

RFQL 3685 Flexible Energy Technical Analysis Support Areas (A–N) and Qualified Contractors

Updated March 21, 2023

RFQL 3685 Support Area

Contractors

A. Electric Systems Analysis

ABB, Inc.
Acelerex
Advisian (The Worley Group)
The Brattle Group
DNV GL (KEMA)
Electric Power Research Institute
Energy and Environmental Economics
EnerNex, LLC
GE Energy Consulting
Guidehouse, Inc.
ICF Incorporated, LLC
Levitan & Associates, Inc.
Leidos (RW Beck)
Nexant
PowerGEM
ProsumerGrid, Inc.
Quanta Technology, LLC
Siemens Industry, Inc.
Telos Energy

B. Life-Cycle Assessment

Abt Associates
Akimeka (Energetics)
Cadmus Group (Meister)
Eastern Research Group
ICF Incorporated, LLC
Industrial Economics, Inc.
Leidos (RW Beck)
Ricardo, Inc.

C. Macroeconomic Analysis and Modeling

Abt Associates
BW Research Partnership
Cadmus Group (Meister)
DNV GL (KEMA)
ICF Incorporated, LLC
Illume Advising LLC
Industrial Economics, Inc.
Leidos (RW Beck)
PA Consulting
Resources for the Future

**D. Forecasting of Energy Use, Prices, and
Greenhouse Gas Emissions**

2050 Partners, Inc.
Akimeka (Energetics)
Cadmus Group (Meister)
Eastern Research Group
Electric Power Research Institute
Energy and Environmental Economics
ICF Incorporated, LLC
Industrial Economics, Inc.
Integral Analytics, Inc.
Leidos (RW Beck)
PA Consulting
Resources for the Future
Ricardo, Inc.
Sustainable Energy Economics (Evelyn Wright)

E. Benefit Cost Analysis

Acelerex
Baker Tilly US, LLP
Cadmus Group (Meister)
Energy and Environmental Economics
Energy Shrink, LLC
EnerNex, LLC
Green Banyan Consulting, LLC
Guidehouse, Inc.
ICF Incorporated, LLC
Industrial Economics, Inc.
Optimal Energy, Inc.

F. Transportation Systems Analysis

2050 Partners, Inc.
Akimeka (Energetics)
Allegheny Science & Technology Corporation
Atlas Public Policy
Cadmus Group (Meister)
Center for Sustainable Energy
Deloitte Consulting, LLP
Eastern Research Group
Electric Power Research Institute
Electrification Coalition
Energy and Environmental Economics
Guidehouse, Inc.
Hatch
ICF Incorporated, LLC
Industrial Economics, Inc.
Leidos (RW Beck)
MJ Bradley & Associates, LLC
Ove Arup & Partners, P.C.
Sam Schwartz Engineering, D.P.C.
Synapse Energy Economics
VHB
WSP USA

G. Health and Environmental Impacts

Abt Associates
BioDiversity Research Institute
E&S Environmental Chemistry
Industrial Economics, Inc.
Leidos (RW Beck)
NESCAUM
Normandeau Associates, Inc.
Tetra Tech, Inc.
VHB
Western Ecosystems Technology, Inc.

H. Fossil Fuel Infrastructure

Advisian (The Worley Group)
Analysis Group
Black & Veatch (BVH)
Brattle Group
Guidehouse, Inc.
ICF Incorporated, LLC
INTEK, Inc.
Leidos (RW Beck)
Levitan & Associates, Inc.
Nexant
PA Consulting Group

I. Nuclear Safety

Electric Power Research Institute
Enercon Services, Inc.
Four Points Group, Inc.
ICF Incorporated, LLC
Leidos (RW Beck)
Mary Miller Consulting Services, LLC

J. Policy Analysis and Technology Assessment

2050 Partners, Inc.
Abt Associates
Akimeka (Energetics)
Allegheny Science & Technology Corporation
APPRISE, Inc.
Arcadis of New York, Inc.
The Brattle Group
Cadmus Group (Meister)
CEC Stuyvesant Cove d/b/a Solar One
Center for Renewables Integration
DNV GL (KEMA)
Dunsky Energy Consulting
D & R International Ltd.
Electric Power Research Institute
Elementa Engineering D.P.C.
Energy and Environmental Economics
Energy Shrink, LLC
EnerNex LLC
Guidehouse, Inc.
ICF Incorporated, LLC
Illume Advising LLC
Industrial Economics, Inc.
Kearns & West
kW Engineering
Leidos (RW Beck)
Levitan & Associates, Inc.
M.J. Bradley & Associates
NESCAUM
New Buildings Institute
NORESCO
Northeast Energy Efficiency Partnerships
Optimal Energy, Inc.
Ove Arup & Partners, P.C.
Power Advisory
RAND Corporation
Resource Refocus
Resources for the Future
Ricardo, Inc.
Rocky Mountain Institute
Strategen Consulting
Sustainable Energy Advantage
Sustainable Energy Economics (Evelyn Wright)
Urban Green Council
VEIC
VHB
Wadsworth Energy, LLC
WSP USA

K. Facilitation Services

2050 Partners, Inc.
Akimeka (Energetics)
Arch Street Communications
Cadmus Group (Meister)
Consensus Building Institute
Converge Strategies
Deloitte
Eastern Research Group
Energy & Resource Solutions, Inc.
Guidehouse, Inc.
Hester Street Collaborative, Inc.
Illume Advising LLC
Industrial Economics, Inc.
Kearns & West
Kinetic Communities Consulting
MRB Group Engineering, Architecture & Surveying, D.P.C.
Sam Schwartz Engineering, D.P.C.
Urban Green Council
VHB
WSP USA

L. Workforce Development and Labor Economics

BVG Associates LLC
BW Research Partnership
Electric Power Research Institute
Economic Development Research Group (EBP)
ICF Incorporated, LLC
Industrial Economics, Inc.
MRB Group Engineering, Architecture & Surveying, D.P.C.

