

**Zero Energy for the Ocean State (ZEOS) Demonstration Project
Request for Proposals
Construction Contractor / Development Team**

I. INTRODUCTION

Through this Request for Proposals (“RFP”), the Rhode Island Housing and Mortgage Finance Corporation (“RIHousing”), the Rhode Island Office of Energy Resources (“OER”) and The Narragansett Electric Company, (“National Grid”) (collectively, the “Program Partners”) seek proposals from qualified teams (“Project Teams or “Project Team Members”) to design and construct affordable¹ energy efficient Zero Energy Building (ZEB) housing unit(s) to serve low- and moderate-income² (“LMI”) residents in Rhode Island. The Program Partners are offering a grant of up to \$250,000 for the development of these units. The housing units must employ solar PV and air-source heat pump (“ASHP”) technologies to achieve ZEB status. The units may be new construction and/or renovation projects as detailed in the Project Requirements and Scope of Work at Attachment A.

A ZEB is defined as an energy-efficient building where, on a source energy basis, the actual annual delivered energy is less than or equal to the annual on-site renewable exported energy (based on the US Department of Energy’s ZEB definition³).

This new program, Zero Energy for the Ocean State (“ZEOS”) is the result of a collaborative approach by the Program Partners to expand ZEB housing to low- and moderate-income sectors. The Program Partners seek demonstration projects that encompass four primary elements – design, explore, inform, and assess – meant to create a pathway for scaling ZEBs in low- and moderate-income residential sectors as a means of reducing greenhouse gas emissions. The program is in response to the recommendations included in the Rhode Island Zero Energy Task Force’s Zero Energy Building Pathway to 2035 white paper⁴. The white paper established a goal to create ZEB demonstration projects across building sectors.

PROJECT REQUIREMENTS

The total award from the Program Partners will not exceed \$250,000. Buildings must qualify as ZEB (according to DOE’s ZEB definition) and participate in National Grid’s Residential New Construction Program.

Projects that may qualify include:

¹ In general, housing for which the occupant(s) is/are paying no more than 30 percent of his or her income for gross housing costs, including utilities.

² Low- and Moderate-Income Family: families whose [combined] income does not exceed 60 to 120 percent of the median family income for the area.

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https://energy.gov/sites/prod/files/2015/09/f26/bto_common_definition_zero_energy_buildings_093015.pdf

⁴ https://www.nationalgridus.com/media/pronet/ri-ee-task-force/cm6459-ri-zne-white-paper-12_16.pdf

- Single family new construction
- Single family significant rehab
- Multi-family new construction
- Multi-family significant rehab

Zero Energy Buildings are defined as any energy-efficient building where, on a source energy basis, the actual annual delivered energy is less than or equal to the annual on-site renewable exported energy⁵ (based on the DOE's ZEB definition).

PROGRAM INTENT

The intent of the program is to:

1. Provide a grant to contribute to the design of one or more ZEBs that are aesthetically attractive, affordable, replicable and meet RIHousing Design Standards.
2. Stimulate innovative, replicable solutions to utilize cost saving clean energy technologies in homes available to low- and moderate-income customers through the efficient use of multi-agency funding.
3. Demonstrate the potential for solar PV systems in combination with ASHP and energy efficiency measures to reduce the energy burden of low- and moderate-income customers.
4. Deliver the highest, long-term cost savings for the households living in the units.
5. Collect data to inform the design and administration of future programs benefiting low- and moderate-income Rhode Island Residents.
6. Collect data to inform the Office of Energy Resources and National Grid on program design that will contribute to the mobilization of the ZEB market and other goals as stated in the Zero Energy Task Force White paper.

This ZEOS project aims to:

- Design and establish a replicable ZEB model for low- and moderate-income customers that can be brought to scale across the State;
- Explore options for ZEB feasibility and impact in the residential sector;
- Inform the Program Partners and stakeholders on new and available resources, project successes and details, and lessons learned;
- Assess and evaluate aspects of the ZEOS project to identify areas for calibration and modification.
- Identify options for customers to meet the zero-energy goal of their home.

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https://energy.gov/sites/prod/files/2015/09/f26/bto_common_definition_zero_energy_buildings_093015.pdf

The applicant will be expected to work closely with the Program Partners throughout the project design, construction, performance verification, inspections, interconnection and data collection processes.

II. ELIGIBLE APPLICANTS

Applicants must have sufficient technical capacity in the design and oversight of high energy performing building contracting.

Applicants may be:

1. An individual company, organization, or institution
2. Project Team consisting of a lead organization with additional organizations to complement the lead.
3. Applicants may include, but are not limited to:
 - non-profit organizations
 - community-based organizations
 - public assistance programs
 - private consultants
 - contractors

Applicants must have the following certificates and registrations:

<u>Qualification Information</u>	
<u>Registered in Rhode Island</u>	All Applicants/Installers or Project Team members must be registered to do business in RI. (http://www.sos.ri.gov/divisions/business-portal)
<u>State of Rhode Island Contractors' Registration and Licensing Board</u>	Rhode Island law requires anyone who is in the business of commercial construction, home construction, alterations, remodeling, or repair to residential home be registered with the State of Rhode Island Contractors' Registration and Licensing Board. http://www.crb.state.ri.us/ . Please provide a scanned copy of the registration card.

<u>Master Electrician License:</u>	The Electrical Contractor's License already includes the work allowed by the Renewable Energy Professional (REP) ⁶ limited license. Only contractors or individuals without an “A” Electrical License are required to obtain the REP limited license to perform ancillary non-electrical work on renewable energy systems. Please provide this information in the application.
<u>HVAC Contractor Training</u>	To be eligible for this program, the HVAC contractor must have been HVAC Check trained in proper airflow and charge protocols through National Grid’s Rhode Island Heating and Cooling program https://www.nationalgridus.com/ri-mini-split-heat-pump https://www.nationalgridus.com/media/pdfs/resi-ways-to-save/rhode-island-electric-mshp-contractors.pdf
<u>Special Licenses:</u>	Contractors must possess all the applicable licenses and certifications required under RI law and regulations to install the technologies requested.

