>-</del>   |   |
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| encoord            | Wallace Kenyon  | Contact Email: wallace@encoord.com; Contact Address: 1525 Raleigh Street, Suite 500, Denver, CO, USA 80204   | Energy System Modeling Software<br>Company | 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.  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. | 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.  | 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.   |
| EnerNex            | Michel Pastore  | Contact Address: 620 Mabry Hood Road, Suite 300, Knoxville, TN 37932; Contact Name: Michele Pastore;Contact Email: mpastore@enernex.com; Contact Phone: 865-770-4892 | LLC  | Topic Areas 1 and 2  | 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. | 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 AnalysisTransmission and Distribution StudiesBulk Power System Studies / AnalysisPower Quality / Power Disturbance TroubleshootingRenewable and Distributed Energy Integration and InterconnectionSolar converter and wind turbine modelingWind and solar integration studiesRenewable plant interconnection studiesEnergy Storage IntegrationGrid ModernizationSmart Metering / AMIDemand ResponseEnergy Assurance Planning –Resilient Energy SystemsMicrogrid |
| Emera Technologies | Louise Anne Comeau, Vice<br>President Government<br>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  | Col Smart       | Col Smart Senior  | Engineering, Environmental and                       | Topics 1, 2 and 3       | ESG Strategy and Implementation  | TRC Companies is a global engineering, environmental and   |
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| TRC Companies<br>(https://www.trccompa<br>nies.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  | 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                                 | Kenneth Nolan   | Contact Email: knolan@vppsa.com   | Electricity Generator, Joint Action                  | Topic Areas 1 and 2     | Energy Efficiency Renewable Energy Electrification and EVs Market Research Customer Programs Advanced Data Analytics Vermont Public Power Supply Authority (VPPSA) is a  | The Vermont Public Power Supply Authority (VPPSA) has  |
| Supply Authority<br>(VPPSA)                          |                 | Contact Phone: (802) 882-8500 Contact Address: P.O. Box 126 5195 Waterbury-Stowe Road Waterbury Center, VT 05677 Contact Website: www.vppsa.com | Agency for (11) Distribution<br>Providers            |                         | 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. | 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<br>Austin, TX 78741<br>mary.sprayregen@oracle.com<br>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,<br>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.   |

| Sense Labs, Inc.                          | Brandon Dyer                          | Contact Address: 485 Massachusetts Ave, Ste. 4, Cambridge, MA, 02139; Contact Email: brandon.dyer@sense.com; Contact Website: sense.com; Contact Phone: 303-489-9101                                     | Technology Vendor              | Topic Areas 1, 2, and 3 | 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.  | 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. |
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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 Enginering Services Firm | Topic Areas 1, 2 or 3   | Bisk Based Maintenance and Capital Investment Planning Beliability and Resiliency Solutions Beliability and Resiliency Solutions Beliability and Resiliency Solutions Besset Management Strategy Perations Optimization Brid Modernization Energy Storage Technology Development and Deployment Bransmission, Substation and Distribution System Project Contracting, Management and Controls Beliability, Resiliency and Microgrid Solutions Brisk Informed Investment and Maintenance Prioritization Brower System Planning and Analysis Brower Systems Equipment Reliability, Qualification and Standards Benewable Energy Integration     | Onncept Development     Strategy and Program Management     Data Governance and Analytics     Project Development and Delivery     Owners Engineer     Asset and Risk Management     Advanced Technology Development and Deployment  |
| Transmission & Distribution Services, LLC | Harry Barnes, Jr., Managing<br>Member | Contact Address: 9550 San Mateo Blvd. NE, Suite G<br>Albuquerque, NM 87113Contact Email: hbarnesjr@t-d-<br>services.com Contact website: https://www.t-d-<br>services.com. Contact Phone: (503) 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 | 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.   |

| Idaho Falls Power | Josh Roos   | Josh Roos 140 S. Capital Ave, Idaho Falls, ID<br>83402/jroos@ifpower.org/208-612-81203                      | Municipal electric utility   | Topic Area 1,2 and 3 | 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 thaht 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. | 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. |
|-------------------|---|---|------------------------------|----------------------|---|---|
| Sentient Energy   | Bob Karschnia, Chief<br>Executive Officer             | 15815, Executive Drive, Suite 300, Frisco, TX 75035, bob.karschnia@sentient-energy.com, Phone: 46-296-1122  | Technology Solution Provider | Grid Reliability     | Network Topology Optimization, Advanced Power Flow Analysis, real-time Grid Monitoring, Situational Awareness, Outage frequency and customer minutes interrupted time reduction , wildfire risk mitigation  | 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  |
| Sentient Energy   | Giri Iyer, Vice President,<br>Corporate Development   | 15815, Executive Drive, Suite 300, Frisco, TX 75035, giyer@sentient-energy.com, Phone: 469-636-2732         | Technology Solution Provider | Grid Resiliency      | 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   | 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  |
| Sentient Energy   | John Costello, Senior Vice<br>President, Global Sales | 15815, Executive Drive, Suite 300, Frisco, TX 75035, john.costello@sentient-energy.com, 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 viltage 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<br>Austin, TX 78741<br>mary.sprayregen@oracle.com<br>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.  |