M. Climate Change Impacts and Adaptation Analysis

Abt Associates
Akimeka (Energetics)
The Cadmus Group, LLC
Climate Adaptation Partners
Columbia University
Converge Strategies
Cornell University (Northeast Regional Climate Center)
Dewberry Engineers
Eastern Research Group
Electric Power Research Institute
Guidehouse, Inc.
ICF Incorporated, LLC
Industrial Economics, Inc.
Lynker Technologies
Ove Arup & Partners, P.C.
Research Triangle Institute
Resource Refocus
Sam Schwartz Engineering, D.P.C.
University at Buffalo
Urban Green Council
WSP USA

N. Large Scale Renewables Technical Review

Advisian (The Worley Group)
Antares Group, Inc.
Arcadis of New York, Inc.
Baker Tilly US, LLP
BioDiversity Research Institute
COWI Consulting Inc
DNV GL
Electric Power Research Institute
ESS Group
Guidehouse, Inc.
Hatch Associates
HDR, Inc.
ICF Incorporated, LLC
Mott MacDonald, NY Inc.
Ove Arup & Partners, P.C.
Pace University School of Law
Quanta Technology, LLC
Renewables Consulting Group
Research Triangle Institute
Synapse Energy Economics
Telos Energy, Inc.
Tetra Tech, Inc.
Ventolines B.V.
VHB
Wendel Energy
WFB Engineering P.C.
WSP USA



New York State Flexible Energy Technical Analysis
Request for Qualifications (RFQL) 3685
No Funding is Associated with this Solicitation

Proposals Due: August 31, 2022 by 3:00 PM Eastern Time*

The New York State Energy Research and Development Authority (NYSERDA) is issuing this solicitation (RFQL 3685) to establish a pool of consulting firms qualified to provide NYSERDA with diverse technical, energy, economic, and environmental analytical capacity, some of which may be requests for services on short notice (with exceptions, short notice is typically considered to be three to six months). NYSERDA's mission includes the provision of research, analytic and modeling support on a range of topics, often with finite time horizons. Access to a pool of consultants with wide-ranging high-quality technical expertise established through this solicitation will augment and enhance NYSERDA's expertise when undertaking individual, discrete projects with firm timelines. These retained resources will be made available to all NYSERDA Programs, providing technical expertise when such services are needed and appropriate.

NYSERDA anticipates entering into zero-dollar Task Work Order Agreements with successful proposers. As needs arise, individual Task Work Orders will emanate from these Agreements and will clearly define the Contractors' required obligations that, if fulfilled, would result in payment. Work issued under this solicitation will vary in scope and budget. The earliest expected start date for any potential work under this effort is January 2018, and December 31, 2023 is the anticipated end date. RFQL 3685 will also allow for an "open enrollment" mechanism whereby potential contractors may submit additional proposals until August 31, 2022. Further information regarding the process for participation in the open enrollment mechanism is provided in this document.

NYSERDA has broadly defined potential needs across the following Support Areas, which are described in greater detail in this solicitation document:

- A. Electric System Analysis
- B. Life-Cycle Assessment
- C. Macroeconomic Analysis and Modeling
- D. Forecasting of Energy Use, Prices, and Greenhouse Gas Emissions
- E. Benefit Cost Analysis
- F. Transportation Systems Analysis
- G. Health and Environmental Impacts
- H. Fossil Fuel Infrastructure
- I. Nuclear Safety
- J. Policy Analysis and Technology Assessment
- K. Facilitation Services
- L. Workforce Assessment and Labor Economics
- M. Climate Change Impacts and Adaptation Analysis
- N. Large Scale Renewables Technical Review

Proposers may submit a proposal to provide services in one, multiple, or all of the above Support Areas. **Proposers should clearly identify which of the Support Areas the proposal is intended to address.**

Proposal Submission: Electronic submission is preferable. Proposers may submit Word, Excel, or PDF files (file formats include: csv, doc, docx, pdf, xls, xlsx, and zip). Individual files should be 100MB or less in file size. Proposal PDFs should be searchable and should be created by direct conversion from MS Word, or other conversion utility. Files should not be scanned. For ease of identification, all electronic files must be named using the proposer's entity name in the title of the document. NYSERDA will also accept proposals by mail or hand-delivery if electronic submission is not possible. For detailed instructions on how to submit a proposal (electronic or paper submission), click the link "NYSERDA Solicitation User Guide [PDF]" located in the "Current Opportunities" section of NYSERDA's website (<https://www.nyserda.ny.gov/Funding-Opportunities/Current-Funding-Opportunities.aspx>).

Communication related to this procurement is permitted by contacting Sarah Rambacher (Designated Contact) at (518) 862-1090, ext. 3604 or by e-mail SarahFlexergy@nyserda.ny.gov or Tara Mae Tobler (Secondary Contact) at (518) 862-1090, ext. 3465 or by e-mail TaraMaeFlexergy@nyserda.ny.gov. If you have contractual questions concerning this solicitation, contact Nancy Marucci (Designated Contact) at (518) 862-1090, ext. 3335 or NancySolicitations@nyserda.ny.gov. Contacting anyone other than the Designated Contacts (either directly by the proposer or indirectly through a lobbyist or other person acting on the proposer's behalf) in an attempt to influence the procurement: (1) may result in a proposer being deemed a non-responsible offerer, and (2) may result in the proposer not being awarded a contract.

*** All proposals must be received by 3pm Eastern Standard Time on August 31, 2022, as noted above. Late, faxed, or emailed proposals will not be accepted.** Incomplete proposals may be subject to disqualification. It is the proposer's responsibility to ensure that all pages have been included in the proposal. Please note: for electronic submission, there are required questions that you will have to answer in addition to uploading attachments and you should allot at least 60 minutes to enter/submit proposals. The electronic proposal system closes promptly at 3pm, files in process or attempted edits or submission after 3pm Eastern Standard Time on the date above, will not be accepted. If changes are made to this solicitation, notification will be posted on NYSERDA's web site at <https://www.nyserda.ny.gov/>.

