

**U.S. Industry Opportunities for Advanced
Nuclear Technology Development
Funding Opportunity Number: DE-FOA-0001817
Industry Funding Opportunity Announcement (FOA) Introductory Questions and Answers**

Please revisit answers as they may have been updated since your last visit (updates are in red). New questions/answers are added at the end of the document.

Updated: October 4, 2022

#	Question	Answer
	During the webinar and subsequent Q&A processes, we have received a number of requests for the Department to identify whether specific proposed work activities might be eligible for award under the various proposal pathways of the FOA.	Determining the relevancy of the proposal to the goals of the FOA is the responsibility of the applicant. The applicant is requested to carefully read the FOA and make their own determination regarding the potential applicability of the proposal.
1	The scope of this FOA seems to be incredibly broad. Is the DOE focused on any particular areas of nuclear technology development?	No, this FOA was intentionally crafted to allow the widest spectrum of potential applications possible from U.S. nuclear industry entities involved in developing advanced nuclear technologies. In doing so, the DOE can provide the broadest opportunity for industry to receive support on innovative concepts that are best suited to support the accelerated development and commercialization of new reactor designs, as well as the improvement of existing reactors.
2	What opportunities are included in this “industry-focused” FOA?	The FOA provides a direct vehicle for U.S. nuclear industry support through 3 distinct application pathways: 1- <u>First of a Kind Nuclear Demonstration Readiness Projects</u> – Applications under this pathway should address major advanced reactor design development projects or complex technology advancements for existing plants which have significant technical and licensing risk. 2- <u>Advanced Reactor Development Projects</u> – Applications will lead directly to advances in the innovation and competitiveness of a broad set of domestic nuclear reactor designs and technologies.

#	Question	Answer
		<p>3- <u>Regulatory Assistance Grants</u> – Cost-shared grants will be awarded for applicants seeking funds in support of work with the U.S. Nuclear Regulatory Commission (NRC) to resolve design driven regulatory issues, review topical reports or papers, and/or other efforts focused on obtaining certification and licensing approvals.</p>
3	<p>Will activities proposed under the First of a Kind Nuclear Demonstration Readiness Projects need to involve the certification or licensing of a new technology?</p>	<p>Yes, these projects are expected to involve the proposed new technologies clearing the final regulatory hurdles prior to deployment. However, the scope of work proposed for Government cost share is anticipated to be much broader, and include activities such as design development, design finalization, engineering and technology development, resolving supply chain issues, and manufacturing/prototyping activities.</p>
4	<p>Can Regulatory Assistance Grants be used to support efforts that do not result in a certification or license?</p>	<p>Yes, Regulatory Assistance Grants may be applied to early stage development work activities that address potential regulatory concerns for a project, but the proposed work does not need to result in a license.</p>
5	<p>Are Technology Vouchers included as a part of this FOA?</p>	<p>Not directly. DOE NE will continue to provide support for nuclear technology development similar to that provided by the GAIN Small Business Voucher Pilot Program that was initiated in 2016. Although currently not part of this FOA, the NE voucher program is now available to assist U.S. industry to support nuclear energy innovation. If you are interested in access to these capabilities utilizing the NE voucher program, please visit the link: https://gain.inl.gov/SitePages/Nuclear%20Energy%20Vouchers.aspx for information on how to apply.</p>
6	<p>What is the expected amount of DOE program funding per year?</p>	<p>The amount of funding available in the various programs supporting projects under this FOA will always be subject to congressional appropriations. However, in the first year of this FOA (FY18), NE hopes to establish awards totaling up to approximately \$30 M, and this could be higher or lower depending on the final FY18 budget. Refer to Q#161 for FY 21 funding.</p>

#	Question	Answer
7	What is the total expected DOE program funding for this FOA?	The total expected funding for all awards over the five-year period is approximately \$400 million, contingent upon congressional appropriations. This value was updated to \$250 million.
8	What amount of DOE program funding is expected to be available for an individual award for First of a Kind Nuclear Demonstration Readiness Projects?	NE anticipates making up to 1-2 awards with each individual project receiving a minimum of \$10 million not to exceed \$40 million (excluding recipient's cost share). Update: 0-3 per FY expected number of awards under pathway 1 and the Federal floor was updated to \$5 million and Federal Ceiling of \$20 million. The federal floor for pathway 1 has been reduced to \$1M.
9	What amount of DOE program funding is expected to be available for an individual award for Advanced Reactor Development Projects?	NE anticipates making up to 3-6 awards annually with each individual project receiving a minimum of \$500 K not to exceed \$10 million (excluding recipient's cost share). Update: The expected number of awards under pathway 2 Advanced Reactor Development Projects to 1-3 per FY.
10	What amount of DOE program funding is expected to be available for an individual award for Regulatory Assistance Grants?	NE anticipates making 10 - 20 awards annually with no individual award expected to exceed \$500 K. Update: The expected number of awards under pathway 3 Regulatory Assistance Grants to be 1-5 per FY.
11	What is the anticipated period of performance for the project?	<p><u>First of a Kind Nuclear Demonstration Readiness Projects:</u> DOE anticipates making cooperative agreement awards with an estimated project period of performance of up to three years.</p> <p><u>Advanced Reactor Development Projects:</u> DOE anticipates making cooperative agreement awards with an estimated project period of performance of up to two years.</p> <p><u>Regulatory Assistance Grants:</u> DOE anticipates making grant awards with an estimated project period of performance for approximately one year.</p>
12	Can previous work be submitted in an application or used for cost share?	No, this FOA is only for new work. However, prior work done may permit/facilitate the accomplishment of new work proposed in

#	Question	Answer
		applications to this FOA. Prior work may not be re-performed under the award or count for cost share.
13	Is a not-for-profit industry group (with eligible member companies) eligible to be the applicant?	Yes, all U.S. entities are eligible for award in accordance with 2 CFR 910.126(b).
14	If the prime applicant is a U.S.-based company or entity, can a foreign based subsidiary or sub-contractor qualify to participate in the FOA?	The prime applicant is restricted to U.S. entities; however foreign entities may be subrecipients, subawardees, vendors, or team members of the prime/lead applicant.
15	How does the flow of funds work for subcontractors? Do grant funds come through a prime applicant?	The flow of funds for all of the application pathways is through the prime applicant, unless a subcontractor is a Federally Funded Research and Development Centers (FFRDC); DOE FFRDCs will be provided funding separately by DOE under their existing DOE contracts.
16	What percentage can be performed by an FFRDC in support of the prime applicant?	The FFRDC is allowed to perform up to 49% of the scope of work.
17	Will the applicant be required to provide a cost-share investment?	Yes, industry cost share is required for all potential awards made under this FOA. (See 2 CFR 200.306 and 2 CFR 910.130 for the applicable cost sharing requirements).
18	How do I determine cost share amount that my project would be eligible to receive?	The applicant should determine the technology maturity/readiness of their application. However, the Department will consider the type of research being proposed (i.e., basic, applied, or demonstration) and will make a final determination regarding the type of research being proposed and the percentage of cost-share to be provided. In these cases, the determination of the Department will be considered final.
19	Can "in-kind" contributions be used for the cost share?	Yes, subject to the conditions described in 2 CFR 200.306.
20	Can one company submit more than one application?	Applicants may submit more than one application under this FOA (with a limit of two applications per quarterly review cycle).
21	Can one company submit multiple applications in one topical area?	Applicants may submit more than one application under this FOA (with a limit of two applications per quarterly review cycle). Each application must describe a unique project, with distinct applicability to industry needs, and must clearly demonstrate that the applicant has sufficient resources (i.e., personnel, cost-share, facilities, etc.) to successfully manage the award.

#	Question	Answer
22	How many awards can one company receive?	An applicant is allowed no more than two (2) active awards resulting from this FOA. Once a current award is complete, the applicant is eligible to receive a new award if selected. Update: The applicant is considered to be the prime recipient and is allowed no more than, two (2) active awards resulting from this FOA, unless one or more of the awards is a Pathway 3 award, in which case the applicant is allowed no more than three (3) active awards.
23	Is a Letter of Intent (LOI) required for participation?	No.
24	What are the deadlines for submission for this FOA?	This FOA is expected to be continuously open (with modifications as needed) for up to five years and will provide applicants the opportunity to submit new applications for consideration at any time while the solicitation is open. These applications will be reviewed on a nominal quarterly basis. The due dates are January 31; April 30; July 31; and October 31 at 5:00:00 pm ET. Update: In order to meet the nominal twice yearly DOE reviews, applications should be submitted in accordance with the due dates below each year the FOA remains open, as follows: Due Date: April 30 at 5:00:00 p.m. ET Due Date: September 30 at 5:00:00 p.m. ET Note: There will only be <u>one</u> application cycle for FY2021, due April 30
25	When will DOE announce selections?	DOE anticipates making selection announcements no later than 60 days after the applications are due. Update: DOE anticipates making selection announcements no later than 120 days after the applications are due.
26	When will DOE make awards?	If an application is selected for award, the applicant will receive an award after negotiations are complete and the Contracting Officer executes the funding agreement, accessible by the Prime Recipient in FedConnect.
27	What is the typical time it takes to complete negotiation?	This will depend on the complexity of the application (i.e. applying for a first of a kind demonstration v. regulatory assistance grant); number of sub-recipients; and other factors.
28	Are pre-award costs allowed?	Recipients must request and receive prior written approval from the contracting officer to incur any reimbursable pre-award costs. Pre-

#	Question	Answer
		award costs are incurred at the applicant's risk. DOE is under no obligation to reimburse such costs to an applicant who, for any reason, does not receive an award or receives an award for a lesser amount than the applicant expected. Pre-award costs cannot be incurred prior to the Selection Announcement.
29	Is the "Ask a Question" feature in FedConnect the best way to ask questions about the FOA?	No, questions regarding the content of the funding opportunity announcement must be emailed to IndustryFOA@id.doe.gov .
30	Where will the questions/answers on the FOA be posted and publically available?	Frequently Asked Questions (FAQ) will be posted at the www.id.doe.gov website.
31	Will there be a webinar/conference to explain the FOA requirements?	Yes, DOE will conduct a webinar on January 9, 2018 at 1:00 p.m. ET covering project details and FOA application instructions. Attendance is not mandatory and will not positively or negatively impact the overall review of any applicant submissions.
	Added December 21, 2017	
32	<p>First paragraph in Section I.B. Can you please clarify the meaning of "these technologies" in the following sentence? It is a rather long sentence, and it is difficult to understand what "these technologies" refer to.</p> <p><i>"These activities may include development of technologies that improve the capability of the existing fleet, methods to improve the timelines for advanced reactor deployments, the cost and schedule for delivery of nuclear products, services, and capabilities supporting these nuclear technologies, design and engineering processes, and resolution of regulatory/certification issues potentially impeding the introduction of these technologies into the marketplace"</i></p>	The reference to "these nuclear technologies" refers to technology development activities that the applicant may decide to propose to the Department for award under this FOA. There is a list underneath this statement that identifies topical areas under which applicants may wish to propose technology development work that would result in nuclear industry innovations and improvements. The scope of the FOA is intentionally broad to allow the widest spectrum of potential applications possible from U.S. nuclear industry entities.