|-----------------------|-----------------|--|--|------------------------|--|---|
| GDS Associates, Inc.  | Julio Rovi      | Contact email: julio.rovi@gdsassociates.com. Main 770-799-2385. Cell 407-851-9886.         | C-type Consulting firm founded in 1986 | Areas 1, 2, and 3      | 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:  • 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 | 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.  •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.  |
| Smart Wires Inc.      | Ted Bloch-Rubin | Address: 1035 Swabia Ct., Suite 130, Durham, NC 27703 Email: ted.blochrubin@smartwires.com | C-Corporation                          | Topic Area 1, 2, and 3 | 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.   | 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. |

| Chip Scan Inc          | Chip D. or Calvin C.         | email: accounts+doegrip@chipscan.us, phones: 332-256-    | Coroll non-traditional minority                               | Topic Areas 2 and 3     | Cybersecurity for OT Systems                            | We offer unique cyber defense designed for critical            |
|------------------------|------------------------------|--|---|-------------------------|---|--|
| Cnip Scan inc          | Cnip D. or Calvin C.         | 3381, 332-256-1927; address 88-08 Rockaway Beach Blvd.   | Small, non-traditional, minority owned, cybersecurity company | Topic Areas 2 and 3     | <u>Cybersecurity for OT Systems</u>                     | infrastructure operational technologies such as power grid,    |
|                        |                              | Ste 205, NY 11693  |   |                         |   |  |
|                        |                              | Ste 205, NY 11693  | located in a climate disadvantaged                            |                         |   | transportation systems, manufacturing, and                     |
|                        |                              |  | community in NYC. S-corp.                                     |                         |   | aerospace/defense. Most control systems are small footprint,   |
|                        |                              |  | DoD/DMEA trusted supplier                                     |                         |   | low-resource devices running specialized real-time operating   |
|                        |                              |  |   |                         |   | systems and control loops. These systems are typically         |
|                        |                              |  |   |                         |   | protected by airgapping or through the use of IT cybersecurity |
|                        |                              |  |   |                         |   | controls such as network monitoring. IT systems generally rely |
|                        |                              |  |   |                         |   | on heavyweight cyber defense practices that requires           |
|                        |                              |  |   |                         |   | scanning of signatures, behavioral patterns and use of         |
|                        |                              |  |   |                         |   | heuristics and network packet introspection that are beyond    |
|                        |                              |  |   |                         |   | the capability of OT systems to do. We offer a new type of OT  |
|                        |                              |  |   |                         |   | protection that lives within the device and provides a         |
|                        |                              |  |   |                         |   | lightweight modern defense that does not upset the delicate    |
|                        |                              |  |   |                         |   | balance required to maintain their mission.                    |
| POWER Engineers Inc.   | Larry Wilke, Strategic       | Contact Address: 3940 Glenbrook Drive, Hailey, ID 83333; | Engineers, Scientists and                                     | Topic Areas 1, 2, and 3 | POWER has over 3,500 employees of which specialize      | We're specialists, not generalists. We combine our core        |
| ]                      | Consultant                   | Contact Email: Larry.Wilke@powereng.com;                 | Consultants who team together to                              |                         | in the following broad divisional areas:                | competencies with a culture of multidiscipline teamwork to     |
|                        |                              | Contact Website: www.powereng.com; Contact Phone:        | create integrated, multidiscipline                            |                         | - Advanced Distribution Management Systems              | bring a diversity of knowledge and experience to your project. |
|                        |                              | 818-903-5036   | solutions.  |                         | - Asset Management Solutions                            | Here's how we stack up:  |
|                        |                              |  |   |                         | - Construction Support                                  | - #3 in Power (2022 ENR)                                       |
|                        |                              |  |   |                         | - Distributed Energy Resources                          | - 45 Locations across the US                                   |
|                        |                              |  |   |                         | - Electrical Studies                                    | - Largest Power Delivery detail designer in the US             |
|                        |                              |  |   |                         | - Geospatial Information (Justice40)                    | - Over 2,450 professional licenses and certifications          |
