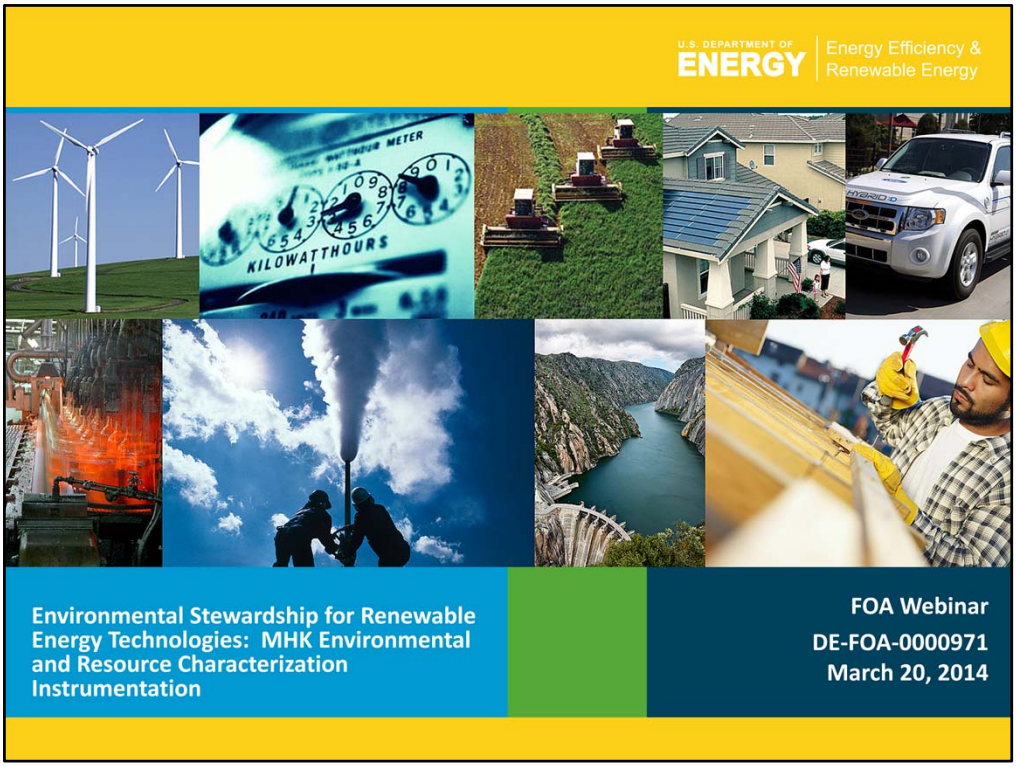

Transcript:

Good afternoon. My name is Hoyt Battey and I am a Technology Manager for the DOE Wind and Water Power Technology Office in Washington, DC. Thanks to of the attendees for their interest in this Funding Opportunity Announcement (FOA), titled "Environmental Stewardship for Renewable Energy Technologies: MHK Environmental and Resource Characterization Instrumentation".

Please note that all attendees are on mute, but you can submit questions about the FOA and this webinar through the Go-to-meeting webinar Chat feature. If we have time after the presentation, we will try to address any questions that are submitted. However, there may be some questions that cannot be answered live. Responses to those questions, along those answered live, will be posted on EERE Exchange within 3 business days.

DE-FOA-0000971: Environmental Stewardship for Renewable Energy Technologies: MHK Environmental and Resource Characterization Instrumentation

Anticipated Schedule:

FOA Issue Date:	**March 10, 2014**
FOA Informational Webinar:	March 20, 2014
Submission Deadline for Concept Papers:	April 7, 2014
Submission Deadline for Full Applications:	May 22, 2014
Submission Deadline for Replies to Reviewer Comments:	June 24, 2014
Expected Date for EERE Selection Notifications:	Mid-August 2014
Expected Timeframe for Award Negotiations:	60 Days

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Transcript:

This slide shows the anticipated schedule for the FOA. As shown on this schedule, the FOA has already been posted, and we are now conducting the FOA Informational Webinar. The FOA was issued on March 10th, 2014. Concept papers must be submitted on April 7th, 2014. Full Applications are due on May 22nd, 2014. EERE is implementing a new process where applicants can submit a reply to reviewer comments. Those replies will be due on June 24th, 2014. We anticipate making selections and notifying applicants in the middle of August.

Please note that there are a few requirements that we will go over in the presentation that are different than in past FOAs, such as Replies to Reviewer Comments – we will cover all requirements for this FOA later in the presentation.

Notice

- All Applicants are strongly encouraged to carefully read the Funding Opportunity Announcement DE-FOA-0000971 ("FOA") and adhere to the stated submission requirements. The content included in this presentation is intended to summarize the contents of FOA. If there are any inconsistencies between the content of this presentation and the information presented in the FOA please contact MHKFOA971@go.doe.gov. In the event there is an inconsistency, the Funding Opportunity Announcement is the controlling document and applicants should rely on the FOA language.

