EERE 205: FOA Applicant Webinar Presentation

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

Wind Energy – Eagle Impact Minimization Technologies and Field Testing Opportunities

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FOA Webinar

DE-FOA-0001554

June 27, 2016

Anticipated Schedule:

FOA Issue Date:	**6/22/16**
FOA Informational Webinar:	**6/27/16**
Submission Deadline for Concept Papers:	**7/22/16 5:00pm ET**
Submission Deadline for Full Applications:	**9/15/16 5:00pm ET**
Submission Deadline for Replies to Reviewer Comments:	**10/20/16 5:00pm ET**
Expected Date for EERE Selection Notifications:	**Fall/Winter 2016**
Expected Timeframe for Award Negotiations:	**Early 2017**

Notice

- All applicants are strongly encouraged to carefully read the Funding Opportunity Announcement DE-FOA-0001554 **("FOA")** and adhere to the stated submission requirements.
- This presentation summarizes the contents of FOA. If there are any inconsistencies between the FOA and this presentation or statements from DOE personnel, the FOA is the controlling document and applicants should rely on the FOA language and seek clarification from EERE.
- If you believe there is an inconsistency, please contact EagleImpact@ee.doe.gov.

Agenda

1) FOA Description
2) Topic Areas/Technical Areas of Interest
3) Award Information
4) Statement of Substantial Involvement
5) Cost Sharing
6) Concept Papers
7) Full Applications
8) Merit Review and Selection Process
9) Registration Requirements

FOA Description

The Wind Program, part of the Wind and Water Power Technologies Office, works to enable rapid expansion of clean, affordable, and reliable domestic wind power to promote national security, economic vitality, and environmental quality. The Wind Program is committed to supporting technological innovations that facilitate the growth of the domestic wind industry. In addition to wind technology research and development (R&D), the Program funds R&D to address market barriers that affect the deployment of wind energy, including the effects of wind on wildlife.

FOA Description

The purpose of the Wind Energy - Eagle Impact Minimization Technologies and Field Testing Opportunities FOA is to advance the commercial readiness of eagle detection and impact minimization technologies in an effort to reduce market barriers for the deployment of wind facilities by providing wind energy stakeholders with proven and cost effective tools to minimize environmental impacts.

In this FOA, “impact minimization technology” or “technologies” means any device meant to detect and then deter eagles away from turbine blades; technology designed to automatically detect and classify eagles, with the intent of triggering a deterrent device or alteration of turbine operation (informed curtailment); or any other method (such as painting of turbine blades to increase visibility to eagles) that can be employed at an operational wind energy facility that has the intended effect of reducing impacts (particularly mortality) to bald and golden eagles. This definition specifically excludes methods situated in other parts of the mitigation hierarchy, such as pre-construction siting or micrositing impact avoidance measures, or compensatory mitigation, such as lead abatement programs.

FOA Description

This FOA aims to advance the technical readiness of eagle detection, classification and impact minimization technologies in order to 1) expand the scientific basis of and number of technical options available for further development and testing (Topic Areas 1 & 2 – described in detail below), and 2) support the field testing and evaluation of near-commercial technologies (Topic Area 3 – described in detail below), which, if successful, will provide wind farm owner-operators with viable and cost effective tools to reduce wildlife impact risks and ease regulatory hurdles.

Topic Areas/Technical Areas of Interest

Topic Area 1 (TA1): Eagle Physiology and Behavior (Required Non-Federal Cost Share: 20%, up to $250k per Award)

Awards under this Topic Area will support research on eagle ability to sense and respond to stimuli, in an effort to identify signals that will serve as optimal deterrents. Awards under this Topic Area may include physiological research, genetics research, and/or behavioral testing to evaluate the ability to sense and respond to stimuli in controlled settings.

