Attachment B

NYSERDA PON 3585

Energy Storage Technology and Product Development

Form Fillable Proposal Form for: (select one for each)

Funding Category: Click here

PROPOSAL TITLE: Click or tap here to enter text.

Date of Submission: Click or tap to enter a date.

Submitted by:

COMPANY NAME

Company Principal Investigator

Principal Investigator Phone #

Principal Investigator Email

The instructions below are intended to guide the proposer through the submission, addressing pertinent information for a successful submission. The format provided allows for the evaluation of the relevance and importance of the problem targeted and the probability that the project will meet its technical and commercialization objectives to ultimately solve the stated problem. All questions should be completed, unless they are indicated for a specific project type. Provide concise, clear, detailed, and direct responses to assist in the review of the proposal.

For each funding category, the following sections (denoted by roman numerals) and questions (Qs) are REQUIRED:

Funding Category	Section												
	I	II	III	IV	V	VI	VII	VIII	IX	X	XI	XII	XIII
Category A.1, A.2, A.3	✓	✓					✓	✓	✓	✓	✓	✓	✓
Category B	✓	✓	✓	✓				✓	✓	✓	✓	✓	✓
Category C	✓	✓	✓	✓	✓	✓		✓	✓	✓	✓	✓	✓

I. EXECUTIVE SUMMARY

Provide a non-proprietary summary of your proposal including:

1. Team Members: Identify all significant participants and their primary relevant qualifications. [Do not exceed 250 words]

Click or tap here to enter text.

2. Background: Describe the energy storage system-related problem or opportunity being addressed, and its significance to New York State. [Do not exceed 250 words]

Click or tap here to enter text.

3. Objective: Describe the technical concept and how it will address the identified problem or opportunity. [Do not exceed 250 words]

Click or tap here to enter text.

4. Scope: Outline the technical and commercialization (if applicable) tasks that will be performed within the proposed Statement of Work. [Do not exceed 250 words]

Click or tap here to enter text.

5. Benefits: Provide an estimate of the ultimate impact the product, supporting solution or field testing may have in terms of energy savings and other benefits sought by this solicitation. [Do not exceed 250 words]

Click or tap here to enter text.

II. PROBLEM STATEMENT & PROPOSED SOLUTION

1. What is the problem and who is the customer? Describe the energy storage system problem or opportunity, and its significance to New York State. Describe the proposed solution, how it addresses the problem or opportunity and how it provides value to the customer. Describe the customers for your product or service in as specific terms as possible. Describe, in detail, your interactions with these customers so far. Describe your understanding of your customers' pain point(s), problem, or need that your product or service will solve and indicate whether you have validated the customer "pain point(s)" or need(s). How are these customers addressing (or failing to address) the problem now?

[Do not exceed 600 words]

Click or tap here to enter text.

2. What is your solution? Describe your proposed solution (*i.e.* the product or service to be developed and the technology behind it) and how it addresses the problem or opportunity. Describe the solution in sufficient detail to support performance, cost, other claims, and include any innovative characteristics inherent to the proposed product or service. [Do not exceed 600 words]

Click or tap here to enter text.

3. How well does your solution solve the customer's problem?

a. Describe how your solution helps New Yorkers alleviate their current energy storage condition or problem. Describe your customer's motivation to purchase/use your solution (i.e. the value proposition to the customer). [Do not exceed 200 words]

Click or tap here to enter text.

b. Describe alternative products or services to your proposed solution, and describe your solution's market superiority in terms of advantages/disadvantages over these competitors. When you do this, consider similar solutions, solutions that can be substituted, alternative methods of solving the problem, and the "do nothing" option. [Do not exceed 200 words]

Click or tap here to enter text.

c. If similar ideas or technologies have failed to become commercially successful, explain why your solution is likely to be more successful. [Do not exceed 200 words]

Click or tap here to enter text.

4. Business Model Canvas (Funding Categories B ONLY): The Business Model Canvas is a strategic management and entrepreneurial tool. It will help you to describe, design, challenge, improve, and pivot your business model for the proposed product or supporting solution, regardless of whether you are in the feasibility/concept stage or ready to demonstrate it. Complete the Business Model Canvas for your

product or service by downloading the corresponding link from Sales Force. Once it is fully completed, please save a copy of the Business Model Canvas in PDF format and include it as Attachment C2 to this submission.

THIS SECTION SHOULD BE COMPLETED FOR FUNDING CATEGORY B & C PROJECTS ONLY

III. STATE OF RESEARCH AND TECHNOLOGY TARGETS

1. Technology and Commercialization Readiness Level Calculator: Access the Technology Readiness Level (TRL) and Commercialization Readiness Level (CRL) Calculator by downloading the corresponding link from Sales Force. Complete the "Instructions & Calculator" worksheet. Once this worksheet is fully completed, please save a copy of the entire workbook in PDF format to include as an attachment to this submission, and indicate the resulting TRL and CRL values below.

a. Based on the "Summary & Results" worksheet from the link above, indicate the technology's current TRL: Start TRL

b. Based on the "Summary & Results" worksheet from the link above, indicate the technology's expected TRL at the end of the project: End TRL

c. Based on the "Summary & Results" worksheet from the link above, indicate the technology's current CRL: Start CRL

d. Based on the "Summary & Results" worksheet from the link above, indicate the technology's expected CRL at the end of the project: End CRL

e. The TRL/CRL Calculator workbook should be attached. Is it? Yes/No

2. Describe the **current state of research** and development of the technology as it relates to your proposal and how your proposal will enable follow-on from this existing research knowledge and the expected change in the technology readiness level because of the project. Include test data and other information that supports the technology's current performance, cost, and other claims (include any graphics, images, or data needed for support after the text). Indicate whether the data, performance, cost, and other claims have been independently tested/validated. [Do not exceed 600 words]

Click or tap here to enter text.