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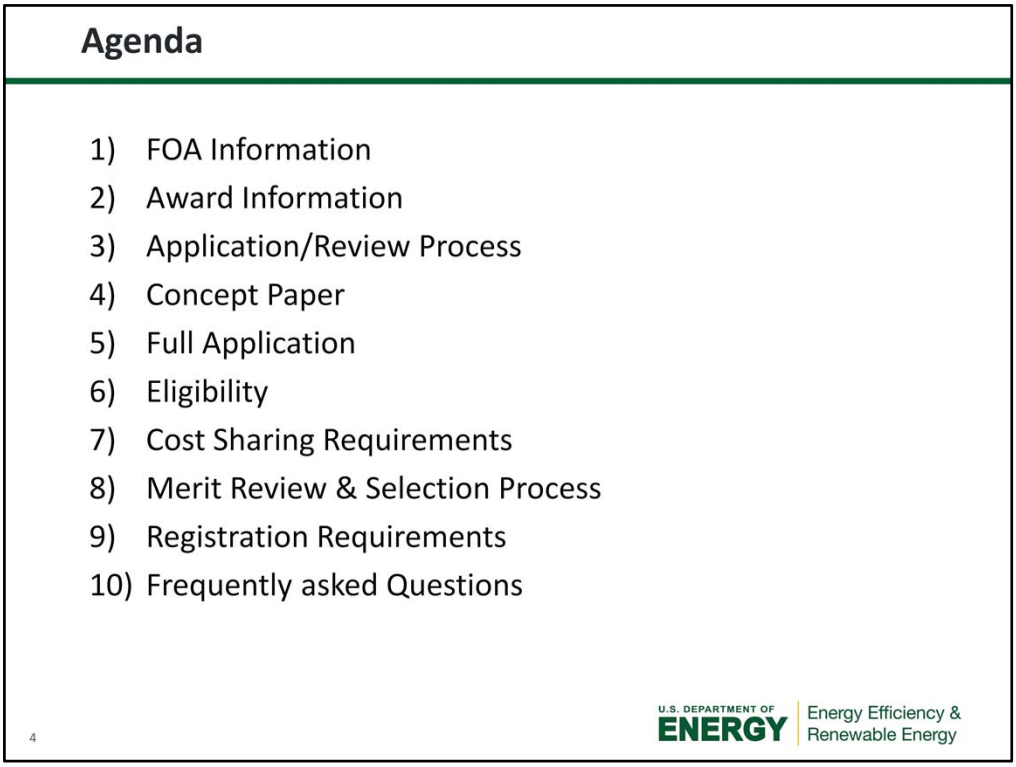
U.S. DEPARTMENT OF ENERGY | Energy Efficiency & Renewable Energy

Transcript:

All Applicants are strongly encouraged to carefully read the Funding Opportunity Announcement DE-FOA-0000971 ("FOA") and adhere to the stated submission requirements. The content included in this presentation is intended to summarize the contents of FOA. If there are any inconsistencies between the content of this presentation and the information presented in the FOA please contact MHKFOA971@go.doe.gov. In the event there is an inconsistency, the Funding Opportunity Announcement is the controlling document and applicants should rely on the FOA language.



Transcript:

The agenda for this presentation is as follows:

1) FOA Information
2) Award Information
3) Application/Review Process
4) Concept Paper
5) Full Application
6) Eligibility
7) Cost Sharing Requirements
8) Merit Review & Selection Process
9) Registration Requirements
10) Frequently asked Questions

We encourage you to have a copy of the FOA in front of you for reference as we go through the presentation.

FOA Description

- This FOA will support the development and advancement of cost-effective technologies used to monitor for potential environmental impacts associated with MHK technologies (in Topic Areas 1 and 2), and for evaluating resource characteristics for wave energy conversion (WEC) devices (in Topic Area 3).
- The objective of Topic Areas 1 and 2 is to ensure that tools and techniques exist to answer high priority environmental questions successfully and cost effectively.
- The goal of Topic Area 3 is to develop new instrumentation and/or processing techniques to provide the wave measurements required for tuning of Wave Energy Converters (WECs).

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Transcript:

This FOA will support the development and advancement of cost-effective technologies used to monitor for potential environmental impacts associated with MHK technologies (in Topic Areas 1 and 2), and for evaluating resource characteristics for wave energy conversion (WEC) devices (in Topic Area 3).

The objective of Topic Areas 1 and 2 is to ensure that tools and techniques exist to answer high priority environmental questions successfully and cost effectively. This FOA seeks to help fill the gap between questions regarding the environmental effects of MHK technologies and the capabilities of existing monitoring technologies to collect data that answer those questions. In some instances, gaining resolution on questions regarding environmental impact is challenging, in part because current instrumentation was not purpose-designed to monitor MHK installations nor to operate for long periods of time in often remote, high energy environments. Many environmental monitoring technologies also generate large amounts of raw data and in some instances the lack of automated post-processing techniques causes data analysis lags and limitations in the amount of data that can be analyzed, thus reducing the spatial and temporal coverage of monitoring. Topic Areas 1 and 2 of the FOA aim to help solve these issues by providing support to improve monitoring instrumentation for the purpose of monitoring MHK devices. This will include the development of instrumentation to meet MHK-specific monitoring needs, development

of signal processing software or algorithms, and the development of integrated instrumentation packages.

Resource characterization is a prime driver for reducing the levelized cost of energy (LCOE) of any renewable resource and for reducing risks in MHK device deployment. Comprehensive resource characterization occurs at a range of spatial and temporal scales, from national scale resource assessments of total energy available annually, to characterizing energy variability ahead of a device as input to MHK control systems. To address the latter, the goal of Topic Area 3 is to develop new instrumentation and/or processing techniques to provide the wave measurements required for tuning of Wave Energy Converters (WECs). The wave environment experienced by a WEC can vary rapidly over very short time periods; the wave height, period, and direction are all highly variable. WECs currently rely on feedback controllers to adjust to this stochastic input. This form of reactive control could be augmented by shorter term wave statistics on a time horizon of minutes ahead of the device. Feed forward controllers have the potential to double energy capture, but require future knowledge of incoming waves on a time horizon of a few wave lengths (i.e., 30 seconds). This Topic Area seeks to support the development of wave instrumentation or new processing software for current instrumentation to provide the short term wave statistics or wave-by-wave height, period, and directionality measurements that enable feed forward controls.

Topic Areas/Technical Areas of Interest

Topic Area 1: MHK Environmental Software and Instrumentation Development

- **Funding: Up to $250,000 or $500,000 per award**
- Period of performance: 24 months
- This Topic Area seeks to improve the tools that developers have at their disposal for environmental monitoring, with the goal of taking a critical step towards reducing environmental, and thus regulatory, uncertainty for future MHK projects.
- The Department of Energy seeks applications that will increase the cost-effectiveness and quality of these studies by enhancing and, where necessary, developing new remote-sensing methods for baseline biological monitoring and/or observing effects of MHK devices on marine organisms.

