Wes Moore, Governor
Aruna Miller, Lt. Governor
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Funding Opportunity Announcement ("FOA")

FY24 Resilient Maryland Program

Area of Interest 1: Preconstruction Planning

Note: Updated November 17, 2023, to: (1) correct the codification number for definitions of overburdened and underserved communities (corrected section number highlighted in yellow); and (2) clarify the content expectations of the Project Proposal in the Required Application Documents Section of this FOA.

Area of Interest Description:

The Maryland Energy Administration (MEA) is pleased to announce funding under the FY24 Resilient Maryland Program, Area of Interest (AOI) 1: Preconstruction Planning. AOI 1 provides grants to Maryland communities, critical facilities and infrastructure, and other Maryland organizations to conduct feasibility analysis and preconstruction planning activities for microgrids, resiliency hubs, and other sustainable resilient energy systems. Specifically, these funds are used to produce a set of key deliverables that help critical project stakeholders conceptualize the microgrid, resiliency hub, or other resilient energy system, and make informed decisions on mobilizing the project for construction. MEA is interested in projects that will bolster the energy resilience of essential facilities, organizations, and services that help Maryland's overburdened and underserved communities[1] thrive through extended power outages and emergency situations, by making use of solar and other renewable energy technologies, storage, and other supportive equipment and systems. Ideal projects will accomplish these objectives while maximizing greenhouse gas reductions.

Grants will be awarded under three (3) Categories:

- **Category 1: Microgrids:** This Category provides preconstruction planning funds for microgrids that will serve campuses and communities. For the purposes of the Resilient Maryland program, a microgrid is defined as a system of renewable energy technologies that are configured to operate in parallel with the electric grid and can operate separately from the electric grid to sustain essential electric loads. Category 1 projects must serve at least two (2) buildings or critical infrastructure facilities on a campus or within a community.

- **Category 2: Resiliency Hubs:** This Category provides preconstruction planning

[1] *"Overburdened" and "Underserved" communities as defined by Environment Article, §1-701, Annotated Code of Maryland.*

funds for resiliency hubs. A resiliency hub is an easily accessible community location where residents can congregate and stay during extended power outages to receive power for essential devices (e.g., cell phones, laptops, portable medical devices, etc.), refrigeration for temperature-sensitive items, and conditioned space to keep community members in safe and healthy temperatures. Examples of good resiliency hub sites include but are not limited to: schools, community centers, libraries, faith-based institutions, etc.

- **Category 3: Resilient Facility Power Systems:** This Category provides preconstruction planning funds for resilient facility power systems. A resilient facility power system is similar to a microgrid, but is designed to power only one facility instead of multiple facilities.

Type of Grant Program: **Statewide Competitive**

Application Deadline: **3:00 P.M. EST, Thursday, February 15, 2024**

Anticipated Funding: A total of **$800,000** is anticipated to be available, from the Strategic Energy Investment Fund ("SEIF"), for Resilient Maryland AOI 1 projects. The amount awarded may be more or less depending on the quantity and quality of applications received.

Award Formula: Maximum award amounts are established for each Category in the table below.

Category	Maximum Award Amount
Category 1: Microgrids	$125,000
Category 2: Resiliency Hubs	$12,000 per hub, maximum total award $120,000
Category 3: Resilient Facility Power Systems	$30,000

Eligible Applicants: The following organizations are eligible to apply for Resilient Maryland AOI 1 funds:

- Critical Infrastructure
- Local Governments
- Nonprofits
- Universities and Colleges
- Multifamily Housing
- Manufacturers
- Farms / Agriculture
- Municipal Utilities
- Others, case-by-case

basis

Cost Match Requirement: **YES,** 20% of the total project cost. Cash-in-kind, value of donated labor, other grants or incentives, and other external funding sources are all acceptable.