Projects should result in an evaluation of potential stimuli, with an identification of stimuli (e.g., light wavelengths or noise within specific frequency bands and intensity) that are deemed to be most likely to elicit a consistent deterrent response in golden and/or bald eagles without causing physical harm to the animals. Although not solely focused on golden eagles, DOE may consider the degree to which the proposed project includes research on golden eagles when making project selections (see Section V.C.i. Program Policy Factors).

Topic Areas/Technical Areas of Interest (TA1)

- Proposals should include a clear justification of the sense(s) (e.g., hearing, vision) selected for evaluation based both on the biology of the focal species and potential for relevant stimuli to serve as a deterrent.

- Projects should be short term (1 year) in duration with the intent of making the data available to Topic Area 2 and Topic Area 3 award recipients as they work to refine their technologies after initial testing.

- Project teams will be expected to submit their results to peer reviewed journals.

- Applicant teams should currently possess permits for this research or demonstrate ability to obtain permits and other necessary approvals (e.g., Institutional Animal Care and Use Committee (IACUC)) soon after the awards are made.

Topic Areas/Technical Areas of Interest

Introduction to Technology Readiness Levels for Topic Areas 2 and 3

Given the range in technical and commercial readiness of impact minimization technologies, this FOA will use a Technology Readiness Level (TRL) approach (see Table 1) to fund work in Topic Areas 2 and 3. This strategy aims to advance technologies across stages of maturity in an effort to stimulate development of novel impact minimization technologies, demonstrate and advance existing concepts, and move advanced-stage designs towards commercialization through rigorous field testing.

Topic Areas/Technical Areas of Interest

TRL 1	Basic Research: Initial scientific research has been conducted. Principles are qualitatively postulated and observed. Focus is on new discovery rather than applications.
TRL 2	Applied Research: Initial practical applications are identified. Potential of material or process to solve a problem, satisfy a need, or find application is confirmed.
TRL 3	Critical Function or Proof of Concept Established: Applied research advances and early stage development begins. Studies and laboratory measurements validate analytical predictions of separate elements of the technology.
TRL 4	Lab Testing/Validation of Alpha Prototype Component/Process: Design, development and lab testing of components/processes. Results provide evidence that performance targets may be attainable based on projected or modeled systems.
TRL 5	Laboratory Testing of Integrated/Semi-Integrated System: System Component and/or process validation is achieved in a relevant environment.
TRL 6	Prototype System Verified: System/process prototype demonstration in an operational environment (beta prototype system level).
TRL 7	Integrated Pilot System Demonstrated: System/process prototype demonstration in an operational environment (integrated pilot system level).
TRL 8	System Incorporated in Commercial Design: Actual system/process completed and qualified through test and demonstration (pre-commercial demonstration).
TRL 9	System Proven and Ready for Full Commercial Deployment: Actual system proven through successful operations in operating environment, and ready for full commercial deployment.

Topic Areas/Technical Areas of Interest (TA2)

Topic Area 2: Prototype Advancement through Laboratory and Small-Scale Field Testing (Required Non-Federal Cost Share: 20%, up to $500k per Award)

This Topic Area will support development and testing activities for bald and golden eagle impact minimization systems, advancing systems from TRL 5/6 at time of application through TRL 7. At minimum, projects awarded under this Topic Area should result in an integrated pilot system that has undergone demonstration testing in the field at the end of their awards.

Under this Topic Area, testing of technology at a wind farm is not required. For example, this Topic Area might support the field testing of a prototype eagle detection or deterrent system in an outdoor environment not associated with a wind facility to establish its ability to reliably detect or reduce eagle activity without habituation.

While wind farm testing is not required, systems that are intended to integrate with the supervisory control and data acquisition (SCADA) system of wind turbines are encouraged to test system integration capabilities. Applicants are also encouraged to evaluate the impact of moving turbine blades on the detection portion of their systems.