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Transcript:

This slide provides a broad overview of Topic Area 1: MHK Environmental Software and Instrumentation Development

Two levels of funding will be available for applications under this Topic Area:

- A lower level of funding (up to $250,000) will support the development of improved signal processing algorithms aimed at improving automation and real-time detection to reduce data processing time and costs. At the end of the project period, recipients will be asked to demonstrate the effectiveness of the products developed through testing and demonstration with a relevant data set (e.g., image detection algorithms must demonstrate effective detection of targeted organisms within the marine environment) .
- A higher level of funding (up to $500,000) will be used to support the development or enhancement of monitoring instrumentation, which may include some signal processing algorithm and/or hardware-specific processing software development, but must also include hardware development and testing. At a minimum, hardware testing must be performed in a controlled setting (wave-tank, flume, etc). Work plans that involve open-water field testing to assess performance under real world conditions will be considered more robust than plans without.

The anticipated period of performance for award funded under Topic Area 1 is 24 months.

This Topic Area seeks to improve the tools that developers have at their disposal for environmental monitoring, with the goal of taking a critical step towards reducing environmental, and thus regulatory, uncertainty for future MHK projects.

The Department of Energy seeks applications that will increase the cost-effectiveness and quality of these studies by enhancing and, where necessary, developing new remote-sensing methods for baseline biological monitoring and/or observing effects of MHK devices on marine organisms.

Note that for all signal processing software and/or algorithms developed or improved under this Topic Area must be made open-source. Hardware-specific processing software will not be required to be open-source. Open-source distribution of software must be addressed in the Technical Volume of the Full Application as part of the Market Transformation/Commercialization Plan. For additional information about open-source software distribution requirements see Appendix D.

Topic Areas/Technical Areas of Interest

Topic Area 1: MHK Environmental Software and Instrumentation Development

Applicants must demonstrate the following in their applications:

1. Proposed research will provide results that will substantially reduce regulatory and environmental risks to future projects by substantially reducing the costs and/or risks associated with performing required environmental monitoring. If the technology proposed is currently not cost competitive with alternatives, a credible pathway to cost competitiveness must be demonstrated.
2. Proposed studies will actively incorporate the input of, and demonstrate buy-in from, relevant federal and/or state regulatory and resource management agencies, project developers, and/or any other stakeholders whose participation will be critical to the effective execution of the studies.
3. For projects focused on, or that include the development of signal processing software and/or algorithms, a strategy for the public dissemination and open-source access to code developed must be included in the Technical Volume of the Full Application as part of the Market Transformation/Commercialization Plan. For additional information about open-source software distribution requirements see Appendix D. For additional information about dissemination of data see Appendix E.

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Transcript:

Successful applications must describe a high priority need related to regulatory requirements for MHK developers and then specifically explain how the advancement proposed will help address that need. Applications should include a thorough description of the current strengths and limitations of existing technologies in the context of monitoring MHK projects and a discussion of how the improvements proposed will affect the following: spatial and temporal resolution, data bandwidth, data storage and transfer, survivability in marine environments, data processing time and cost. Importantly, since environmental regulations are species-specific, applications should address current device ability to distinguish between species and ways the proposal will enhance this capability.

Under Topic Area 1, applicants must demonstrate the following in their applications:

1. Proposed research will provide results that will substantially reduce regulatory and environmental risks to future projects by substantially reducing the costs and/or risks associated with performing required environmental monitoring. If the technology proposed is currently not cost competitive with alternatives, a credible pathway to cost competitiveness must be demonstrated.
2. Proposed studies will actively incorporate the input of, and demonstrate buy-in from, relevant federal and/or state regulatory and resource management agencies, project developers, and/or any other stakeholders whose participation will be

critical to the effective execution of the studies.

3. For projects focused on, or that include the development of signal processing software and/or algorithms, a strategy for the public dissemination and open-source access to code developed must be included in the Technical Volume of the Full Application as part of the Market Transformation/Commercialization Plan. For additional information about open-source software distribution requirements see Appendix D. For additional information about dissemination of data see Appendix E.

Topic Areas/Technical Areas of Interest

Topic Area 1: MHK Environmental Software and Instrumentation Development

This Topic Area will support development of and advancements of technologies including, but not limited to:

A) Active Acoustic Devices

B) Passive Acoustic Devices

C) Optical Devices

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Transcript:

This Topic Area will support development of and advancements of technologies including, but not limited to:

A) Active Acoustic Devices – This sub-topic will support the development, enhancement, and testing of active acoustic technologies for detecting animal interactions, such as turbine blade strike, with and around MHK devices and for conducting more accurate pre- and post-construction assessments of changes in species composition, abundance, and/or behavior. This sub-topic will also support the development of image recognition and additional signal processing algorithms and related tools for active acoustic systems.

B) Passive Acoustic Devices – This sub-topic would support the development, enhancement, and testing of passive acoustic systems for improving the detection, classification, localization, and density estimation of marine mammals around MHK devices and development sites, with the aim of evaluating the effects of MHK deployments on the presence, abundance, and behavior of marine mammals at project sites. This sub-topic will also support the development of signal processing algorithms and related tools.

C) **Optical Devices** – This sub-topic would support the development, enhancement, and testing of optical systems aimed at monitoring marine animal interactions with MHK devices. This sub-topic will also support the development of image recognition and other signal processing algorithms and related tools.

Topic Areas/Technical Areas of Interest

Topic Area 2: Development and Integration of Instrumentation Packages

- **Funding up to $1,000,000**
- Period of performance: 30 months
- This Topic Area seeks to support development and testing of combined instrumentation packages directly tailored to address baseline biological monitoring and/or observing effects of MHK devices on marine organisms.
- The primary focus of this Topic Area is to support instrumentation integration and testing efforts, however some improvement of instruments, components or software may also occur as part of this larger effort.

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Transcript:

This slide provides a broad overview of Topic Area 2: Development and Integration of Instrumentation Packages

Funding up to $1,000,000 per award will be available for projects funded under Topic Area 2.

The anticipated period of performance for award funded under Topic Area 2 is 30 months.

This Topic Area seeks to support development and testing of combined instrumentation packages directly tailored to address baseline biological monitoring and/or observing effects of MHK devices on marine organisms.

The primary focus of this Topic Area is to support instrumentation integration and testing efforts, however some improvement of instruments, components or software may also occur as part of this larger effort.

Similar to Topic Area 1, please note that any signal processing software and/or algorithms

developed or improved under this Topic Area must be made open-source. Hardware-specific processing software will not be required to be open-source. Open-source distribution of software must be addressed in the Technical Volume of the Full Application as part of the Market Transformation/Commercialization Plan. For additional information about open-source software distribution requirements see Appendix D.