|                        |                              |  |   |                         | - Owner's Engineering                                   | - Recognized by our contributions to the industry              |
|                        |                              |  |   |                         | - Power Plant Engineering                               |  |
|                        |                              |  |   |                         | - Process and Controls                                  |  |
|                        |                              |  |   |                         | - Program and Project Services                          |  |
|                        |                              |  |   |                         | - System Protection and Control                         |  |
|                        |                              |  |   |                         | - Testing and Commissioning                             |  |
|                        |                              |  |   |                         | - Transmission and Distribution Engineering             |  |
|                        |                              |  |   |                         | - Visualization Services, AI and ML                     |  |
| AutoGrid Systems, Inc. | Nils Frenkel, Sales Director | Contact Address: 255 Shoreline Drive, Suite 350, Redwood | Vendor of DERMS and VPP Software                              | Topic Areas 1, 2, and 3 | AutoGrid builds software applications that enable a     |  |
| , ,                    |                              | City, CA 94065;  |   |                         | smarter distributed energy world. AutoGrid's suite of   |  |
|                        |                              | Contact Email: Nils.Frenkel@auto-grid.com;               |   |                         | flexibility management applications allows utilities,   | We provide solutions for Demand Response (DR), Distributed     |
|                        |                              | Contact Website: www.auto-grid.com; Contact Phone:       |   |                         | electricity retailers, and energy service providers to  | Energy Resources (DER), and Virtual Power Plants (VPP) for     |
|                        |                              | 866-652-5889   |   |                         | deliver cheap, clean, and reliable energy by managing   | aggregation and optimization of these resources such as        |
|                        |                              |  |   |                         | networked distributed energy resources (DERs) in real-  | Electric Vehicles, Fleets, Energy Storage, Thermostats,        |
|                        |                              |  |   |                         | time and at scale.                                      | Microgrids, and others.  |
| Smart Grid Solutions   | Huy Nguyen                   | Contact Address: PO Box 302825, Austin, TX 78703;        | LLC, US-based manufacturer of line                            | Topic Areas 1, 2, and 3 | Our fault indicators will improve the resiliency of     |  |
|                        |                              | Contact Email: h.nguyen@smartgridsolutions.com;          | based sensors, e.g. fault indicators.                         |                         | almost any distribution system and are an excellent     | SGS is a manufacturer of fault indicators based in Austin TX.  |
|                        |                              | Contact Website: https://smartgridsolutions.com;         |   |                         | addition to projects related to system resiliency.      | We have US-based engineers and manufacturing that has          |
|                        |                              | Contact Phone: +1-512-782-9698                           |   |                         |   | decades of experience servicing the power industry. Our        |
|                        |                              |  |   |                         | SGS has designed and manufactured line-based            | products qualify Buy American and are an excellent addition    |
|                        |                              |  |   |                         | sensors for the last 10 years. We have engineering      | to almost any project that relates to system resiliency.       |
|                        |                              |  |   |                         | resources that cover the needs of product               |  |
|                        |                              |  |   |                         | development for the electric utility sector. Our most   | We understand well the design, development and                 |
|                        |                              |  |   |                         | successful products are our fault indicators. We have a | manufacture of line-based sensors and are agile in our ability |
|                        |                              |  |   |                         | number of options that cover the spectrum from          | to customize and develop according if presented with a         |
|                        |                              |  |   |                         | overhead to underground and from wireless to LED        | quality business opportunity.                                  |
|                        |                              |  |   |                         | indicating.   |  |

| Ampacimon, Inc       | Joey Alexander   | Contact Address:                             | S-Corp           | Topic Areas 1, 2, and 3 | Ampacimon, Inc is a Georgia based corporation             | Dynamic Line Rating (DLR)   |
|----------------------|------------------|--|------------------|-------------------------|---|---|
|                      |                  | 110 Allen Street                             |                  |                         | specializing in advanced sensor and AI Grid-Enhancing     | The Ampacimon Dynamic Rating System (ADR) was developed           |
|                      |                  | Cumming, GA                                  |                  |                         | Technologies (GET's) that increase the capacity,          | in 2010 and has been proven by numerous opertional                |