Topic Areas/Technical Areas of Interest (TA2)

In order to receive funding under this solicitation, applications will need to credibly demonstrate that the proposed technology has the potential to be an effective and affordable long-term solution for reducing eagle mortality at wind farms compared to current eagle detection and risk minimization methods. For deterrent technology, over the course of project performance demonstration of efficacy should include demonstration of a consistent changes in behavior in response to deterrent stimuli at a scale likely to be sufficient to prevent collisions.

Topic Areas/Technical Areas of Interest (TA2)

Testing Partners, Oversight, Peer Review, and Analysis

Following the announcement and negotiation of awards under this FOA, DOE will coordinate a peer review of testing methodology; ensure, to the greatest extent practicable, that field tests are conducted with standardized research methodology; and provide final independent verification of results.

Additionally, EERE strongly encourages teams to include biologists or consultants capable of conducting the biological field studies associated with demonstrating the impact minimization technology. These biologists or consultants should have appropriate biological expertise, including well-demonstrated experience with designing and conducting successful relevant environmental monitoring or research at wind farms, expertise regarding the species of interest, and expertise in relevant statistical methodology for wind farm environmental impact study design and data analysis.

Topic Areas/Technical Areas of Interest (TA2)

Awardees under Topic Area 2 will be asked to produce an end-of-project analysis of technical performance and of the full costs of the technology. Information regarding system and/or component technical specifications will be protected under this FOA; however, performance results will be made publicly available. Projects under this Topic Area may be up to 2-3 years in duration. Although not solely focused on golden eagles, DOE may consider the degree to which the proposed project includes research on golden eagles when making project selections (see Section V.C.i. Program Policy Factors).

Teams must also already have, or show the ability to obtain, any necessary permits or authorizations in a timely manner. Applications should discuss the types of permits/authorizations anticipated to be required to carry out project scope and plans to obtain such permits/authorizations. Teams must confer with the U.S. Fish and Wildlife Service to determine the appropriate permits, authorizations, or other requirements necessary for the proposed research and wind energy facilities. Note that issuance of a grant from this program does not authorize the take of eagles, does not commit the government to enter into any settlement agreement, and does not in any way affect the enforcement of the BGEPA or other wildlife laws.

Topic Areas/Technical Areas of Interest (TA3)

Topic Area 3: Operational Demonstration and Validation (Required Non-Federal Cost Share: 50%, up to $1.3m per Award)

This Topic Area will support the demonstration of a proposed TRL 7+ bald and golden eagle impact minimization systems at an operational wind facility at a scale sufficient to provide an accurate demonstration of efficacy through a reduction of impact at a reasonable cost. The intent of this Topic Area is to provide final technical improvements and independent verification of system performance prior to commercialization.

Topic Areas/Technical Areas of Interest (TA3)

Projects under this Topic Area should last approximately 3-4 years in duration and are **recommended** to include the following components: 1) initial testing of device effectiveness prior to field testing at operational wind farm; and 2) technical improvements following initial testing. Projects are **required** to include field testing at a **minimum of two geographically distinct wind farms** for a **minimum of two field seasons** with a study design appropriate for meta-analyses across sites and years. DOE anticipates making a Go/No-Go decision after the initial testing and technical improvements, based on an evaluation of initial performance and demonstrated degree of readiness for wind farm trials, including successful receipt of any necessary permits or authorizations to cover these testing activities. Information regarding technical specifications will be treated as set forth in Section VIII, paragraph N. Performance results will be made publicly available.

In order to receive funding under this FOA, applications will need to credibly demonstrate that the proposed technology has the potential to be an effective and affordable long-term solution for reducing eagle mortality at wind farms.

Topic Areas/Technical Areas of Interest (TA3)

Testing at Operational Wind Farms

As stated above, projects awarded under Topic Area 3 will be required to undergo field testing at a **minimum of two geographically distinct wind farms** for a **minimum of two field seasons, preferably at each wind farm,** with a study design appropriate for meta-analyses across sites and years. Applications should include a proposed methodology for the field testing, including identification of response variables.