Eligible Activities: Funds are available to complete a portfolio of planning deliverables that are designed to best inform multiple key stakeholders in energy resilience projects about the proposed microgrid, resiliency hub, or resilient facility power system. These are referred to as the "Final Deliverables" for the purposes of the Resilient Maryland Program. **Each recipient of a Resilient Maryland AOI 1 award is required to complete all Final Deliverables listed below.** They are summarized in the list below.

1. **Feasibility Analysis:** Comprehensive feasibility study and analysis for one or more microgrid, resiliency hub, or resilient facility power system configuration(s).
2. **Preliminary System Drawings & Engineering Data:** One-line diagrams, system schematics, engineering calculations and metrics, etc.
3. **Lifecycle Project Proforma (20 years):** Traditional financial proforma for the microgrid, resiliency hub, or resilient facility power system. Explains funding sources and uses, revenue streams, operations and maintenance costs, capital costs, etc. Must include net present value ("NPV"), internal rate of return ("IRR"), and weighted average cost of capital ("WACC").
4. **Greenhouse Gas Reduction Projections (20 years):** Lifecycle greenhouse gas reduction projections. Must include annual carbon dioxide equivalent (CO_{2e}) estimations and total lifecycle estimations.
5. **Implementation Barriers Analysis:** Analysis of any existing or potential barriers and challenges that must be addressed for the microgrid, resiliency hub, or resilient facility power system to be installed. Examples include but are not limited to regulatory, geographical, supply chain, logistical, and other barriers.

Minimum Eligibility Requirements: The following requirements apply to each applicant to the FY24 Resilient Maryland Program. Each condition **must be met** to be evaluated and considered for funding. No exceptions.

1. **Authority to Operate in Maryland**: The applicant must be authorized to operate and transact business in the State of Maryland.
2. **Site Location**: The facility or facilities that the microgrid, resiliency hub, or resilient facility power system will be designed to serve must be located within the State of Maryland.
3. **Project Location**: The microgrid, resiliency hub, or resilient facility power system must be located within the State of Maryland.

4. **Cost Match**: The applicant must contribute a cost match that is at minimum 20% of the total project cost. Cash-in-kind, value of donated labor, other grants or incentives, and other external funding are all eligible, including combinations thereof.
5. **Project Planning Committee**: The Resilient Maryland AOI 1 project must include a project planning committee that is composed of key project stakeholders (e.g., applicant representative(s), contractor/developer/vendor representative(s), community representative(s), electric utility representative(s), etc.). The applicant must demonstrate that they attempted to engage the electric utility, even if the electric utility declined.
6. **Applicant Good Standing**: The applicant must be in Good Standing with the Maryland Department of Assessments and Taxation (DAT)[2]. The applicant must provide proof of Good Standing with the application. This can be done by providing either (1) a screenshot or PDF of the applicant's status in DAT's Business Entity Search[3] that indicates a Good Standing status; OR (2) a copy of a Certificate of Good Standing, which can be obtained on DAT's website here[4].
7. **Contractor/Developer/Vendor Good Standing**: Any contractor, developer, or vendor that the applicant enters into a contract with to complete the project must be in Good Standing with DAT. The applicant must provide evidence of this in its application, if the contractor, developer, or vendor is known at the time of application (see item 5 above for instructions on how to obtain). If the applicant has not yet selected a contractor, developer, or vendor, and the applicant is selected for an award, evidence of contractor, developer, or vendor Good Standing must be provided at the time of selection.
8. **Prior Expenses Unallowed**: Resilient Maryland Program funds cannot be used for costs that were incurred by the applicant prior to execution of a Grant Agreement with MEA, if the applicant is selected for an award.
9. **Prior Recipients Restriction**: If an applicant has previously participated in the Resilient Maryland Program and received feasibility and planning funds, the applicant cannot receive an FY24 Resilient Maryland AOI 1 award for the same project.
10. **Technology Restrictions**: Resilient Maryland AOI 1 funds cannot be used for analysis that includes fossil fuel technologies. MEA may grant an exception for combined heat and power ("CHP", also known as "cogeneration" or "cogen") systems when they meet the following conditions: (1) the applicant must determine that no other renewable generation or energy storage technologies are **technically** viable (cannot be based on financial or economic restrictions alone); (2) the loads that the CHP system would power are vital for the life, health, and safety of the community; (3) the project must still achieve a projected net greenhouse gas **reduction**; and (4) the CHP system must have the ability to operate during a utility power outage. **MEA will**