Introduction

NYSERDA Program areas engage in policy and technical analysis support to groups within NYSERDA and to other external State energy policy and decision-makers. NYSERDA also routinely works collaboratively with other State agencies and entities to develop, implement, and evaluate energy policies and programs. Often, NYSERDA is called upon to support these efforts by undertaking research and analytic work to advance deliberations on general or specific energy and environmental proposals. NYSERDA also has the lead in conducting analysis for the *New York State Energy Plan*.

RFQL 3685 establishes a pool of consulting firms qualified to support NYSERDA's program areas, with diverse technical, energy, economic, and environmental analytical capacity, and which can provide some services on short notice. NYSERDA frequently provides research, analytic, and modeling support on a

range of topics, often with constrained time horizons. Access to the pool of consultants, with wide-ranging, high-quality technical expertise, established through this RFQL will augment and enhance NYSERDA's ability to undertake individual, time-sensitive projects. These retained resources will also be available to all NYSERDA Programs, providing technical expertise, as needed. The Support Areas described in this solicitation illustrate NYSERDA's current and anticipated mission.

Program Requirements

Services Requested

As a result of RFQL 3685, NYSERDA expects to retain qualified contractors to provide services in each of the specified Support Areas. The number and type of services requested from the selected contractors will depend on the nature and complexity of the project, the contractor's expertise, the volume and frequency of the services requested by NYSERDA, the contractor's past performance and the absence of conflicts of interest. NYSERDA does not guarantee that all types of services will be requested or that all selected contractors will receive work pursuant to executed Task Work Order Agreements.

Upon a successful demonstration within a proposal, NYSERDA may designate contractors that have demonstrated "specialized capabilities" in specific areas. For example, a contractor may be designated as having specialized capabilities for a particular type of service requested if it demonstrates that it possesses exceptionally scarce qualifications or experience; specialized equipment or facilities not readily available from other sources; or proprietary data or methods. Submitted proposals should clearly articulate any proposed specialized capabilities, supported by a justification as to why these attributes may be exceptionally scarce, specialized or proprietary. NYSERDA reserves the right to make all decisions regarding a successful demonstration of a specialized capability.

Proposers are permitted, but not required, to team with partners (subcontractors) they consider would offer complementary expertise in the identified Support Areas.

Support Areas¹

Proposers are invited to submit a proposal, describing their qualifications, skills, expertise with documented references, and personnel rates in any or all the support areas described below.

- A. Electric System Analysis: Assistance may be requested for analysis and modeling of the electric power system. Assessments may include the economic and physical impacts of changes and additions to elements of the electricity system such as generation, transmission, and distribution. Analyses may include electricity system optimization, simulation modeling, and thermal, voltage, and stability power flow analyses; and any other similar activities.

¹It is important to note that NYSERDA's listing of representative software packages in this solicitation is **not** an endorsement of any of the listed products; does not imply that NYSERDA believes the listed products to be superior to any other similar products (listed or not listed); nor is it a guarantee that NYSERDA intends to use any of the listed software products or to not use additional, unlisted products.

For illustration, some of the software packages with which the Proposer is conversant may include, but are not limited to, the following:

Network Reliability

GE Multi-Area Reliability Simulation (MARS), GE Positive Sequence Load Flow (PSLF), Siemens/PTI Power System Simulator for Engineering (PSS/E), PowerGEM TARA, and ASPEN.

Production Cost (Unit Commitment and Dispatch)

GE Multi-Area Production Simulation Software program (MAPS), PROMOD, GridView, and PLEXOS.

Capacity Expansion Models

National Energy Modeling System (NEMS), Regional Energy Deployment System (ReEDS), Integrated Planning Model (IPM), and PLEXOS.

- B. Life-Cycle Assessment: Assistance may be requested to perform life cycle assessments for clean technologies and products as well as life cycle analysis, including total fuel cycle analysis, for all relevant fuel pathways and energy end-uses in New York. Fuels of interest may include, but not be limited to, fossil fuels, nuclear power, renewable fuels, and energy carriers (e.g., electricity and hydrogen). Fuel cycle analysis may include, but not be limited to, the following processes: energy feedstock production; feedstock transportation and storage; fuel production; fuel transportation, storage and distribution; provision of energy service involving a conversion process (e.g., combustion in an engine or boiler). The primary analytic outputs of interest may include: embodied energy by fuel type, energy required to produce a fuel, energy required to perform a service (e.g., miles of travel or space heating), fossil fuel energy requirements, emission levels of the major greenhouse gases, criteria air pollutants, particle characterization (size, number, composition), particle and ozone precursors, and air toxics; and any other similar activities.

For illustration, modeling systems may include, but are not limited to, the following: Argonne National Laboratory's Greenhouse Gases, Regulated Emissions, and Energy Use in Transportation (GREET) Model.

- C. Macroeconomic Analysis and Modeling: Assistance may be requested to assess the impacts of energy and environmental policies on New York's employment, income, output, mobility, and other parameters. Analyses may be required to account for changes in investment and incremental costs of new technologies, energy savings from use of new technologies, changes in the price of electricity and other fuels, changes in energy expenditures and revenue to energy providers, opportunity costs, and changes from consumer and business expenditure patterns due to revenue that may be collected to cover the costs of the policies. Analyses may be conducted on a net impact basis; and any other similar activities.

For illustration, software may include, but are not limited to, the following:

Macroeconomic Modeling

Regional Economic Models, Inc. (REMI) and IMPLAN, Decision Time and SYSTAT 9 software created by SPSS Inc.