#	Question	Answer
33	<p>Second paragraph in Section IV.C, when saying: <i>“Each Application shall be limited to a single concept or technology. Unrelated concepts and technologies shall not be consolidated in a single application”</i>. What is the definition of “concept”, vs “technology”? Can the application be about the development of, for example, two devices that are key for the development of a specific GenIV technology, but that are unrelated to each other?</p>	<p>The statement “concept or technology” implies thoughts, ideas, plans, machinery, or equipment that might be developed from the application of scientific knowledge and submitted to the Department for consideration. The statement implies that the Department wishes to support proposals that address discrete “concepts or technologies” as opposed to multiple unrelated concepts and technologies. This being the case, if the applicant wished to apply for funding for two unrelated devices, the applicant should submit two applications.</p>
34	<p>Can you please clarify whether applications to the “Advanced Reactor Development” pathway can be about a technology supporting the existing fleet? Section I.C.2 says: “ (...) support for applications involving concepts and ideas that they believe are best suited to improving the capabilities and commercialization potential of advanced reactor designs and technologies”, whereas Section IV.D.5 says “For Advanced Reactor Development projects, applicants should include a technical description that provides a general understanding of the technology being proposed, and how the technology will be implemented into the existing fleet or advanced reactor design”.</p>	<p>The Advanced Reactor Development pathway would allow applicants to propose projects that focus on innovative improvements in existing fleet operations and performance, as well as advanced reactor designs and technologies. DOE will consider clarifying this language in updates to the FOA in the future.</p>
35	<p>Please clarify the length of the Project Narrative file for Advanced Reactor Development projects. The table in Section IV.C says that it is 15 pages, whereas at the very end of Section IV.D.5 it says that it is 25 pages</p>	<p>Advanced Reactor Development projects have a 25-page narrative limit. (When the FOA is amended, this language will be updated.)</p>
36	<p>Please confirm whether references are included in the page count for the project narrative? On this regard, Section IV.D.5 says that: <i>“References are included in the page limits”</i>, whereas the 4th bullet in Section IV.B does not mention references in the list of sections included in the page count, i.e. <i>“Each submission must not exceed the specified maximum page limit, including cover page, charts, graphs, maps, and photographs when printed</i></p>	<p>References are included in the page limits.</p>

#	Question	Answer
	<i>using the formatting requirements set forth above and single spaced</i>	
37	In Section IV.D.22 the following sentence seems misplaced, and it is not entirely clear what it means: <i>“In an appendix to the Budget Justification, the following information for each commitment has been signed”</i> .	Commitment letters from third parties should be uploaded in the “Commitment Letters from Third Parties Contribution to Cost Sharing” section of the application form. Budgetary information concerning third party cost sharing should be included in the Budget Justification document.
38	In Section V.D.2, the FOA says: <i>“Prior to making a Federal award with a total amount of Federal share greater than the simplified acquisition threshold”</i> . Can you please clarify what this “simplified acquisition threshold” is?	<p>“Simplified acquisition threshold” means \$150,000 (41 U.S.C. 134), except for–</p> <p>(1) Acquisitions of supplies or services that, as determined by the head of the agency, are to be used to support a contingency operation or to facilitate defense against or recovery from nuclear, biological, chemical, or radiological attack (41 U.S.C. 1903), the term means–</p> <p>(i) \$750,000 for any contract to be awarded and performed, or purchase to be made, inside the United States; and</p> <p>(ii) \$1.5 million for any contract to be awarded and performed, or purchase to be made, outside the United States; and</p> <p>(2) Acquisitions of supplies or services that, as determined by the head of the agency, are to be used to support a humanitarian or peacekeeping operation (10 U.S.C. 2302), the term means \$300,000 for any contract to be awarded and performed, or purchase to be made, outside the United States.</p>
39	I presume that the statement (Section III.D): “Applicants may submit multiple applications under this FOA (with a limit of two applications per quarterly review cycle)” does NOT include GAIN proposals.	The GAIN NE voucher program is part of a separate Request for Applications and has its own eligibility and submission requirements. Please refer to the NE Voucher RFA at gain.inl.gov . Applications for the GAIN NE voucher program will not count against the application limit for this FOA.
40	In a situation in which the FFRDC/NL has 49% of the work, can the prime still subcontract with other entities even though the FFRDC/NL may then end up with the majority of the work? That is, the FFRDC/NL may have 49%, and the remaining 51% might be	If utilizing an FFRDC/National Laboratory contractor, the FFRDC/National Laboratory scope of work may not exceed 49% of the total scope of work to be performed. The prime recipient must perform a minimum of 35% and the remaining percentage will be

#	Question	Answer
	split 30%, 15%, 6% among the prime and two other subcontractors.	performed by any subrecipients and can be split in any way the applicant sees fit to accomplish the proposed work.
41	The FAQs posted to the web site indicate that non-profits are eligible for apply for an award. At the top of page 4 of the FOA (Section I.C.1), however, it states that “Awards for these projects (FOAK Demo Projects) will be made in the form of cost-shared cooperative agreements with a domestic technology developer and/or utility customer(s), with provisions for appropriately selected team members as subrecipients (see eligibility requirements listed in Section III A).” Does that imply that non-profits are excluded from leading a Demonstration Pathway projects unless they are a technology developer or utility?	No, the terminology is inclusive of non-profits. However, the non-profit organization would need to assure the Department that it had access to the staff, capabilities and means to accomplish the objectives of a project under this pathway.
42	Section III.F notes the period of performance for awards. For example, advanced reactor development projects list an estimated period of performance of up to two years. The word “estimated” makes it sound like there might be some leeway, but the phrase “up to two years” implies that the projects will not be longer than two years. Will there be any flexibility in period of performance?	The estimated period of performance of 'up to two years' means a maximum of two years can be requested but less time can be requested. There isn't flexibility in the award period.
43	Does the limit of only two applications per entity per quarterly review cycle apply to just prime applicants?	Yes, the limit is only applicable to prime applicants.
	Added January 4, 2018	
44	Will there will be a meeting or webinar to expand on the FOA and provide an opportunity for potential participants to ask questions?	The DOE Office of Nuclear Energy will hold an informational webinar on the Industry FOA on January 9, 2018, from 1:00 – 3:00 pm ET. The link to the webinar can be found here: https://attendee.gotowebinar.com/register/7675161096076116995

#	Question	Answer
45	First of a Kind Nuclear Demonstration Readiness Projects and Regulatory Assistance Grants explicitly call out licensing work in expected work scope while not featured in Advanced Reactor Development Projects. Will including licensing activities in Advanced Reactor Development Projects proposals fall outside the expected proposal scope?	The expectation of having licensing work included in First of a Kind Nuclear Demonstration Readiness Projects stems from an anticipation that the project has reached a stage of maturity where the applicant is executing licensing work as a mid- to-late-stage step preceding commercialization. DOE is willing to accept proposals which include licensing activities as a part of the Advanced Reactor Development Project pathway under the circumstance that the proposal will lead directly to advances in the innovation and competitiveness of domestic nuclear designs and associated technologies. However, if accepted, the cost share expected from industry for these activities will likely be at the 50% level.
46	The paragraph states that no more than two awards may be granted to a single applicant, and that an applicant is eligible for an award after completion of the first award. Please clarify whether an applicant can be selected for two awards at a time, and whether an applicant can perform technical activities under two awards concurrently (awarded either in the same evaluation period or in different evaluation periods).	Any applicant company is eligible to receive 2 awards at any one time and can perform activities under 2 awards concurrently. Once an applicant has completed work under an award, that applicant is eligible to compete for another award. Update: The applicant is considered to be the prime recipient and is allowed no more than, two (2) active awards resulting from this FOA, unless one or more of the awards is a Pathway 3 award, in which case the applicant is allowed no more than three (3) active awards.
47	IV.D.9 Capabilities has three sections; two of those sections (Facilities & Other Resources Appendix and Equipment Appendix) are instructed to be added as appendices to Item #5 Project Narrative. Please confirm these Item #9 appendices are excluded from the Project Narrative page count.	The Capabilities document is a separate document and does not count against the Projective Narrative page count. Please log into the application site and create a draft application. This will help clarify application structure.
Added January 11, 2018		
48	Would a proposal that is focused on design development, first-of-a-kind engineering, permitting, and/or licensing of a capability or facility that is not directly in support of the existing fleet of nuclear reactors or the deployment of new, innovative designs	Applications submitted under this pathway are expected to result in operational improvements of the existing fleet, or the deployment of new, innovative designs, and have the potential to be deployed by the mid-to-late 2020s. The applicant should consider whether the

#	Question	Answer
	be eligible for an award under the First of a Kind Nuclear Demonstration Readiness Project pathway?	proposed project will meet these goals when deciding whether to submit an application under this pathway.
49	If any additional conflicts are discovered, shall we following the instructions of the FOA and ignore those of the website, or vice versa, or shall we submit additional questions to the CO?	Applicants are instructed to follow the directions identified in the FOA. If discrepancies are discovered, please notify the Contracting Officer as soon as possible for resolution.
50	For the section on “Potential Conflicts of Interest or Bias in Selection of Reviewers Appendix,” for which proposed person(s) shall information be provided? The FOA instructions indicate that we are to list persons who are or have been collaborators, co-authors, or co-editors with what the FOA terms as “you,” as well as “your graduate advisor(s) and principal postdoctoral sponsor(s).”	The applicant should list the names of all funded or unfunded collaborators with potential Conflicts of Interest or Bias.
51	The FOA calls for a Narrative Cover Page to include certain specific information. Later, the FOA refers to “the cover sheet of the application,” upon which additional information is to be provided. We assume both refer to the Narrative Cover Page. Please confirm.	The Narrative Cover page and the “cover sheet of the application” are one and the same and the FOA language will be updated to reflect this.
52	<p>FOA Section IV.D.7 requests technical expertise for teaming partners by name and organization as well as roles and responsibilities. It then goes on to ask for collaborators who will contribute.</p> <p>As such, there are three categories of personnel, Principal Investigator, Partners (Co-Principal Investigators), and additional collaborators. How many people can be identified for partners (co-principal investigators) and additional collaborators?</p> <p>Are resumes/CVs needed for each category of personnel? What is the page limit for the additional collaborators resumes/CVs?</p>	There is no limit on the number of parties that can be identified as partners or additional collaborators. Resumes are required for lead personnel as described in Section IV of the FOA. The page limit for any resume submitted under this FOA is 2 pages.

#	Question	Answer
53	FOA Section IV.B states that a font size of 11-point times new roman to be used in text. Please provide acceptable font and font size for exhibits, graphics, and tables.	The applicant may use the font and font size of their choosing for exhibits, graphics, and tables, as long as these items are adequately legible to the reviewers (i.e., will not require the use of magnification to read).
54	FOA Section IV.D.14 requires current and pending support for all senior – key personnel. It is conceivable that a single partner (co-principal investigator) could have several pages of current and pending support using times new roman 11-point font. Please provide guidance (either additional pages, or reduced font)	The applicant has a limit of 5 pages to identify recent similar work that has been conducted by the applicant company. If applicant cannot reasonably address all of the information requirements within the 5-page limit, the applicant should prioritize and identify the most recent, relevant work activities, and summarize the remainder of the work on page 5 of the Current and Pending Support. Update: page limit removed.
55	Will the Webinar on January 9th be recorded for future reference?	Yes, a recording of the webinar will be available at https://id.doe.gov on or before January 19, 2018
56	FOA IV.D.9 – Capabilities requires a list and description of infrastructure, facilities, and equipment resources for this grant. Given the amount of facilities and equipment needing to be described, would DOE consider making this a 5 page limited section?	The FOA will be updated to allow a 5-page limit for the applicant to provide a list and description of infrastructure, facilities, and equipment resources.
57	The FFRDC/NL effort is capped at 49% which indicates the prime applicant is responsible for 51% of the effort. As part of that 51% can the prime applicant include their sub recipients, contractor/vendor and consultants?	Yes, the prime applicant is free to decide how the work will be allocated between any sub-recipients, contractors, vendors, and/or consultants, as long as the prime applicant meets the requirement to perform a minimum of 35% of the total project.
58	In paragraph 5, the FOA states that DOE will make a determination of the appropriate cost share percentage based on the type of research proposed. If the DOE concludes that an applicant's proposal chose the "wrong" cost share percentage based on the type of research proposed, will the applicant be allowed to modify their proposal to use the "correct" cost share percentage, or will the proposal be rejected? Recommend that DOE provide a clear one-to-one correlation between the three pathways and the minimum cost share percentage required for each (e.g., FOAK Nuclear Demonstration Readiness Projects	No modification to an application will be allowed. DOE follows the requirements of EPACT 2005 Section 988 concerning cost share. An application will not be rejected if DOE does not agree with the cost share proposed by the applicant. If the application is selected for an award, and DOE modifies the cost share, then DOE will require that the applicant provide the required documentations and assurances that they can meet the modified cost share requirement prior to finalization of the award. Also, see last sentence of paragraph 5 “If interested applicants have questions regarding the appropriate percentage of cost sharing required for a particular proposed project,