3. Provide the estimated goals (technical, performance, and cost) of the proposed solution: 1) at the end of this project (or at the prototype stage if there will be no prototype by project conclusion) and 2) when fully commercialized. Provide support for your estimates. Note that end-of-project goals should match those in your proposed Statement of Work. [Do not exceed 400 words]

Click or tap here to enter text.

4. Intellectual Property: Describe any relevant intellectual property (IP), patents or licenses involved with your proposed solution. If appropriate, address patents (pending, filed or granted), patent searches performed, freedom to operate, ownership of the IP, reliance on other IP or agreements, the status of licensing your technology to others or your need to license others' technology, etc. If your solution would require access to platform IP or an enabling technology in the private domain, describe your plans for securing access. [Do not exceed 300 words]

Click or tap here to enter text.

THIS SECTION SHOULD BE COMPLETED FOR FUNDING CATEGORY B & C PROJECTS ONLY

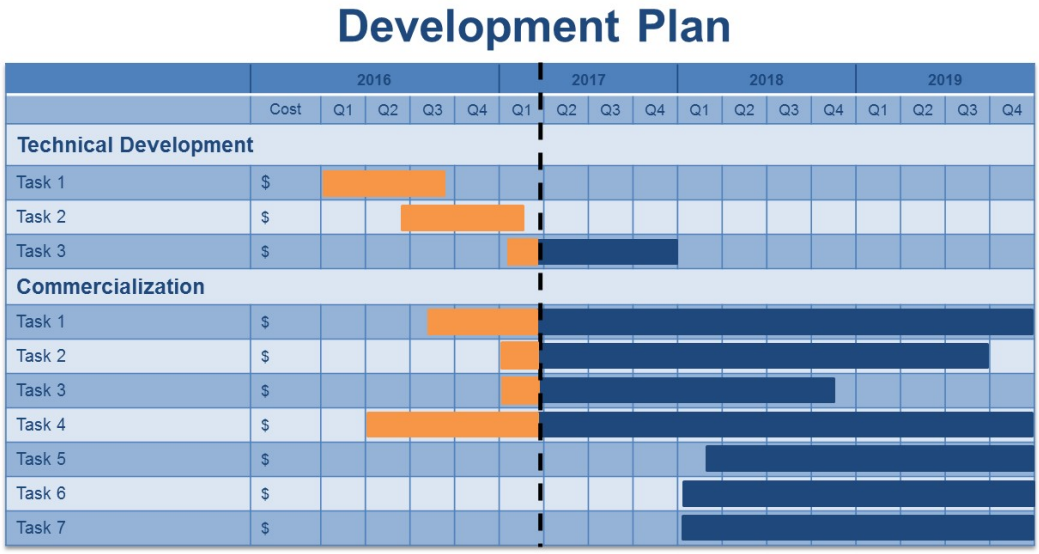
IV. COMMERCIALIZATION POTENTIAL OF PROPOSED PRODUCT

1. Past and Future Efforts:

a. Indicate how much time and funding have been spent to bring the energy storage technology to the current state of development. Indicate the amount and source of funding to bring this technology to its current state of development (e.g. self-funded, investor-funded, any previous NYSERDA-funded projects, federally-funded efforts, etc.). Indicate whether you have participated in the NYSERDA entrepreneurs-in-residence program and if you are a current or past participant in a NYSERDA-sponsored incubator or proof-of-concept center. Also, indicate when significant milestones were achieved. [Do not exceed 300 words]

Click or tap here to enter text.

b. Indicate how much time and funding will be needed to commercialize the energy storage product or supporting solution and bring it to market **after completion of the proposed project**. Indicate anticipated sources of funding (i.e. private capital, federal funding, other research organizations, corporate partners, etc.) methods to acquire this funding. Identify any potential target strategic partners that could reduce the time to market of your product or service by providing access to marketing/sales channels, manufacturing facilities or other resources. Indicate when you expect to achieve significant milestones. You are encouraged to provide this information using a multi-year timeline graphic, starting at project commencement and going through product commercialization. As an example, please refer to the sample Gantt chart provided below. [Do not exceed 300 words]



Click or tap here to enter text.