- D. Forecasting of Energy Use, Prices, & Greenhouse Gas Emissions: Assistance may be requested to model New York State's energy system on a "bottom-up" or "top-down" basis and produce long-term scenarios and forecasts. Output may include projections of energy demand by sector, subsector, technology, and fuel/energy carrier; projections of energy supply by technology and fuel; and projections of fuel and electricity prices. Outputs may also include emissions associated with these scenarios and forecasts. Fuels may include natural gas; distillate and residual oil with varying sulfur content; various types and grades of coal; renewable resources including wind, biomass, landfill gas, and photovoltaic systems; and nuclear power. Sectors may include electricity, commercial, industrial, residential, and transportation. Prices for each fuel and customer sector may include commodity prices (e.g., the price at Henry Hub for natural gas or the price of crude oil for petroleum products) and transportation prices to various New York delivery points; and any other similar activities.
- E. Benefit Cost Analysis (BCA): Assistance may be requested to develop inputs necessary to conduct BCA of NYSEERDA's public benefits programs including programs that target electric energy efficiency, natural gas and fuel oil efficiency, demand response, renewable electricity and fuels, distributed generation, and transportation efficiency. Inputs to BCA include estimation of benefits such as avoided energy and capacity costs, avoided distribution and transmission costs, wholesale price suppression, system reliability benefits, options benefits, macroeconomic impacts, and monetization of non-market goods such as comfort, health, and environmental impacts. In addition, the proposer must have experience with monetizing impacts of innovative building technologies as well as experience with estimating positive and negative impacts on operations and maintenance (O&M), water use, waste, and labor costs associated with the energy efficiency and other programs. Proposers must also have experience in identifying appropriate baselines, development of incremental measure costs, use of appropriate discount rates and time horizons, and life cycle analysis. Specific types of benefit-cost analyses will follow those in the New York State BCA Handbook for Total Resource Cost Test, and may also include Societal Cost Test, Utility Cost Test, Participant Cost Test, and Ratepayer Impact Measure; and any other similar activities.
- F. Transportation Systems Analysis: Assistance may be requested to analyze the effects of transportation programs and policies on energy efficiency and consumption and the effects of energy policies and pricing on transportation demand and use. The proposer should be knowledgeable about alternative fuels and vehicle technologies; transportation demand; advanced transportation technologies, such as intelligent transportation systems; transportation systems management and operations; and travel demand modeling. Examples of possible requests could include: evaluation of the regional or statewide impact of alternative transportation fuel facilities such as liquefied or compressed natural gas and other alternative transportation fuel facilities; conducting projects related to energy and fuel supply infrastructure; systems modeling and

assessment; safety issues; fuel supply adequacy studies; and electric vehicle infrastructure deployment; and any other similar activities.

- G. Health and Environmental Impacts: Assistance may be requested to perform environmental and health impact assessments related to energy policy options in support of a multi-pollutant policy analysis framework. This may include but not be limited to emissions measurements, emission inventory estimates, regional or micro-scale air quality modeling, or health impacts analysis. An example could be the use of the U.S. Environmental Protection Agency (U.S. EPA) Benefits Modeling and Analysis Program (BenMAP) or the use of health data for NYS populations. Activities may include compiling and analyzing best practices for energy technology deployment; development of realistic test-methods for technology energy efficiency and emissions performance characterization and developing representative emissions inventories; measuring or modeling air quality with high time resolutions or performing health impact assessments due to emissions from existing and emerging energy technologies. Successful proposers may be requested to conduct analyses of environmental issues associated with energy policy and planning and development including:
- Technology operational duty-cycle characterization;
 - Emissions estimates (e.g., PM_{2.5} and precursors, SO₂, CO, NO_x, CO₂, CH₄ and other greenhouse gases, NH₃, mercury, particulate number, size, and composition, volatile organic compounds, particulate matter, ozone precursors, and air toxics);
 - Air quality monitoring or modeling using various existing and emerging tools for ozone, secondary PM, and the pollutants listed above;
 - Estimates of the direct and indirect effects of energy production, use, transport, and storage on:
 - o local, regional, national, or global air quality including climate
 - o human exposure health effects, and public health impacts
 - o wildlife,
 - o performance and costs of technologies,
 - o water quality,
 - o changes in ecosystems, and
 - o economic impacts of ecosystem degradation and recovery
 - Impacts of climate change;
 - Costs and benefits of mitigation of environmental impacts; and
 - Costs and benefits of incumbent and emerging energy technologies on health impacts.

Activities could also include reviewing and commenting on draft environmental or energy regulations; draft environmental impact assessments and statements, as well as State and federal licensing and permitting actions; providing technical analysis to support the review and development of studies related to such actions; and identifying viable alternatives to proposed activities addressed in the assessments and categorizing and developing responses to public comments; and any other similar activities.

- H. Fossil Fuel Infrastructure: Assistance may be requested to undertake projects analyzing fuel supply and associated infrastructure in New York. These projects may include, but are not limited to, assessments of current and possible future supply and demand of natural gas, petroleum products, coal, renewable fuels (e.g., gaseous and liquid biofuels as well as solid biomass), and

alternative energy sources that may replace existing fossil fuel supply (example: hydrogen). Firms may specialize in different fossil fuel sources (natural gas, petroleum, coal) or technologies in analyzing supply. Additionally, expertise in New York State fossil fuel supply chain and associated infrastructure should be highlighted. Firms should specify the fuel sources, technologies, and/or specialties in which they specialize and are able to provide assistance.

With regard to natural gas projects, assistance may be requested for (1) evaluating changes in domestic gas supply and pipeline projects on the cost, reliability and capabilities of the natural gas infrastructure serving New York and the Northeast, (2) customizing and running hydraulic models to produce simulations of pipeline operating conditions, (3) customizing and running modeling software to analyze regional supply/demand, (4) using the Contractor's database of gas pipelines operating in New York to analyze the effects of increasing demand, new supply sources, and limited transportation capacity, and (5) identifying the potential natural gas system impact from emerging end-use applications such as, but not limited to, compressed natural gas (CNG) and liquefied natural gas (LNG) for transportation related uses.

For illustration, some of the software packages with which the Proposer is conversant may include, but are not limited to, the following:

Natural Gas Infrastructure Analysis

Gregg Engineering's WinFlow and Gregg Engineering's WinTran

Assessments of petroleum products may include fuel specific analysis of production costs, characterization of technological change (i.e., extraction or conversion technologies), and market dynamics affecting supply, demand, and prices. Analyses may also include an assessment of the current and future required infrastructure to develop, produce, process, refine, transport, and deliver these fuels to end-users in New York. The contractor may be requested to identify possible energy assurance issues such as supply disruption scenarios and strategies to respond to such events; and any other similar activities.