All subcontractors hired and used for any activities related to the project must be disclosed in writing to the Program Partners if they are not identified in the response to this RFP. All subcontractor licenses, registrations and insurance requirements must be provided to the Program Partners at the time of hire. The Program Partners must approve the use of any subcontractors in writing prior to the Project Team using funds to pay for expenses associated with subcontractor costs. The Program Partners reserve the right to verify the licenses, registrations, and insurance requirements of all subcontractors to ensure compliance with Rhode Island State Law and the requirements of this Program.

Individual homeowners are not eligible to receive direct funding under this grant.

III. INSTRUCTIONS

RFP REQUIREMENTS:

Notwithstanding any requirements described in this RFP, a summary checklist of requirements is included as Attachment F. **One (1)** original and **one (1)** copy of the proposal should be submitted to RIHousing, 44 Washington Street, Providence, Rhode Island 02903-1721, Attn:

⁶ For more information on the Renewable Energy Professional certificate visit - <http://www.energy.ri.gov/renewable/REP/>

ZEOS Program, Development, Rhode Island Housing. Please also direct a courtesy copy by email to: **ZEOSProgram@rihousing.com**. Proposals should be concise and include all attachments and work samples. Proposals should be presented on business letterhead.

RFP TIMELINE

RFP Issued: July 17, 2019

RFP Question Submission Deadline: July 31, 2019

RFP Answer Responses Due: August 7, 2019

Proposals must be received no later than 5:00 EST P.M. on August 14, 2019.

Respondents are advised that all submissions (including those not selected for engagement) may be made available to the public on request upon completion of the process and award of a contract(s).

SCOPE OF WORK

Please see the Scope of Work provided at Attachment A.

ITEMS TO BE INCLUDED WITH YOUR PROPOSAL

Please note that failure to provide any information, certification, or document requested in this RFP **may cause your submission not to be scored**.

A. General Organization Information (include information for all Project Team Members):

1. Executive Summary:

- a. If there is more than one organization on the Project Team, identify the lead organization (the "Lead Member") and all Project Team Members,
- b. Executive Summary of proposed approach (see detailed requirements below).

2. Proposed budget. Please use the provided template (Attachment B). Also include the Construction Trade Breakdown for all construction costs (Attachment B continued).

3. Contact Information:

- a. Name, telephone number and email address of the Lead Member organization authorized to discuss your proposal,
- b. Name of the principal(s) of each Project Team Member,
- c. Address of all offices of the Project Team Members.

Submission
Check List

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B. *Experience and Resources*

1. Describe each Project Team organization and its capabilities and number of employees. In particular, provide a description of the Team's capacity to perform the proposed Scope of Work. Provide a description of the organizational history and current status including services, projects, staff capacity, and evidence of a proven track record of success with energy efficiency, ASHP, integrated controls, solar PV installations and working with low- and moderate-income programs and populations. Include a description to the extent that the proposed project has the potential to mobilize the ZEB market by demonstrating the benefits of ZEB, establishing scalability, and making a case for ZEB as a financially worthwhile choice.

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2. Provide a roster of principals and associates from the lead team member firm who would be involved in providing services to the proposed project. Provide appropriate background information for each such person and identify his or her responsibilities. Clearly demonstrate that the organization has the staff capacity and thorough understanding of the scope to quickly launch and deploy the project as proposed.

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3. Please include a current client roster, including a lead contact name and telephone number for each. [OR] Provide a detailed list of references, including a contact name and telephone number for organizations or businesses for who you have performed similar work

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4. Provide case studies including photos of past work completed related to this Scope of Work.

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5. Identify any conflict of interest that may arise as a result of business activities or ventures by your firm and associates of your firm, employees, or subcontractors as a result of any individual's status as a member of the board of directors of any organization likely to interact with RIHousing, the Office of Energy Resources or National Grid. **If none, please provide a statement to such effect.**

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6. Describe how your Lead Member organization and all Project Team Member organizations will handle actual and or potential conflicts of interest.

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7. Identify any material litigation, administrative proceedings or investigations in which your firm and all Project Team Member organizations are currently involved. Identify any material litigation, administrative proceedings or investigations, to which your firm or any of its principals, partners, associates, subcontractors or support staff was a party that has been settled within the past two (2) years. **If none, please provide a statement to such effect.**

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8. Identify individuals in Lead Team with multi-lingual skills, who are available to assist with written and/or verbal communication in languages other than English. Please identify the language(s).

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C. *Project Approach Narrative*

The project approach narrative should provide a detailed description of the proposed solution for conducting the tasks detailed in the Scope of Work provided in Attachment A, while delivering significant energy and cost savings for each dollar of public investment. The narrative shall be no longer than eight pages (not including schematic plans & specifications) and at minimum include:

1. A detailed timeline including dates for key milestones and deliverables associate with the Scope of Work.
2. A methodology for evaluating and selecting participants that meet the 60%-120% AMI guidelines for the region as defined by HUD⁷.
3. Detail of expected project performance metrics. (Refer to Key Performance Indicators table and list of key deliverables included in the Scope of Work) Applicants must provide a description of any qualitative benefits that will result from their proposed approach (i.e. better indoor air quality, greenhouse gas reductions, etc.).
4. A discussion of how the proposed project approach will address existing ZEB market barriers for low-income residents and other sectors.
5. Schematic Plan & Building Info
 1. Basic Schematic Design to include:
 - Site Plan w/ location map showing:
 - Zoning requirements & North arrow
 - Setbacks
 - Easements
 - Streets
 - Parking
 - Landscaping
 - Floor Plans
 - Elevations – Showing window types & finish materials.
 - Sections – Showing insulation & construction type
 2. Outline Preliminary Specification by Division
 3. Fact Sheet Listing:
 - Proposed Building Type
 - Lot Size
 - Gross & Net Building Area
 - Unit type, size, & distribution