|                      |                  | 30040;                                       |                  |                         | flexibility, reliability, and resilience of existing grid | integrations with EMS systems to increase transmission and        |
|                      |                  | Contact Email:                               |                  |                         | assets:   | distribution capaicty by 20% - 50% for utilities around the       |
|                      |                  | Contact-US@Ampacimon.com                     |                  |                         |   | world. We focus on the most advanced conductor mounted            |
|                      |                  | Contact Phone:                               |                  |                         | Overhead Transmission                                     | sensor metrologies to produce highly accurate and reliable        |
|                      |                  | 678-231-9473                                 |                  |                         | - Dynamic Line Rating (DLR)                               | ratings data with 98% forecasting confidence as required by       |
|                      |                  | Contact Website:                             |                  |                         | - Ambient Adjusted Ratings (AAR)                          | ISO's and RTO's in the U.S. Typical use cases are (i) solving     |
|                      |                  | www.Ampacimon.com                            |                  |                         | - Asset Health, Condition Monitoring, and Statistical     | market congestion issues, (ii) deferral of line upgrades for 5 -  |
|                      |                  | ·  |                  |                         | Remaining Useful Life of Conductors                       | 10 years, (iii) increased capacity for the interconnectino of     |
|                      |                  |  |                  |                         |   | renewable generation sources.                                     |
|                      |                  |  |                  |                         | Overhead Distribution                                     |   |
|                      |                  |  |                  |                         | - Dynamic Line Rating (DLR)                               | Ambient Adjusted Ratings (AAR)                                    |
|                      |                  |  |                  |                         | - Fault Detection and Localization (smart cFCI),          | Ampacimon offers a sensorless line rating solution that is        |
|                      |                  |  |                  |                         | Vegetation and Mechanical Event Detection                 | compliant with FERC Order 881. Included in the solution are       |
|                      |                  |  |                  |                         |   | services (i) to identify all of the critical spans in the network |
|                      |                  |  |                  |                         | Underground Transmission & Distribution                   | and (ii) create models/configurations for each specific line      |
|                      |                  |  |                  |                         | - Online and Permanant Partial Discharge Detection fo     | r needing AAR, (iii) recommend fixed or variable wind speeds      |
|                      |                  |  |                  |                         | underground cables  | based on historical weather data localized to the span level,     |
|                      |                  |  |                  |                         | - Fault Localization for underground cables               | and (iv) on-premise system deployment and integration into        |
|                      |                  |  |                  |                         | C C   | EMS.  |
|                      |                  |  |                  |                         |   | Asset Health, Condition Monitoring, and Statistical               |
|                      |                  |  |                  |                         |   | Remaining Useful Life   |
|                      |                  |  |                  |                         |   | Ampacimon's overhead line sensors for transmission and            |
|                      |                  |  |                  |                         |   | distribution are equipted with vibration and tension-based        |
|                      |                  |  |                  |                         |   | metrologies that are able to detect mechanical events like        |
| Smart Grid Solutions | William Marshall | Contact Address:                             | FCI Manufacturer | Topic Areas 1, 2,       | Faulted Circuit Indicators                                | Smart Grid Solutions manufactures reliable faulted circuit        |
|                      |                  | 6004 Techni Center Dr #200, Austin, TX 78721 |                  | and 3                   |   | indicators that improve system reliability by reducing outage     |
|                      |                  | Contact Email:                               |                  |                         |   | time on electrical distribution systems of all sizes and          |
|                      |                  | w.marshall@smartgridsolutions.com            |                  |                         |   | voltages. SGS's fault indicators are manufactured in Dallas,      |
|                      |                  | Contact Website:                             |                  |                         |   | TX, and qualified Buy American.                                   |
|                      |                  | www.smartgridsolutions.com                   |                  |                         |   |   |
|                      |                  | Contact Phone: (512) 782-9698                |                  |                         |   |   |