- I. Nuclear Safety: Assistance may be requested related to nuclear power plants that are operating or undergoing decommissioning. Assistance may be requested for: (1) review and evaluation of license amendment, exemption, and relief requests, as they relate to plant safety, design, and engineering issues; (2) review and evaluation of decommissioning reports, submittals, and activities; (3) review and evaluation of reports, initiatives, rulemakings, and guidance from industry and the state and federal government pertaining to nuclear safety, security, or environmental impact of nuclear generating and other nuclear fuel cycle facilities; (4) decommissioning fund evaluation and analysis including sufficiency of funds and appropriate use; and (5) providing technical expertise and advice on nuclear power matters as they may relate to potential health, radiological, economic, and environmental risks and impacts; and any other similar activities.
- J. Policy Analysis and Technology Assessment: Assistance may be requested to perform analyses and

assessments of energy-related public policy initiatives and novel technologies. Analyses sought may be qualitative or quantitative and include: assessments of best practices regarding regulatory and market-based policies to promote clean energy goals and objectives; analysis of proposed policy initiatives in regards to energy supply and costs, estimated effects on businesses in the State, impacts on consumers (i.e., ratepayers or taxpayers), direct job impacts, and fiscal and tax implications for the State's general fund; technology assessments of energy efficiency and clean energy measures; and penetration studies including analysis of market activity of specific energy technologies, relative to other technologies, and changes over time, including historic information and forecasting of future activity; and any other similar activities.

For illustration, some of the software packages with which the Proposer is conversant may include, but are not limited to, the following:

Energy, Economic, and Environmental
MARKet Allocation (MARKAL) Model

- K. Facilitation Services: Assistance may be requested to develop strategic engagement plans, create collaborative processes for problem solving, moderate, mediate, or facilitate meetings or workshops. Proposers may be asked to support the identification of appropriate stakeholders to invite to meetings, draft meeting agendas and briefing documents, conduct issue-specific research and interviews, as well as summarize meeting outcomes. Proposers must have experience in strategic facilitation, project management and planning, and encouraging dialogue to advance common understanding and problem solving among diverse groups of stakeholders. These stakeholder groups commonly include, but are not limited to, project developers, economic development organizations, the public, labor and workforce development organizations, non-governmental organizations, and local, state and federal government entities.
- L. Workforce Assessment and Labor Economics: Assistance may be requested to estimate and characterize features of New York State's energy economy and workforce. Estimates might include: numbers of firms and workers engaged in activity directly or indirectly related to the energy sector, both statewide and for smaller geographies within the State; levels of investment and spending by firms, workers, and supply chains; levels of activity by firms and workers on different types of energy-related projects and training in different regions. Characterization might include: the skills, certifications, and educational backgrounds of workers by occupation, technology, and intra-state region; the size of firms and their connections with educational and governmental institutions; workers' levels of compensation and benefits by firm size, occupation, technology, or region; and worker demographics and affiliations, such as veteran status and union membership. Contractors may be asked to assess the effects of policies focused directly or indirectly on workforce outcomes and develop recommendations for programmatic changes or novel interventions in the energy sector and related labor markets. In addition, contractors may be asked to support implementing various workforce strategies and programs across a wide range of areas including but not limited to offshore wind, energy storage, energy efficiency, etc.

- M. Climate Change Impacts and Adaptation Analysis: Assistance may be requested to analyze the impacts of climate change in New York State, as well as adaptation and resilience strategies. Requests could be either quantitative (e.g., energy system modeling) or qualitative (e.g., literature review and synthesis). Proposers should be knowledgeable about climate change in New York and demonstrate climate-related experience in one or more of the following sectors: agriculture, buildings, coastal zones, ecosystems, energy, health, telecommunications, transportation, or water resources. Proposers should note if they have experience with climate-related equity issues. Examples of types of requests could include: climate impacts to vulnerable populations; impacts to the physical energy system; financial impacts to the energy market(s), benefit-cost analysis of adaptation or resilience measures; case studies of adaptation implementation; economic impacts on a specific sector; and any other similar activities.
- N. Large Scale Renewables Technical Review: Assistance may be requested to support technical and engineering review and/or policy support of commercial/industrial, large distributed (~5 MW AC), and utility-scale renewable energy projects to strengthen NYSERDA's engagement in advancing clean energy projects and industry development in New York. Such support and review services may include, among others, environmental impact studies, resource assessments, permitting and planning approaches, grid interconnection issues, filings to regulatory proceedings, and project schedules and timelines. Among all renewable technologies, particular focus will be given to offshore wind, land-based wind, and PV solar as well as the combination of renewable energy with storage and other so-called "Power-to-X" complementary technologies.

Proposers may submit a proposal to provide services in one, multiple, or all the above Support Areas. Proposers should clearly identify which of the Support Areas the proposal is intended to address.

NYSERDA reserves the right to create new Support Areas to address any needs that arise outside of the defined support areas included in the issuance of this RFQL. In this instance, all existing firms in the Task Work Order Agreement pool, along with any new proposers will be eligible to submit a proposal for the new Support Area(s).

Task Work Order Agreements & Task Work Orders

A pool of qualified proposers will be selected through this RFQL to fulfill the needs of each of the identified Support Areas. NYSERDA will enter into zero-dollar Task Work Order Agreements with the qualified contractor(s) for each Support Area, enabling NYSERDA to retain services as needs arise. A Task Work Order Agreement is used because no estimate can be made in advance as to the type, amount, and complexity of the work each contractor will be requested to perform. A Task Work Agreement is not a guarantee for any specific amount of future work.

There will be no initial cap to the number of proposers in any one subject matter area. However, NYSERDA may subsequently institute a cap for any or all Support Areas as a means of managing the number of resultant contracts. NYSERDA anticipates the Scoring Committee to convene periodically, as frequently as quarterly, to review and evaluate new proposals on a schedule depending on NYSERDA's

needs and on the number of new proposals that are received. Upon appropriate notice, NYSEDA may forego or discontinue the rolling open enrollments to manage the number of resultant contracts. In deference to the established end of the contract period of December 31, 2023, the open enrollment mechanism will be active through August 31, 2022.