2. Marketing and Sales:

a. Identify target markets and their relative characteristics, including: size, competition, regulatory constraints, and technological trends. (A bottom-up market description of your specific target markets is preferred, where you demonstrate an understanding of who your customers are and their needs, as opposed to a "generic" top-down approach. This should be directly tied to your Business Model Canvas.) [Do not exceed 350 words]

Click or tap here to enter text.

b. Describe your proposed marketing strategies and why they will be successful. Describe how you will reach, engage, and distribute your product or supporting solution to the target market(s). Provide realistic sales/revenue estimates. Describe market entry barriers you will encounter and how you would expect to overcome them. [Do not exceed 350 words]

Click or tap here to enter text.

c. Does the success of the proposed activity rely on a specific environment to achieve scale and function (i.e. it requires a certain brand of equipment or a particular setting or location)? [Do not exceed 350 words]

Click or tap here to enter text.

d. Describe any partnerships and/or licensing agreements you have secured or will need to secure to undertake the project work that you propose. Describe the relationships and critical partnerships that will be required for the deployment and commercial success of your product or supporting solution. You should include letters of commitment from key partners that reinforce these relationships. [Do not exceed 350 words]

Click or tap here to enter text.

3. Financial Projections (Funding Category B ONLY): Provide a three-year, high-level financial forecast (sample below) for the product or supporting solution starting in the first year that it is commercially available. Include expected revenue, costs, and profits. To complete the Three-Year Financial Projections, please download the corresponding link from Sales Force and complete the entire worksheet. Once this worksheet is fully completed, please save a copy of it in PDF format and include the worksheet as an Attachment C4 to this submission. In preparing projections, please allocate corporate-wide costs, such as Depreciation or G&A to the specific product/solution that is the subject of the proposal, and indicate your assumptions or methods for that allocation

The Three-Year Financial Projections worksheet should be attached. (Attachment C4) Is it? Yes/No

4. Manufacturing Plan (Funding Category B ONLY): Discuss your product manufacturing plan, describing whether one of the team members will manufacture the product, if there will be a manufacturing partner, if a license will be sold for the technology, or if you have another strategy in mind. If you plan on manufacturing the product, describe your plans for initiating setup and expanding existing facilities. Discuss any key issues that will need to be addressed (i.e. any specialized equipment, strategic alliances, long lead time buying decisions, cost/volume issues, and plans for any service support functions to enhance the production). If you plan on licensing the technology, describe your licensing strategy, including your strategy to find licensing partners. [Do not exceed 500 words]

Click or tap here to enter text.

THIS SECTION SHOULD BE COMPLETED FOR FUNDING CATEGORY C PROJECTS ONLY

V. FIELD TESTING SITE AND PRODUCT

1. Field Testing Site: Provide the following information about the field testing site(s) that will host the product or supporting solution. This includes site contact, physical address, facility or fleet type and application, facility or fleet size, primary use, and other relevant information. Include a discussion explaining why the field testing site is a good candidate for the technology or supporting solution to be field tested. [Do not exceed 400 words]

Click or tap here to enter text.

2. Letter of Commitment: Have you secured a commitment of interest from the proposed product or supporting solution field testing site(s) or fleet(s) decision makers? If so, include the letter of interest for each site as an attachment. If not, describe the plan for identifying and securing commitments. [Do not exceed 300 words]

Click or tap here to enter text.

The letter of site commitment should be attached. Is it? Yes/No

3. Description of Product or Supporting Solution Being Field Tested: Describe the specific product or supporting solution that will be demonstrated. Include information on any system components, key specifications, and a description of any site- or fleet-specific design issues. [Do not exceed 500 words]

Click or tap here to enter text.

3. Provide the estimated cost and goals (technical, performance, cost, and other goals) of the specific product or supporting solution that you will be field testing. Describe technical and performance goals for the proposed field testing project and provide support as to why they are achievable. Provide an economic analysis of the proposed technology, including an estimated cost/benefit ratio. [Do not exceed 500 words]

Click or tap here to enter text.

4. Evaluation: Field testing projects must include an evaluation. Identify the independent evaluator who will evaluate the energy performance and customer satisfaction of the proposed installation. [Do not exceed 500 words]

Click or tap here to enter text.

THIS SECTION SHOULD BE COMPLETED FOR FUNDING CATEGORY C PROJECTS ONLY

VI. REPLICATION POTENTIAL OF PROPOSED FIELD TESTING

1. What barrier or challenge does your proposed field testing project seek to overcome, how will your project overcome this challenge, and why will your approach be successful? Describe the reason(s) that the product or supporting solution that you are field testing has not had traction in the New York State market, or might have difficulty achieving such traction. Describe what new knowledge or insights you expect to gain because of this project. Describe how this proposed field testing project will help to overcome these challenges and facilitate market adoption in New York State. Describe the proposed outcome of this project as it relates to changing the market (*i.e.* influential results from the field testing). [Do not exceed 600 words]

Click or tap here to enter text.

2. Replication Potential: Is the field-testing site(s) representative of other facilities (physically and/or functionally) or fleets in New York State that could potentially benefit from using this product or service? What is the current market penetration in New York State? Describe the potential New York State market (including market size) for the product or supporting solution that you expect to open by overcoming the barriers addressed in this proposal. [Do not exceed 500 words]

Click or tap here to enter text.

3. Replication Strategy: What is your strategy (both during the proposed project and after the project is complete) to promote market acceptance and replication in New York State, and to stimulate more New York State installations of the demonstrated product or supporting solution? Identify key partners and stakeholders that will be involved in the project and describe how they will be involved. Identify other stakeholders that will be influential in accelerating adoption and describe plans for engaging with these stakeholders? Describe how the results from the field testing evaluation will be made public to a wider audience. [Do not exceed 400 words]

Click or tap here to enter text.