[2] *https://dat.maryland.gov/pages/default.aspx*
[3] *https://egov.maryland.gov/businessexpress/entitysearch*
[4] *https://dat.maryland.gov/businesses/Pages/Internet-Certificate-of-Status.aspx*

determine at its sole discretion whether the CHP system has demonstrated that it will meet these conditions. MEA has no obligation to allow a CHP system to be part of a Resilient Maryland AOI 1 project. See **Appendix 1** for more information on MEA's Fossil Fuel Policy.

11. **NABCEP Requirement:** At least one (1) North American Board of Certified Energy Practitioners (NABCEP)[5] PV Installation Professional or PV Design Specialist must be employed and involved in the electrical and mechanical design of the microgrid, resiliency hub, or resilient facility power system, if solar PV or battery energy storage technologies will be considered in the project.
12. **Ability to Enter into a Grant Agreement**: The Applicant must be willing and able to enter into a Grant Agreement with MEA if selected for an award.
13. **Completion Deadline**: The applicant must complete the project by **December 31, 2025,** if selected for an award. This assumes a Grant Agreement execution date of no later than June 15, 2024.

Category 2 Project-Specific Requirements (applies only to Category 2 projects): As part of the requirements of a Grant Agreement, a Category 2 project must demonstrate that the preconstruction activities address, with reasonable certainty, whether the proposed resiliency hub will be able to meet the following minimum requirements under the FY24 Resilient Maryland AOI 3: Resiliency Hubs:

1. **Lighting:** Must be able to provide emergency lighting during grid outage events.
2. **Personal Device Charging:** Must have dedicated plug outlets for community members to charge personal electronic devices, such as phones and laptops.
3. **Portable Medical Equipment Power:** Must have dedicated plug outlets for portable medical equipment, such as continuous positive airway pressure ("CPAP") and dialysis machines.
4. **Conditioned Space:** Must have a dedicated conditioned space that maintains a safe and healthy ambient temperature for community members to congregate within during extreme temperature events.
5. **Refrigeration:** Must provide refrigeration capacity for temperature-sensitive medications and other essential temperature-sensitive items (this does NOT include food).
6. **Solar PV and Battery Storage Requirement:** Must use solar photovoltaics (PV) and battery energy storage as the primary technologies in the resiliency hub configuration.
7. **Resilience Capabilities:** Must be designed to have a fifty percent (50%) probability of maintaining power to the electricity loads described in items 1 – 6 above.
8. **Non-Emergency Uses of the Resiliency Hub:** The solar PV and battery storage system must provide solar energy to the facility and should be able to reduce demand to avoid demand charges (as applicable) when the system is not being used for resiliency functions. Utilizing the system for other purposes

[5] *https://www.nabcep.org/*

(such as frequency regulation) are permitted if the system will operate under an authorized utility tariff. System controls must be designed to reach and maintain a minimum ninety percent (90%) battery charge prior to any known storm or weather condition that might be expected to cause a power outage (e.g., hurricane, severe thunderstorm, derecho, blizzard, ice storm, etc.).

9. **Interconnection and SREC Registration:** The proposed solar PV and battery storage system must be able to connect to the electric distribution grid serving Maryland, and must register for Solar Renewable Energy Credits (SRECs).
10. **Resiliency Hub Guarantee:** The owner of the facility for the proposed resiliency hub must agree to maintain the facility as a resiliency hub for at least five (5) years.