Projects are encouraged to design study plans that have the power to demonstrate statistically significant reduction in impacts to eagles. However, given the rare nature of eagle mortality at wind farms, projects that propose to demonstrate efficacy using a weight of evidence approach that also incorporates behavioral data and or data on surrogate species may be considered, if a scientifically credible argument can be made for using these metrics as a means to predict effectiveness of reducing bald and golden eagle mortality. For example, projects may propose to use Bayesian methods to demonstrate reduction in posterior risk probabilities. Applications should include a power analysis demonstrating ability to demonstrate a significant reduction in risk to eagles over the course of the study periods.

Topic Areas/Technical Areas of Interest (TA3)

Testing Partners, Oversight, Peer Review, and Analysis

Following the announcement and negotiation of awards under this FOA, where applicable, awardees will work with an entity identified by DOE to: coordinate peer review of testing methodology; ensure, to the greatest extent practicable, that field tests are conducted with standardized research methodology; and provide final independent verification of results. This party may also lead a meta-analysis of system efficacy results across projects. Awardees must execute any necessary nondisclosure agreements with the entity in a timely fashion so that the project may proceed on schedule.

Topic Areas/Technical Areas of Interest (TA3)

Additionally, it will be essential that awardees conduct technology demonstrations at operational wind facilities, and have the active participation and support of the facility operators to ensure safe and effective integration of the impact minimization technology being evaluated, as well as to allow for a full evaluation of the costs associated with implementing the technology. DOE therefore strongly encourages teams to include the following entities during demonstration: 1) a mitigation technology provider, 2) wind facility operators, and 3) biologists or consultants capable of conducting the biological field studies associated with demonstrating the impact minimization technology. These biologists or consultants should have appropriate biological expertise, including well-demonstrated experience with designing and conducting successful relevant environmental monitoring or research at wind farms, expertise regarding the species of interest, and expertise in relevant statistical methodology for wind farm environmental impact study design and data analysis. Teams should also demonstrate strong capacity to commercialize their technologies in a timely fashion.

Topic Areas/Technical Areas of Interest (TA3)

Teams must confer with the U.S. Fish and Wildlife Service to determine the appropriate permits, authorizations, or other requirements necessary for the proposed research and wind energy facilities. Note that issuance of a grant from this program does not authorize the take of eagles, does not commit the government to enter into any settlement agreement, and does not in any way affect the enforcement of the BGEPA or other wildlife laws.

Awardees under Topic Area 3 will be asked to produce an end-of-project analysis of technical performance and of the full costs of the technology. Although not solely focused on golden eagles, DOE may consider the degree to which the proposed project includes research on golden eagles when making project selections (see Section V.C.i. Program Policy Factors).

Non-Responsive Applications

The following types of applications will be deemed nonresponsive and will not be reviewed or considered for an award:

- Applications that fall outside the technical parameters specified in Section I.B of the FOA, including but not limited to :
  - Impact minimizations methods situated in other parts of the mitigation hierarchy, such as pre-construction siting or micrositing impact avoidance measures, compensatory mitigation, such as lead abatement programs, or conservation banking programs.
  - Technologies aimed at mitigating impacts on species other than eagles
  - Applications for proposed technologies that are not based on sound scientific principles (e.g., violates the law of thermodynamics).

Award Information

Total Amount to be Awarded	**$4.1 Million**
Average Award Amount	EERE anticipates making awards that range from up to $250k (TA1); $500k (TA2); $1.3M (TA3)
Types of Funding Agreements	Cooperative Agreements
Period of Performance	12 months (TA1); up to 36 months (TA2); up to 48 months (TA3)
Cost Share Requirement	20% (TA1 and TA2) and 50% (TA3) of Total Project Costs

*Subject to the availability of appropriated funds

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 Recipient for the management, control, direction, and performance of the Project.
- 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 may redirect or discontinue funding the Project based on the outcome of EERE's evaluation of the Project at that the Go/No Go decision point.
- EERE participates in major project decision-making processes.