4. Evaluation of Results: Describe the evaluation plan for validating the observations conducted during this project field testing. You must include the following in describing the plan:

- Statement of the equipment installation, completion/implementation, and system commissioning.
- Adherence to all applicable local, state, and federal building, fire, electrical, and interconnection codes.
- Describe in detail: the data acquisition system, its sampling schedule, supporting instrumentation, remote monitoring and report generating capabilities.
- Identify who will be responsible for all data collection, operator and maintenance interfacing, and tracking system performance.
- Identify how you will track system performance, pre- and post-installation/implementation of the proposed product or supporting solution at the field testing site or fleet, and how these relate to the performance goals that you specified.
- Describe your plan to measure and validate this actual cost/benefit ratio during the field testing.
- Describe the technology transfer strategies that would be performed to educate relevant partners and stakeholders that the proposed technology's or service's barriers have been removed.

[Do not exceed 500 words]

Click or tap here to enter text.

THIS SECTION SHOULD BE COMPLETED FOR FUNDING CATEGORY A.1, A.2 & A.3 PROJECTS ONLY

VII. EARLY STAGE: Prod. Develop., Field Testing Feasibility, or Technology Facilitation Projects

1. Provide statistics or other data for quantifying how prevalent the described problem you are seeking to solve is in New York State and how significant the problem's impact is in terms of fuel or energy use or GHG emissions or other system performance measures relevant to the problem statement, as appropriate. [Do not exceed 300 words]

Click or tap here to enter text.

2. Describe in detail the current or pending circumstance preventing the technology or service from being used in the described situation.

Examples of such circumstance include, but are not limited to, outdated codes or standards, lack of information to form effective government regulations or policies, and unintended market disincentives. [Do not exceed 300 words]

Click or tap here to enter text.

3. Describe the strategies for removing barriers that prevent or limit wider use of the proposed technology or supporting solution. [Do not exceed 300 words]

Click or tap here to enter text.

4. Describe the technology transfer strategies that would be performed to educate relevant partners and stakeholders that the proposed technology's barriers have been removed. [Do not exceed 300 words]

Click or tap here to enter text.

VIII. STATEMENT OF WORK & SCHEDULE

1. Statement of Work: The Statement of Work (SOW) is the primary contractual document that outlines work activities and quantifies deliverables. Complete the Statement of Work using the format exemplified in the Statement of Work attachment available through Sales Force and include it in your proposal.

Your Statement of Work should be attached. Is it? Yes/No

2. Schedule: Provide an overall schedule of the project and timing of major tasks and deliverables. Note that project tasks in the schedule should match the project tasks in the Statement of Work. The schedule should be in a bar chart starting with “Month 1”, Month 2”, etc. Schedule for Category A projects preferred to be completed within 18 months, Category B and C projects are preferred to be complete in 36 months.

Click or tap here to enter text.

IX. PROJECT BENEFITS

1. Discuss how the proposed project will reduce GHG emissions and energy use in New York State. This is an important evaluation criterion. [Do not exceed 300 words]

Click or tap here to enter text.

2. Quantify any additional project benefits to the extent possible: resiliency & reliability benefits, congestion, etc., environmental benefits (e.g., emission reductions, minimizing hazardous materials, etc.), economic benefits (e.g., jobs created or retained, reduced life-cycle costs, enhanced economic viability, etc.), safety and security benefits (e.g., reduction in deaths, injuries and real property losses, etc.), and other benefits (e.g., cost of compliance with State or Federal regulations, enhanced quality of life issues, etc.). [Do not exceed 300 words]

Click or tap here to enter text.

3. Describe the methodology that will be used to collect the necessary data and quantify the project benefits. [Do not exceed 300 words]

Click or tap here to enter text.

X. BUDGET

1. Complete the **Budget Form - Attachment D**. Indicate requested NYSERDA funding in the column labeled "Funding & Co-funding via NYSERDA." If applicable, proposers should allocate 10-25% of the project budget for commercialization-related tasks, such as customer discovery, IP protection, business plan development, and design for manufacturing. Include non-NYSERDA cash and in-kind contributions in the column labeled "Cost-sharing and Other Co-funding." Phased projects should include a budget for each phase, as well as one for the total project.

Proposers should also include a budget for each sub-contractor that comprises greater than 20% of the total budget or more than $50,000.

The Cost Pricing Proposal Form should be attached. Is it? Yes/No

2. Cost Sharing: All proposals require a minimum cost sharing. The amount of cost sharing required is dependent on the project category. Cost sharing that exceeds these minimums will be favorably considered (refer to evaluation criteria).

- Cost sharing can be from the proposer, other team members, and other government or private sources. Contributions of direct labor (for which the laborer is paid as an employee) and purchased materials may be considered "cash" contributions. Unpaid labor, indirect labor, or other general overhead may be considered "in-kind" contributions. The proposal should show the non-NYSERDA funding relative to cost share described directly above in BUDGET section.
- NYSERDA will not fund efforts that have already been undertaken. The proposing team cannot claim as cost-share any expenses that have already been incurred.
- **Using the following table as an example, show your cost sharing plan below. Make sure that this table agrees with your Budget Form.**

PROPOSAL COST SHARING TABLE (expand as needed)						
Proposed Funding By Task (Cash and In-Kind)					Project Total	
Funding Source	Task 1 ($)	Task 2 ($)	Task 3 ($)	...	Cash ($)	In-Kind ($)
NY State						
Proposer						
Co-Funder (identify)						
Co-Funder (identify)						
Task Total ($)						

If you include indirect costs in your budget, you MUST attach supporting documentation to support indirect cost (overhead) rate in your proposal as follows:

- Describe the basis for the rates proposed (*i.e.*, based on prior period actual results, based on projections, based on federal government or other independently approved rates).
- If rate(s) is/are approved by an independent organization, such as the federal government; provide a copy of such approval.