Evaluation Criteria: All projects **must meet the Minimum Eligibility Criteria listed in the previous section of this FOA** to be considered for an award. Upon meeting these criteria, each eligible project will be evaluated using the Evaluation Criteria below. The highest-scoring proposals will be awarded, subject to the program's funding availability. Up to 16 total points are possible, and ranges of possible points for each Evaluation Criterion are provided in the third column of the table below.

Criterion	Description	Points
Value Proposition	Applicant's proposal delivers a detailed description of the facilities or infrastructure to be served by the resilient energy system and makes a strong, detailed, and well-supported case for the quantifiable and qualitative benefits that the project provides to the community, campus, facilities, grid resilience, and the general public. The proposal must explicitly detail why it is a good investment of State funding and articulate the outcomes the State can expect for its investment.	0 – 4
Greenhouse Gas Reduction	The proposed project, if ultimately installed, will provide a meaningful and measurable reduction in the emission of Scope 1, Scope 2, and Scope 3 greenhouse gas emissions in the State of Maryland. Preference will be given to a project that includes accurate estimated reductions in Scope 1 and Scope 2 emissions, as well as projects that include decarbonization and beneficial electrification measures.	0 – 4
Equity	The proposed project provides substantial and measurable direct benefits to Maryland communities that have historically and	0 – 4

	disproportionately been impacted by socioeconomic, environmental, income, and other current or historic disequities, disasters, and challenges. Preference will be given to a project that directly benefits one or more Overburdened communities or Underserved communities, as defined by §1-701[6] of the Environment Article, Annotated Code of Maryland. Examples of "direct benefit" include but are not limited to reduction in energy burden*; improved power quality in areas with higher-than-average outages, flicker, and other power disruptive events; siting clean energy technologies on brownfield sites; improved local air quality; improved access to the benefits of renewable energy sources; etc. **Energy burden is the monthly percentage of household income that is spent on energy expenses.*	
Resilience Capability	The proposed project enhances the energy resilience of a community, campus, critical infrastructure, essential service, or other organization important to the ability for a community to thrive. This includes adding or expanding the availability of onsite or localized energy sources in electricity grid outage situations (known as "islanding"), improving the duration of islanding capability, adding redundancy to energy sources, improving the resilience of the electric grid through the provision of grid services, and other activities that directly improve access to clean and reliable power.	0 – 3
Creative Solutions	The proposed project pursues new and promising technologies and configurations, ownership and financing models, innovative applications of technologies to use cases, or solution strategies. The project is also replicable, scalable, and marketable. Advanced microgrid controllers are not considered a Creative Solution for the purposes of the FY24 Resilient Maryland Program,	0 – 1

[6] *Update made November 17, 2023: This codification number was mistakenly stated as "§1-107" in previous versions of this FOA. This has been corrected to the proper codification number of "§1-701". – Updated November 17, 2023. URL: https://mgaleg.maryland.gov/mgawebsite/Laws/StatuteText?article=gen&section=1-701&enactments=false*

	unless they are demonstrably different from advanced models available today and are supported by vetted data and sources.	

Geographic Diversity: Please note that, in order to enhance geographic diversity, MEA, at its sole discretion, may consider a project's location within the State when determining an award decision.

Review Process: Each application package will be evaluated competitively by an Evaluation Team comprised of MEA staff with relevant experience. This evaluation includes three (3) review steps that are detailed below.

1. Program Manager Eligibility Review: The MEA Resilient Maryland Program Manager reviews the application for eligibility according to the Minimum Eligibility Criteria listed in this FOA. An application that does not meet the Minimum Eligibility Criteria will be rejected from funding consideration and the applicant will be notified.

2. Evaluation Team Member Individual Review: Each member of the Evaluation Team reviews and scores the application according to the Evaluation Criteria established in this FOA.