#	Question	Answer
	require a minimum 50% cost share requirement and Advanced Reactor Development Projects require a minimum 20% cost share requirement, etc. regardless of type of research being proposed).	they are encouraged to engage with the DOE Contracting Officer early on in the application development process to seek a required cost share determination.”
	Industry FOA Live Webinar Jan 9, 2018, from DOE Germantown	
	Webinar Questions	Webinar Answers. Clarifications to existing answers and questions that were not answered in the webinar are included in red.
59	Can an applicant make multiple, simultaneous proposals with each being aligned with a different Tier?	The answer is two total, not two per pathway. There is a limit of 2 per quarter by any company. Once the quarter ends, we will announce awards and the company can submit two additional applications the next quarter. We believe this is a reasonable approach but if experience dictates that we need to change the limit, we will evaluate that at a future time.
60	Does a CRADA give company all of the IP for the NE Vouchers?	The IP protection is capped at 5 years for CRADAs. The federal government gets rights to the IP generated but protects it for 5 years.
61	Are Accident tolerant fuels included in this FOA?	Yes. It depends based on what we have asked for. Not all accident tolerant fuels will be applicable but there is room for that. We are putting the onus on U.S. industry to explain their needs and why a private/government cost share partnership should be considered. We do not want this to be a deadline chasing activity. You should submit your application when you are ready, don't feel like you need to chase an arbitrary date.
62	Do the proposals need to fit within the defined missions of the DOE programs listed to manage them (i.e. NEET, ART, LWRS, etc.). Also, is it intended that the FOA require a 51/49% funds allocation (max of 49% to a National Lab)	Not necessarily. This is not a call for those programs to complete work for those programs themselves. You should be looking at the most promising technologies that you can develop; we will worry about the funding source. The second part is yes. FFRDC's are capped at 49%.
63	If Tier 2 is named "Advanced Reactor Development Projects", why are you accepting proposals to support current LWRs under Tier 2?	The advanced technology is the focus, not the reactor type. For example, if there was a desire to apply a new digital technology to the existing fleet that would enhance the existing fleet with a new, advanced technology. Remember we are not just talking plant

#	Question	Answer
		designs; we are talking design, systems, components, SSC's. Some companies are pursuing entire designs and other are focusing on a specific component. We are not taking those focused on components out of bounds as long as they fit within the DOE-NE mission and objectives. We are considering advanced LWR designs as well as advanced reactors with other cooling capabilities. Our definition of advanced reactor includes advanced LWR designs.
64	Could the DOE award a Tier 1 project while lowering the funding amount from what the applicant initially proposed?	Yes, this is all part of the budget review process that goes along with the award negotiation. There is always an opportunity for an application request to be reduced.
65	Currently there is \$30M allocated for this FOA. Will that change with a CR till end of FY? If a budget will be passed, do you expect more funding added during the year?	If you follow the federal budget appropriation process, during a continuing resolution we have to operate and execute the government in a minimalist nature based on the lowest amounts we have requested or what the House and Senate have put in their budget earlier in the year. The \$30 million is a conservative budget based on our worst case budget for 2018. As long as we are in a short-term continuing resolution making awards will be limited, not impossible, but limited. We do anticipate adjustments once a budget is actually passed. A CR could be significantly higher than what we currently have as well but the \$30 million is conservative based on worst case scenario. The House language has \$60 million in its current budget for this type of FOA.
66	Are universities allowed as partners? Are they limited to 49% cap?	Yes, they are allowed to partner. The university is not a FFRDC so there is no cap for them. I'm not sure how strong an application would be that had a large university budget since this is intended to drive toward commercialization. The case is yours to make on why partnerships are structured the way they are in your application.
67	Would an application concerning technologies associated with inspecting, monitoring and/or remediating spent nuclear fuel be considered? Addressing the storage or transportation areas related to the spent fuel.	If it supports advanced reactor capabilities, then it would be allowable. That is on a case-by-case basis. One priority is on the entire fuel cycle so you would have to show how it would accelerate and promote the growth of nuclear energy in the United States.
68	Early in the discussion you mentioned \$30M as available funds based on conservative estimates of the yet to be approved	Those are maximum awards under each pathway. We are required to give those numbers as part of a financial assistance package.

#	Question	Answer
	budget. How does that relate to the \$40M, \$10M, and \$500K of the "Anticipated Total Federal Cost Share" regarding the 3 pathways?	Depending on the nature of the budget we will look to make as broad a range of awards as possible under each pathway.
69	This is a question for the panel at the end: What is the reasoning for capping the scope of work performed (and funding received) by an FFRDC/NL contractor at 49%?	This was somewhat arbitrary, but we wanted to allow the industry partner to take a lead role for the project. If we get input that more laboratory work to actually complete the projects is needed, then we will reevaluate the limit in the future.
70	Can the form of cost share on the industry partner be in the form of employee time and effort	Yes, in-kind labor costs have been included in the past. It should be described how that is going to take place. This is referenced in the Energy Policy Act of 2005.
71	Is it acceptable to use a standard EERE budget justification workbook to provide budget justification information?	I don't know what the EERE budget justification template is. We will engage EERE and see if that will meet the need. Look at our budget justification template to see if all parts are there. Clarification: At this point, please follow the budget justification requirements in the FOA.
72	Would utility owners' groups be eligible to submit an application	If they meet the definition of a U.S. company as described in the FOA. We defined those very clearly so if you meet those requirements, you can apply. From experience in the NP2010 program, we had a consortium as a prime recipient. A consortium would be allowed.
73	For cross-cutting technologies solving industry problems, is there any opportunity for reduced cost share less than 20%?	Updated Answer: Section III – Eligibility Information, C. Cost Sharing states “The recipient’s cost share must be a minimum of 20 percent of the total allowable costs for applied research projects or other efforts that are lower on the technology readiness level (TRL). For technologically mature or demonstration projects a minimum of 50 percent of the total allowable costs . . .”
74	Section F of the FOA contains a subsection that discusses "Class Patent Waivers" in regards to subject inventions. Noting that there was multiple types of patent waivers offered by the DOE in relation to subject inventions, are subject inventions created or conceived under this FOA limited to Class Patent Waivers or is the Recipient able to file any type of waiver to retain title to the subject inventions?	Under this FOA, IP waivers will be considered on a case-by-case basis. DOE-NE is not considering Class Patent Waivers at this time.
75	Is software product development or commercialization of software developed by DOE labs eligible for the application?	It depends if it drives technology innovation that would move advanced reactor designs toward commercialization or provide the requested improvements of existing designs.

#	Question	Answer
76	Please explain "prime recipient" in relation to this program.	The Department considers the "prime recipient" to be the lead applicant responsible for the execution, finances, and management of the project and the award. The "prime recipient must meet the eligibility requirements identified in Section III.A of the FOA.
77	There have been several projects and grants recently completing current scope (over the past 2 years (for example). Has DOE reviewed those projects and identified any that have a potential for continuing under this FOA? Seems a continuation or expansion of some projects under this may be a shorter path than starting additional projects. John Mahoney NGNP Industry Alliance	NE will consider these previous awards in the context of the goals of the new industry FOA. If the applicant feels that there is additional scope applicable to the previous project that meets the intent of this FOA, they are welcome to submit an application. Specific work scope conducted under the previous award cannot be identified for cost sharing under a new award.
78	What is the ID # to be placed at the end of our file names?	The ID # to be used is the number that is automatically generated when the prime applicant initiates an application.
79	Given that the labs will not be eligible as the prime or lead applicant, are there restrictions on number of applications per quarter and number of active awards that the labs can be a part subject to these limitations?	No, there are no restrictions on sub-awardees. Clarification: There are no restrictions on the number of awards that an FFRDC can participate on. However, the FFRDC cannot be responsible for more than 49% of the work on any award.
80	Are concepts limited to power producing reactors?	It depends. As long as the concept proposed by the applicant meets the goals of the FOA and supports innovation and competitiveness of the U.S. nuclear industry, the application may be considered for award.
81	Do the Accident Tolerant Fuel's clearly reduce the fuel cost, improve performance AND extend fuel lifetime? This is not a question of other POTENTIAL cost savings.	We do not understand the question. Please reword and submit to the Industry FOA e-mail at: IndustryFOA@id.doe.gov
82	Regarding the limit of 2 applications per period, can a company partner with other companies as a non-prime recipient?	Yes, this is allowable and there is no limit to the number of sub-awards a company can have.
83	On the FOA: if a proposal is not selected in the quarter in which it was submitted, is it eliminated from further consideration in future quarters?	We are evaluating that. I believe what we are going to do is reconcile and disposition applications in each review period. The applicant then would be eligible to adjust the application and then resubmit in the next quarter.
84	Can an entity re-submit a proposal that does not get awarded?	Yes, feedback will be provided from the review process to improve non-awarded applications.

#	Question	Answer
85	It might be helpful for someone or company to make a proposal without specific team members but know what type of team members are needed. Essentially, it would be easier for the person making the proposal to bring on an appropriate team to fulfill requirements team requirements after getting the go ahead from the government with timelines in place.	From an application perspective you cannot do a review on a budget without team members. You will need to submit a full application as described in the FOA so that we can perform a complete review on the application. One of the merit review criteria is Team Capabilities which means we need to understand who those team members are.
86	ARPA-E has reduced the Cost Share percentage for small businesses. Would NE consider a reduction in the Cost-Share for this FOA	We will consult with our colleagues at ARPA-E and, as it makes sense, we will apply those lessons to this FOA. Clarification: Please note that you are competing with other applicants who may propose providing more than the minimum cost share, and this will be a discriminating factor in the selection process.
87	Once the budget is spent on awards for a year. What happens to the remaining applications?	Once the funding for a pathway has been allocated to an award, we are anticipating that the pathway may be closed with a modification to the FOA. We cannot fully answer that question until we know the budget better. A lot of funding and distribution will depend on the scope of work. For example, programs where the proposal has high interest may be a funding source for some of these projects. As Tim Beville indicated, this is not just one source of funds. This is multiple program lines in the DOE-NE budget. We have identified a variety of sources of funds, and it depends on the appropriation and how this FOA can be balanced with the other funding needs of the Office of Nuclear Energy mission.
88	Are projects that focus on the existing fleet eligible for Pathway 2?	Yes.
89	If a voucher is awarded in a quarter, can more vouchers be awarded through the rest of the year?	Yes, as I stated earlier, you can have up to two at a single time.
90	The FOA states: "Regulatory support cost shared grants will be awarded...to support" items such as analysis and engineering, however further states that "Support for salaries, travel, or other costs...is not allowed." Can you clarify how analysis/engineering is accomplished without paying for salaries? Can you give examples of what is allowed to be costed?	The statement "Support for salaries, travel, or other costs...is not allowed" has been deleted in an amendment to the FOA. For the latest FOA version, please go to www.id.doe.gov.
91	Are there page limits to the applications?	Yes. The page limits for an application are identified in Section IV of the FOA.