When NYSEDA identifies a specific need under any of the Support Areas, the process options for retaining services include: 1) issuing a mini-bid to all of the qualified firms within the Support Area; 2) selecting any qualified firm in the Support Area for projects with a funding amount of \$50,000 or less; or 3) selecting a qualified firm that has successfully demonstrated specialized capabilities, as determined by NYSEDA.

The amount of work assigned to each contractor will depend on the contractor's particular expertise, the amount of work requested in the contractor's support area, past performance, current workload, actual or perceived conflicts of interest, references, deadline requirements, and the ability of the contractor to fulfill a Support Area, provide high quality, cost-effective, and timely services.

The Task Work Order is representative of a discrete project (typically, a series of tasks) which requires external support and is assigned to a qualified contractor under the terms of the executed Task Work Order Agreement between NYSEDA and that contractor. A direct contract or mini-bid process may be employed, at NYSEDA's discretion, to select the appropriate contractor(s) within a given support area. In response to a Task Work Order Request issued by NYSEDA, respondents provide a detailed response to the request, including staffing, hours, budget, and scope of work. A Task Work Order will not guarantee any specific amount of work but may contain a maximum dollar amount.

Funding & Schedule

Funding will be identified on a project-specific basis, and will be determined, in part, on the scope and subject matter of the Task Work Orders as they are developed according to needs expressed by NYSEDA. NYSEDA cannot anticipate whether the need will arise or if funding will be available for any, or all, of the Support Areas listed above.

The general Task Work Agreements that result from this RFQL will remain in effect until December 31, 2023, and no new Task Work Orders will be issued after this date. Task Work Orders initiated prior to December 31, 2023 are intended to remain in effect until all tasks are completed, final work products are delivered to NYSEDA, and payment is issued.

Contractor Responsibilities & Compensation

NYSEDA expects to issue, to selected Contractors, requests for services, in the form of a Task Work Order Request, in one or more of the Support Areas. For each such Request, the selected contractor shall be required to:

- Prepare a Task Work Order Plan with budget, for each project for review and approval by NYSEDA;

- Negotiate the scope and cost of the technical assistance with NYSERDA;
- Upon agreement by all parties to the Task Work Order Plan, provide the required assistance within the required time frame;
- Submit any deliverables to NYSERDA for review and approval; NYSERDA's review will ensure that the deliverable conforms to the Task Work Order Plan, and;
- Provide required documentation of expenditures by Task, based on the Task Work Order Plan, when seeking reimbursement from NYSERDA.

Compensation will be based on the contractor's direct and indirect personal services costs (included in the proposal) plus allowable expenses. Fees will be based on the contractor's hourly rates for the appropriate level of staff as well as for any subcontractors listed in the proposal. NYSERDA will negotiate each Task Work Order on the basis of demonstrated competence and qualifications, at fair and reasonable fees. Fee schedules shall be included in each proposal that identify rates for each member of the team by title, including subcontractors. Proposers are asked to consider the length of the Task Work Order (five years) in proposing their fee schedules and annual escalation rates. Budgets for all work conducted will be included in the Task Work Order Plan and approved by NYSERDA. The Task Work Order Plan will also place a ceiling, or not-to-exceed amount, for each project.

Contractors who accrue billable hours beyond the ceiling in the Task Work Order Plan, without approval in writing by NYSERDA, will do so at their own risk. **Contractors will not be compensated for time spent in the preparation of any Task Work Order Plan.** Preparation of the Task Work Order Plan is considered to be covered by the contractor's overhead expense.

Proposal Requirements

Identified Support Areas

Proposers are invited to submit, in the format described in this solicitation, proposals describing their skills, expertise, qualifications, and personnel rates in any or all of the Support Areas listed in this solicitation. Proposers must clearly identify Support Area(s) to which the proposal responds. Proposers are permitted, but not required, to team with partners (subcontractors) they consider would offer complementary expertise in the Support Areas:

- A. Electric System Analysis
- B. Life-Cycle Assessment
- C. Macroeconomic Analysis, Modeling
- D. Forecasting of Energy Use, Prices and Greenhouse Gas Emissions
- E. Benefit Cost Analysis
- F. Transportation Systems Analysis
- G. Health and Environmental Impacts
- H. Fossil Fuel Infrastructure
- I. Nuclear Safety
- J. Policy Analysis and Technology Assessment

- K. Facilitation Services
- L. Workforce Assessment and Labor Economics
- M. Climate Change Impacts and Adaptation Analysis
- N. Large Scale Renewables Technical Review

This RFQL allows for new support areas to be created when unforeseen and ongoing needs are desired by NYSERDA. The ability to create new support areas will be restricted to the first two years of the contract, until December 30, 2020. Firms may submit up to two proposals to new and existing support areas over the course of the open enrollment period to accommodate any changes of in-house capabilities. This open-enrollment allows contractors to submit proposals up to a defined due date of August 31, 2022 to reflect the planned end date of the anticipated term of the Task Work Order Agreements of December 31, 2023.

Length & Format

Proposals should not be excessively long or submitted in an elaborate format that includes expensive binders or graphics. Unnecessary attachments beyond those sufficient to present a complete, comprehensive, and effective response will not influence the evaluation of the proposal. Each page of the proposal should state the name of the proposer, RFQL 3685, and the page number.

Outline

Each Support Area proposal shall be uploaded into Salesforce as three separate documents: (1) Proposal and Supporting Documents; (2) Attachment A: Project Personnel and Rates Form; and (3) Attachment B: Sample Agreement. These three documents should contain, at a minimum, the following:

Document 1: Cover Letter and Main Body of Proposal

Cover Letter(s) (1 page suggested)

Proposers shall submit a cover letter on company letterhead that:

- References RFQL 3685
- Specifies the Support Area, by name and letter, where services are being offered
- Summarizes the proposer's ability to perform such services
- Is signed by a person with authority to enter into a contract with NYSERDA

Letters from subcontractors included in the proposal must be included in each Support Area proposal and include the same information included in the proposer's cover letter.