⁷ <https://www.rhodeislandhousing.org/sp.cfm?pageid=572>

- % of lot covered by buildings, parking & other paved areas
6. An organizational chart that demonstrates reporting structures and roles and responsibilities for program administration, including key staff and any subcontracted firms. Highlight all relevant certifications and registrations held by any Project Team Member. Provide a written description, summarizing the overall project and methodology for achieving all required deliverables, tasks, and objectives outlined in the Scope of Work (Attachment A).
 7. A description of the education activities and materials as well as site tours that will be created/conducted during the project to support the Goals & Objectives listed in the Evaluation and Selection section of this RFP.

D. Fee Structure

Cost of services and the ability to leverage other funds are factors that will be considered in awarding this contract. Information requested in this section is required to support the reasonableness of the proposed fees. Applicants should give careful thought to their cash flow needs during the execution of the project. Costs incurred prior to the execution of an agreement with RIHousing will not be reimbursed.

1. Provide a cost proposal for providing the Scope of Work as described in Attachment A. Use Attachment B and Attachment B (Continued) as a template for reporting the project cost breakdown. At a minimum, the cost proposal should address:
 - a. Design and construction;
 - b. All overhead and profit costs clearly identified;
 - c. Additional technical expertise during the design phase;
 - d. Additional onsite expertise during construction;
 - e. Technology and equipment requirements such as solar panels, ASHPs, insulation, windows, and air sealing;
 - f. Cost benefit analysis of level of energy efficiency and solar capacity to meet energy load;
 - g. Creation of replicable plans and specifications;
 - h. Creation of Operations and Maintenance manuals for all the major equipment used in the project;
 - i. Leveraged sources and dollars; and
 - j. Ongoing maintenance costs including inverter replacements or extended warranties.
2. Provide an itemized breakdown of billing rates and hourly costs, list of key personnel and their hourly rates, reimbursable expenses, etc. for any services that may be requested in addition to the services previously described.
3. Provide any other fee information applicable to the engagement that has not been previously covered that you wish to bring to the attention of RIHousing, the Office of Energy Resources and National Grid.

E. Miscellaneous

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1. RIHousing and its Program Partners encourage the participation of persons of color, women, persons with disabilities and members of other federally and State-protected classes. Describe your firm's affirmative action program and activities. Include the number and percentage of members of federally and State-protected classes who are either principals or senior managers in your firm, the number and percentage of members of federally and State-protected classes in your firm who will work on RIHousing's engagement and, if applicable, a copy of your Minority- or Women-Owned Business Enterprise state certification.

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2. Submit any questions or topics not covered in this Request for Proposals that you would like to bring to the Program Partner's attention via email: ZEOSProgram@RIHousing.com. All questions must be submitted by **July 31, 2019**.

F. Certifications

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1. RIHousing and its Program Partners insist upon full compliance with Chapter 27 of Title 17 of the Rhode Island General Laws, Reporting of Political Contributions by State Vendors. This law requires State Vendors entering into contracts to provide services to an agency such as RIHousing, for the aggregate sum of \$5,000 or more, to file an affidavit with the State Board of Elections concerning reportable political contributions. The affidavit must state whether the State Vendor (and any related parties as defined in the law) has, within 24 months preceding the date of the contract, contributed an aggregate amount in excess of \$250 within a calendar year to any general officer, any candidate for general office, or any political party. Please acknowledge your understanding of this in your RFP response.

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2. Does any Rhode Island "Major State Decision-maker," as defined below, or the spouse or dependent child of such person, hold (i) a ten percent or greater equity interest, or (ii) a Five Thousand Dollar or greater cash interest in this business?

For purposes of this question, "Major State Decision-maker" means:

- (i) All general officers; and all executive or administrative head or heads of any state executive agency enumerated in § 42-6-1 as well as the executive or administrative head or heads of state quasi-public corporations, whether appointed or serving as an employee. The phrase "executive or administrative head or heads" shall include anyone serving in the positions of director, executive director, deputy director, assistant director, executive counsel or chief of staff;

(ii) All members of the general assembly and the executive or administrative head or heads of a state legislative agency, whether appointed or serving as an employee. The phrase “executive or administrative head or heads” shall include anyone serving in the positions of director, executive director, deputy director, assistant director, executive counsel or chief of staff;

(iii) All members of the state judiciary and all state magistrates and the executive or administrative head or heads of a state judicial agency, whether appointed or serving as an employee. The phrase “executive or administrative head or heads” shall include anyone serving in the positions of director, executive director, deputy director, assistant director, executive counsel, chief of staff or state court administrator.

If your answer is “Yes,” please identify the Major State Decision-maker, specify the nature of their ownership interest, and provide a copy of the annual financial disclosure required to be filed with the Rhode Island Ethics Commission pursuant to R.I.G.L. §§36-14-16, 17 and 18. If your answer is “No,” please provide a statement to such effect.