#	Question	Answer
92	What is the expected contractual method of execution -- will it be a CRADA, or is DOE NE open to more flexible contracts?	Awards under this FOA will be made as cooperative agreements under Pathways 1 and 2, and grants under Pathway 3. If you are applying for a technology development voucher under the NE Voucher program (through GAIN), the contractual method of execution will be a CRADA.
93	Is there a restriction on accessing www.id.doe.gov? I wasn't able to access it from multiple computers and multiple locations. Is the email IndustryFOA@id.doe.gov ok to send for IT issues like this?	There are no restrictions. Please try alternate www.id.energy.gov. If you continue to have problems accessing the site, please contact the Contracting Officer through: IndustryFOA@id.doe.gov
94	Is the \$30M allocation for this FOA a yearly allocation, or spread across the entire 5-year Period of Performance? Thank you.	That is a conservative estimate for Fiscal Year 2018. This will be a percentage allocation from the DOE-NE from 2019 onward for five years. Clarification: Please see Section II.B of the FOA which identifies the approximate 5-year funding for awards under this FOA.
95	If a company has received one or two awards, can they apply for another? (We know they can only apply for 2 per quarter) Can they apply if they have received active awards?	A company can have two active awards at any given time. This means that over the course of 5-years an applicant can complete multiple awards and continue to apply.
96	If one pathway is "closed" for a fiscal year, what happens to an application already submitted? Does it remain in queue until the next fiscal year?	Applications will be reviewed and dispositioned in each quarter, so they will not remain in a queue. The applicant will be responsible for monitoring the amendments and other information on the FOA to determine current funding availability and opportunities.
97	What is the most appropriate venue to offer feedback on the FOA? Should we submit comment via email to the same address that accepts questions about the FOA?	Yes, please provide feedback at the e-mail address provided. Clarification: IndustryFOA@id.doe.gov
98	Does the cost share on the industry include fringe benefits and overhead costs on their part?	Yes.
99	Is there a standard Budget justification template for this solicitation?	It should be in the application site under the tier you have selected.
100	Is there a limit to a number of awarded projects a company can have at one time? Is it better to submit multiple small proposals vs one larger proposal?	The total number of awards a company can have is two awards. It's not up to us to answer, 'what is better'. The company needs to thoughtfully decide what to submit based on its needs. If you would like to give us additional input on ways to structure this FOA to better support industry, please let us know. We may add to or delete aspects of these pathways based on needs.

#	Question	Answer
101	What "milestones" or objectives are you trying to achieve by year?	This FOA has been structured to provide broad flexibility to industry to further the development of technologies that improve the capability of the existing fleet, methods to improve the timelines for advanced reactor deployments, the cost and schedule for delivery of nuclear products, services, and capabilities supporting these nuclear technologies, design and engineering processes, and resolution of regulatory/certification issues potentially impeding the introduction of these technologies into the marketplace. We are trying to establish private/public partnerships that will achieve the broad goals of improving innovation and competitiveness of the U.S. nuclear industry. We have not set any specific milestones but expect the applicants to provide the plans and milestones that will meet the above FOA objectives.
102	JoAnne - Is Prime required to be a for-profit entity?	That has been answered in the context of the FOA, which is that non-profits can participate as prime as long as they are structured in a way that they can handle the project management aspects of the project. We have defined who is eligible so I would defer to the words in the FOA.
103	Can the Accident Tolerant Fuel funding be transferred into the Advanced Reactor area, since ATF does not reduce the risk to the public, since no one has died from a commercial reactor accident. Therefore, reducing reactor cost is the best way to reduce public risk of deaths/injuries by displacing more dangerous power systems, i.e. All of them.	No.
104	Clarification Q, please. Regarding the number of awards a given company can receive, is there a limit on the number of awards a company can receive over the lifetime of the FOA, i.e. could a company receive one award in January 2018, one award in April 2018, and one award in November 2018...each resulting from one or two applications per submittal period? Thank you.	A company can have two active awards at any given time. This means that over the course of 5-years an applicant can complete multiple awards and continue to apply. Update: The applicant is considered to be the prime recipient and is allowed no more than, two (2) active awards resulting from this FOA, unless one or more of the awards is a Pathway 3 award, in which case the applicant is allowed no more than three (3) active awards.
105	Are the "Ceiling" amounts for maximum funding fixed limits for each Tier?	Yes, they are fixed limits.

#	Question	Answer
106	Are awards and funding more likely to be distributed in response to proposals submitted in advance of the first deadline (31 January)?	No, as I said earlier, we are envisioning this to be an ongoing process that reacts to thoughtful application on the timeframe that industry requests. We understand that there is a limited budget each year, but there will be a budget each year. It would not be our intent to distribute all of the year's funds in the first period.
107	On page 17 of FOA-0001817, the project narrative includes a bullet titled "Proposed Scope Description" followed by a bullet titled "Technical Description." Whereas the "Technical Description" bullet then includes some sub-bullets listing what should be included, there is no detail provided for the "Proposed Scope Description" bullet. Are these two items distinct? If so, is further definition required around the Project Scope Description?	The proposed scope description is just an overview of the technical description that you will include below it. They are interconnected and there is no prescriptive format for the scope description.
108	Can award funding be carried over to next FY to complete projects in the 18-24 months	Clarification: Yes. Potentially, that would be part of the award negotiation. It would carry over in certain circumstances, for example, during the final quarter of the fiscal year. As long as it is part of a competitive process, there is no problem with carrying over funds. We are looking for discrete beginning and endings for every project that are relatively short-term projects. These projects are fully funded up front so it can be continued across fiscal years.
109	Is FFRDC cost share paid by the government or the applicant?	FFRDC cost share is paid by the applicants.
109A	Who determines the TRL for each proposal?	We expect that the applicant will define their own TRL when submitting the application. During the review we would evaluate the proposed TRL and if it differed from DOE's opinion it would be adjusted during the negotiation phase of the award. This is important since industry cost share would be expected to increase at higher TRL levels.
110	Will ITAR regulations be considered, or is that determined based on the topic of the submitting application (i.e., Nuclear fuel application vs. sensor application)	Answer to be posted at a later date.
111	Where can the 1. Conflict of Interest Acknowledgement form be found? Thank you.	The form is available in the application

#	Question	Answer
112	How is allocation of funding decided between the different tiers?	That is an internal decision that will be made based on the spread of budget allocation and the scope, quality, and number of applications in each tier.
113	Will FFRDC's be funded and paid directly by the DOE, as opposed to FFRDC payments being passed through the Prime award recipient?	The FFRDC would be paid directly by DOE.
114	Do the NE Vouchers count toward the limit of FOA awards?	The NE Vouchers are separate from the Industry FOA so they should not affect each other.
115	Who will be the owner of the requirements property or IP generated in this process?	The guidelines for treatment of IP generated under agreements with the Government are outlined in Section VIII.F. Of the FOA.
116	Did I hear correctly that the DOE is interested in breeder reactors?	NE is interested in receiving applications supporting the development of all reactor types that meet the goals of the FOA.
117	Is it possible that the DOE would/could make a single award for the totality of available funding (30M) in the first "wave"?	Yes, that would be possible. We need to consider the universe of applications and how it all fits together. We don't want to speculate so until we know what the budget is we won't know. Our intent is not to focus on a single award in 2018 so it will depend on appropriations and number, quality, and type of applications received as with all financial assistance applications.
118	Is there a cap on how much money a subcontractor can receive from a project?	No, there is no cap on the amount of funding that can be provided to sub-awardees.
119	Which version of the R&R Budget (Total Fed + Non-Fed) are we required to submit as a PDF, since the bidders' library only contains an Excel version of the form?	The applicant should submit an Excel version of the R&R Budget document. This requirement has been updated in the current amendment to the FOA.
120	Will the number of Tier 1 awards still be 1-2 for the entire 5 years or will remain like this?	NE currently intends to make 1-2 awards in the top tier pathway over the 5-year period. However, we reserve the right to select additional awards if additional funding becomes available.
121	Is 'performance of work in the U.S.' a 100% requirement for the award, including cost share?	That is the intent, but we realize that in some cases the technical feasibility and economics of the proposal depend on conducting work in locations outside of the U.S. However, NE will consider the amount of work that the applicant intends to perform in the U.S. as a discriminating factor in the selection of applications for award.

#	Question	Answer
122	Is the DOE interested in reactor technology to consume plutonium and/or SNF, including commercial and Navy SNF?	Maybe, it depends on how it would bring technologies closer to commercialization. Clarification: NE will consider all applications and will base its selection decision on how well the proposal meets the goals specified in the FOA.
123	When does the DOE anticipate making its first award announcement following the first submittal deadline of 31 January?	DOE intends to make announcements of successful applications in late March of 2018. Finalization of awards will be dependent on award negotiation, readiness of the applicant to proceed with the work, and availability of funding.
124	After generating a new application for a Regulatory Assistance Grant, we discovered that several instructions found on the INL website application page conflict with those of the FOA. Shall we following the instructions of the FOA and ignore those of the website, or vice versa, or shall we submit questions to the CO?	Thank you for bringing this to our attention. We have taken steps to correct this discrepancy. Please feel free to contact us at our FOA email address (IndustryFOA@id.doe.gov) if you identify any other issues with the application site.
125	Some of us fear that most of the funding would be depleted early on, maybe even after round 1. How is that anticipated to be managed if we only have \$30M for whole FY?	NE has identified approximately \$30 M of funding based on our FY18 funding situation under the current continuing resolution. We will know more about the funding that will be available through the remainder of the year when the budget has been resolved. Until then, the \$30 M is just an estimate. The selecting officials intend to take a thoughtful and judicious approach to funding awards based on how well the proposals address the goals of the FOA and the available funding.
126	Has the DOE streamlined in any way, the review and award process described today such that there is a reasonable expectation that the DOE can complete the review process and make an award announcement by the end of March?	Yes, NE is making an effort to streamline the application review and award process so that we can turn awards around on a quarterly basis. Please note that external circumstances outside the control of the Department could impact the announcement timing.
127	Is that 20 vouchers for FY18 or CY18?	That would be for fiscal year 2018. We are aligned with the first quarter of fiscal 2018 at this point.
128	So, a company cannot apply for more than one voucher in different nuclear R&D areas? Is it really only 1 voucher per cycle for a given company?	Yes, since there are four review cycles per year this shouldn't be a big issue. We would review one application for the NE voucher program per review cycle.
129	If there are multiple voucher applications from a company, would those applications all be disqualified, or will DOE/GAIN still be able to choose one for funding?	Only one voucher per cycle, per company would be funded under the GAIN NE voucher program. We are not going to focus all of our attention on one company. The community should not put the government in a position where the government has to choose in a

#	Question	Answer
		position where the government has to choose what to review. If we are reviewing one application at a time, then you should follow the rules and submit one application. We would review one application regardless of how many you submit.
130	How can federal cost share be up to 100% of cost of proposal (according to the slides)? E.g., speaker said that up to 500K for tier 3 and 10M for tier 2.	The maximum Federal cost share is outlined in Section II.E. of the FOA. As an example, if NE selects 2 projects in Pathway 1, the total for those 2 projects will be a maximum of \$40 M. This means the applicants must provide a minimum of \$40 M of cost-share. Update: Maximum Federal Cost share is now \$20 M.
131	Can you please clarify if other program managers from offices other than NE-5 be managing projects under this FOA?	This is a NE-wide process; this is not a NE-5 effort. If an application is selected for award and is funded under a specific program, the work done under that award would be managed under that program. As stated in the webinar, the NE priorities are maintaining the existing fleet, populating the advanced reactor pipeline, and improving fuel cycle capability.
132	Would innovative new fuels be considered?	Yes, it could be but, the relevance of the proposal to the goals of the FOA will need to be justified in the proposal.
Added January 18, 2018		
133	Please consider expanding the page allocation for the Advanced Reactor Demonstration Project Narrative File from 15 to 20 pages, enabling a more thorough project description, given the potential size and complexity of a project of up to \$10M in cost share funding.	The applicant is expected to provide the Project Narrative File within the 25-page limit.
134	The required "Research and Related (R&R) Budget Form", provided in the DOE application website, is in an Excel format. The FOA instructions state that this should be submitted as a PDF file – "IND FOA FY20__ Budget "Insert ID#.pdf" ". Please confirm it is acceptable to submit this form in the Excel format, per the form provided on the website.	This discrepancy has been corrected in Amendment 0001 to the FOA. Please use Excel format for the R&R Budget Form.
135	Would DOE consider allowing the use of fold outs (11" by 17" paper size with 1 inch margins) for larger graphics, such as schedule/Gantt chart? If acceptable, can you confirm that an 11"x17" page would count as 2 pages?	Applicants are expected to provide all information on 8 1/2" by 11 " paper. No 11" by 17" paper is allowed. Please follow the directions identified in the FOA.