Topic Areas/Technical Areas of Interest

Topic Area 2: Development and Integration of Instrumentation Packages

Applicants must demonstrate all of the following in their applications:

1. Proposed research will provide results that will substantially reduce regulatory and environmental risks to future projects facing similar issues by substantially reducing the costs and/or risks associated with performing required environmental monitoring. If the technology proposed is currently not cost competitive with alternatives, a credible pathway to cost competitiveness must be demonstrated.
2. Proposed research will actively incorporate the input of, and demonstrate buy-in from, relevant federal and/or state regulatory and resource management agencies, MHK project developers, and/or any other stakeholders whose participation will be critical to the effective execution of the studies.
3. Applications should clearly lay out a process by which instrumentation packages will be developed and tested. Field testing is required under this Topic Area.
4. For projects that include the development or improvement of signal processing algorithms and/or software, a strategy for the public dissemination and open-source access to the code developed must be included in the Technical Volume of the Full Application as part of the Market Transformation/Commercialization Plan. For additional information about open-source software distribution requirements see Appendix D. For additional information about dissemination of data see Appendix E.

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Transcript:

Successful applications must clearly articulate how the project will address a high priority need related to regulatory requirements for MHK developers and specifically address how the advancement proposed will help address that need. Successful applications must also clearly describe how the combination of devices integrated in the package will more effectively address the articulated need than any single device in isolation. Applications should include a thorough description of the current strengths and limitations of the technologies in question in the context of monitoring MHK projects and a discussion of ways in which the work proposed will affect each of these variables, including limitations on: spatial and temporal resolution, data bandwidth, data storage and transfer, survivability in marine environments, and data processing time and cost. Importantly, since environmental barriers often involve specific species located at project development sites, applications should address current device ability to distinguish between species and any ways in which the proposal will enhance this capability.

Under Topic Area 2, Applicants must demonstrate all of the following in their applications:

1. Proposed research will provide results that will substantially reduce regulatory and environmental risks to future projects facing similar issues by substantially reducing the costs and/or risks associated with performing required environmental monitoring. If the technology proposed is currently not cost competitive with

alternatives, a credible pathway to cost competitiveness must be demonstrated.

2. Proposed research will actively incorporate the input of, and demonstrate buy-in from, relevant federal and/or state regulatory and resource management agencies, MHK project developers, and/or any other stakeholders whose participation will be critical to the effective execution of the studies.
3. Applications should clearly lay out a process by which instrumentation packages will be developed and tested. Field testing is required under this Topic Area.
4. For projects that include the development or improvement of signal processing algorithms and/or software, a strategy for the public dissemination and open-source access to the code developed must be included in the Technical Volume of the Full Application as part of the Market Transformation/Commercialization Plan. For additional information about open-source software distribution requirements see Appendix D. For additional information about dissemination of data see Appendix E.

Topic Areas/Technical Areas of Interest

Topic Area 3: Wave Measurement Instrumentation for Feed Forward Controls

- **Funding up to $500,000**
- Period of performance: 24 months
- This Topic Area seeks to support the development of wave instrumentation or new processing software for current instrumentation to provide the short term wave statistics or wave-by-wave height, period, and directionality measurements that enable feed forward controls.
- This topic will support development and testing of sensors, instrumentation, or processing techniques to collect wave data (e.g., height, period, directionality, steepness). Instrumentation is needed to generate wave information across a range of time scales, from generating shorter term wave statistics to resolving individual waves ahead of a WEC device.

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Transcript:

This slide provides a broad overview of Topic Area 3: Wave Measurement Instrumentation for Feed Forward Controls

Funding up to $500,000 per award will be available for projects funded under Topic Area 3.

The anticipated period of performance for award funded under Topic Area 3 is 24 months.

This Topic Area seeks to support the development of wave instrumentation or new processing software for current instrumentation to provide the short term wave statistics or wave-by-wave height, period, and directionality measurements that enable feed forward controls.

This topic will support development and testing of sensors, instrumentation, or processing techniques to collect wave data (e.g., height, period, directionality, steepness). Instrumentation is needed to generate wave information across a range of time scales, from generating shorter term wave statistics to resolving individual waves ahead of a WEC device.

Successful applications must clearly articulate how the hardware or software being developed will enable tuning of WEC devices. Applications should describe the impact of the proposed projects relative to the strengths and limitations of existing wave measurement instrumentation for supporting WEC controls. Applicants must specify the targeted time scales for collecting wave statistics or the time horizon (e.g., 1-2 minute look ahead) for phase resolved (wave by wave) wave measurement, while discussing any limitations on: spatial coverage, wave period, wave steepness, directionality, data bandwidth, data storage, data processing time, and survivability in marine environments. Applications must include a plan for defining a targeted production cost.

Projects will include in-water testing of fully functional instrumentation (hardware and software) to verify wave measurement capabilities in either a controlled (e.g. wave basin) or field environment, commensurate with the technical readiness of the concept. This topic will focus on providing instrumentation to enable control of a single WEC device. Approaches that generate measurements from adjacent WEC devices in an array will not be considered under this effort. In order to support WEC arrays and larger farms, affordability of instrumentation will be crucial to providing the spatial coverage required.

Applications Specifically Not of Interest

- EERE performs a preliminary eligibility review of Full Applications
  - Any "Applications Specifically Not of Interest," as described in Section I.C of the FOA, are deemed nonresponsive and are not reviewed or considered
- Per Section I.C of the FOA, the following types of applications will be deemed nonresponsive and will not be reviewed or considered:
  - Applications that fall outside the technical parameters specified in Section I.B of the FOA.
  - Applications for proposed technologies that are not based on sound scientific principles (e.g., violates the law of thermodynamics).
  - For Topic Areas 1 and 2, instrumentation should focus on aquatic species and not on monitoring bird or bat interactions with MHK devices.

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Transcript:

EERE now defines applications that are specifically not of interest in FOAs. This is for the benefit of the applicants, as we are aware that submitting applications is time-consuming. Please refer to Section I.C of the FOA for applications that would be deemed nonresponsive. These applications would not be reviewed or considered by EERE.

