Larry Hogan, Governor
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Request for Information for Potential Grant Program

Disclaimer

This Request for Information (RFI) is issued solely for information and planning purposes, and does not constitute a solicitation or announcement of a grant program by the Maryland Energy Administration (MEA) or the State of Maryland. Responses to this RFI are not offers and cannot be accepted by MEA, or the State of Maryland, to form a binding agreement. Respondents are solely responsible for all expenses associated with responding to this RFI. Responses to this RFI will not be returned.

Responses to this RFI are subject to Public Information Act (PIA), Title 10, Subtitle 6, Part III of the State Government Article, Annotated Code of Maryland. Respondents are responsible for clearly identifying those portions of their response that they consider confidential, proprietary commercial information or trade secrets, and for providing justification to MEA why such materials, upon request, should not be disclosed under the PIA.

Purpose

The Maryland Energy Administration (MEA) is considering the opportunity to implement a new grant program (tentatively named the Resiliency Hub Program) that could help provide future incentives[1] for the development of solar resiliency hubs, particularly within neighborhoods that have high population density, significant reliance on public transportation, and a high percentage of low to moderate income households.[2] In this context, a "resiliency hub" is a building with reliable, onsite renewable electricity generation and energy storage to be used in the face of a prolonged grid outage, such as during an emergency weather event.

The Maryland Energy Administration seeks comments from representatives of county and municipal government, non-governmental organizations, and the public regarding pertinent information to help MEA consider possible incentives for the development of resiliency hubs.

MEA Potential Resiliency Hub Program Overview

MEA currently envisions a Resiliency Hub Program that will incentivize the development of resiliency hubs that can be used during an emergency event and will:

[1] All funding is subject to the State of Maryland's budgeting process, which includes approval of each fiscal year's budget by the Maryland General Assembly.

[2] Low to moderate income is typically defined as being 80% of area median income or less. Income limits for Maryland, based on county or area, are available at http://dhcd.maryland.gov/HousingDevelopment/Documents/prhp/2018_MD_Income_Limits.pdf.

- be within walking distance of the serviced neighborhoods;
- provide electricity to recharge cell phones and laptop computers;
- provide refrigeration for temperature sensitive drugs and medical supplies; and,
- provide limited heating and cooling sufficient to prevent serious health effects for users.

MEA envisions that each resiliency hub would consist of a solar array, an energy storage device (such as a battery), and an inverter capable of islanded operation (i.e., the ability to operate independent of a utility-managed electric grid). An optional backup generator may also be included but would not be incentivized under this program. Other variations to this proposed equipment arrangement may be considered as well. The system would be sized to meet the electricity needs described above for approximately 5 days of continuous operation.

MEA anticipates that grants would be provided to help project developers purchase and install solar panels, energy storage (e.g., a battery), a grid forming inverter, and potentially a critical functions electric panel. If an applicant proposes including a building that already has solar panels installed, MEA could potentially incentivize the installation of the battery and inverter if the applicant could show that these remaining elements would be used to increase the amount of solar energy used while facilitating the development/construction/implementation of a resiliency hub. City and County governments would not be excluded from being project developers.

Each proposed solar resiliency hub would only activate when the grid is down. **At all other times, the solar photovoltaic and energy storage system could be used as desired by the hosting facility.** As an example, the cafeteria at an elementary school could be selected as the site of the resiliency hub. When the grid is operational the solar system and batteries would be used to reduce the electric bill to the school facility. When the grid is down, the building would remain open and serve as a resiliency hub for the surrounding community.

Envisioned Emergency Preparedness Implications

1. As part of the proposed project, it is envisioned that impacted cities and counties, as well as the Maryland Emergency Management Agency (MEMA), would be notified of the proposed location of the Resiliency Hubs. Impacted cities, counties, and MEMA will have the ability to make comments for MEA to take into consideration regarding the perceived suitability of the location of any proposed resiliency hub for the purpose of providing a state incentive.
2. Impacted cities and counties, as well as MEMA, may wish to include Resiliency Hubs in their master emergency planning documents.

Question to Responders

Given the above description of possible resiliency hubs, MEA is seeking input from interested parties, particularly from representatives of city and county government. Relevant questions to be addressed include but are not limited to:

Q1: Are you familiar with any local requirements in your area that may apply to a Resiliency Hub (e.g., zoning, permitting)? Are you aware of any other potential requirements related to its use during grid outages (e.g., serving members of the public)?

Q2A. For potential developers: would you be willing to work with the city/county to identify site locations? If so, would you consider the city/county as a partner or as an advisor? Please explain.

Q2B. For potential operators: Would you be willing to work and/or coordinate with the city/county office of Emergency Services (or equivalent) to provide additional services from the Resiliency Hub (i.e. water, food, medical, security, etc.). If yes, please explain how you anticipate this would be coordinated.

Q2C. For local government representatives: Do you believe the city/county should be involved in site selection of a Resiliency Hub? Do you believe the city/ county want to work as a partner, an advisor, or simply have the right to "veto"? Explain.

Q3 What, if any, involvement do you believe city/county emergency management planners may want in the siting and/or operations of a resiliency hub in your area? For example, do you anticipate that they may want to serve in an advisory capacity? Would they want to have "veto" over siting of a resiliency hub? Please explain your answers.

Q4. Is the proposed criterion for a 5-day duration reasonable? If not, please explain what a better criterion may be. In what way would you modify it?

Q5. What local access restrictions apply to a public shelter in your area? Do you believe that these or similar restrictions would apply to a Resiliency Hub? Do you believe that a Resiliency Hub in your area would need additional restrictions as well? If so, please explain.

Q6. Would there be any additional cost to the city/county associated with inclusion of a Resiliency Hub in your area (e.g., planning, reviewing, approving)? If so, would it likely be on ongoing cost or simply an initial cost? Please explain, and if possible, provide an estimate of the additional cost to the city/county.

Q7: There may be some incidental costs associated with the operation of a resiliency hub (e.g., increased water usage, sewage, janitorial services) following a grid outage. Who should pay these costs and why? What, if any, city/county resources may be available for upkeep and/or addressing these additional costs?

Q8. Are you aware of any solar photovoltaic systems currently in operation at a site that could potentially be a good site for conversion to a Resiliency Hub? If so, if you know, what is the funding source for this site? Please provide examples.

Q9. If you have relevant experience or knowledge in the operation of this type of facility, what are the "lessons learned" that may be useful in the development of this program?

Q10. Do you have any other input that would be applicable to the development of Resiliency Hubs and developing this potential program?

RFI Response Format

The Maryland Energy Administration welcomes input regarding the potential Resiliency Hub Program from all sources. If your response is not formatted to specifically answer each question, please include a reference in each paragraph to indicate which question is being answered.

Comments on this subject matter area will be accepted by the Maryland Energy Administration through August 20, 2018. If possible, please submit responses via email to David.Comis@maryland.gov. MEA will also accept responses via postal mail at Maryland Energy Administration, ATTN: Resiliency Hubs Program, 1800 Washington Blvd, Suite 755, Baltimore, MD 21230.

Questions and Inquiries

MEA will take questions regarding this RFI by e-mail to David.Comis@maryland.gov or postal mail at Maryland Energy Administration, ATTN: Resiliency Hubs Program, 1800 Washington Blvd, Suite 755, Baltimore, MD 21230.