3. In the course of providing goods or services to RIHousing, the selected respondent may receive certain personal information specific to RIHousing customer(s) including, without limitation, customer names and addresses, telephone numbers, email addresses, dates of birth, loan numbers, account numbers, social security numbers, driver’s license or identification card numbers, employment and income information, photographic likenesses, tax returns, or other personal or financial information (hereinafter collectively referred to as the “Personal Information”). The maintenance of the Personal Information in strict confidence and the confinement of its use to RIHousing are of vital importance to RIHousing. **Please include a letter from your president, chairman or CEO certifying that, in the event your firm is selected:**

(i) any Personal Information disclosed to your firm by RIHousing or which your firm acquires as a result of its services hereunder will be regarded by your firm as confidential, and shall not be copied or disclosed to any third party, unless RIHousing has given its prior written consent thereto; and

(ii) your firm agrees to take all reasonable measures to (a) ensure the security and confidentiality of the Personal Information, (b) protect against any anticipated threats or hazards to the security or integrity of the Personal Information, and (c) maintain reasonable security procedures and practices appropriate to your firm’s size, the nature of the Personal Information, and the purpose for which the Personal Information was collected in order to protect the Personal Information from unauthorized access, use, modification, destruction or disclosure; and

(iii) when discarding the Personal Information, destroying it in a commercially reasonable manner such that no third party can view or recreate the information, electronically or otherwise.

These provisions, which implement the requirements of the Rhode Island Identity Theft Protection Act, R.I.G.L. § 11-49.2 et seq., will also be incorporated into the final contract with the selected respondent(s). In addition, if selected, your firm may be requested to provide a copy of its information security plan.



4. Please include a letter from your president, chairman or CEO certifying that
- i. no member of your firm has made inquiries or contacts with respect to this Request for Proposals other than in an email or written communication to **ZEOSProgram@RIHousing.com** seeking clarification on the Scope of Work set forth in this proposal, from the date of this RFP through the date of your proposal;
 - ii. no member of your firm will make any such inquiry or contact until after the August 14, 2019;
 - ii. all information in your proposal is true and correct to the best of her/his knowledge;
 - iii. no member of your firm gave anything of monetary value or promise of future employment to a RIHousing employee or Commissioner, or a relative of the same, based on any understanding that such person's action or judgment will be influenced; and
 - iv. your firm is in full compliance with Chapter 27 of Title 17 of the Rhode Island General Laws, Reporting of Political Contributions by State Vendors.

IV. EVALUATION AND SELECTION

RIHousing recommends that Applicants carefully follow instructions and prepare complete, clear and concise applications. It is the sole responsibility of the Applicant to ensure that its application is complete, meets the requirements of this RFP, and is properly submitted to RIHousing. The Program Partners reserve the right to only consider applications that in their sole judgment, meet the submission requirements.

A selection committee consisting of RIHousing, the Office of Energy Resources and National Grid staff (the "Committee") will review all proposals and make a determination based on the following factors:

- 1) Project Team experience
 - a) Applicant's experience and demonstrated ability to deliver high quality work for relevant projects of similar complexity in the area(s) of the requested services.
 - b) Previous work experience and performance with RIHousing and/or similar organizations.

- c) Recommendations by references
- d) Level of experience in working with the LMI community and demonstrated experience developing LMI rental or homeownership units.
- e) Degree to which the Project Team Members have worked collaboratively in the past.
- f) Litigation & Firm History.
- g) Firm minority status and affirmative action program or activities.
- 2) Budget (use Attachment B)
 - a) Provide the requested information in sufficient detail.
 - b) Provide the requested services at a reasonable cost.
 - c) Demonstrate a cost-efficient approach to each of the proposed tasks and services.
 - d) List all outside funding sources.
 - e) Include all identified potential expenses required to achieve successful management and completion of the project.
- 3) Overall Project Approach
 - a) A sound approach to program management and meeting all programs goals and objectives.
 - b) Ability to perform within time and budget constraints
 - c) Understanding the motivation underlying this RFP.
 - d) Integration of existing energy efficiency and renewable energy programs and associated incentives. Proposals that demonstrate a cohesive plan for integrated delivery of energy efficiency and other clean energy technologies will be most competitive.
 - e) Degree to which the Project Team Members represent firms with businesses based in Rhode Island.
 - f) Overall quality of the proposal.
- 4) Extent to which proposed approach achieves the following Goals & Objectives:
 - a) Stimulate innovative, replicable solutions to deploying solar PV systems in combination with energy efficiency and ASHPs that achieve the ZEB definition for low- and moderate-income residents.
 - b) Deliver the highest, long term costs savings for residents; Cost saving calculations should include both energy and non-energy impacts.
 - c) A user-friendly home that makes it easy for a customer to achieve zero energy consumption.
 - d) Demonstrate potential of solar PV systems in combination with ASHPs for reducing the energy burden of low-income customers.
 - e) Undertake activities and create deliverables that build upon lessons learned from implementing similar projects, especially ZEB projects.
 - f) All projects must serve families at or below 120% AMI as defined by HUD⁸
 - (i) Projects that serve clients at or below 60% AMI will be given preference.

⁸ <https://www.rhodeislandhousing.org/sp.cfm?pageid=572>

- g) Number of housing units created. More points will be awarded for more housing units.
- h) Replicability of project.
- i) Ability to complete all required deliverables.
- j) Projects that include both new construction and rehab projects will be given preference.
- k) Strategy for third-party verification that demonstrate units meet the Department of Energy (“DOE”) ZEB definition.
- l) Project with achievable yet expedient timelines are preferred.
- 5) Efficient use of funds, including the extent to which other funds are leveraged.
 - a) Proposals that leverage additional funds such as utility incentives; state, federal, other incentives; and private capital are highly encouraged.
 - b) Overall affordability of project.
- 6) Quality of Interview Presentation (only required for finalists that are chosen to present to the selection committee)
- 7) Up to 5 extra points will be awarded to any proposal that meets the RI Stretch Code⁹ requirements or includes the use of innovative technologies such as energy storage, EV charging infrastructure, and/or energy management systems/smart control technologies.