Per Section I.C of the FOA, the following types of applications will be deemed nonresponsive and will not be reviewed or considered:

- Applications that fall outside the technical parameters specified in Section I.B of the FOA which defines the Topic Areas/Technical Areas of Interest for this FOA.
- Applications for proposed technologies that are not based on sound scientific principles (e.g., violates the law of thermodynamics).
- For Topic Areas 1 and 2, instrumentation should focus on aquatic species and not on monitoring bird or bat interactions with MHK devices.

Award Information

Total Amount to be Awarded	**$3,500,000***
Average Award Amount	EERE anticipates making awards that range from $250,000 to $1,000,000, depending on the Topic Area
Types of Funding Agreements	Cooperative Agreements, Grants, Technology Investment Agreements, Work Authorizations, and Interagency Agreements
Period of Performance	Topic Area 1 Period of Performance: 24 months Topic Area 2 Period of Performance: 30 months Topic Area 3 Period of Performance: 24 months

*Subject to the availability of appropriated funds

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Transcript:

EERE expects to make approximately $3.5 million of Federal funding available for new awards under this FOA subject to the availability of appropriated funds. The average award amount is anticipated to range from $250,000 to $1,000,000, depending on the Topic Area.

EERE intends to fund mostly Cooperative Agreements under this FOA, but may also fund Grants, Technology Investment Agreements, Work Authorizations, and Interagency Agreements.

Statement of Substantial Involvement

EERE has substantial involvement in work performed under Awards made following this FOA. EERE does not limit its involvement to the administrative requirements of the Award. Instead, EERE has substantial involvement in the direction and redirection of the technical aspects of the project as a whole. Substantial involvement includes, but is not limited to, the following:

- EERE shares responsibility with the Prime Recipient for the management, control, direction, and performance of work under the projects.
- EERE reviews and approves in a timely manner project plans, including project management, testing and technology transfer plans, and recommending alternate approaches, if the plans do not address the critical programmatic issues.
- EERE participates in project management planning activities, including risk analysis, to ensure EERE Technology Office requirements or limitations are considered in performance of the work elements.
- EERE may intervene in the conduct or performance of work under this Award for programmatic reasons. Intervention includes the interruption or modification of the conduct or performance of project activities.
- EERE promotes and facilitates technology transfer activities, including disseminating Technology Office results through presentations and publications.
- EERE may redirect or discontinue funding projects that fail to fully and satisfactorily complete the work described in the Statement of Project Objectives as evaluated at the Go/No Go decision points.
- EERE participates in major project decision-making processes.

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Transcript:

Under cooperative agreements, there will be what is known as “substantial involvement” between EERE and the Recipient during the performance of the project.

Substantial involvement includes, but is not limited to, the following:

- EERE shares responsibility with the Prime Recipient for the management, control, direction, and performance of work under the projects.
- EERE reviews and approves in a timely manner project plans, including project management, testing and technology transfer plans, and recommending alternate approaches, if the plans do not address the critical programmatic issues.
- EERE participates in project management planning activities, including risk analysis, to ensure EERE Technology Office requirements or limitations are considered in performance of the work elements.
- EERE may intervene in the conduct or performance of work under this Award for programmatic reasons. Intervention includes the interruption or modification of the conduct or performance of project activities.
- EERE promotes and facilitates technology transfer activities, including disseminating Technology Office results through presentations and publications.

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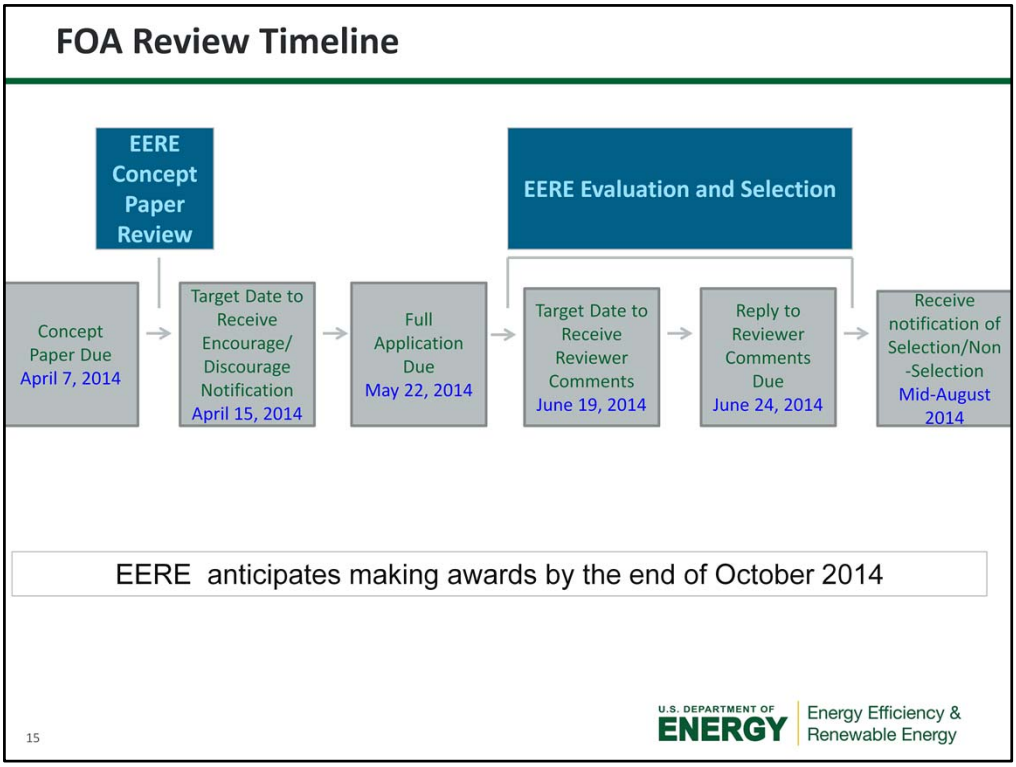

Transcript:

EERE's Evaluation and Selection Process is shown in blue here. EERE will review Concept Papers, Replies to Reviewer Comments (which we will cover later in the presentation), and Full Applications. The gray boxes represent the actions that apply to applicants throughout the FOA process.