#	Question	Answer
136	Would DOE consider allowing a smaller size font for graphics and tables, such as Arial Narrow 10 point or Times New Roman 9 point?	The applicant may use the font and font size of their choosing for exhibits, graphics, and tables, as long as these items are adequately legible to the reviewers (i.e., will not require the use of magnification to read).
137	Instructions for the Resume/Vitae section of the application require us to provide education and professional experience information for each individual. However, Section O. PROTECTED PERSONALLY IDENTIFIABLE INFORMATION, on page 56, specifically states that the applications <u>must not</u> include data, such as education or employment history. Could you please provide guidance to deconflict these two contradicting requirements?	This has been clarified in amendment 0003. Please do not include any PII information in the project information document. This information must only be submitted in the Resume/Vitae file and DOE will follow PII requirements to protect the provided data.
138	<p>1. Budget:</p> <p>a. The provided SF-424 budget template is provided as an excel file and the FOA indicates it should be submitted as an excel file (.xls). While the id.doe.gov submission site shows it should be uploaded as a .pdf. Should we submit it as listed in the FOA? Or as a pdf as indicated on the online submission?</p> <p>b. We are supposed to submit one for the lead applicant and each non-FFRDC collaborator. Are we to combine them into one document or are we to upload multiple attachments? It is not clear if we can attach multiple files.</p>	Please follow the directions identified in the FOA. Submit a separate budget document for the Prime applicant and each collaborator. The application site will have a place to upload each budget document individually. We recommend you start a draft application to help clarify structure and content of the application.
139	<p>2. Budget Justification:</p> <p>a. Are we to provide a separate budget justification for each team member (i.e., lead applicant and each collaborator), or are we do combine into a single file.</p>	Please submit a separate budget justification for the prime applicant and each sub-applicant or collaborator.
140	<p>3. Data Management Plan</p> <p>a. The FOA indicates a data management plan should be submitted with the proposals, but it is not stated in the FOA where the data management plan should be placed (such as in the PMP). The id.doe.gov submission site does not provide a location for submittal as well. Can guidance be provided as to where the DMP should go for the submission?</p>	Requirements for Data Management Plans have been clarified in Amendment 0003 to the FOA. Data Management Plans will only be required if a project is selected and as part of the award process.

#	Question	Answer
141	Where do we upload the data management plan?	Requirements for Data Management Plans have been clarified in Amendment 0003 to the FOA. Data Management Plans will only be required if a project is selected and as part of the award process.
142	Does DOE really intend for national laboratories to include past performance?	Applicants are not required to provide past performance for national laboratories/FFRDCs.
143	The application website notes the Advanced Reactor Development Project Narrative as 25 pages. The paragraph above says 15 pages and the FOA calls out 15 pages.	This discrepancy was corrected in Amendment 0002 to the FOA. The page limit is 25 pages.
144	<p>The Application Website provides the form entitled “Section B” for the Summary Abstract. On the form itself, the following instructions are provided: “For Sections A and B, provide a one-page maximum summary of the project, including background and objectives and replace text here. For Section C, two pages are allowed.” However, the FOA, instructions specify a total two-page limit for the Summary Abstract, using the template on the Application Site.</p> <p>Would the Government please clarify if this is the correct template for the Summary Abstract, and if so, what constitutes Sections A, B, and C?</p>	Template has been corrected.
145	The application site lists Facilities & Other Resources Appendix and Equipment Appendix under the Capabilities File instructions section; however, it instructs us to provide these sections as Appendices to the Project Narrative. Please clarify whether these appendices should be included in the Capabilities file or Project Narrative file. If they are to be included in the Project Narrative file as Appendices, please confirm they are not included in the page count limitations.	The Capabilities document is a separate document and does not count against the Project Narrative page count. Please log into the application site and create a draft application. This will help clarify application structure.
146	There is currently a requirement in the FOA to submit a Data Management Plan, however, there is not place on the Application Site to submit it. Please clarify how we should submit this document with our application.	Requirements for Data Management Plans have been clarified in Amendment 0003 to the FOA. Data Management Plans will only be required if a project is selected and as part of the award process.

#	Question	Answer
147	Please confirm acceptability of proposals to include unclassified, export-controlled information as part of the proposal, specifically in the past performance file.	Applicants may include unclassified, export-controlled information as part of the proposal. Please mark any proprietary or business sensitive information accordingly. Please DO NOT include any of this information in the Project Summary/Abstract
148	Please indicate where the Data Management Plan shall be included. We imagine this will be an appendix to either the Budget Justification or Project Narrative. If an appendix to the latter, please verify that this section will not count against the page limitation of the Project Narrative.	Requirements for Data Management Plans have been clarified in Amendment 0003 to the FOA. Data Management Plans will only be required if a project is selected and as part of the award process.
149	The FOA instructs applicants to name all teaming partners by name and organization, as well as their proposed roles and responsibilities. The website gives us space for name and organization, but not for proposed roles and responsibilities. Will a proposal be acceptable if it follows the website format and does not name roles and responsibilities?	The proposed roles and responsibilities of the teaming partners are captured in the "Benefit of Collaboration" document uploaded on the application site. Collaborators are also named by organization, proposed funding, and contact information in a separate section of the application site to distinguish funding allocations and manage conflict of interest issues associated with application review.
150	Please indicate where the Data Management Plan shall be included. We imagine this will be an appendix to either the Budget Justification or Project Narrative. If an appendix to the latter, please verify that this section will not count against the page limitation of the Project Narrative.	Requirements for Data Management Plans have been clarified in Amendment 0003 to the FOA. Data Management Plans will only be required if a project is selected and as part of the award process.
Added January 24, 2018		
151	Which budget form should be used for applications submitted under the Advanced Reactor Development Projects Pathway? FOA Section IV.D.10. indicates that applicants are to complete the "Research and Related Budget (Total Fed and Non-Fed) form," and the response to FOA FAQ Question #119 indicates that applicants should submit an Excel version, but we do not know where to find what the questioner referred to as the "bidders' library," nor could we find the Excel version of the form at http://grants.gov/ (we did find a PDF version there). Furthermore, after generating a new application for this pathway via https://www.id.energy.gov/ , the section on Budget instructs applicants to use a different Excel form: "Budget Information - Non Construction Programs" (available at	You will find the budget form for the applicant at https://www.id.energy.gov/NEWS/FOA/FOAOpportunities/FOA.htm . It is the document that is second from the bottom under the "Document Library" and named SF424 Research and Related 3 yr Budget (.xls document). You will find the budget form for the applicant at https://www.id.energy.gov/NEWS/FOA/FOAOpportunities/FOA.htm . It is the document that is second from the bottom under the "Document Library" and named SF424 Research and Related 3 yr Budget (.xls document)

#	Question	Answer
	<p>https://energy.gov/management/office-management/operational-management/financial-assistance/financial-assistance-forms).</p>	
152	<p>Reference Q&A number 124: FOA Sections IV.C (table) and IV.D.2 refer to SF 42 (R&R) available at www.grants.gov which is OMB Number 4040-0001; however, the link in the Application takes you to an SF 424 form without the R&R designation (OMB Number 4040-0004). Which form is to be utilized? If OMB Number 4040-0004 is the correct form, should file name be adjusted to IND FOA FY20__ SF424 "Insert ID #.pdf (i.e., remove "RR" from file name)?</p>	<p>Use the SF 424 form provided in the application: Application for Federal Assistance SF-424, OMB number 4040-0004, Expiration Date 10/31/2019. Using the naming convention as stated in the FOA: Name File: IND FOA FY20__SF424RR "Insert ID#.pdf"</p> <p>Use the SF 424 form provided in the application: Application for Federal Assistance SF-424, OMB number 4040-0001, Expiration Date 12/31/2022. Use the naming convention stated in the FOA: Name File: IND FOA FY20__ SF424RR "Insert ID #.pdf"</p>
153	<p>The Conflict of Interest Acknowledgement Form is not included as an attachment on the website. Can DOE please provide this form? Can DOE please advise what the Section B Template is to be used for?</p>	<p>There is no form for Conflict of Interest (COI). Submit your response in your preferred format.</p> <p>Conflicts of interest may exist due to previous efforts performed by the Labs or assistance provided in program direction and other mission related activities. Accordingly, each applicant must identify any potential conflicts of interest, fully explain the conflict, whether you feel it is significant or not, along with your rationale, and, if significant, how you will avoid, neutralize, or mitigate the potential conflict</p> <p>The incorrect name was used for the "Section B Template". The Document Library has been updated with the correct title of "Project Summary/Abstract".</p>
154	<p>In the FOA and on the Application Site, under "Identification of Potential Conflicts of Interest or Bias in Selection of Reviewers Appendix" the instructions read: "In an appendix to your Project Narrative, you must identify the following information for each third party contributing to cost sharing: (1) the name of the organization; (2) the proposed dollar amount to be provided; (3) the amount as a percentage of the total project cost; and (4) the proposed cost sharing - cash, services, or property."Similarly, in</p>	<p>Please provide the information as an appendix in both the project narrative and the budget justification. This should not require additional work as it is the same information and format. This request for duplicate requirements will be addressed in the future amendment to the FOA.</p>

#	Question	Answer
	<p>the FOA and on the Application Site, under “Commitment Letters from Third Parties Contribution to Cost Sharing” the instructions read: “In an appendix to the Budget Justification, the following information for each third party contribution to cost sharing must be identified: (1) the name of the organization; (2) the proposed dollar amount to be provided; (3) the amount as a percentage of the total project cost; and (4) the proposed cost sharing – cash, services, or property.” Please de-conflict these instructions and confirm that the contribution to cost sharing information should be provided in an Appendix to the Budget Justification.</p>	
155	<p>From the FOA documentation, it appears that 2 CFR 910.360 governs real property and equipment acquired under this FOA.</p> <p>According to 2 CFR 910.360 (f) Additional uses during and after the project period:</p> <p>(1) During the Project Period, the recipient must make real property and equipment available for use on other projects or programs, if such other use does not interfere with the work on the project or program for which the real property or equipment was originally acquired. Use of the real property or equipment on other projects is subject to the following order of priority:</p> <p>(i) Activities sponsored by DOE grants, cooperative agreements, or other assistance awards;</p> <p>(ii) Activities sponsored by other Federal agencies' grants, cooperative agreements, or other assistance awards;</p> <p>(iii) Activities under Federal procurement contracts or activities not sponsored by any Federal agency. If so used, use charges must be assessed to those activities. For real property or equipment, the use charges must be at rates equivalent to those for which comparable real property or equipment may be leased.</p>	<p>Non-government use of property is addressed in 2 CFR 910.360(iii) as follows: (iii) Activities under Federal procurement contracts or activities not sponsored by any Federal agency. If so used, use charges must be assessed to those activities. For real property or equipment, the use charges must be at rates equivalent to those for which comparable real property or equipment may be leased.</p> <p>Answer: If the property/equipment is used for non-government activities then lease or rent charges must be assessed for those activities. If the property/equipment is used for activities supporting the Advanced Reactor Development Projects objectives, then it would most likely be considered an appropriate use, even if the specific activity didn't utilize Federal funding.</p>

