



**Innovative Solutions for Fish
Passage at Hydropower Dams**
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**FOA Webinar
DE-FOA-0001662
October 5, 2017**



Innovative Solutions for Fish Passage at Hydropower Dams

Anticipated Schedule:

FOA Issue Date:	9/21/2017
FOA Informational Webinar:	10/5/2017
Submission Deadline for Concept Papers:	10/23/2017
Submission Deadline for Full Applications:	12/7/2017 5:00pm ET
Submission Deadline for Replies to Reviewer Comments:	1/23/2018 5:00pm ET
Expected Date for EERE Selection Notifications:	March 2018
Expected Timeframe for Award Negotiations:	March 2018 – June 2018

Notice

- All applicants are strongly encouraged to carefully read the Funding Opportunity Announcement [DE-FOA-0001662](#) (“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 HydroNextFOA@ee.doe.gov.

Notice

- NO NEW INFORMATION OTHER THAN THAT PROVIDED IN THE FOA WILL BE DISCUSSED IN THE WEBINAR.
- There are no particular advantages or disadvantages to the application evaluation process with respect to reviewing this presentation.



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

- Hydropower is a key component to strengthening the American economy and energy security, and DOE's Water Power Technologies Office (WPTO) is poised to ensure that the fleet continues to generate clean electricity and provide grid stability and bulk storage.
- The WPTO is committed to lowering the cost of hydropower deployment and significantly reducing the environmental footprint and impacts of new and existing technologies. Realizing the potential for future hydropower growth and optimization of the existing fleet in the United States, however, will require overcoming a number of key technological, environmental, and market challenges.
- This funding opportunity seeks to address these challenges as they relate to upstream and downstream fish passage at hydropower dams.

FOA Description

Fish Passage

- Safe and effective fish passage is often a mandatory license requirement for hydropower projects regulated by the Federal Energy Regulatory Commission (FERC).
- These requirements are typically prescribed by resource agencies with regulatory authority such as the National Marine Fisheries Service or the U.S. Fish and Wildlife Service during licensing or relicensing.
- There are nearly 400 existing FERC-licensed hydropower projects that are expected to undergo relicensing in the next 13 years.

FOA Description

- While existing technologies for upstream and downstream passage (such as fish lifts, ladders, and screens) are well-understood for certain species and/or locations, available designs are typically site specific and capital intensive.
- Further, operation of conventional fish passage designs may require bypassing large volumes of water, adversely affecting potential power generation, project revenues, and the ability to operate flexibly in response to the changing demands of the electrical grid.
- High costs of constructing and operating fish passage facilities are disproportionately challenging for developers of smaller hydropower projects in particular, where the cost of fish passage comprises a larger percentage of total project costs.

FOA Description

- Overall, fish that encounter hydropower dams during migrations or other movements add complexities to site management which often results in increased costs.
- Providing safe and efficient upstream fish passage for fish species of concern (e.g. Endangered Species Act-listed fish, adult American eel, and migratory fish) is especially challenging if passage technologies were originally designed for different target species/sites, thus increasing the likelihood that passage facilities may be ineffective at a particular site.
- Further, new technologies cannot be approved for sites if data and information about their effects on fish are not quantified and established.

FOA Description

- Detection, sorting, counting, and identification of fish at passage facilities are essential to site operations, ensuring regulatory compliance, and meeting fisheries management goals and objectives. However, these functions may be hindered by unpredictability in the timing of fish species movements and migrations or when multiple species arrive at a dam at the same time.
- Current technologies for understanding fish arrival and movements at or near hydropower dams primarily rely on human observation or fish tagging which are labor and/or cost intensive. In addition, many conventional technologies for managing fish passage utilize handling, removing fish from water, and crowding fish into temporary holding tanks which may create stressful environments.
- Therefore, cost-effective technologies that provide information about timing of fish migrations, the quantities of fish, and the types of fish that utilize fish passage facilities are essential to advance real-time monitoring efforts and optimized fish passage operations.

FOA Description

- In addition, technologies and techniques that direct fish to the entrances of passage structures and away from turbine intakes and tailraces are key components of optimal operation of fish passage facilities but may take many years of study, iterations, and design changes to be effective.
- When conventional attraction and guidance technologies are unsuccessful at a site, fish may become exhausted or disoriented searching for passage entrances, thus increasing susceptibility to predation, or may fail to migrate entirely. At some sites, despite many years of study, attraction and guidance technologies are still ineffective and therefore innovative solutions are needed.

FOA Description

- Therefore, more research is needed for improving fish passage technologies, both in terms of cost and efficiency, for many fish species among different river systems.
- Through these topic areas, the WPTO is looking to fund research focused on innovative upstream and downstream fish passage solutions to effectively provide volitional fish passage while reducing both construction and operational costs compared to existing methods.
- In this context, volitional upstream passage means that fish will be migrating around a dam through a ladder, lift, or other passage system without human intervention (e.g. trap and haul).