EERE anticipates notifying applicants regarding their selection status in Mid-August 2014 and making award by the end of October.

Concept Papers

- EERE conducts an initial eligibility review of Concept Papers. For the Concept Paper to be considered eligible for the technical review, the Applicant must:
  - Submit the Concept Paper through EERE Exchange
  - Include the required information in a single document
  - Submit the Concept Paper by 5:00pm ET on April 7, 2014
- See Section IV.C of the FOA for information on the content requirements for Concept Papers
- If an Applicant fails to submit an eligible Concept Paper, the Applicant will not be eligible to submit a Full Application

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Transcript:

Concept Papers are required for this FOA. In order to submit a full application, applicants must submit an eligible Concept Paper. Please refer to Section IV.C. of the FOA for content requirements of the Concept Paper. Concept Papers must be submitted through the EERE Exchange system by 5:00pm ET on April 7, 2014.

Concept Paper Review

- Each eligible Concept Paper will be reviewed based on the criteria in Section V.A.1. of the FOA
- Applicants will be notified of an Encourage/Discourage decision, and review comments on their Concept Paper will be available in EERE Exchange
  - Applicants will be provided approximately 30 days to prepare a Full Application
  - An Applicant who receives a "discouraged" notification may still submit a Full Application
  - By **discouraging** the submission of a Full Application, EERE intends to convey its lack of programmatic interest in the proposed project

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Transcript:

Each eligible Concept Paper will be reviewed based on the criteria in Section V.A.1. of the FOA. Applicants will be notified of an Encourage/Discourage decision, and review comments will be made available in EERE Exchange.

Applicants will be provided approximately 30 days to prepare a Full Application. An Applicant who receives a "discouraged" notification may still submit a Full Application. By discouraging the submission of a Full Application, EERE intends to convey its lack of programmatic interest in the proposed project

Please note that regardless of the date applicants receive the Encourage/Discourage notifications, the submission deadline for the Full Application remains the date stated on the FOA cover page.

Full Application Eligibility Requirements

- Applicants must submit a Full Application by 5:00pm ET on May 22, 2014
- Full Applications are deemed eligible if:
  - The Applicant is an eligible entity Section III.A of FOA;
  - The Applicant submitted an eligible Concept Paper;
  - The Cost Share requirement is satisfied Section III.B of FOA;
  - The Full Application is compliant Section III.C of FOA; and
  - The proposed project is responsive to the FOA Section III.D of FOA

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Transcript:

Applicants must submit full applications by 5:00pm ET on May 22, 2014. EERE will conduct an eligibility review, and the full application will be deemed eligible if:

- The Applicant is an eligible entity Section III.A of FOA;
- The Applicant submitted an eligible Concept Paper;
- The Cost Share requirement is satisfied Section III.B of FOA;
- The Full Application is compliant Section III.C of FOA; and
- The proposed project is responsive to the FOA Section III.D of FOA

Who's Eligible to Apply?

Eligible applicants for this FOA include:

1. Individuals
2. Domestic Entities
3. Foreign Entities
4. Incorporated Consortia
5. Unincorporated Consortia

For more detail about each eligible applicant, please see Section III.A of the FOA for eligibility requirements

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U.S. DEPARTMENT OF ENERGY | Energy Efficiency & Renewable Energy

Transcript:

Eligible applicants for this FOA include:

1. Individuals
2. Domestic Entities
3. Foreign Entities
4. Incorporated Consortia
5. Unincorporated Consortia

For more detail about each eligible applicant, please see Section III.A of the FOA for eligibility requirements

Please note that nonprofit organizations described in Section 501(c)(4) of the Internal Revenue Code of 1986 that engaged in lobbying activities after December 31, 1995, are not eligible to apply for funding.

Also, note that all Prime Recipients receiving funding under this FOA must be incorporated (or otherwise formed) under the laws of a State or territory of the United States.

Cost Sharing Requirements

- Applicants must propose to contribute a minimum of 20% of the total project costs for R&D projects. *Unless the project qualifies for the Cost Share Reduction.*

- ***Cost Share Reduction***: EERE has reduced the Recipient Cost Share Requirement to **10%** for R&D activities where:
  - The Prime Recipient is a domestic institution of higher education; domestic nonprofit entity; FFRDC; or U.S. State, local, or tribal government entity; and
  - The Prime Recipient performs more than 50% of the project work, as measured by the Total Project Cost

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Transcript:

Applicants must propose to contribute a minimum of 20% of the total project costs for R&D projects, unless the project qualifies for the Cost Share Reduction.

EERE has reduced the Recipient Cost Share Requirement to 10% for R&D activities where:

- The Prime Recipient is a domestic institution of higher education; domestic nonprofit entity; FFRDC; or U.S. State, local, or tribal government entity; and
- The Prime Recipient performs more than 50% of the project work, as measured by the Total Project Cost

Applicants who believe their project qualifies for the reduced recipient cost share must be able to provide verification that the above requirements are satisfied

Cost Share Contributions

- Contributions must be:
  - Specified in the project budget
  - Verifiable from the Prime Recipient's records
  - Necessary and reasonable for proper and efficient accomplishment of the project
- Every cost share contribution must be reviewed and approved in advance by the Contracting Officer and incorporated into the project budget before the expenditures are incurred

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Transcript:

The total budget presented in the application must include both Federal (DOE), and Non-Federal (cost share) portions, thereby reflecting TOTAL PROJECT COSTS proposed. All costs must be verifiable from the Recipient's records and be necessary and reasonable for the accomplishment of the project.

Cost Share Payment

- Recipients must provide documentation of the cost share contribution, incrementally over the life of the award
- The cumulative cost share percentage provided on each invoice must reflect, at a minimum, the cost sharing percentage negotiated

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Transcript:

Recipients must provide documentation of the cost share contribution, incrementally over the life of the award.

Cost Share must be provided on an invoice basis, unless a waiver is requested and approved by the DOE Contracting Officer. The process for requesting a waiver is discussed on the following slide.