#	Question	Answer
	<p>2 CFR 910.360 does not appear to address non-government use of the property acquired under the FOA. Can the property/equipment acquired under the FOA be used for other non-government activities (e.g., testing, data acquisition, etc.) associated with the Advanced Reactor Development Project but that is not covered by the funds allocated as part of the cooperative agreement or other U.S. government contract or grant?</p>	
156	<p>Would you please provide the registration list for the Industry FOA webinar?</p> <p>This will aid us in developing collaboration opportunities.</p>	<p>We are unable to provide this information.</p>
157	<p>In the one-page summary of the three Pathways, I saw a small bullet that mentioned that no collaborators are allowed for Regulatory Assistance Proposals (Pathway 3). I was not able to find this information in the amended FOA. Are collaborators/subcontractors allowed for Pathway 3 proposals?</p>	<p>Collaborations with other eligible entities and / or FFRDCs is allowed for Regulatory Assistance. Collaborations with other entities and/or an FFRDC is allowed.</p>
	<p>Added April 16, 2018</p>	

#	Question	Answer
158	<p>On RFP Page 17, Section 5, Project Narrative File, the first sub-bullet under Technical Description, begins, “For the First of a Kind Nuclear Demonstration Readiness Projects, applicants should provide a detailed technical description of the proposed innovative project <u>for projects other than reactor designs.</u>” The paragraph then goes on to describe what an applicant for new reactor should provide. The last sentence of the paragraph starts, “In addition, the applicant should provide...” and goes on to list three sub-bullets. Are these three sub-bullets (Safety, Operations, Economics) to be addressed by all applications or by only by applications for new reactor design projects?</p>	<p>For either type of project, new reactor designs or for proposed innovative technology for projects other than reactor designs, the three sub-bullets should be addressed. The language in the FOA will be modified to clarify this intent.</p>
	<p>Added July 24, 2018</p>	
159	<p>Please define “collaborators”</p>	<p>A collaborator is an individual that makes a defined, material contribution that is critical to the success of the project. Any individuals that do not meet these criteria should not be listed as collaborators on the application.</p>
	<p>Added December 2, 2020</p>	
160	<p>In DOE-FOA-0001817, Revision 8, section I.E. "Applications Specifically Not of Interest", thorium related technology is called out in this category as "Applications proposing a commercialization case within the next decade that is dependent on development of a large-scale domestic thorium fuel cycle infrastructure." Can you clarify which thorium related technologies remain eligible for award?</p>	<p>The objective of the Industry Funding Opportunity Announcement (DE-FOA-0001817) is to advance near-term concepts toward the marketplace, whether these are new reactors or supporting technologies that would enhance the existing or future fleet. Currently, there is no domestic fuel cycle infrastructure in place to support thorium-based concepts, and no clear evidence of near-term commercial market interest in establishing it, beyond the developers themselves. Therefore, within the current resources available for the FOA, DOE-NE is focusing on concepts that do not rely on development of a large-scale domestic thorium fuel cycle infrastructure. US developers of thorium-based technologies targeting the export market remain eligible for award. Excluding up front the technologies that are unlikely to be selected under this announcement saves the substantial resources that would be</p>

#	Question	Answer
		expended in preparing and reviewing applications seeking to advance these technologies.
	Added March 18, 2021	
161	Is the Office of Nuclear Energy (NE) able to continue its support of the <i>U.S. Industry Opportunities for Advanced Nuclear Technology Development</i> Funding Opportunity Announcement (Industry FOA)?	The Industry FOA was intended to stimulate interest in advanced reactor development and deployment over a five year period. These efforts, combined with other industry-supporting initiatives, have been wildly successful. We now have many major projects underway through joint agreements with industry that span from conceptual design through development and demonstration of innovative advanced reactors. Given this significant number of partnerships and current priorities for available funds, NE will only complete one application and review cycle for FY 2021 and FY 2021-2 will be suspended. Opportunities in FY 2022 will be communicated as soon as possible once appropriations and associated priorities are better understood. The following table identifies the prior year and new FY 2021 funding that NE will allocate to support additional Industry FOA awards in Cycle 2021-1, which closes for applications on April 30, 2021. Update: At the request of the community, DOE has extended the due date for the FY2021 FOA application from April 30, 2021, to May 28, 2021.

#	Question				Answer				
	Nuclear Energy Industry FOA Funding Sources (\$ millions)								
	Nuclear Energy Enabling Technologies			Reactor Concepts RD&D			Fuel Cycle R&D		
	Funding	Nuclear Energy Advanced Modeling and Simulation (NEAMS)	Crosscutting Technology Development (CTD) General	CTD Integrated Energy Systems	Light Water Reactor Sustainability (LWRS)	Advanced SMR R&D	Advanced Reactor Technologies (ART)	Total	
	Total Funding Available for Cycle 2021-1	5.5	0.0	0.5	18.0 Hydrogen**	0.0	2.0 Microreactor	0.0	26.0
	<p>**Funding for hydrogen production demonstration project(s) jointly supported by NE and the Office of Energy Efficiency and Renewable Energy</p>								
162	<p>Why does the combined maximum federal ceiling for award sizes in all three pathways total \$40.5M in funding, while the total available funding for this cycle is only \$26M?</p>				<p>The ceilings for award sizes in each pathway correspond to anticipated maximum individual award amounts for this cycle and any subsequent cycles. We have adjusted these ceilings over the life of the FOA to align with anticipated funding levels in any given year. For example, our current estimate of available combined funding between NE and EERE for hydrogen production awards of \$18M could be used to support a single award in Pathway 1 First of a Kind Nuclear Demonstration Readiness Projects or Pathway 2 Advanced Reactor Development Projects, or multiple awards in any of the three pathways. We allow the possibility for either program to apply additional funds should a high-priority, high-impact project be proposed.</p>				

#	Question	Answer
163	If a reactor designer received a notice of award in the <u>ARC-20</u> pathway under Advanced Reactor Demonstration Funding Opportunity DE-FOA-0002271 as either a <u>prime</u> recipient or <u>subrecipient</u> , is that company still eligible to receive funds under DE-FOA-0001817?	Yes, a recipient (prime or sub) of an ARD FOA ARC-20 award is eligible to apply for an award under the Industry FOA for distinctly different scope. Additionally, a recipient (prime or sub) of an ARD FOA Risk Reduction award is eligible to apply for an award under the Industry FOA for distinctly different scope.
	Added March 30, 2021	
164	Is the Government cost-share funding that is being made available for Fiscal Year (FY) 2021 awards expected to be the ceiling amount, i.e., the totality of DOE’s cost share, for any awards selected for negotiation in FY 2021?	Yes. For any multi-year awards selected for negotiation in FY 2021, the FY 2021 funds being made available represent the total DOE cost share to apply to award scope selected in response to Cycle 2021-1. Please note that FY 2021 funds do not need to be expended in FY 2021; that is the year that DOE funds become available. They may be spent in subsequent years or budget periods. For example, multi-year activities may be proposed in multiple “budget periods” and the Government may consider this, but any proposed activities that exceed the available DOE funds for Cycle 2020-1 would be subject to a future follow-up application in FY 2022.
166	The three pathways listed in the Q&A are not the same as those in original Industry FOA. The three pathways now listed, are “Nuclear Energy Enabling Technologies,” “Reactor Concepts RD&D,” and “Fuel Cycle RD&D”?	The three industry application pathways remain unchanged in the FOA. The chart in question #161 refers to the DOE sources of funding as appropriated by Congress.
167	Are the amounts shown in the Q&A available funding for an award in FY21 only?	The chart showing available funding in question 161 shows funding currently available for FY21. Depending on awards made in the FY 21 cycle, any remaining funding may carry over to future cycles.
168	The funding ceiling shown in Industry FOA - Amendment 10, Table II (C): are these multi-year award ceilings, and are these amounts DOE’s cost-share values, and not total project values?	These amounts are DOE’s cost shared minimum (federal floor) and maximum (federal ceiling) values for multi-year awards as applicable, not the total project cost.
169	Will DOE-NE entertain applications for a multi-year award capped at the funding ceiling amount shown in Amendment 10, Table II(C)?	Yes, we will entertain applications up to the ceiling amount. However, applicants need to carefully consider FY-2021 funding limitations identified in question #161.
170	Synopsis 15 on Grants.gov https://www.grants.gov/web/grants/view-	Yes, the \$20M is the federal ceiling for an award (which could be a multi-year award).

#	Question	Answer
	<p>opportunity.html?oppld=299283, shows a \$20M award ceiling. Are we to interpret this amount as a total, multi-year amount with the DOE cost share for FY21 limited to available funds indicated for Cycle 2021-1 in the Q&A number 161?</p>	
171	<p>Why were the min and max award sizes changed? Is there something specific that can be shared about that decision?</p>	<p>Only the anticipated federal minimum and federal maximum for Pathway 1 changed, to align more closely with the anticipated federal funds available. Please refer to Question #161.</p>
172	<p>The info in the Funding Source table in #161 was not included in the official FOA or any of its amendments. Do you mean to say that only proposals in the areas indicated in funding source tables will be considered?</p>	<p>While the table in Question #161 identifies specific fund sources, all proposals will be considered. Applicants need to carefully consider FY-2021 funding limitations identified in question #161.</p>
173	<p>Will the Department consider applications addressing materials development in support of advanced reactor development? For example, will the Department make the \$5M in its FY-2021 appropriation under NEET, provided to strengthen the pipeline of new materials for the current fleet and advanced reactors to make the pipeline more resilient and more economically competitive available for award under the Industry FOA?</p>	<p>The Industry FOA supports projects in a broad range of topics. With regard to the \$5M identified in the FY-2021 appropriation for a new program, the Department is in the process of evaluating, in consultation with industry stakeholders, the most appropriate way to implement the new materials program, including identifying and addressing the highest priority gaps for material and supply chain development needs for advanced reactors.</p>
174	<p>The table titled “Nuclear Energy Industry FOA Funding Sources” in the Q&A shows Hydrogen funding under LWRS. It is listed in the funding table as the LWRS Program. But the one-pager does not indicate it is only for LWRS. For example, would a microreactor applicant be considered for a hydrogen production proposal?</p>	<p>No, a microreactor applicant would not be considered for a hydrogen production proposal using the funds identified for NE LWRS hydrogen production activities. The available hydrogen demonstration funding under NE was appropriated under LWRS which is limited to support of the existing fleet. However, microreactor proposals could be considered for hydrogen production activities under the \$2M identified for microreactors, but such proposals would not be supported under LWRS funding.</p>
	<p>Added April 13, 2022</p>	

#	Question	Answer
175	Is the Office of Nuclear Energy (NE) able to continue its support of the U.S. Industry Opportunities for Advanced Nuclear Technology Development Funding Opportunity Announcement (Industry FOA) in fiscal year (FY) 2022?	Yes, the Industry FOA has stimulated interest in advanced reactor technology development and deployment since 2018. These efforts, combined with other industry-supporting initiatives, have been highly successful. We now have many projects underway through joint agreements with industry that span from conceptual design through development and demonstration of innovative advanced reactor technologies. Given this significant number of partnerships, the delay in receipt of FY 2022 appropriations, and current NE priorities for available funds, NE will only complete one Industry FOA application and review cycle for FY 2022. The following table identifies the new FY 2022 funding that NE plans to allocate to support additional Industry FOA awards in Cycle 2022-1, which closes for applications on June 29, 2022 (see notes). Please refer to the FY 2022 budget request for more information about NE programs (DOE FY 2022 Budget Request Vol 3.2 (energy.gov)). FYI, NE was able to apply nearly all available prior year funding towards awards under Cycle 2021-1; thus, there are no prior year funds available for Cycle 2022-1.