Cost Sharing Requirements (TA 1 and 2)

The cost share must be at least 20% of the total allowable costs for research and development projects (i.e., the sum of the Government share, including FFRDC costs if applicable, and the recipient share of allowable costs equals the total allowable cost of the project) and must come from non-Federal sources unless otherwise allowed by law. (See 2 CFR 200.306 and 2 CFR 910.130 for the applicable cost sharing requirements.

Cost Sharing Requirements (TA 1 and 2)

Special Cost Share Waiver for Domestic Institutions of Higher Education, Domestic Nonprofit Entities, FFRDCs, or U.S. State, Local, or Tribal Government Entity

The Assistant Secretary for the Office of Energy Efficiency and Renewable Energy has issued a Cost Share Reduction determination pursuant to Section 988(b)(3) of the Energy Policy Act of 2005 that is applicable to certain entities applying under this FOA. Specifically, recipient cost share requirement for applied research and development activities projects is reduced from 20% to 10% 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 Sharing Requirements (TA 3)

The cost share must be at least 50% of the total allowable costs for demonstration projects (i.e., the sum of the Government share, including FFRDC costs if applicable, and the recipient share of allowable costs equals the total allowable cost of the project) and must come from non-Federal sources unless otherwise allowed by law. (See 2 CFR 200.306 and 2 CFR 910.130 for the applicable cost sharing requirements.)

To assist applicants in calculating proper cost share amounts, EERE has included a cost share information sheet and sample cost share calculation as Appendices B and C to this FOA.

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

Allowable Cost Share

- 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
For-profit entities	FAR Part 31
All other non-federal entities	2 CFR Part 200 Subpart E - Cost Principles