Cost Share Payment

- In limited circumstances, the Prime Recipient may submit a waiver request to meet its cost share requirements on a less frequent basis, such as monthly or quarterly
- Such waiver requests must be sent by email to the Contracting Officer during award negotiations and include:
  - (1) A detailed justification for the request;
  - (2) A proposed schedule of payments, including amounts and dates;
  - (3) A written commitment to meet that schedule; and
  - (4) Such evidence as necessary to demonstrate that the Prime Recipient has complied with its cost share obligations to date.
- The Contracting Officer must approve all such requests before they may go into effect

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Transcript:

This slide shows the process for submitting a waiver request to allow for cost sharing on a less frequent basis.

In limited circumstances, the Prime Recipient may submit a waiver request to meet its cost share requirements on a less frequent basis, such as monthly or quarterly. Such waiver requests must be sent by email to the Contracting Officer during award negotiations and include:

(1) A detailed justification for the request;

(2) A proposed schedule of payments, including amounts and dates;

(3) A written commitment to meet that schedule; and

(4) Such evidence as necessary to demonstrate that the Prime Recipient has complied with its cost share obligations to date.

The Contracting Officer must approve all such requests before they may go into effect. Again, this process happens after selection, during award negotiations.

Allowable Cost Share

- If proposed, Cost Share must be allowable and must be verifiable upon submission of the Full Application
- Refer to the following applicable Federal cost principles:

Entity	Cost Principles
Educational Institutions	2CFR220
State, Local, and Indian Tribal Governments	2CFR225
Non-profit Organizations	2CFR230
For-profit Organizations	FAR Part 31

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Transcript:

Cost Share must be allowable and must be verifiable upon submission of the Full Application. Please refer to this chart for your entity's applicable cost principles. It is imperative that you follow the applicable cost principles when creating your budget for the full application.

Allowable Cost Share

- Cash Contributions
  - May be provided by the Prime Recipient, Subrecipients, or a Third Party
- In-Kind Contributions
  - Can include, but are not limited to: personnel costs, indirect costs, facilities and administrative costs, rental value of buildings or equipment, and the value of a service, other resource, or third party in-kind contribution

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Transcript:

Cost share can be provided as cash and/or in-kind contributions. Cost share contributions can be provided by the Prime Recipient, subrecipients, or a third party.

The basic definition of in-kind cost share is the donation of personnel time, equipment, facilities, or other items that an organization will contribute to the project. It can take many

forms, each of which must be assigned a dollar value to be included in the budget.

Unallowable Cost Share

- The Prime Recipient may not use the following sources to meet its cost share obligations including, but not limited to:
  - Revenues or royalties from the prospective operation of an activity beyond the project period
  - Proceeds from the prospective sale of an asset of an activity
  - Federal funding or property
  - Expenditures reimbursed under a separate Federal Technology Office
  - Independent research and development (IR&D) funds
  - The same cash or in-kind contributions for more than one project or program

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Transcript:

Please be aware that there are items that are considered unallowable cost share. If a cost is considered unallowable, it cannot be counted as cost share. This slide provides some examples of cost share that is unallowable.

Multiple Applications

Applicants may submit more than one application to this FOA, provided that each application describes a unique, scientifically distinct project.

Note: Only applicants who have submitted a compliant Concept Paper will be eligible to submit a Full Application. In order to submit more than one application to this FOA, a separate Concept Paper must be submitted for each unique, scientifically distinct project.

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Transcript:

Applicants may submit more than one application to this FOA, provided that each application describes a unique, scientifically distinct project.

Please note: Only applicants who have submitted a compliant Concept Paper will be eligible to submit a Full Application. Therefore, in order to submit more than one application to this FOA, a separate Concept Paper must be submitted for each unique, scientifically distinct project.

Merit Review and Selection Process - Overview

- The Merit Review process consists of multiple phases that each include an initial eligibility review and a thorough technical review
- Rigorous technical reviews are conducted by reviewers that are experts in the subject matter of the FOA
- Ultimately, the Selection Official considers the recommendations of the reviewers, along with other considerations such as Program Policy Factors, in determining which applications to select
- See Section V.A.2 of the FOA for information on the review criteria for Full Applications

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Transcript:

This slide describes EERE's merit review and selection process.

The Merit Review process consists of multiple phases that each include an initial eligibility review and a thorough technical review. Rigorous technical reviews are conducted by reviewers that are experts in the subject matter of the FOA.

Ultimately, the Selection Official considers the recommendations of the reviewers, along with other considerations such as Program Policy Factors, in determining which applications to select.

See Section V.A.2 of the FOA for information on the review criteria for Full Applications.

Replies to Reviewer Comments

- EERE will provide Applicants with reviewer comments in EERE Exchange following evaluation of all eligible Full Applications
- Applicants will have three business days to prepare a short Reply to Reviewer Comments responding to comments however they desire
- EERE will review and consider each compliant and responsive Full Application, even if no Reply is submitted or if the Reply is found to be noncompliant
- Please see Sections IV.F. and V.A.3 for additional information regarding replies to reviewer comments

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Transcript:

EERE has implemented a new process where applicants can reply to reviewer comments as part of the merit review process. Reviewer comments will be provided to applicants in Exchange following the evaluation of eligible full applications. Applicants will then be able to respond to the comments through the Reply to Reviewer Comments process. Applicants will have 3 days to respond. Please see Sections IV.F. and V.A.3 for additional information regarding the replies to reviewer comments process.

Selection Factors

The Selection Official may consider the merit review recommendation, program policy factors, and the amount of funds available in arriving at selections for this FOA

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Transcript:

As previously discussed, the Selection Official may consider the merit review recommendations, program policy factors, and the amount of funds available in arriving at selections for this FOA.

Program Policy Factors

- The Selection Official may consider the following program policy factors in determining which Full Applications to select for award negotiations:
  - The degree to which the proposed project, including proposed cost shares, optimizes the use of available EERE funding to achieve programmatic objectives;
  - The level of industry involvement and demonstrated ability to commercialize energy or related technologies;
  - Technical, market, organizational, and environmental risks associated with the project;
  - Whether the proposed project is likely to lead to increased employment and manufacturing in the United States;
  - Whether the proposed project will accelerate transformational technological advances in areas that industry by itself is not likely to undertake because of technical and financial uncertainty;
  - The degree to which the proposed project directly addresses EERE's statutory mission and strategic goals.
  - Potential risk of delayed deployment based on regulatory processes
  - Selection to ensure a diverse range of projects
  - Selection to ensure adequate distribution of awards geographically
  - Greatest advancement to the national knowledge base

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Transcript:

As stated in the previous slide, after the Merit Review process, the Selection Official may consider program policy factors to come to a final selection decision.