Scoring Criteria	Possible Points
1. Project Team Experience	20
2. Budget	20
3. Overall Project Approach	15
4. Achievement of Project Goals & Objectives	40
5. Efficient Use of Funds & Affordability of Project	20
<i>Selection of Finalists (top 3 applicants)</i>	<i>115</i>
6. Quality of Interview Presentation	20
7. Stretch Code and/or Innovation	5
Total Possible Points	140

V. REQUIREMENTS FOR PROJECT EXECUTION AND COMPLETION

Additional requirements will apply to the execution and completion of funded projects and will be documented in an agreement (“Grant Agreement”). These requirements will include the following, as applicable:

⁹ <http://www.energy.ri.gov/policies-programs/lead-by-example/rhode-island-stretch-codes.php>

1. Project Team must submit evidence that sufficient financing is in place to complete a project before RIHousing will disburse the first construction installation of a grant.
2. All construction work must be performed in compliance with local, state, and federal laws and codes.
3. Project Team must identify subcontractors not included as part of the identified Program Team in this RFP as detailed in Section II of this RFP.
4. All equipment funded in part or in whole by this grant must be new and of a design suitable for the proposed installation.
5. Major purchased equipment must carry a warranty of at least one year, or the project must have a combination warranty or service contract to cover this first year of operations. Solar PV equipment must have a minimum of a three-year workmanship warranty.
6. The applicant will be expected to work closely with the Program Partners throughout the project design, construction, performance verification, inspections, interconnection and data collection processes. In addition, operations manuals for the major equipment used in the project must be provided.
7. A Data Acquisition System (DAS) for the solar PV system and integrated controls/smart controls for the ASHPs must be installed and the data from these systems must be available to the Program Partners for a minimum of five years.

VI. DISCLAIMERS

1. RIHousing and its Program Partners may, in their sole discretion, require applicants to submit additional detailed project specifics.
2. By issuing this Request for Proposals, RIHousing and its Program Partners have not committed to undertake the work set forth. RIHousing and its Program Partners reserve the right to reject any and all proposals, waive defects or irregularities in any response, to rebid the original or amended scope of services and to enter into negotiations with one or more respondents. RIHousing and its Program Partners reserve the right to make those decisions after receipt of responses. RIHousing's and its Program Partners' decision on these matters is final.
3. It is the responsibility of the Applicant to check the RIHousing website for any addenda or modifications to this RFP. RIHousing and the Program Partners accept no liability and will provide no accommodation to Applicants who submit an application based on an out-of-date RFP or related document, including the information provided in the posted FAQ document.

In its sole discretion, RIHousing may negotiate with one or more firms who have submitted qualifications to submit more detailed proposals on specific projects as they arise.

By this Request for Proposals, RIHousing has not committed itself to undertake the work set forth. RIHousing reserves the right to reject any and all proposals, to rebid the original or amended scope of services and to enter into negotiations with one or more respondents.



STATE OF RHODE ISLAND
**OFFICE OF
ENERGY RESOURCES**

RIHousing reserves the right to make those decisions after receipt of responses. RIHousing's decision on these matters is final.

For additional information contact: ZEOSProgram@RIHousing.com.

Revised: January 2019

Attachment A

Scope of Work

RIHousing, the Rhode Island Office of Energy Resources and National Grid (collectively the “Program Partners”) seek to engage building contractors and/or project teams (the “Project Teams” or “Project Team Members”) to participate in a demonstration project that designs and constructs either new construction or significant rehabilitation of existing units to serve at or below 60% - 120% AMI as defined by HUD. The design and construction must meet the requirements of a certified Department of Energy (“DOE”) Zero Energy Building (“ZEB”) and must participate in National Grid’s Residential New Construction Program (links for more information on these standards are provided in Additional References at Attachment D).

The Program Partners seek to increase access to cost-saving, clean energy technologies for Rhode Island’s low and moderate-income residents. We are seeking Project Teams that can deliver significant energy and cost savings for each dollar of public investment in creative and effective ways.

Through this Request for Proposals (“RFP”), the Program Partners will competitively select and fund, in full or in part, a Project Team to design, construct, and verify programmatic requirements that include solar PV systems, air-source heat pumps (“ASHP”), data acquisition systems (“DAS”) and innovative energy efficiency building practices to achieve net zero buildings as defined by DOE. The integration of renewable and energy efficient technology will provide a direct economic benefit to low- and moderate-income households.

The Project Team Members must demonstrate their plan for monitoring construction quality, adherence to specifications and energy program compliance verification. Additionally, the Project Team Members shall work with National Grid and Program Partners on various data capture equipment requirements and consumption feedback system requirements. Post-construction data collection may include measurement of energy consumption, energy performance and load disaggregation/energy management systems. Occupants/Owners of the ZEB will be required to participate in energy use education and monitoring classes.

The Project Team is urged to leverage other funds for development; however, the housing units must be made affordable to the potential tenants/buyer.

1. TASKS TO BE COMPLETED

The Scope of Work for awards under this program will include the following tasks:

Task 1: Project Design

- a) Independently design, manage, construct and deliver the proposed project.
- b) Identify homeowners or tenants and their eligibility under HUD's 120% guidelines.
- c) Provide a detailed project approach which outlines all grant-related activities and associated milestones and deliverables.
- d) Include a solar-siting analysis and shade analysis for the proposed project. If the project includes a new construction project, show that the building(s) has/have been orientated to achieve the appropriate solar generation.
- e) Participate in periodic meetings and conference calls to review project status and identify appropriate project adjustments.