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

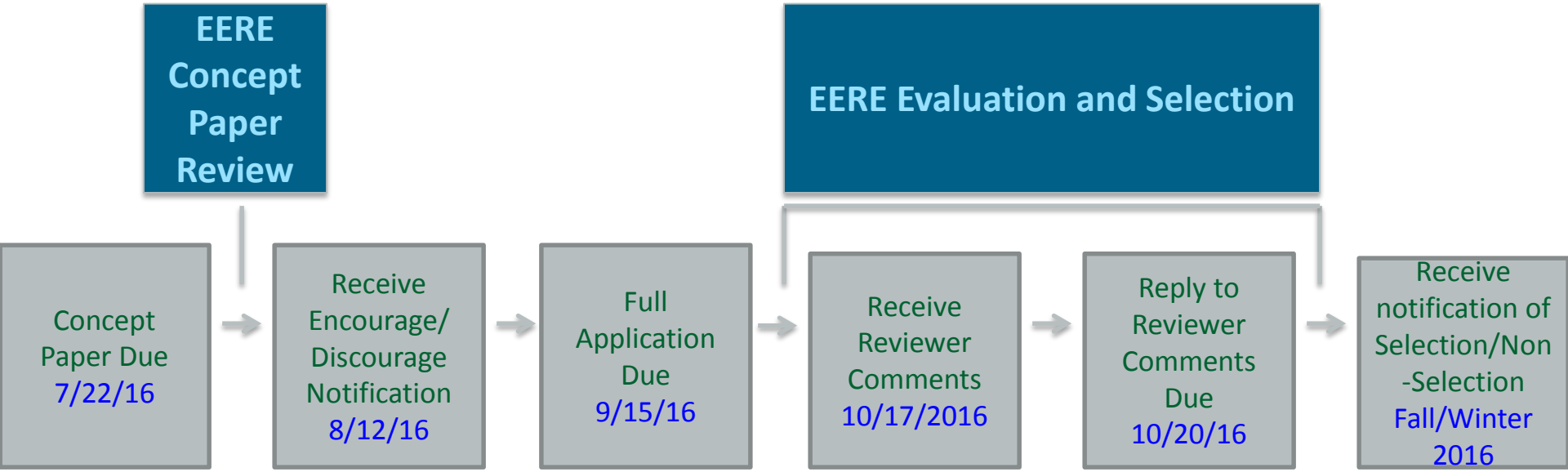
Unallowable Cost Share

- 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

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
- In limited circumstances, and where it is in the government's interest, the EERE Contracting Officer may approve a request by the Prime Recipient to meet its cost share requirements on a less frequent basis, such as monthly or quarterly. See Section III.B.7 of the FOA.

FOA Timeline



EERE anticipates making awards in early 2017

Pre-Selection Interviews

- EERE may invite one or more applicants to participate in Pre-Selection Interviews
- All interviews will be conducted in the same format
- EERE will not reimburse applicants for travel and other expenses relating to the Pre-Selection Interviews, nor will these costs be eligible for reimbursement as pre-award costs
- Participation in Pre-Selection Interviews with EERE does not signify that applicants have been selected for award negotiations

Concept Papers

- Applicants must submit a Concept Paper
  - Each Concept Paper must be limited to a single concept or technology
- The Concept Paper must include a technology description (See Section IV.C of the FOA)
  - The technology description is limited to 5 pages
  - The Concept Paper can also include graphs, charts, or other data (limited to 5 pages)
- Concept Papers must be submitted by 7/22/16 at 5:00pm ET, through EERE Exchange, and must comply with the content and form requirements in Section IV.C of the FOA
- EERE provides applicants with: (1) an “encouraged” or “discouraged” notification, and (2) the reviewer comments

Concept Paper Review

EERE evaluates the Concept Papers based on the following technical review criteria:

Concept Paper Criterion: Overall FOA Responsiveness and Viability of the Project (Weight: 100%)

- The applicant clearly describes the proposed technology, describes how the technology is unique and innovative, and how the technology will advance the current state-of-the-art;
- The applicant has identified risks and challenges, including possible mitigation strategies, and has shown the impact that EERE funding and the proposed project would have on the relevant field and application;
- The applicant has the qualifications, experience, capabilities and other resources necessary to complete the proposed project; and
- The proposed work, if successfully accomplished, would clearly meet the objectives as stated in the FOA.

Full Applications

- The Full Application includes:
  - **Technical Volume**: The key technical submission - info relating to the technical content, project team members, etc.
  - **SF-424 Application for Federal Assistance:** The formal application signed by the authorized representative of the applicant.
  - **EERE 335 Budget & Budget Justification:** a detailed budget and spend plan for the project.
  - **Summary for Public Release**
  - **Summary Slide**
  - **Administrative Documents:** E.g., U.S. Manufacturing Plan, FFRDC Authorization (if applicable), Disclosure of Lobbying Activities, etc

Full Applications: Technical Volume Content

- **Technical Volume: the key technical component of the Full Application**

Content of Technical Volume	Suggested % of Technical Volume
Cover Page	
Project Overview	10%
Technical Description, Innovation and Impact	30%
Workplan	40%
Technical Qualifications and Resources	20%

Full Application Eligibility Requirements

- Applicants must submit a Full Application by 9/15/2016 at 5:00pm ET.
- Full Applications are eligible for review 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
  - The Full Application meets any other eligibility requirements listed in Section III of the 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

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.

Multiple Applications

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

Merit Review and Selection Process (Full Applications)

- 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, to make the selection decisions

Technical Merit Review Criteria

Criterion 1: Technical Merit, Innovation, and Impact (50%)

Technical Merit and Innovation

- Extent to which the proposed technology or process is innovative;
- Degree to which the current state of the technology and the proposed advancement are clearly described;
- Extent to which the application specifically and convincingly demonstrates how the applicant will move the state of the art to the proposed advancement; and
- Sufficiency of technical detail in the application to assess whether the proposed work is scientifically meritorious and revolutionary, including relevant data, calculations and discussion of prior work in the literature with analyses that support the viability of the proposed work.