For this FOA, the Selection Official may consider the following program policy factors in determining which Full Applications to select for award negotiations:

- The degree to which the proposed project, including proposed cost shares, optimizes the use of available EERE funding to achieve programmatic objectives;
- The level of industry involvement and demonstrated ability to commercialize energy or related technologies;
- Technical, market, organizational, and environmental risks associated with the project;
- Whether the proposed project is likely to lead to increased employment and manufacturing in the United States;
- Whether the proposed project will accelerate transformational technological advances in areas that industry by itself is not likely to undertake because of technical and financial uncertainty;
- The degree to which the proposed project directly addresses EERE's statutory mission and strategic goals;

- Potential risk of delayed deployment based on regulatory processes;
- Selection to ensure a diverse range of projects;
- Selection to ensure adequate distribution of awards geographically; and
- Greatest advancement to the national knowledge base

Registration Requirements

- To apply to this FOA, Applicants must register with and submit application materials through EERE Exchange: https://eere-Exchange.energy.gov
- Obtain a "control number" at least 24 hours before the first submission deadline
- Although not required in order to submit an Application, the following registrations must be complete to received an award under this FOA:

Registration Requirement	Website
DUNS Number	http://fedgov.dnb.com/webform
SAM	https://www.sam.gov
FedConnect	https://www.fedconnect.net
Grants.gov	http://www.grants.gov

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Transcript:

There are several one-time actions required before submitting an application in response to this FOA, and it is vital that applicants address these items as soon as possible. Some may take several weeks, and failure to complete them could interfere with an applicant's ability to apply to this FOA, or to meet the negotiation deadlines and receive an award if the application is selected.

To apply to this FOA, Applicants must register with and submit application materials through EERE Exchange: https://eere-Exchange.energy.gov

Applicants must obtain a "control number" for each application from the EERE Exchange system at least 24 hours before the first submission deadline.

Although not required in order to submit an Application, the following registrations must be complete to received an award under this FOA:

- Selectees must obtain a Dun and Bradstreet Data Universal Numbering System (DUNS) number.

- Award recipients must register with the System for Award Management (SAM). If your organization is already registered in SAM, that registration must be renewed on an annual basis.
- Applicants should also register in the FedConnect system. FedConnect is used to transmit award documents to award recipients.
- Applicant may also want to register in Grants.gov to receive automatic updates when Amendments to this FOA are posted. However, please note that Concept Papers and Full Applications will not be accepted through Grants.gov. All applications must be submitted through the EERE Exchange system.

Means of Submission

- Concept Papers, Full Applications, and Replies to Reviewer Comments must be submitted through EERE Exchange at https://eere-Exchange.energy.gov
  - EERE will not review or consider applications submitted through other means
- The Users' Guide for Applying to the Department of Energy EERE Funding Opportunity Announcements can be found at https://eere-Exchange.energy.gov/Manuals.aspx

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Transcript:

All required submissions must come through EERE Exchange at https://eere-Exchange.energy.gov

EERE will not review or consider applications submitted through any other means.

Key Submission Points

- Check entries in EERE Exchange
  - Submissions could be deemed ineligible due to an incorrect entry
- EERE strongly encourages Applicants to submit 1-2 days prior to the deadline to allow for full upload of application documents and to avoid any potential technical glitches with EERE Exchange
- Make sure you hit the submit button
  - Any changes made after you hit submit will un-submit your application and you will need to hit the submit button again
- For your records, print out the EERE Exchange Confirmation page at each step, which contains the application's Control Number

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Transcript:

Please take care to double check the accuracy of data entered in EERE Exchange. Submissions could be deemed ineligible due to an incorrect entry.

EERE strongly encourages Applicants to submit 1-2 days prior to the deadline to allow for full upload of application documents and to avoid any potential technical glitches uploading applications to EERE Exchange.

Also, make sure you hit the submit button after uploading your application. Note: Any changes made after you hit submit will un-submit your application and you will need to hit the submit button again.

For your records, we encourage you to print out the EERE Exchange Confirmation page at each step, which contains the application's Control Number.

Applicant Points-of-Contact

- Applicants must designate primary and backup points-of-contact in EERE Exchange with whom EERE will communicate to conduct award negotiations
- It is imperative that the Applicant/Selectee be responsive during award negotiations and meet negotiation deadlines
  - Failure to do so may result in cancelation of further award negotiations and rescission of the Selection

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Transcript:

Applicants must designate both a primary and backup points-of-contact in EERE Exchange with whom EERE will communicate with to conduct award negotiations.

It is imperative that the Applicant/Selectee be responsive during award negotiations and meet specified negotiation deadlines. Failure to do so may result in cancelation of the award negotiations and rescission of the Selection.

Questions

- Questions about this FOA? Email MHKFOA971@go.doe.gov
  - All Q&As related to this FOA will be posted on EERE Exchange
    - You must first select this specific FOA Number in order to view the Q&As
  - EERE will attempt to respond to a question within 3 business days, unless a similar Q&A has already been posted on the website
- Problems logging into EERE Exchange or uploading and submitting application documents with EERE Exchange? Email EERE-ExchangeSupport@hq.doe.gov.
  - Include FOA name and number in subject line
- All questions asked during this presentation will be posted on EERE Exchange

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Transcript:

If you have questions about this FOA, please submit your questions via the FOA mailbox: MHKFOA971@go.doe.gov

All Q&As related to this FOA will be posted on EERE Exchange. EERE will attempt to respond to a question within 3 business days, unless a similar Q&A has already been posted on the website.

If you have problems logging into EERE Exchange or uploading and submitting application documents with EERE Exchange, please contact the EERE Exchange helpdesk at: EERE-ExchangeSupport@hq.doe.gov. For tracking purposes, please include FOA name and number in subject line of your helpdesk request.

All questions submitted during this webinar will be posted on EERE Exchange.