NYSERDA reserves the right to audit indirect rates presented in the proposal and adjust for differences. Requests for financial statements or other financial information may be made if deemed necessary.

For any new projects **exceeding $100,000** that involve product development, including business development, **NYSERDA will require a royalty based on sales and/or licensing of the new product developed** (Please see Attachment F, Sample Agreement for specific recoupment obligations).

The basis for your indirect costs should be attached. Is it? Yes/No

XI. PROPOSER QUALIFICATIONS

NYSERDA PON 3585
Enter Company Name

In this section, you will be describing your team, organization's strengths, key individuals and past performances.

1. Proposing Organization(s), Organizational Chart, and Location of Personnel: Briefly describe your organization and the section/department/group proposing to carry out the work. Include date founded, the total number of employees, product portfolio, any previous examples of successful product commercialization, and geographic location. Include any sub-contractors and other sponsors with significant involvement. **Note that** if any sub-contractor not named in the proposal is to be paid more than $50,000, a competitive bid must follow. (Sample agreement will exemplify.) [Do not exceed 400 words]

Click or tap here to enter text.

2. Qualifications of Key Individuals: Identify key individuals that will be involved in the project and its success. Provide one- to two-paragraph summaries of relevant technical and business expertise of these individuals and provide their physical location. Submit resumes (as appendices) of all key project team members. [Do not exceed 400 words]

Click or tap here to enter text.

Resumes of key individuals should be attached. Are they? Yes/No

3. Prior NYSERDA Experience: List NYSERDA contracts awarded, if any, in the past five years. [Do not exceed 300 words]

Click or tap here to enter text.

XII. LETTERS OF SUPPORT

If other organizations or businesses are doing some of the work, providing services or equipment, or share in the non-NYSERDA cost, include a signed letter on that organization's letterhead describing their

commitment and cash/in-kind dollar commitment. Include letters of interest from potential customers for the product to be developed and/or to support claims made in your proposal.

XIII. ATTACHMENTS

Please check the box to indicate which additional, attachments are included in your proposal submission. Appendices should be limited to documents directly supporting the narrative such as resumes, letters of support, calculations, business literature, and detailed schedules.

- ☐ Statement of Work – Attachment B1 (required)
- ☐ Business Model Canvas – Attachment B2 (required for funding category B)
- ☐ TRL/CRL Calculator – Attachment B3 (required)
- ☐ Three-year financial projections worksheet – Attachment C (required for funding category B)
- ☐ Budget Form - Attachment D (required)
- ☐ Indirect Cost Rate Support
- ☐ Letters of Support
- ☐ Letters of Site Commitment
- ☐ Resumes
- ☐ References

Attachment B1

EXHIBIT A: STATEMENT OF WORK
Project Title
NYSERDA Agreement No. _____

BACKGROUND/OBJECTIVES

(PROVIDE A BRIEF DESCRIPTION OF THE PROJECT. THIS SHOULD BE NO MORE THAN A TWO PARAGRAPH DESCRIPTION THAT PROVIDES A BACKGROUND OF THE PROBLEM, AS WELL AS HOW THE CONTRACTOR INTENDS TO SOLVE THE PROBLEM. KEEP IN MIND THAT THE CONTRACT SHOULD "STAND ON ITS OWN", I.E. ANYONE SHOULD BE ABLE TO PICK IT UP AND FIGURE OUT WHAT IS GOING ON.)

DEFINITIONS

SOW: Statement of Work
(*Define any acronyms or uncommon words/phrases/technical terms to be used in the SOW)*

The Contractor is defined as:

Company Name
PI Name
Street Address, City, State Zip code
Phone/Fax
E-mail

Subcontractor(s) is/are defined as:

Subcontractor name
Street Address, City, State Zip code
Phone/Fax
E-mail

The Project Site(s) is/are defined as:

Site Name
Street Address, City, State Zip code

TASK 0 - PROJECT MANAGEMENT AND PROGRESS REPORTING

Responsibility

Regardless of subcontracting arrangements, the Contractor shall be responsible for the timely completion of all the tasks in the SOW per the Project Schedule included herein. The Contractor shall provide all project management activities necessary for the performance of this SOW, as per attached *milestone schedule/budget*, which shall include the following activities:

- Coordinate the work of the Contractor's employees and those of subcontractors and equipment vendors that are undertaking tasks described in this SOW;
- Ensure control over the Project Budget and adherence to the Project Schedule; and
- Provide all project reporting to NYSERDA as specified in this SOW.

Subcontract(s)

The Contractor shall enter into an agreement with (*name subcontractor*) to perform work in the area of (*include subcontractor area of responsibility*).

(Repeat identification of additional subcontractor agreements as needed under this contract.)