See Question #179 for updated table issued May 12, 2022

Nuclear Energy Industry FOA Funding Sources (\$ millions) Cycle 2022-1 ^{1,2}										
	Nuclear Energy Enabling Technologies			Reactor Concepts RD&D			Fuel Cycle R&D	Advanced Reactor Demonstration Program (ARDP)		
Funding	Nuclear Energy Advanced Modeling and	Advanced Sensors and Instrumentation (ASI)	Advanced Materials and Manufacturing Technologies (AMMT)	Light Water Reactor Sustainability (LWRS)	Advanced SMR RD&D	Advanced Reactor Tech. (ART)	TRISO	National Reactor Innovation Center	Reg. Devel.	Total

#	Question					Answer					
	Simulation (NEAMS)										
	Total Funding Avail. for Cycle 2022-1	1.0	0.5 ³	9.0 ⁴	7.0 Hydrogen ⁵	20.0 ⁶	2.0 MicroRx ⁷	2.0 ⁸	1.0 ⁹	1.0 ¹⁰	43.5

Notes:

1. The due date for submission of NE Industry FOA Cycle 2022-1 applications has been extended from April 30, 2022, to **June 29, 2022, at 5:00 p.m. Eastern Time**. DOE will not accept questions after June 15, 2022.

2. Due to funding limitations, DOE will not execute additional cycles in FY 2022. Accordingly, the NE Industry FOA (#DE-FOA-0001817) will permanently close upon completion of Cycle 2022-1. Analysis and planning for follow on engagements between NE and United States Industry is underway and outcomes will be communicated separately.

3. Advanced Sensors and Instrumentation (ASI) seeks applications to develop methods of implementing digital innovation in the development of Instrumentation and Control (I&C) systems for advanced reactor concepts. Successful proposals should include digital engineering of a relevant advanced reactor component or system with full integration of I&C. The proposal should include the development of a Digital Twin of the component through modeling and simulation and the fabrication of a physical system with the capability for hardware-in-the-loop implemented on a surrogate non-nuclear facility or testbed. The system demonstration should focus on the integration of advanced I&C technologies and the assessment of their impact on the system performance. The developed system should be able to demonstrate high coupling factor with the physical non-nuclear surrogate through experimental testing and allow for historical and time-forward perturbation studies. Additionally, applicants are highly encouraged to pursue system designs that are directly connected with an advanced reactor facility or testbed already existing or under construction. If applicants do not have access to the physical resources, they should seek partnerships with advanced reactor developers to provide relevance of the digital engineering to a physical system already under development to aid in the maturation of an established reactor component or system.

4. AMMT seeks applications supporting demonstration of technologies through the production of parts, components, and subsystems that have the potential for widespread impact in manufacturing for the nuclear sector. New materials combined with innovative processing techniques can accelerate the transition of promising nuclear systems and improve the competitiveness of the current fleet and advanced reactors. To catalyze the adoption of cutting-edge technologies, AMMT wants to invest resources at critical decision points to help overcome technological and regulatory hurdles that could be seen as too risky for the private sector to take on alone. Additionally, other factors that need to be considered are performance, costs/savings, deployment potential, technical risk, and required measurement and verification efforts. The goal is to engage reactor vendors and original equipment manufacturer (OEM) suppliers for products and capabilities with the intent for adoption of the technologies. **Applications for this topic area must culminate in a demonstration of the proposed technology under Pathway 1, which requires a minimum of a 50/50 cost share. For additional information see Q&A Document Question # 176, as well as Questions #18, #58 and #109A.**

5. LWRS seeks applications to support flexible plant operation and generation, including applications of heat from the current nuclear fleet. DOE currently has private-public partnerships to demonstrate both high temperature and low temperature small-scale systems for producing hydrogen. In preparation for future scale-up of industrial use of nuclear energy, it is anticipated that selected awardees will include development of infrastructure needed for a nuclear industrial energy

#	Question	Answer
	<p>park near an existing reactor, to include thermal and electrical output, as well as feedstock inputs for industrial/chemical processes. Potential activities that advance nuclear integration beyond the current small scale nuclear hydrogen production demonstrations may include but are not limited to activities that lead to or achieve:</p> <ul style="list-style-type: none"> • Demonstration of thermal energy extraction, distribution, and control at the 20 to 300 MW_{th} levels to support high temperature electrolysis and thermal storage applications at a nuclear plant; • Emulation of a full range of heat flow dynamics for thermal applications (including electrolyzers) with a controllable thermal load (connected to a 20 to 300 MW_{th} nuclear plant thermal distribution system) used to support probabilistic risk assessments, understand new initiating events, provide regulatory guidance, understand human factors, and evaluate the response (or lack of response) of reactor coolant temperature, turbine generators, and other aspects of operation; • Site designs for energy parks, including infrastructure near existing nuclear plants for transporting and storing CO₂ sources for use in chemical processes, and design optimization of local electrical infrastructure to support localized use of nuclear energy; and • Scalable prototype fuel synthesis system for verification of conversion efficiencies and development of fully autonomous synfuel plant controls. <p>It is expected that these first-of-a-kind activities will be used to benefit all U.S. nuclear plants through data sharing, and by providing a basis for licensing and development of regulatory requirements.</p> <p>6. Advanced SMR RD&D seeks applications to support development and demonstration of domestic manufacturing capabilities needed in the development of small modular reactors of various technology types. Applications for this funding may include innovative reactor component manufacturing capabilities and first-of-a-kind applications, e.g. large forgings, that will enhance the domestic supply chain and have broad applicability to the demonstration of advanced SMR technologies. Applications for this topic area must culminate in a demonstration of the proposed technology under Pathway 1, which requires a minimum of a 50/50 cost share. For additional information see Q&A Document Question # 176, as well as Questions #18, #58 and #109A.</p> <p>7. ART seeks applications to support activities related to microreactor development and future demonstration. Other reactor types will not be considered for this funding.</p> <p>8. TRISO seeks applications to support activities related to TRISO fuel and graphite qualification, fabrication of TRISO fuel, use of TRISO fuel in advanced reactors, and closing regulatory gaps associated with the qualification and use of TRISO fuel and graphite in advanced reactors.</p> <p>9. NRIC seeks applications to support activities to enable advanced reactor development, testing, and demonstration.</p> <p>10. Advanced Reactor Regulatory Development seeks applications to support activities to establish a regulatory framework and licensing technical requirements for advanced reactors and perform targeted research to reduce the regulatory risks associated with advanced reactors.</p>	
176	<p>What Pathway should I submit my application under to be considered for FY2022 funding for the first scope area identified under Advanced Materials and Manufacturing Technologies (AMMT)? Is the cost share requirement a minimum of 50%?</p>	<p>All applications for the first scope area within AMMT should be submitted under Pathway 1 and are required to provide a minimum of 50% cost share.</p>

#	Question	Answer
	Added May 12, 2022	
177	Due to the broad nature of the topics being solicited under this FOA and the fact that there will be no further opportunities for subsequent application submission, would the DOE consider allowing more than two applications for this last review cycle? Specifically, a regulatory assistance grant is being sought in addition to two distinctly different topics for pathway 1 applications.	Due to the limited amount of available funding for the last cycle of DE-FOA-0001817, the number of applications that a company can submit will not be changed.
178	The following statement is in Section III – Eligibility Information A. Eligible Applicants, 5 th paragraph <i>“Any reactor design developers who receive funds under DOE’s Advanced Reactor Demonstration Funding Opportunity Announcement for advanced reactor demonstrations are not eligible to receive funds under this FOA. By applying to this FOA, applicants are certifying they comply with this requirement”</i> . Our company is a recipient of funding from DOE for Advanced Reactor Demonstration. We have a project to propose for iFOA cycle 2022-1 that has nothing to do with our current planned DOE ARDP effort. Are we eligible to propose this project (that is unrelated to our ongoing ARDP project) to the iFOA cycle 2022-1?	A recipient (a prime or sub) of an Advanced Reactor Demonstration award is eligible to apply for an award under the Industry FOA for scope that is distinctly unrelated to advanced reactor demonstrations.
179	Is the Office of Nuclear Energy (NE) able to continue its support of the U.S. Industry Opportunities for Advanced Nuclear Technology Development Funding Opportunity Announcement (Industry FOA) in fiscal year (FY) 2022?	Yes, the Industry FOA has stimulated interest in advanced reactor technology development and deployment since 2018. These efforts, combined with other industry-supporting initiatives, have been highly successful. We now have many projects underway through joint agreements with industry that span from conceptual design through development and demonstration of innovative advanced reactor technologies. Given this significant number of partnerships, the delay in receipt of FY 2022 appropriations, and current NE priorities for available funds, NE will only complete one Industry FOA application and review cycle for FY 2022. The following table identifies the new

#	Question	Answer				
		<p>FY 2022 funding that NE plans to allocate to support additional Industry FOA awards in Cycle 2022-1, which closes for applications on June 29, 2022 (see notes). Please refer to the FY 2022 budget request for more information about NE programs (DOE FY 2022 Budget Request Vol 3.2 (energy.gov)). FYI, NE was able to apply nearly all available prior year funding towards awards under Cycle 2021-1; thus, there are no prior year funds available for Cycle 2022-1. Please Note: NE has striven to maximize and diversify the funding made available to the Industry FOA throughout its 12 cycles and communicate funding amounts and programmatic sponsors to the Industry Community as quickly as possible to facilitate applicant planning. NE continued this approach by posting the below table in mid-April 2022. However, based on updated planning requirements, the below table has been revised to adjust available funding amounts, sources, and guidance. NE regrets any inconvenience caused by these changes.</p>				
<p>See Question #180 for an updated table issued August 11, 2022</p>						
<p>Nuclear Energy Industry FOA Funding Sources (\$ millions) Cycle 2022-1^{1,2}</p>						
	<p>Nuclear Energy Enabling Technologies</p>	<p>Reactor Concepts RD&D</p>	<p>Fuel Cycle R&D</p>	<p>Advanced Reactor Demonstration Program (ARDP)</p>		

#	Question					Answer					
	Funding	Nuclear Energy Advanced Modeling and Simulation (NEAMS)	Advanced Sensors and Instrumentation (ASI)	Advanced Materials and Manufacturing Technologies (AMMT)	Light Water Reactor Sustainability (LWRS)	Advanced SMR RD&D	Advanced Reactor Tech. (ART)	TRISO	National Reactor Innovation Center	Reg. Devel.	Total
	Total Funding Avail. for Cycle 2022-1	1.0	0.5³	11.0⁴	7.0 Hydrogen⁵	0.0	2.0 MicroRx⁶ 2.5⁷ MSR Adv. Isotope Seps.	2.0⁸	1.0⁹	1.0¹⁰	28.0

Notes:

1. The due date for submission of NE Industry FOA Cycle 2022-1 applications has been extended from April 30, 2022, to **June 29, 2022, at 5:00 p.m. Eastern Time**. DOE will not accept questions after June 15, 2022.

2. Due to funding limitations, DOE will not execute additional cycles in FY 2022. Accordingly, the NE Industry FOA (#DE-FOA-0001817) will permanently close upon completion of Cycle 2022-1. Analysis and planning for follow on engagements between NE and United States Industry is underway and outcomes will be communicated separately.