3. Evaluation Team Group Review and Award Recommendation: The Evaluation Team convenes for a group review of their findings and scores for each eligible application. An Evaluation Team member is permitted to modify their score for an eligible application considering new information discovered during the Group Review discussion. The final score for an eligible application is determined by taking the average of the individual Evaluation Team member scores for that application. The Evaluation Team will finalize all scores and make an award recommendation for each application that has scored at least "7" or higher. Awards will be recommended in order of highest final score to lowest eligible final score, until all available funding is exhausted, or all eligible awards are funded, whichever comes first. No application that scores under "6" will be eligible for funding.

Partial awards: Partial awards may be awarded under this AOI, depending on the number of complete proposals received and associated total grant funds requested. Full grant awards will be made for approved projects, based on rankings of applications, in descending order from highest-to lowest, until grant funds are exhausted. If sufficient grant funds are not available to fully fund a project, the applicant will be given an option to accept partial funding, based on the ability to complete the project with partial grant funding. If the applicant declines, MEA will offer partial

grant funding under this same structure to the next qualified applicant until all funding has been expended or all remaining projects have rejected the offer.

Program Provisions:

MEA grant programs are covered by general requirements that will be made part of the grant agreement between MEA and a grantee. A copy of the General Provisions document is available on MEA's website[7]; this document will be incorporated into all MEA FY24 grant agreements.

In addition to the general provisions, the following funding qualification applies to this program:

- MEA at its sole discretion may obligate all or none of the FY23 Resilient Maryland program budget, based on the quality and eligibility of applications submitted to MEA**.**
- **All projects that receive financial support from MEA must adhere to its Fossil Fuel Policy, which is provided as Appendix 1 to this FOA.**

Grant Funding and Payment:

The following requirements apply to the request for reimbursement and payment of grant funds for each awardee that is selected for funding:

- **NEW REQUIREMENT: ELECTRONIC PAYMENTS**

  Participation in MEA grant programs is voluntary. If selected for award and to ensure the secure transmission of grant funds, grantee recipients of MEA funding are generally required to receive electronic payments from the State of Maryland. Electronic payments are set up through the State of Maryland's Comptroller's Office. Grantee must fill out and submit the "ACH/Direct Deposit Authorization for Vendor Payments Form X-10[8]" to the Comptroller's Office via the submission methods outlined on the X-10 form. ACH/Direct Deposit Authorization for Vendor Payment Form X-10 **should not be sent to MEA**. Failure to submit ACH/Direct Deposit Authorization Form X-10 may result in award reimbursement being delayed. If an applicant is unable to receive ACH/Direct Deposit payments, MEA may provide an exception to this requirement on a case-by-case basis, at the sole discretion of MEA.

- Upon receipt of a grant agreement signed by both the grantee and MEA, MEA

[7] *https://energy.maryland.gov/Pages/all-incentives.aspx*

[8] https://www.marylandtaxes.gov/forms/state-accounting/static-files/GADX10Form.pdf

will encumber funds.

- No costs incurred by a Grantee prior to execution of a Grant Agreement will be reimbursed by MEA for a Project.

Required Application Documents:

To be considered **complete**, an application to the Resilient Maryland Program AOI 1 must include the following documents**.** Failure to submit any of the required documents will result in rejection of the application.

- Complete and signed FY24 Resilient Maryland AOI 1 Application Form[9]
- Project Proposal *(*****carefully read the required content and formatting restrictions below******)*[10]
    - Applicants **MUST USE** the MEA Resilient Maryland AOI 1 Proposal Template[11] and provide all information it requests.
    - Must be **no more than 10 pages**.
    - Must include an executive summary (no more than 1 page).
    - Must provide detailed explanations of how the project meets the Evaluation Criteria established in this FOA.
    - Must name each member of the Project Planning Committee, if currently known.
- Completed FY24 Resilient Maryland AOI 1 Project Budget Workbook[12]
- Complete and signed IRS Form W9[13] for the applicant
- Proof of Good Standing with Maryland Department of Assessments and Taxation for applicant; and its contractor, developer, or vendor (if known at the time of application). Business Entity Search result or Certificate of Good Standing are acceptable.