At NYSERDA's request, the Contractor shall submit a copy of the above agreement(s) to NYSERDA's Project Manager.

Progress Reporting

The Contractor shall submit **periodic** progress reports, no less frequently than quarterly, to NYSERDA's Project Manager no later than the 15th of the month following each reporting period. The Progress Reports shall include information on the following subjects in the order indicated, with appropriate explanation and discussion:

a. Name of contractor
b. Title of the project.
c. Agreement number.
d. Reporting period.
e. Project progress including a summary of progress, findings, data, analyses, results and field-test results from all tasks carried out in the covered period.
f. Planned work for the next reporting period.
g. Identification of problems.
h. Planned or proposed solutions to identify problems described in (f) above.
i. Ability to meet schedule, reasons for slippage in schedule.
j. Schedule - percentage completed and projected percentage of completion of performance by calendar quarter - may be presented as a bar chart or milestone chart.
k. Budget- analysis of actual costs incurred in relation to the budget.

Project Kick-off Meeting

The Contractor shall hold a project kick-off meeting within thirty days from the contract execution date. The Contractor shall coordinate with NYSERDA's Project Manager to arrange the meeting at a mutually convenient time and place. The Contractor is encouraged to invite representatives of subcontractors and equipment vendors. The purpose of this meeting shall be to finalize the strategies for accomplishing the objectives of this work. In a timely manner, the Contractor shall submit to NYSERDA's Project Manager a brief report summarizing the issues discussed and decisions made, if any, during this meeting.

Project Completion Meeting

The Contractor shall conduct a project completion meeting, it shall occur within time period covering 15 days prior to and 15 days following the submission of the draft Final Report. The Contractor shall coordinate with NYSERDA's Project Manager to arrange the meeting at a mutually convenient time and place.

Annual Metrics Reports

On an annual basis, the Contractor shall submit, to NYSERDA's Project Manager, a prepared analysis and summary of metrics addressing the anticipated energy, environmental and economic benefits that are realized by the project. All estimates shall reference credible sources and estimating procedures, and all assumptions shall be documented. Reporting shall commence the first calendar year after the contract was executed. Reports shall be submitted by January 31st for the previous calendar year's activities (i.e. reporting period). The Contractor shall provide metrics in accordance with the attached Metrics Reporting Guide.

Task 0 Deliverables:

(1) Written periodic Progress Reports.
(2) Brief report summarizing the Kick-off Meeting and Minutes.
(3) Brief report summarizing the Completion Meeting and Minutes.
(4) Annual Metrics Reports.

Task 1-Title

Identify Task and Expected Deliverable for said task. The tasks should:

- *Be worded using action phrases, and should always start with "The Contractor shall…"*
- *Tasks should be worded so it is clear what the Contractor is required to do.*
- *If the Contractor is working with a subcontractor, it should say which one, specifically (unless there is only one, or all of them, in which case 'Subcontractor' or Subcontractor's, respectively, is acceptable.)*
- *Avoid using phrases like 'etc,' or 'including, but not limited to;' these phrase are ambiguous and hard to enforce.*
- *Tasks should be linear, so later tasks build on earlier tasks, and earlier tasks inform work being completed later on, as much as possible.*
- *When referring to previous tasks, it should be worded as "….the work/report/system/method approved in Task X."*

Task 1 Deliverable- *This should be directly tied to the work completed in the Task. Most, if not all Tasks, should have a deliverable, except in special circumstances.*

- *Deliverables should be a tangible item: a report, a presentation, pictures, purchase orders or bills of lading.*
- *Deliverables should not be something not asked for the in the Task, and work completed in the Task should be reported on in the deliverable.*

Task 1 Schedule- *Every Task should have a timeframe from the Effective Date that the work is expected to be completed in. This can be divided up task by task or included as a separate attachment.*

(Repeat Identification of task and deliverable as often as needed under this contract.)

Task X - Final Report

Upon completion of the contract period, the Contractor shall prepare a non-proprietary/non-confidential Final Report covering all aspects of the work performed under this Agreement; the report shall include information on the following subjects:

- Discussions of the observations and findings and recommendations, if any, from all tasks, and avenues for further improvements, as appropriate;
- Discussions of the project results and lessons learned regarding configuration, capabilities, and benefits of the project; and
- Environmental, and economic benefits, and implementation scenarios associated with such.

Draft Version and Final Version of Final Report: A draft version of the Final Report shall be submitted to NYSERDA's Project Manager no later than the date specified in the Milestone Schedule of the NYSERDA Agreement for this task. NYSERDA will comment on the draft version within 30 working days after receipt of such draft. Within 30 working days after receipt of NYSERDA's comments, the Contractor shall prepare a final version of the report reflecting therein careful consideration of NYSERDA's comments to the satisfaction of NYSERDA, and submit two (2) bound, color hard copies and one (1) electronic copy of the final version of the Final Report.

Task X Deliverables:

(1) A draft version of the Final Report.
(2) A final version of the Final Report.