Task 2: Project Execution

- a) Construct buildings and install eligible technologies. Awardees will be responsible for the design, construction and installation of efficient building technologies, techniques and products, solar PV systems, ASHP and monitoring equipment. These systems shall be installed in a turn-key manner, with the Project Team leader overseeing all installation activities. All equipment shall be installed in a manner consistent with the minimum technical requirements found in Attachment C. It is expected that a higher level of installation monitoring be conducted as installation of systems are critical to achieving maximum energy efficiency.
- b) Participate in National Grid's Residential New Construction Program at onset of project.
- c) Include additional, on-site construction supervision for the installation of energy efficient measures in the program design and construction costs.
- d) Provide ongoing system maintenance services. Awardees will provide a minimum of a one-year construction warranty including operating, maintenance and monitoring services for installed systems. The Awardees must also obtain consent from the occupant(s) of the housing to maintain the data systems and continue sharing data with the Project Partners for at least 5 years after construction. Solar PV installations must have a minimum of a three-year workmanship warranty. Additionally, all PV inverter(s) installed as part of the program shall have extended warranties that meet or exceed the expected life of the PV installation. If an extended warranty is not available or if the equipment is not warrantied for the entire expected life of the system

(minimum 20 years), please detail the plan to replace the inverter(s) making sure to include the replacement cost in the proposed fee structure.

TASK 3: Certifications & Data Collection

- a) Obtain certifications that the building(s) meet the DOE Zero Energy Home standards and at minimum National Grid's Residential New Construction Tier 3 requirements¹⁰. Conduct testing that verifies the building is performing as designed and to the expected energy use goals.
- b) Project Team will work with National Grid and Project Partners to conduct testing that verifies the building is performing as designed to meet expected energy use goals. Project Team will make adjustments to building systems to address any inefficiency as needed in order to maximize building performance.
- c) Collect and report project performance data and report Key Performance Indicators. Awardees will report Key Performance Indicators including those listed in the chart below. Awardees will produce the project deliverables including an Operations & Maintenance Manual for the building(s) owner and tenants, as shown in the table below. Other data reporting requirements will be negotiated and mutually agreed upon during contracting.

2. SCHEDULE, DELIVERABLES AND REPORTING

The required Attachment E asks for additional information on schedule and milestones. The Program Partners anticipate that projects awarded under this RFP will be conducted and deliverables provided according to the following table and list.

The Program Partners anticipate the Scope of Work contained in any Agreement between the Program Partners and the selected Project Team will follow the format as detailed here (in Attachment A) and report estimated construction and program costs as shown in Attachment B. Awardees will be required to provide quarterly updates on project performance. Metrics for performance reporting will be mutually agreed upon during the contracting process, however reporting will include, at minimum, the following performance indicators.

¹⁰ General website: [https://www.nationalgridus.com/RI-Home/Energy-Saving-Programs/](https://www.nationalgridus.com/RI-Home/Energy-Saving-Programs/Tiers)
Tiers Applications: https://www.nationalgridus.com/media/pdfs/resi-ways-to-save/ee6174_ri_newconsprogram.pdf

KEY PERFORMANCE INDICATORS	
INDICATOR	UNITS
Expected Energy Savings for Building Residents	\$
Funds Leveraged	\$
Construction Costs (above code)	\$
Operation & Maintenance Cost Estimates	\$
Solar PV System Size Installed	kW
Number of Units Constructed/Renovated	#
Annual and Lifetime Energy Savings for Building Residents	kWh &/o Therms
Number of Customers Served	#

3. KEY DELIVERABLES

- Submit project design and timeline for approval by Project Partners
- Submit completed Solar Site Analysis to Project Partners
- Include a data acquisition system (“DAS”) to be installed with the PV system. Specifications sheet(s) for the proposed DAS must be provided to and approved by the Project Partners. A list of DAS providers can be found in Attachment D. If wireless Internet will be a barrier to the DAS requirement at the proposed project location, solutions must be proposed and approved before DAS installation. The DAS contract must explicitly identify the party responsible for the continuous functioning of the system.
- Identification of income-qualified occupants with verification of eligibility
- Formal presentation of final design with approval from the Project Partners, and final project proforma with construction cost estimates.
- Final Construction Design & Costs Approved by Project Partners
- Provide specification sheets for all major systems including ASHPs and solar PV equipment for approval by the Project Partners. Solar equipment will include racking, modules, inverters or other proposed equipment.
- Deliver constructed building(s) in Rhode Island that include the following:
 - A minimum of Tier 3 Certification from National Grid
 - Certification that the building meets DOE’s Zero Net Energy Guidelines (third party verification required)
 - Installed solar PV system
 - Installed ASHP
- Participate in ongoing weekly installation monitoring and job progress report and/or meetings and a monthly requisition for payment meeting.
- Provide equipment and workmanship warranties for all major systems and the overall project, as appropriate.
- Conduct systems testing and performance monitoring measured, verified and certified at various construction benchmarks

- Make available all design and specifications to be published publicly for the development of additional ZEB low- and moderate-income housing units.
- Make available a public construction best practice document for the development of ZEB projects.
- Provide a cost and time comparison between the construction of the proposed project building and the same building built to minimum code standards.
- Provide an operation and training manual for residents and make it publicly available to advance the operations knowledge of ZEB building owners.
- Written confirmation from the building owner (and subsequent owners) granting the Program Partners permission to freely access data usage.
- Provide site access for tours and educational activities in coordination with the Project Partners

ANTICIPATED TERM OF CONTRACT

It is expected that contracts will commence in mid September. Final contracts are subject to successful negotiation of a final budgets and scope of services. The contract will be reviewed during its course and may be extended at the sole discretion of the Project Partners.

ATTACHMENT B

PROJECT BUDGET

Please see attached fillable Excel budget worksheet to be completed and submitted with your proposal (screenshot of Proforma shown below).