Submission Instructions:

Once complete, Application packages should be submitted to MEA via email to **RMP.MEA@Maryland.gov. Applications submitted to the direct email inbox(es)**

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[9] *Available on the FY24 Resilient Maryland webpage: https://energy.maryland.gov/business/pages/ResilientMaryland.aspx.*

[10] *Update made November 17, 2023: Line item "Must include a preliminary budget (budget section provided in the proposal template)" removed. The project budget is to be provided in the FY24 Resilient Maryland AOI 1 Project Budget Workbook, available on the Resilient Maryland webpage.*

[11] *See Footnote 6.*

[12] *See footnote 6.*

[13] *A blank copy of an IRS Form W9 can be downloaded from the IRS website at: https://www.irs.gov/forms-pubs/about-form-w-9. Click on "Form W9" in the Current Revision section.*

of MEA employees will not be considered. All documents must be submitted no later than 3:00 P.M. EST on Thursday, February 15, 2024. MEA **will not accept** any application packages after this deadline under any circumstances, and all documents received by the deadline will constitute the entire submission. If electronic submission is not possible, an Applicant should contact MEA via email at RMP.MEA@Maryland.gov or by calling Program Manager Brandon Bowser at 443.306.0304 **no fewer than fourteen (14) days** prior to the deadline to arrange an alternative method of submission.

Questions can be directed to **Brandon Bowser, Section Chief, Clean Energy and Resilience and Resilient Maryland Program Manager,** via email at **BrandonW.Bowser@Maryland.gov** or by calling **443.306.0304.**

Questions specific to resiliency hubs can be directed to **David Comis, Senior Clean Energy Program Manager,** via email at **David.Comis@Maryland.gov** or by calling **443.908.1743.**

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APPENDIX 1: FY24 RESILIENT MARYLAND PROGRAM
AREA OF INTEREST 1: PRECONSTRUCTION PLANNING

MEA Fossil Fuel Policy

Each project that receives financial support from MEA must adhere to the MEA Fossil Fuel Policy:

- Projects that include fossil-fuel or other combustion technologies that produce greenhouse gas emissions are typically not eligible for funding.

- Specific examples of projects that would not be eligible for funding under the Program include:

    - Efforts that expand the use of fossil fuel or natural gas technologies, except where meeting one of the exemptions or those efforts are technically infeasible;
    - Expansion of infrastructure that results in an expansion of fossil fuel delivery volume;
    - New installations of fossil fuel or natural gas fired technologies;
    - Projects that result in significant life extension of fossil fuel fired systems, beyond basic health and safety repairs or efforts that enhance efficiency but do not extend the gas system/or fossil fueled fired equipment life. Note: Limited exceptions may be considered where there is no other technically feasible technology or where a source can be demonstrated to be zero emission. Any applications for projects involving fossil fuel should provide evidence that a technical analysis of why electrified or other zero emission alternatives cannot be implemented, this analysis should not be on the basis of operating or capital costs alone.

- While basic health and safety repairs or efforts that enhance efficiency but do not extend the gas system/or fossil fueled fired equipment life are allowable, projects must be part of a project that includes other energy efficiency improvements that reduce or eliminate fossil fuel use. This situation is anticipated to primarily, but not exclusively, be seen in residential energy efficiency projects.

Exemptions:

All exemption requests will be in writing and provide a thorough technical analysis of why electrification and other zero emission technologies cannot be applied from a technical perspective and consider the following:

- Currently available commercialized technologies,
- Ability of locationally specific existing utility infrastructure to support non-fossil fuel applications,
- Thorough evaluation of alternatives,
- Mitigation efforts to offset the greenhouse gas emissions of fossil fuel use,
- A description of any efforts to make infrastructure ready for future technologies, such as green hydrogen, or phase out fossil fueled technology in the future, and
- Statutorily directed activities.

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Operating and capital costs alone will not be considered justification for any exemption and exemptions will not be approved purely on cost saving opportunities alone.

Version 1.0 Initial Version 10/16/2023