To be included on Demonstration Contracts under Task 0:

Site Agreement

The Contractor shall prepare and execute a site agreement with the Host Site prior to beginning the Work. The site agreement shall include terms for installing and monitoring the (*insert technology to be demonstrated*) at the Host Site and shall clearly specify the commitment and responsibilities of all parties. The site agreement shall include terms to allow, upon reasonable advance notice, NYSERDA's Project Manager and his/her invited guests to visit the Host Site to inspect the (*insert technology to be demonstrated*) and to witness operations. Invited guests may include other NYSERDA personnel, New York State agency representatives, and other stakeholders. The site agreement terms shall also specify, at a minimum: (1) cost share contributions; (2) description and duration of the monitoring; (3) descriptions of any modifications required to the Host Site for monitoring the (*insert technology to be demonstrated*); (4) access to the demonstration site for installing, inspecting, and servicing the (*insert technology to be demonstrated*) by the Contractor and its agents; (5) insurance; (6) equipment removal; (7) indemnification (including a provision by which the site owner disclaims any liability against NYSERDA for any damages or losses occurring by virtue of the (*insert technology to be demonstrated*) being installed or operated at the site); (8) site restoration; and (9) publicity (including but not limited to posting of project success information on NYSERDA's website).. The site agreement shall be executed with an entity having the authority to commit the Host Site. A copy of the executed site agreement shall be furnished to NYSERDA for NYSERDA's records.

For projects that will incorporate a Go/No-Go requirement, some suggested language:

Go/No-Go Evaluation: The Contractor shall not proceed with the remaining tasks until the (*provide the deficiency to be addressed i.e. technical data, market study, test plan, economic study, etc*) has been approved by (*name the appropriate project participant(s), customer(s), stakeholder(s), NYSERDA*). The Contractor must document (*name the project participants, customer, stakeholder*) acceptance of the (*name the solution to the deficiency*) and present such documentation to the NYSERDA Project Manager for approval. NYSERDA reserves the option to not proceed beyond this point and terminate the project if NYSERDA's Project Manager determines that the (*name the solution to the deficiency*) is not acceptable to (*name the appropriate project participant(s), customer(s), stakeholder(s), NYSERDA*). If the decision is made to terminate the project, the Contractor shall provide a Final Report, documenting the project results and lessons learned during Task *(#/#'s*).

If the decision is made to continue with the project, the Contractor shall proceed to Task (*next task #*).

BUSINESS MODEL CANVAS – *COMPANY/PROJECT NAME*

Attachment B2

NEW YORK STATE OF OPPORTUNITY. NYSERDA

PROBLEM

List your top 1-3 problems.

SOLUTION

Outline a possible solution for each problem.

UNIQUE VALUE PROPOSITION

Describe why you are different and worth paying attention to in a single, clear, compelling statement.

KEY PARTNERS & SPONSORS

List your key program partners and sponsors.

CUSTOMER SEGMENTS

List your customers and users.

KEY SUCCESS METRICS

List the key numbers that tell you how your program is doing.

HIGH-LEVEL CONCEPT

List your X for Y analogy (e.g. YouTube = Flickr for videos).

CHANNELS FOR CUSTOMERS

List your path to customers (inbound or outbound).

COST STRUCTURE

List your fixed and variable costs.

FUNDING STREAMS

List your sources of funding.

CURRENT

FUTURE

Technology & Commercialization Readiness Level Calculator

Instructions

This Excel Workbook has been developed by NYSERDA to help emerging and growing companies determine the level of technical and commercial maturity of their products/innovations through the use of a customized and integrated Technology Readiness Level (TRL) and Commercialization Readiness Level (CRL) Calculator. This TRL/CRL Calculator is based on the systems developed by NASA, DOE, and ARPA-E, and has been designed specifically for ventures in the clean energy industry.

For each category, select the button next to the description that best fits the status of your product/innovation. This calculator will determine the appropriate TRL and CRL levels based on your answers. Once all categories have been completed, click the "See Results" button to view your TRL and CRL scores and answers.

PLEASE NOTE: This TRL/CRL Calculator is provided for informational purposes only, with the understanding that NYSERDA is not rendering any professional opinion or advice. You should consult with a professional advisor before taking any action based on the content of this calculator.

Profile	
Company/Organization Name:	
Proposal Title:	
Product/Innovation Description:	

Technology		
○	**1**	Project work is beyond basic research and technology concept has been defined

○	**2**	Applied research has begun and practical application(s) have been identified
○	**3**	Preliminary testing of technology components has begun, and technical feasibility has been established in a laboratory environment
○	**4**	Initial testing of integrated product/system has been completed in a laboratory environment
○	**5**	Laboratory scale integrated product/system demonstrates performance in the intended application(s)

Answer	**No Answer**

Product Development		
○	**1**	Initial product/market fit has been defined
○	**2**	Pilot scale product/system has been tested in the intended application(s)
○	**3**	Demonstration of a full scale product/system prototype has been completed in the intended application(s)
○	**4**	Actual product/system has been proven to work in its near-final form under a representative set of expected conditions and environments
○	**5**	Product/system is in final form and has been operated under the full range of operating conditions and environments

Answer	**No Answer**

Product Definition/Design		
○	**1**	One or more initial product hypotheses have been defined
○	**2**	Mapping product/system attributes against customer needs has highlighted a clear value proposition
○	**3**	The product/system has been scaled from laboratory to pilot scale and issues that may affect achieving full scale have been identified