FOA Description

- This research will provide basic information and data on:
 - the effects of innovative technologies on fish (Topic Area 1);
 - advances in detection, sorting, and counting techniques that can be applied to fish passage (Topic Area 2, Subtopic 2.1);
 - and improvements in fish guidance/attraction to optimize passage (Topic Area 2, Subtopic 2.2).
- Applying innovation to fish passage technology design points, including function and modularity, can help drive the future development of devices and systems with improved environmental performance and lower costs.

Topic Areas/Technical Areas of Interest

During the period of performance, projects awarded in Topic Area 1 must demonstrate how their technology can safely and effectively move fish either upstream or downstream of a dam and how construction and operational costs can be reduced by conducting a case study in which the proposed innovation is compared to a reference site with existing fish passage. Proposed technologies should also demonstrate broad applicability to a variety of different hydropower sites by applying concepts of modularity, adjustability, and scalability.

Applicants will propose their concept and identify the following:

- Target fish species
- Target river system or region, if applicable
- Head/flow boundaries of applicable dam(s).



Topic Areas/Technical Areas of Interest

The proposal should include a plan to develop a prototype and/or test the effects of an innovative fish passage technology on fish. Preference will be given to proposals that target species of concern such as Endangered Species Act (ESA)-listed species, adult American eel, migratory fish species, and/or utilize advanced manufacturing.

DOE/NNSA Federally Funded Research and Development Centers (FFRDCs) and DOE Government-Owned, Government-Operated laboratories (GOGOs) are not eligible to apply for funding as Primes within Topic Area 1.

The DOE national laboratories' experience and resources will be available to perform testing, and applicants are encouraged to pair with a national laboratory to achieve the goals established.

Topic Areas/Technical Areas of Interest

- ***Subtopic 1.1: Testing Effects of Innovative Upstream Fish Passage Technologies***

This subtopic will cover innovative upstream volitional fish passage technologies.

Proposals must include a plan to develop a prototype and/or test the effects of the innovative upstream passage technology on fish.

- ***Subtopic 1.2: Testing Effects of Innovative Downstream Fish Passage Technologies***

This subtopic will cover downstream volitional fish passage technologies. Proposals must include a plan to develop a prototype and/or test the effects of the innovative downstream passage technology on fish.

Topic Areas/Technical Areas of Interest

Topic Area 2: Advancing Innovative Methods and Technologies to Improve Fish Passage: Up to 2 awards, up to \$450,000 each, 20% cost share, 1 Budget Period, 9-12 months.

This topic area is focused on technological advancements and research that can improve the efficacy and efficiency of volitional fish passage. Innovations in this context can refer to improvements in detection, sorting, counting, and/or identification of fish that have the ability to improve operations and monitoring and improvements in fish attraction and/or guidance technologies. Technologies are considered innovative if they have the ability to reduce the cost of materials or operations compared to traditional methods or technologies. Awardees must demonstrate the applicability of their design and/or technology to existing or new fish passage technologies and how it will improve the efficiency and cost effectiveness of these technologies and/or designs.

Topic Areas/Technical Areas of Interest

The primary objective is to support the development of a prototype and/or testing of technologies that can demonstrate broad applicability to a variety of different hydropower sites (e.g. via modularity, adjustability, scalability, etc.).

Applicants will propose their concept and identify the following:

- Target fish species
- Target river system or region, if applicable
- Head/flow boundaries of applicable dam(s).

Preference will be given to proposals that target species of concern such as Endangered Species Act (ESA)-listed species, adult American eel, migratory fish species, and/or utilize advanced manufacturing. In cases where ESA species cannot be tested, a suitable surrogate should be identified.

Topic Areas/Technical Areas of Interest

Subtopic 2.1: Improvements in Detection, Sorting, Counting, and/or Identification of Fish for Fish Passage

This subtopic will cover development of a concept and/or testing of a concept related to innovative technologies that improve the ability to remotely and/or autonomously detect, sort, count, and/or identify fish species or sizes for upstream or downstream passage. Innovations in this context can refer to new designs or techniques for volitional fish passage, as well as improvements that work with existing volitional fish passage technologies. Proposals can be related to sensors for detection, counting, or sorting of non-tagged fish, or algorithms and machine learning for advanced identification and/or sorting of species, age class, and/or size, among other advancements. Examples of developing a concept for this subtopic include, but are not limited to:

Topic Areas/Technical Areas of Interest

- Identification of devices and/or sensors from other industries with potential for fish passage;
- Development of new algorithms or machine learning techniques with potential to be applied to fish passage; or
- Developing and improving existing algorithms or machine learning techniques for fish passage.