Table of Contents (1 page)

Proposers should present a comprehensive table of contents that outlines the proposal format. For each Support Area offered, the items listed below must be provided, regardless of whether they have been presented in another proposal:

- (a) Overall Experience, Capabilities, and References

- (b) Personnel and Qualifications
- (c) Cost Proposal

Support Area Proposal(s)

Proposals will be evaluated independently for each Support Area. Salesforce requires each proposer to submit a separate proposal for each Support Area with distinct language for each. Salesforce allows proposers to save and restart solicitations to allow for ample time to complete before the deadline.

Each Support Area proposal must include the following subsections:

- a) **Overall Experience, Capabilities, and References** (2-4 pages) Proposers must describe their expertise and ability as a team/firm to deliver services in the proposed Support Area(s). This should include the aggregate number of years working in this Support Area(s) and a brief summary of at least one, and no more than three, similar projects. The project descriptions should specify the level of involvement of the proposing firm and subcontractors and the results/deliverables of the project. For at least one of the projects mentioned, proposers must include customer contact names and phone numbers. Proposers with specialized capabilities are encouraged to articulate those capabilities in the proposal to assist NYSERDA's understanding of them and the capabilities that may be available to address specific needs identified among broader support areas. Proposers can reference Support Area section of this RFQL for further explanation.
- b) **Personnel and Qualifications Summary** (2 pages) Proposers must identify and describe the company or organization that will be the prime contractor under this RFQL and identify all staff members, teams, and subcontractors that are to be involved in providing services in the Support Area(s), with descriptions of qualifications and past working relationships among team members and subcontractors. Proposals should include an organizational chart, if necessary. Proposers must identify the project manager who will serve as the single point of contact under this RFQL. Proposals must describe the accomplishments, experiences, and expertise of the individuals comprising the proposing team relevant to the Support Area and reference one-page résumés (provided as an attachment) that highlight recent experiences of all individuals who would be directly involved in providing services.
- c) **Conflicts** (1 page) The firm, its principals, subcontractors, and any personnel of the firm must be free from any financial or similar interest in any product or service which may conflict with or appear to conflict with the objectivity of the services provided to NYSERDA. Proposers must submit a statement of conflict of interest and on a yearly basis

if a TWO is assigned following the previous year's conflict of interest form. If any affiliations exist, a statement must be provided verifying these affiliations do not conflict with or appear to conflict with the objectivity of providing services to NYSERDA and its customers. Non-disclosure of any affiliation can result in the termination of a contract, if awarded.

- d) **Résumés** Include one-page résumés that highlight recent experiences of all individuals (proposer and any subcontractors) who would be directly involved in providing services. For ease of reference, organize the résumés in alphabetical order by last name of the individuals providing services, referencing in each résumé header the Support Area(s) they will be directly involved with. Individual résumés shall not exceed one (1) page each.

Document 2: Attachment A: Project Personnel and Rates Form

Proposers must provide a Project Personnel and Rate form (Attachment A) and submit the name, job title, and fully-burdened hourly salary for each individual in the proposal and all subcontractors who would perform the work under an Agreement with NYSERDA. Note: Any escalation rates must be identified for the full five-year contract term.

Indirect Cost

With the Project Personnel and Rates Form, include supporting documentation to describe indirect cost (overhead) rate(s) included in your proposal as follows:

- (a) Describe the basis for the rates proposed (i.e., based on prior period actual results; projections; federal government or other independently approved rates).
- (b) If rate(s) is approved by an independent organization, such as the federal government, provide a copy of such approval.
- (c) If rate(s) is based on estimated costs or prior period actual results, include calculations to support proposed rate(s). Calculation should provide enough information for NYSERDA to evaluate and confirm that the rate(s) are consistent with generally accepted accounting principles for indirect costs.

NYSERDA reserves the right to audit any indirect rate presented in the proposal and to make adjustment for such difference. Requests for financial statements or other needed financial information may be made if deemed necessary.

NYSERDA is not requiring proposers to estimate travel or other direct costs as part of proposals, but reasonable costs for these may be included as an element of TWOs, as appropriate.

Document 3: Attachment B: Sample Agreement

Self-explanatory.

Proposal Materials & Effort

All material submitted as part of this RFQL process becomes the property of NYSERDA. Proposers will not be reimbursed by NYSERDA for any costs associated with the preparation of their proposals.

Proposal Evaluation

All proposals that meet the submission requirements will be reviewed by a Scoring Committee consisting of NYSERDA staff, whether submitted in accordance with the initial due date as provided in this document or in response to the open enrollment period that allows new prospective contractors to submit proposals beyond the first RFQL deadline. NYSERDA Staff will evaluate all proposals based on the same pre-established evaluation criteria of the initial RFQL.

Proposals will be evaluated based on the pre-established qualitative criteria that will require a minimum score in order to be accepted as a successful proposer in any one Support Area. Firms may apply to any number of Support Areas. The criterion for firms to successfully demonstrate a specialized capability will be determined by the evaluation criteria, the Scoring Committee recommendation, and NYSERDA's discretion. At NYSERDA's discretion, as part of the evaluation process, proposers may be asked to have appropriate representatives participate in an in-person interview in Albany, New York, through a webinar, or by conference call prior to final selection. Proposers will be notified if they are requested to participate in an interview.

Responses to this RFQL will be reviewed and assigned scores based on the criteria highlighted below, as well as other programmatic and management factors deemed appropriate by NYSERDA.

Overall Experience, Capabilities, and References

- Previous experience in the conduct and delivery of similar or related services.
- Demonstrated ability to complete projects on schedule.
- Quality and relevance of previous work as evidenced by sample projects.
- References substantiating with evidence the contractor's abilities and past performance.
- Responsiveness to NYSERDA's request as specified in this RFQL, including overall clarity and organization of the proposal.

Personnel and Qualifications

- Adequacy/depth of corporate resources to provide requested services.
- Qualifications and expertise of the personnel/team in relevant Support Areas
- Clear identification of staff that will be assigned to various project types.

Other Considerations

- Past experiences with contractor, notable position within the firm's industry, accomplishments on similar projects.