Submitted by:		Cost to Build ZEB	Cost to Build to Code
Sources:			
	National Grid		
	Office of Energy Resources		
	Rhode Island Housing		
	Addl Source:		
	Addl Source:		
	Addl Source:		
	Total Project Sources:	\$0	\$0
Uses:			
	Acquisition		
	Construction/Rehab (should match Schedule of Values)		
	Solar Equipment Costs (Panels Only)		
	Air Source Heat Pumps		
	Site Work		
	General Requirements		
	Overhead		
	Profit		
	Building Permits		
	Renewable Permits		
	Bonds		
	Contingency		
	Environmental		
	Survey		
	Design		
	Architectural - Design		
	Architectural - Supervision		
	Solar Siting, Design Consulting		
	Engineering		
	Civil Engineering / Landscape Architect		
	Energy Engineering Specialist		
	Environmental Engineer/Remediation		
	Soil/Foundation/Geotechnical Reports		
	Historic Consultant		
	Financing Costs		
	Legal Costs		
	Insurance during Construction		
	Utilities during Construction		
	Taxes during Construction		
	Sewer & Water Hook Ups/Impact Fees		
	Program Administration including:		
	Increased On-site Construction Supervision		
	Development of Operations & Maintenance Manual		
	Prepared Final Plans & Specs Available for Reuse		
	Costs for systems testing, monitoring, verification, certification, & maintenance		
	Educational Activities & Site Visits		
	Developer's Fee		
	Other: (please explain)		
	Total Project Uses:	\$0	\$0

ATTACHMENT B (CONTINUED)

CONSTRUCTION TRADE BREAKDOWN

Please see attached fillable Excel budget worksheet to be completed and submitted with your proposal (screenshot of breakdown shown below).

Date:		CONTRACTOR'S and/or MORTGAGOR'S		Project Number:	
Sponsor:		COST BREAKDOWN		Building Identification:	
Name of Project:		Location:			
L	D	TRADE ITEM	COST	TRADE DESCRIPTION	
1	3	Concrete			
2	4	Masonry			
3	5	Metals			
4	6	Rough Carpentry			
5	6	Finish Carpentry			
6	7	Waterproofing			
7	7	Insulation			
8	7	Roofing			
9	7	Sheet Metal			
10	8	Doors and Hardware			
11	8	Windows			
12	9	Lath and Plaster			
13	9	Drywall			
14	9	Tile Work			
15	9	Acoustical			
16	9	Wood Flooring			
17	9	Resilient Flooring			
18	9	Painting and Decorating			
19	10	Specialties			
20	11	Special Equipment			
21	11	Cabinets			
22	11	Appliances			
23	12	Blinds and Shades, Artwork			
24	12	Carpets			
25	13	Special Construction			
26	14	Elevators			
27	15	Plumbing and Hot Water			
28	15	Heat and Ventilation			
29	15	Air Conditioning			
	15	Air Source Heat Pumps			
30	16	Electrical			
	16	Solar PV Panels			
31		SUBTOTAL (Structures)	\$ -		
32	2	Earth Work			
33	2	Demolition			
34	2	Site Utilities			
35	2	Roads and Walks			
36	2	Site Improvements			
37	2	Lawns and Planting			
38	2	Unusual Site Conditions			
39		SUBTOTAL (LAND IMPRVTS.)	\$ -		
40		TOT. STRUCT. & LAND IMPRV	\$ -		
41		GENERAL REQUIREMENTS			
42		SUBTOTAL (Lines 40 and 41)	\$ -		
43		BUILDER'S OVERHEAD			
44		BUILDER'S PROFIT			
45		OTHER FEES			
46		BOND PREMIUM			
47		Building Permits			
48		Renewable Energy/Solar Permits			
49		TOTAL IMPROVEMENTS	\$ -		

ATTACHMENT C

TECHNICAL STANDARDS

Standards to meet for Net Zero Construction:

The proposed project must meet the requirements of the Department of Energy's (DOE's) Zero Energy Ready Home Program. Requirements for this program can be found here:

<https://energy.gov/eere/buildings/guidelines-participating-doe-zero-energy-ready-home>
and
https://energy.gov/sites/prod/files/2017/04/f34/DOE%20Zero%20Energy%20Ready%20Home%20National%20Program%20Requirements%20Rev06%20-%20Final_0.pdf

In addition, the final project (including the PV solar installation) must meet DOE's definition of a Zero Energy Building. An independent, third party must verify that the project meets the DOE Zero Energy Building definition as defined here:

<https://energy.gov/eere/buildings/downloads/common-definition-zero-energy-buildings>

Standards to meet National Grid's \ Efficiency Certification:

The proposed project must meet the requirements of National Grid's Residential New Construction Program and achieve a minimum of Tier 3.

Minimum Technical Requirements:

Solar PV and air-source heat pump ("ASHP") installations must demonstrate compliance with any Minimum Technical Requirements set forth in any incentive program for solar PV or ASHPs utilized in the proposed project. Program Partners reserve the right to inspect any system installed under this program and withhold funding for any project that does not satisfy the any relevant incentive program Minimum Technical Requirements.

Available Solar PV Incentives:

National Grid's Renewable Energy Growth program is not available to be used with projects in the ZEOS program. OER is utilizing Regional Greenhouse Gas Initiative (RGGI) funding for a portion of the grant award. RGGI funding cannot be combined with the REG program for any project or program. The Renewable Energy Fund (REF) can be used for projects in the ZEOS program. If utilizing the REF, please make sure to review the REF Minimum Technical Requirements (see Attachment D for link). Please note that National Grid's SolarWise program is also not eligible to be used with the ZEOS program for the same reason stated above.

Solar Technical Requirements and Related Equipment:

All installations must use solar photovoltaic (PV) technology, which is defined as cells or solar photovoltaic arrays that directly convert energy from the sun into electricity. Building integrated installations, such as solar shingles, are eligible assuming all other requirements are met. Proposed PV

equipment must be UL listed and it is recommended that the equipment be listed on the California Energy Commission's list of approved equipment.¹¹

Eligible PV Project Costs:

Qualified solar electric property costs include those that use solar energy to generate electricity for the proposed Rhode Island residential project. The following costs associated with a PV project may not be paid for through the program. Please note that this list is not comprehensive:

- Tree trimming or other vegetation management
- Batteries or controllers associated with energy storage systems¹²
- Re-roofing costs

Minimum ASHP Technical Requirements:

Please refer to the Northeast Energy Partnership's listing of all models of ASHP systems¹³. To help ensure that the equipment operates according to manufacturer's specifications the contractor must have been HVAC Check trained in proper airflow and charge protocols through National Grid's Rhode Island Heating and Cooling program.