Impact of Technology Advancement

- How the project supports the topic area objectives and target specifications and metrics;
- The potential impact of the project on advancing the state-of-the-art; and
- The potential of the proposed technology to have broad applicability to the wind industry as a whole, including compatibility with turbines made by more than one manufacturer.

Technical Merit Review Criteria - Continued

Criterion 2: Project Research and Market Transformation Plan (30%)

Research Approach, Workplan and SOPO

- Degree to which the approach and critical path have been clearly described and thoughtfully considered; ad
- Degree to which the task descriptions are clear, detailed, timely, and reasonable, resulting in a high likelihood that the proposed Workplan and SOPO will succeed in meeting the project goals;
- (For Topic Area 2 and Topic Area 3 Applicants Only) The degree of rigor demonstrated in the research plan for testing and demonstrating the effectiveness of the proposed technology;
- Degree to which the applicants demonstrate that they have relevant permits, authorizations, or approvals sufficient to conduct research or have a credible plan to obtain them in a timeframe that will not cause significant project delays; and
- Plan for publication of research results in peer-reviewed literature in an expeditious fashion.

Technical Merit Review Criteria - Continued

Criterion 2, Continued

Identification of Technical Risks

- Discussion and demonstrated understanding of the key technical risk areas involved in the proposed work and the quality of the mitigation strategies to address them.

Baseline, Metrics, and Deliverables

- The level of clarity in the definition of the baseline, metrics, and milestones; and
- Relative to a clearly defined experimental baseline, the strength of the quantifiable metrics, milestones, and a mid-point deliverables defined in the application, such that meaningful interim progress will be made.

Market Transformation Plan (Topic Area 3 Applicants Only)

- Identification of target market, competitors, and distribution channels for proposed technology along with known or perceived barriers to market penetration, including mitigation plan; and
- Comprehensiveness of market transformation plan including but not limited to product development and/or service plan, commercialization timeline, financing, product marketing, legal/regulatory considerations including intellectual property, infrastructure requirements, Data Management Plan, U.S. manufacturing plan etc., and product distribution.

Technical Merit Review Criteria - Continued

Criterion 3: Team and Resources (20%)

- The capability of the Principal Investigator(s) and the proposed team to address all aspects of the proposed work with a high probability of success. The qualifications, relevant expertise, and time commitment of the individuals on the team;
- The sufficiency of the facilities to support the work;
- The degree to which the proposed consortia/team demonstrates the ability to facilitate and expedite further development and commercial deployment of the proposed technologies;
- The level of participation by project participants as evidenced by letter(s) of commitment and how well they are integrated into the Workplan; and
- The reasonableness of the budget and spend plan for the proposed project and objectives.

Replies to Reviewer Comments

- EERE provides applicants with reviewer comments
- Applicants are not required to submit a Reply - it is optional
- To be considered by EERE, a Reply must be submitted by 10/20/16 at 5:00pm ET and submitted through EERE Exchange
- Content and form requirements:

Section	Page Limit	Description
Text	2 pages max	Applicants may respond to one or more reviewer comments or supplement their Full Application.
Optional	1 page max	Applicants may use this page however they wish; text, graphs, charts, or other data to respond to reviewer comments or supplement their Full Application are acceptable.

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

Program Policy Factors

- The Selection Official may consider the following program policy factors in making his/her selection decisions:
  - The degree to which the proposed project, including proposed cost share, 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; and
  - The degree to which the proposed project includes research on golden eagles.

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 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

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

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

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 cancellation of further award negotiations and rescission of the Selection

Questions

- Questions about this FOA? Email EagleImpact@ee.doe.gov
  - All Q&As related to this FOA will be posted on EERE Exchange
    - You must 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