Technologies or methods that utilize fish tagged with Passive Integrate Transponder (PIT), radio frequency identification (RFID), acoustic telemetry tags, and radio telemetry tags, or other electronic animal tagging technologies will *not* be considered.

Topic Areas/Technical Areas of Interest

The proposal must include a plan to develop a concept and/or apply the concept to new devices, techniques, or improvements to existing technologies that can be used for identification, sorting, or classification of non-tagged fish that increase the efficiency or efficacy of fish passage. Awardees must demonstrate the applicability of their concept to new or existing fish passage technologies. Applicants that seek to utilize technologies developed for other industries (e.g. recycling, food, and/or other products) that could be applied to improve fish passage are encouraged.

Topic Areas/Technical Areas of Interest

Subtopic 2.2: Improvements in Fish Attraction and Guidance for Fish Passage

This subtopic will cover development of a prototype and/or testing of improvements in fish attraction and/or guidance to ensure passage facilities are operated in a manner that maximizes efficacy and efficiency. Facilities innovations in this context can refer to new designs or techniques, as well as improvements that work with existing volitional fish passage technologies. Proposals can be related to designs or technologies that seek to improve upstream and/or downstream passage efficiencies and/or reduce the amount of water, among other advancements.

Topic Areas/Technical Areas of Interest

The proposed passage system technology must include a plan to develop a prototype and/or test improvements to fish passage efficiency that can be achieved through attraction/guidance technologies or methods.

For Topic Areas 1 and 2:

Working with ESA-listed species and/or conducting fieldwork may require special permits. Such permits will be the recipient's responsibility to procure. Applicants should list any relevant permits that they already have in their application. Applicants are encouraged to partner with institutions that already have relevant permits.

Within each Topic Area, applicants should specify which Subtopic their proposal applies to or if it applies to both Subtopics.

All work under EERE funding agreements must be performed in the United States. See Section IV.J.3 and Appendix C.

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:
 - Applications for proposed technologies that are not based on sound scientific principles (e.g., violates the law of thermodynamics).
 - Applications for proposed Marine Hydrokinetic technologies will *not* be considered as defined by [EISA 2007, Section 633](#).

Non-Responsive Applications

- **Topic Area 1:** Technologies or methods that propose improvements to new turbine designs will *not* be considered.
- **Topic Area 2:** Technologies or methods that utilize fish tagged with Passive Integrate Transponder (PIT), radio frequency identification (RFID), acoustic telemetry tags, and radio telemetry tags, or other electronic animal tagging technologies will *not* be considered.
- **Topic Areas 1 and 2:** Technologies or methods that propose improvements to physical barriers for fish exclusion (e.g. fixed or moveable screens, nets, and/or curtains) or testing with physical barriers will *not* be considered.



Award Information

Total Amount to be Awarded	\$2,500,000
Average Award Amount	Topic Area 1: EERE anticipates making 1-2 awards with an average award amount of up to \$800,000 each. Topic Area 2: EERE anticipates making 1-2 awards with an average award amount of \$450,000 each.
Types of Funding Agreements	Cooperative Agreements
Period of Performance	Topic Area 1: 9 to 18 months Topic Area 2: 9 to 12 months
Cost Share Requirement	20% of Total Project Costs 10% if Cost Share Waiver is utilized

*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 participates in major project decision-making processes.



Cost Sharing Requirements

- Applicants must contribute a minimum of 20% of the total project costs for R&D projects.
- ***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