<https://www.nationalgridus.com/ri-mini-split-heat-pump>

<https://www.nationalgridus.com/media/pdfs/resi-ways-to-save/rhode-island-electric-mshp-contractors.pdf>

¹¹ <http://www.gosolarcalifornia.ca.gov/equipment/index.php>

¹² If storage is proposed with the solar PV system, applicants must explain why this provides value to a low- or moderate-income tenant or resident.

¹³ <http://www.neep.org/initiatives/high-efficiency-products/emerging-technologies/ashp/cold-climate-air-source-heat-pump>

ATTACHMENT D

ADDITIONAL RESOURCES

Rhode Island Housing Guidelines

https://www.rihousing.com/filelibrary/2019_Section_3-Guidelines_for_Development.pdf

Rhode Island Zero Energy Building Task Force

https://www.nationalgridus.com/media/pronet/ri-ee-task-force/cm6459-ri-zne-white-paper-12_16.pdf

National Grid New Construction Incentive Program

<https://www.nationalgridus.com/RI-Home/Energy-Saving-Programs/>

Renewable Energy Fund (REF)

<http://commerceri.com/finance-business/renewable-energy-fund/commercial-scale-projects/>

REF Minimum Technical Requirements

<http://commerceri.com/wp-content/uploads/2017/01/REF-Minimum-Tech-Reqs-Jan-2017.pdf>

List of Data Acquisition Systems and related services

<http://files.masscec.com/Data%20Acquisition%20Service%20Providers%20%40%20April%202017.pdf>

Voluntary “Cold Climate Air Source Heat Pump Specification” - NEEP

<http://www.neep.org/sites/default/files/resources/Cold%20Climate%20Air%20Source%20Heat%20Pump%20Specification.pdf>

List of NEEP Referenced Resources on Heat Pumps

<http://www.neep.org/referenced/resources/63>

DOE Zero Energy Ready Home Program:

<https://energy.gov/eere/buildings/guidelines-participating-doe-zero-energy-ready-home>
https://energy.gov/sites/prod/files/2017/04/f34/DOE%20Zero%20Energy%20Ready%20Home%20National%20Program%20Requirements%20Rev06%20-%20Final_0.pdf

DOE Definition of a Zero Energy Buildings:

<https://energy.gov/eere/buildings/downloads/common-definition-zero-energy-buildings>

Rhode Island Stretch Codes:

<http://www.energy.ri.gov/policies-programs/lead-by-example/rhode-island-stretch-codes.php>

ATTACHMENT E

Construction Requirements

1. Site Control. *Attach evidence of site control.*

Applicant Owned ☐

P & S Agreement ☐

Option ☐

RIH Land Bank ☐ Purchased with RIH bridge loan? Yes ☐ No ☐

No Site Control ☐ If no site control please provide explanation

Explanation, if needed:

Name of Current Owner: _____

Address: _____

Acquisition Cost: _____

NOTE: If the property is in the RIHousing Land Bank or has been acquired with a RIHousing bridge loan, please remember to add carrying costs/interest to your acquisition budget.

2. Project Status

Respond to each item.

Item	Already Obtained	Not Needed	In Process	Expected Date
Zoning Approval	☐	☐	☐	_____
Planning/Subdivision	☐	☐	☐	_____
Final Comprehensive Permit	☐	☐	☐	_____
Building Permits	☐	☐	☐	_____
DEM Wetlands	☐	☐	☐	_____
DEM Remediation	☐	☐	☐	_____

DEM Septic Approval	☐	☐	☐	_____
HUD Flood Zone	☐	☐	☐	_____
RI Historic Preservation & Heritage Commission	☐	☐	☐	_____
Phase I Environmental	☐	☐	☐	_____
Phase II Environmental	☐	☐	☐	_____
Market Study	☐	☐	☐	____attach or use forms that are included _____
Appraisal	☐	☐	☐	_____
HUD Environmental Review	☐	☐	☐	_____

3. Project Schedule

NOTE: HOME-assisted projects must be completed within four year of commitment date or funds will be recaptured.

Benchmark	Expected Date
Commitment of all funding	
Acquisition of property	
Coordinate with incentive providers and secure all possible incentive programs	
Completion of design/engineering	
Present final design and proforma for Project Partner approval	
Award of construction contract	
Start construction	
Various testing and system verifications as required to assure ZEB performance	

Construction completion, Start of performance monitoring (contractor required for 1year)	
Submission of occupant eligibility documentation	
Full Occupancy	
Final project accounting/cost certification	

ATTACHMENT F

The following is provided to help Project Teams submit a complete application. It is the sole responsibility of a Project Team to ensure that all required materials as described in this RFP are included in a project proposal.

Proposal Check-List

- ☐ General Organization Information
- ☐ Experience & Resources
- ☐ Project Approach Narrative (including schematic plans and specifications)
- ☐ Project Budget Excel File (Attachment B)
- ☐ Construction Requirements Document (Attachment E)
- ☐ Proof of required certificates and registrations
- ☐ Description of your firm's affirmative action program and activities
- ☐ A copy of your Minority or Women-Owned Business Enterprise state certification, if applicable (attach to end of application if applicable as Attachment G)

Interview Presentation (if selected as a finalist)



STATE OF RHODE ISLAND
**OFFICE OF
ENERGY RESOURCES**

ATTACHMENT G