○	**4**	Comprehensive customer value proposition model has been developed, including a detailed understanding of product/system design specifications, required certifications, and trade-offs
○	**5**	Product/system final design optimization has been completed, required certifications have been obtained, and product/system has incorporated detailed customer and product requirements

Answer	**No Answer**

Competitive Landscape		
○	**1**	Secondary market research has been performed and basic knowledge of potential applications and competitive landscape have been identified
○	**2**	Primary market research to prove the product/system commercial feasibility has been completed and basic understanding of competitive products/systems has been demonstrated
○	**3**	Comprehensive market research to prove the product/system commercial feasibility has been completed and intermediate understanding of competitive products/systems has been demonstrated
○	**4**	Competitive analysis to illustrate unique features and advantages of the product/system compared to competitive products/systems has been completed
○	**5**	Full and complete understanding of the competitive landscape, target application(s), competitive products/systems, and market has been achieved

Answer	**No Answer**

Team		
○	**1**	No team or company in place (single individual, no legal entity)
○	**2**	Solely technical or non-technical founder(s) running the company with no outside assistance
○	**3**	Solely technical or non-technical founder(s) running the company with assistance from outside advisors/mentors and/or incubator/accelerator
○	**4**	Balanced team with technical and business development/commercialization experience running the company with assistance from outside advisors/mentors
○	**5**	Balanced team with all capabilities onboard (e.g. sales, marketing, customer service, operations, etc.) running the company with assistance from outside advisors/mentors

Answer	**No Answer**

Go-To-Market		
○	**1**	Initial business model and value proposition have been defined
○	**2**	Customers/partners have been interviewed to understand their pain points/needs, and business model and value proposition have been refined based on customer/partner feedback
○	**3**	Market and customer/partner needs and how those translate to product requirements have been defined, and initial relationships have been developed with key stakeholders across the value chain
○	**4**	Partnerships have been formed with key stakeholders across the value chain (e.g. suppliers, partners, service providers, and customers)
○	**5**	Supply agreements with suppliers and partners are in place and initial purchase orders from customers have been received

Answer	**No Answer**

Manufacturing/Supply Chain		
○	**1**	Potential suppliers, partners, and customers have been identified and mapped in an initial value chain analysis
○	**2**	Relationships have been established with potential suppliers, partners, service providers, and customers and they have provided input on product and manufacturability requirements
○	**3**	Manufacturing process qualifications (e.g. QC/QA) have been defined and are in progress
○	**4**	Products/systems have been pilot manufactured and sold to initial customers
○	**5**	Full scale manufacturing and widespread deployment of product/system to customers and/or users has been achieved

Answer	**No Answer**

3-Year Financial Projections

	All Years Prior (2)	Calendar or Fiscal Year End (please specify)(1) 2015	2016	2017
		(in thousands of $)(3)		
Operating revenues, excluding grants (4):				
Net sales (5)		$ -	$ -	$ -
Licensing and sub-licensing		$ -	$ -	$ -
Other operating revenues (consulting, maintenance, subscription etc.)(6)		$ -	$ -	$ -
Operating revenue		$ -	$ -	$ -
Cost of sales		$ -	$ -	$ -
Gross profit		$ -	$ -	$ -
Gross margin		n/a	n/a	n/a
Operating expense, excluding interest, taxes, depreciation and amortization (7):				
Research and product development	**$ -**	$ -	$ -	$ -
Sales and marketing		$ -	$ -	$ -
General and administrative		$ -	$ -	$ -
Other expenses (8)		$ -	$ -	$ -
Operating expenses		$ -	$ -	$ -
Operating profit/EBITDA		$ -	$ -	$ -
Cash flow adjustments				
Change in Inventory		$ -	$ -	$ -
Change in Receivables		$ -	$ -	$ -
Net cash from operations		$ -	$ -	$ -
Capital expenditures		$ -	$ -	$ -
Private capital raised	**$ -**	$ -	$ -	$ -
Net increase in cash		$ -	$ -	$ -
Cash at end of year (9)	**$ -**	$ -	$ -	$ -
Supplemental information on grant and contract revenues (10)				
Current NYSERDA funding request	**$ -**	$ -	$ -	$ -
Other grants	**$ -**	$ -	$ -	$ -
Total revenue including grants and contracts		$ -	$ -	$ -

Please do not alter info. w/I this box.

Years for Row 2 Validation Drop Down Lists

2015
2016
2017
2018
2019
2020
2021
2022

Notes

(1) Select the appropriate year from the drop-down list for each year of the financial projections. The initial year for the financial projections should be the first year of sales.

(2) Figures in this column should include revenues (current NYSERDA funding request, other prior grants), costs/expenses (research and product development), and private capital raised *that will be required prior to the first year of sales.*

(3) The dollar values in the worksheet should be in thousands of dollars. For example, $500,000 would be recorded as $500.
(4) Operating revenues should not include grants or government R&D contracts. NRE related to product sales should be recorded as other revenue.
(5) Net sales is total sales minus returns/refunds, discounts, and rebates.
(6) ***Describe other revenues here:***

(7) For the purpose of this forecast, please do not include depreciation, amortization, interest or tax expenses.
(8) ***Describe other expenses here:***

(9) Indicate cash on hand at the end of the year immediately prior to the first forecast year.
(10) Include grants or government R&D contracts here. These revenues are not figured into the forecast, but are provided for background information.