- Combination of contractors needed to deliver all services needed in a timely and professional manner.
- Demonstrated specialized unique capability that is considered a priority to a specific TWO which cannot be predetermined. Therefore, contractors must articulate specialized capabilities (e.g., unique or exceptionally scarce qualifications or experience, specialized equipment, or facilities).

Fee Schedule

- Reasonableness and relative competitiveness of labor rates, associated fees, escalation rates and overhead.

General Conditions

Proprietary Information - Careful consideration should be given before confidential information is submitted to NYSERDA as part of your proposal. Review should include whether it is critical for evaluating a proposal, and whether general, non-confidential information, may be adequate for review purposes. The NYS Freedom of Information Law, Public Officers law, Article 6, provides for public access to information NYSERDA possesses. Public Officers Law, Section 87(2)(d) provides for exceptions to disclosure for records or portions thereof that "are trade secrets or are submitted to an agency by a commercial enterprise or derived from information obtained from a commercial enterprise and which if disclosed would cause substantial injury to the competitive position of the subject enterprise." Information submitted to NYSERDA that the proposer wishes to have treated as proprietary, and confidential trade secret information, should be identified and labeled "Confidential" or "Proprietary" on each page at the time of disclosure. This information should include a written request to except it from disclosure, including a written statement of the reasons why the information should be excepted. See Public Officers Law, Section 89(5) and the procedures set forth in 21 NYCRR Part 501 <https://www.nyserda.ny.gov/About/New-York-State-Regulations>. However, NYSERDA cannot guarantee the confidentiality of any information submitted for this RFQL.

Omnibus Procurement Act of 1992 - It is the policy of New York State to maximize opportunities for the participation of New York State business enterprises, including minority- and women-owned business enterprises, as bidders, subcontractors, and suppliers on its procurement Agreements.

Information on the availability of New York subcontractors and suppliers is available from:

Empire State Development
Division for Small Business
625 Broadway Albany, NY 12207

A directory of certified minority- and women-owned business enterprises is available from:

Empire State Development
Minority and Women's Business Development Division
625 Broadway Albany, NY 12207

State Finance Law sections 139-j and 139-k - NYSEDA is required to comply with State Finance Law sections 139-j and 139-k. These provisions contain procurement lobbying requirements which can be found at <https://ogs.ny.gov/acpl/procurement-lobbying-law>. Proposers are required to answer questions during proposal submission, which will include making required certification under the State Finance Law and to disclose any Prior Findings of Non- Responsibility (this includes a disclosure statement regarding whether the proposer has been found non-responsible under section 139-j of the State Finance Law within the previous four years).

Tax Law Section 5-a - NYSEDA is required to comply with the provisions of Tax Law Section 5-a, which requires a prospective contractor, prior to entering an agreement with NYSEDA having a value in excess of \$100,000, to certify to the Department of Taxation and Finance (the "Department") whether the contractor, its affiliates, its subcontractors and the affiliates of its subcontractors have registered with the Department to collect New York State and local sales and compensating use taxes. The Department has created a form to allow a prospective contractor to readily make such certification. See ST-220-TD (available at https://www.tax.ny.gov/pdf/current_forms/st/st220td_fill_in.pdf).

Prior to contracting with NYSEDA, the prospective contractor must also certify to NYSEDA whether it has filed such certification with the Department. The Department has created a second form that must be completed by a prospective contractor prior to contacting and filed with NYSEDA. See, ST-220-CA (available at https://www.tax.ny.gov/pdf/current_forms/st/st220ca_fill_in.pdf). The Department has developed guidance for contractors which is available at <http://www.tax.ny.gov/pdf/publications/sales/pub223.pdf>.

Contract Award – NYSEDA anticipates making multiple selections under this RFQL. In addition, this RFQL has an open enrollment mechanism that allows for new contractors to submit proposals on a quarterly basis. The open enrollment period has an ongoing evaluation process up to a defined due date of August 31, 2022. Upon appropriate notice, NYSEDA may forego or discontinue the rolling open enrollments to manage the number of resultant contracts. NYSEDA may award a contract based on initial proposals without discussion, or following limited discussion or negotiations pertaining to the Task Work Order Agreement. Each offer should be submitted using the most favorable cost and technical terms. NYSEDA may request additional data or material to support applications. NYSEDA will use the Sample Agreement to contract successful proposals. NYSEDA reserves the right to limit any negotiations to exceptions to standard terms and conditions in the Attachment B Sample Agreement to those specifically identified during the proposal submission process. Proposers should keep in mind that acceptance of all standard terms and conditions will generally result in a more expedited contracting process. NYSEDA expects to notify proposers following a convening of the Scoring Committee (approximately 3-4 times per year) whether their proposals have been selected to receive an award. NYSEDA may decline to contract with awardees that are delinquent with respect to any obligation under any previous or active NYSEDA agreement.

Limitation - This RFQL does not commit NYSEDA to award a contract, pay any costs incurred in preparing a proposal, or to procure or contract for services or supplies. NYSEDA reserves the right to accept or reject any or all proposals received, to negotiate with all qualified sources, or to cancel in part

or in its entirety the RFQL when it is in NYSEDA's best interest. NYSEDA reserves the right to reject proposals based on the nature and number of any exceptions taken to the standard terms and conditions of the Sample Agreement. NYSEDA reserves the right to cancel the open RFQL evaluation process prior to August 31, 2022.

Disclosure Requirement - The proposer shall disclose any indictment for any alleged felony, or any conviction for a felony within the past five (5) years, under the laws of the United States or any state or territory of the United States and shall describe circumstances for each. When a proposer is an association, partnership, corporation, or other organization, this disclosure requirement includes the organization and its officers, partners, and directors or members of any similarly governing body. If an indictment or conviction should come to the attention of NYSEDA after the award of a contract, NYSEDA may exercise its stop-work right pending further investigation, or terminate the agreement; the contractor may be subject to penalties for violation of any law which may apply in the particular circumstances. Proposers must also disclose if they have ever been debarred or suspended by any agency of the U.S. Government or the New York State Department of Labor.

Attachments

Attachment A: Project Personnel and Rates Form

Attachment B: Sample Agreement