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

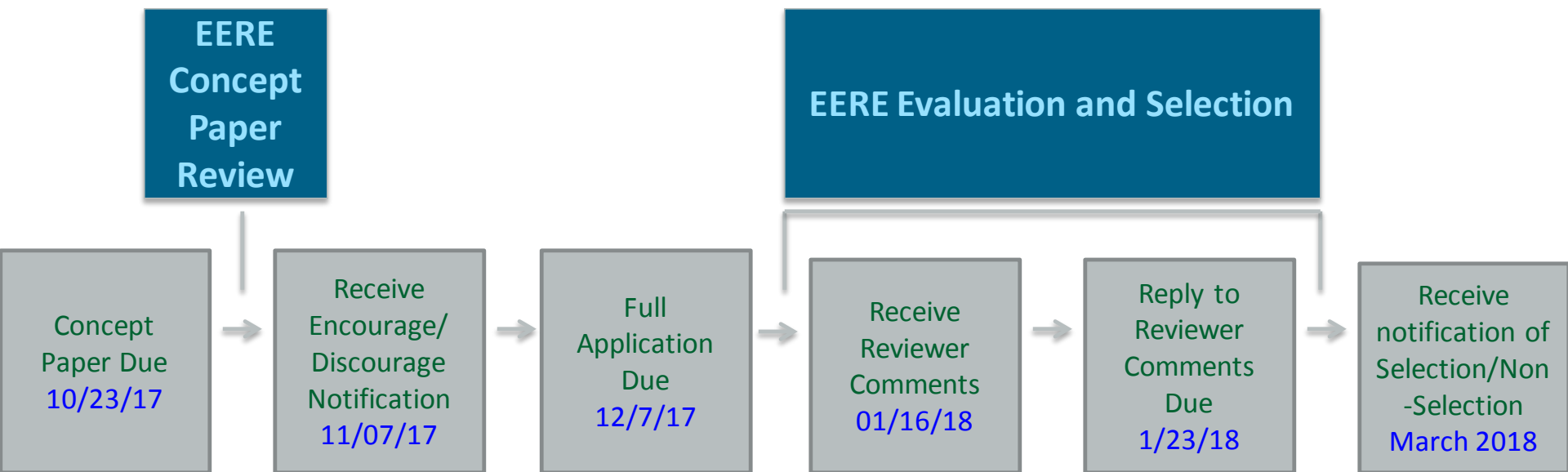


Cost Share Payment

- 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 between March 2018 – June 2018



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 **3** pages
 - The Concept Paper can also include graphs, charts, or other data (limited to **3** pages)
- Concept Papers must be submitted by [10/23/2017, 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

Concept Papers are evaluated based on consideration of the following factors:

- **Overall FOA Responsiveness and Viability of the Project**
- 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.
 - **SF-424A 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 [12/7/2017](#)
- 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.

Who's Eligible to Apply?

Federally Funded Research and Development Centers (FFRDCs):

- **Topic Area 1:** DOE/NNSA Federally Funded Research and Development Centers (FFRDCs) are **NOT** eligible to apply for funding as a Prime Recipient, but they may apply as a Subrecipient.
- **Topic Area 2:** DOE/NNSA Federally Funded Research and Development Centers (FFRDCs) are eligible to apply for funding as a Prime Recipient or a Subrecipient.

Non-DOE/NNSA FFRDCs are eligible to apply for funding as a Subrecipient, but are not eligible to apply as a Prime Recipient.

Federal agencies and instrumentalities (other than DOE) are eligible to apply for funding as a Subrecipient, but are not eligible to apply as a Prime Recipient.



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 (40%)

Technical Merit and Innovation

- Extent to which the proposed technology or process is innovative and has the potential to advance the state of the art;
- 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.



Technical Merit Review Criteria

Criterion 1, Continued

Impact of Technology Advancement

- How the project supports the topic area objectives and target specifications and metrics; and
- The potential impact of the project on advancing the state of the art.
- Degree to which the technology can demonstrate reduced construction and operational costs compared to existing fish passage; and
- Degree to which the proposed fish passage technologies demonstrate broad applicability to a variety of different hydropower sites by applying concepts of modularity, adjustability, and scalability.

Technical Merit Review Criteria - Continued

Criterion 2: Project Research and Commercialization Plan (40%)

Research Approach and Workplan

- Degree to which the approach and critical path have been clearly described and thoughtfully considered; and
- Degree to which the task descriptions are clear, detailed, timely, and reasonable, resulting in a high likelihood that the proposed Workplan will succeed in meeting the project goals.

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 mid-point deliverables defined in the application, such that meaningful interim progress will be made.

Technical Merit Review Criteria - Continued

Criterion 2, Continued

Market Transformation Plan

- 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 commercialization 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 and Open Source Software Distribution 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 good chance of success. Qualifications, relevant expertise, and time commitment of the individuals on the team;
- The sufficiency of the facilities to support the work;
- Degree to which the proposed consortia/team demonstrates the ability to facilitate and expedite further development and commercial deployment of the proposed technologies;
- Level of participation by project participants as evidenced by letter(s) of commitment and how well they are integrated into the Workplan; and
- Reasonableness of budget and spend plan for 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 [1/23/2018, 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 exhibits technological diversity when compared to the existing DOE project portfolio and other projects selected from the subject FOA;
 - The level of industry involvement and demonstrated ability to accelerate commercialization and overcome key market barriers;
 - The degree to which the proposed project, or group of projects, represent a desired geographic distribution (considering past awards and current applications);
 - 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;

Program Policy Factors

- The degree to which the proposed project will maximize deployment or replication based on the application of the solution or strategy; and
- The degree to which the proposed project targets species of concern such as ESA-listed species, adult-American eel, or migratory-fish species and/or utilize advanced manufacturing.



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 HydroNEXTFOA@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