3. Advanced Sensors and Instrumentation (ASI) seeks applications to develop methods of implementing digital innovation in the development of Instrumentation and Control (I&C) systems for advanced reactor concepts. Successful proposals should include digital engineering of a relevant advanced reactor component or system with full integration of I&C. The proposal should include the development of a Digital Twin of the component through modeling and simulation and the fabrication of a physical system with the capability for hardware-in-the-loop implemented on a surrogate non-nuclear facility or testbed. The system demonstration should focus on the integration of advanced I&C technologies and the assessment of their impact on the system performance. The developed system should be able to demonstrate high coupling factor with the physical non-nuclear surrogate through experimental testing and allow for historical and time-forward perturbation studies. Additionally, applicants are highly encouraged to pursue system designs that are directly connected with an advanced reactor facility or testbed already existing or under construction. If applicants do not have access to the physical resources, they should seek partnerships with advanced reactor developers to provide relevance of the digital engineering to a physical system already under development to aid in the maturation of an established reactor component or system.

4. AMMT seeks applications supporting demonstration of technologies through the production of parts, components, and subsystems that have the potential for widespread impact in manufacturing for the nuclear sector. New materials combined with innovative processing techniques can accelerate the transition of promising nuclear systems and improve the competitiveness of the current fleet and advanced reactors. To catalyze the adoption of cutting-edge technologies, AMMT wants to invest resources at critical decision points to help overcome technological and regulatory hurdles that could be seen as too risky for the private

#	Question	Answer
	<p>sector to take on alone. Additionally, other factors that need to be considered are performance, costs/savings, deployment potential, technical risk, and required measurement and verification efforts. The goal is to engage reactor vendors and original equipment manufacturer (OEM) suppliers for products and capabilities with the intent for adoption of the technologies. Applications for this topic area must culminate in a demonstration of the proposed technology under Pathway 1, which requires a minimum of a 50/50 cost share. For additional information see Q&A Document Question # 175, as well as Questions #18, #58 and #109A. A total of \$9.0 million is available for this scope area.</p> <p>AMMT also seeks applications with industry to research and demonstrate accelerated testing in the area of radiation effects to catalyze the adoption of cutting-edge technologies. The primary objective is the identification of the significant property changes induced in new structural materials by radiation from nuclear reactor sources and through accelerated testing to determine the predictive modeling and component life expectancy. An example could be combined neutron and ion irradiation testing. The results of these efforts should be the testing of reactor materials, parts, components, and subsystems under demanding service conditions relevant to reactor applications. The data generated would be used to validate modeling, manufacturing, performance, and support the regulatory process for use. A total of \$2.0 million is available for this scope area.</p> <p>5. LWRS seeks applications to support flexible plant operation and generation, including applications of heat from the current nuclear fleet. DOE currently has private-public partnerships to demonstrate both high temperature and low temperature small-scale systems for producing hydrogen. In preparation for future scale-up of industrial use of nuclear energy, it is anticipated that selected awardees will include development of infrastructure needed for a nuclear industrial energy park near an existing reactor, to include thermal and electrical output, as well as feedstock inputs for industrial/chemical processes. Potential activities that advance nuclear integration beyond the current small scale nuclear hydrogen production demonstrations may include but are not limited to activities that lead to or achieve:</p> <ul style="list-style-type: none"> • Demonstration of thermal energy extraction, distribution, and control at the 20 to 300 MW_{th} levels to support high temperature electrolysis and thermal storage applications at a nuclear plant; • Emulation of a full range of heat flow dynamics for thermal applications (including electrolyzers) with a controllable thermal load (connected to a 20 to 300 MW_{th} nuclear plant thermal distribution system) used to support probabilistic risk assessments, understand new initiating events, provide regulatory guidance, understand human factors, and evaluate the response (or lack of response) of reactor coolant temperature, turbine generators, and other aspects of operation; • Site designs for energy parks, including infrastructure near existing nuclear plants for transporting and storing CO₂ sources for use in chemical processes, and design optimization of local electrical infrastructure to support localized use of nuclear energy; and • Scalable prototype fuel synthesis system for verification of conversion efficiencies and development of fully autonomous synfuel plant controls. <p>It is expected that these first-of-a-kind activities will be used to benefit all U.S. nuclear plants through data sharing, and by providing a basis for licensing and development of regulatory requirements.</p> <p>6. ART seeks applications to support activities related to microreactor development and future demonstration. Other reactor types will not be considered for this funding.</p> <p>7. ART seeks applications for the research and development of advanced isotope separation processes needed to support development and future demonstrations of molten salt reactors (MSR). Potential activities could include: development of novel isotope separation processes, maturation of current isotope separation processes and activities to support scale-up of current processes to produce isotopes at levels required for commercial MSRs. Proposals focused on chlorine isotope (Cl35/Cl37) separation will be a priority. Although this FOA supports research and development activities to develop isotope separation processes, activities to establish commercial production will not be considered. Finally, this FOA does not support activities related to the routine production and processing or sale of any</p>	

#	Question	Answer
	<p>isotopes. The Office of Science’s Isotope Program Office (DOE IP) has the lead Departmental responsibility for R&D for isotope production and processing methods and commercialization of isotope production to the domestic private sector. Applications will be coordinated with the DOE IP and should not duplicate efforts supported by the DOE IP.</p> <p>8. TRISO seeks applications to support activities related to TRISO fuel and graphite qualification, fabrication of TRISO fuel, use of TRISO fuel in advanced reactors, and closing regulatory gaps associated with the qualification and use of TRISO fuel and graphite in advanced reactors.</p> <p>9. NRC seeks applications to support activities to enable advanced reactor development, testing, and demonstration.</p> <p>10. Advanced Reactor Regulatory Development seeks applications to support activities to establish a regulatory framework and licensing technical requirements for advanced reactors and perform targeted research to reduce the regulatory risks associated with advanced reactors.</p>	
Added August 11, 2022		
180	<p>Is the Office of Nuclear Energy (NE) able to continue its support of the <i>U.S. Industry Opportunities for Advanced Nuclear Technology Development</i> Funding Opportunity Announcement (Industry FOA) in fiscal year (FY) 2022?</p>	<p>Yes, the Industry FOA has stimulated interest in advanced reactor technology development and deployment since 2018. These efforts, combined with other industry-supporting initiatives, have been highly successful. We now have many projects underway through joint agreements with industry that span from conceptual design through development and demonstration of innovative advanced reactor technologies. Given recent changes in available funding and areas of interest, NE has decided to extend Cycle 2022-1 to October 11, 2022. Please refer to the FY 2022 budget request for more information about NE programs (DOE FY 2022 Budget Request Vol 3.2 (energy.gov)). NE was able to apply nearly all available prior year funding towards awards under Cycle 2021-1; thus, there are no prior year funds available for Cycle 2022-1. Please Note: NE has striven to maximize and diversify the funding made available to the Industry FOA throughout its 12 cycles, and communicate funding amounts and programmatic sponsors to the Industry Community as quickly as possible to facilitate applicant planning. NE continued this approach by posting the below table in mid-May 2022. However, based on updated planning requirements, the below tables have been revised to adjust available funding amounts, sources, and guidance. NE regrets any inconvenience caused by these changes.</p>

#	Question						Answer				
Nuclear Energy Industry FOA Funding Sources (\$ millions) Cycle 2022-1^{1, 10}											
	Nuclear Energy Enabling Technologies			Reactor Concepts RD&D			Fuel Cycle R&D	Advanced Reactor Demonstration Program (ARDP)			
Funding	Nuclear Energy Advanced Modeling and Simulation (NEAMS)	Advanced Sensors and Instrumentation (ASI)	Advanced Materials and Manufacturing Technologies (AMMT)	Light Water Reactor Sustainability (LWRS)	Advanced SMR RD&D	Advanced Reactor Tech. (ART)	TRISO	National Reactor Innovation Center	Reg. Devel.	Total	
Total Funding Avail. for Cycle 2022-1	1.0	0.5²	2.0³	20.0-40.0⁴	0.0	2.0 MicroRx⁵ 2.5⁶ MSR Adv. Isotope Seps.	2.0⁷	1.0⁸	1.0⁹	41.0-61.0	

Notes:

1. The due date for submission of NE Industry FOA Cycle 2022-1 applications has been extended from **June 29, 2022 to October 11, 2022, at 5:00 p.m. Eastern Time.** DOE will not accept questions after September 27, 2022.

2. Advanced Sensors and Instrumentation (ASI) seeks applications to develop methods of implementing digital innovation in the development of Instrumentation and Control (I&C) systems for advanced reactor concepts. Successful proposals should include digital engineering of a relevant advanced reactor component or system with full integration of I&C. The proposal should include the development of a Digital Twin of the component through modeling and simulation and the fabrication of a physical system with the capability for hardware-in-the-loop implemented on a surrogate non-nuclear facility or testbed. The system demonstration should focus on the integration of advanced I&C technologies and the assessment of their impact on the system performance. The developed system should be able to demonstrate high coupling factor with the physical non-nuclear surrogate through experimental testing and allow for historical and time-forward perturbation studies. Additionally, applicants are highly encouraged to pursue system designs that are directly connected with an advanced reactor facility or testbed already existing or under

#	Question	Answer
		<p>construction. If applicants do not have access to the physical resources, they should seek partnerships with advanced reactor developers to provide relevance of the digital engineering to a physical system already under development to aid in the maturation of an established reactor component or system.</p> <p>3. AMMT seeks applications with industry to research and demonstrate accelerated testing in the area of radiation effects to catalyze the adoption of cutting-edge technologies. The primary objective is the identification of the significant property changes induced in new structural materials by radiation from nuclear reactor sources and through accelerated testing to determine the predictive modeling and component life expectancy. An example could be combined neutron and ion irradiation testing. The results of these efforts should be the testing of reactor materials, parts, components, and subsystems under demanding service conditions relevant to reactor applications. The data generated would be used to validate modeling, manufacturing, performance, and support the regulatory process for use. A total of \$2.0 million is available for this scope area.</p> <p>4. LWRS, in coordination with DOE’s Office of Energy Efficiency and Renewable Energy (EERE) - Hydrogen and Fuel Cell Technologies Office (HFTO), seeks applications that support development of nuclear plant thermal integration that would be required for high temperature hydrogen production or hydrogen coupled end-uses for nuclear energy. In preparation for future scaleup of industrial use of nuclear energy, it is anticipated that selected awardees from this announcement could design and develop the heat extraction infrastructure needed for a nuclear and hydrogen industrial energy park or develop hydrogen coupled end-uses for nuclear produced hydrogen. This effort will enable the use of nuclear thermal and electrical outputs to produce hydrogen at higher efficiencies than today’s low temperature electrolysis technology and enable the scale up of co-located hydrogen infrastructure and end use applications. Potential activities that advance nuclear integration beyond the current DOE funded high and low temperature electrolysis projects may include:</p> <p>Nuclear Plant Thermal Integration:</p> <ul style="list-style-type: none"> • Front end engineering and design (FEED) studies for nuclear plant thermal energy extraction, distribution, and control at the 20 to 300 MW_{th} levels. FEED studies should include high temperature electrolysis designs, as well as develop accurate construction costs to demonstrate economic viability. These FEED studies may include infrastructure for distribution of hydrogen, electricity, heat, and other potential feedstocks or products near existing nuclear plants supporting development of an energy park based on nuclear energy and hydrogen. The energy park could ultimately involve multiple end uses and revenue streams. Factors such as modularity, scalability and flexibility should be considered. • License amendments, other regulatory and permitting requirements of the Nuclear Regulatory Commission (NRC), or requirements of other authorities having jurisdiction, as needed to demonstrate thermal extraction infrastructure and associated hydrogen production and infrastructure. <p>Hydrogen Coupled End-Uses:</p> <ul style="list-style-type: none"> • Development of scalable prototype systems that integrate nuclear powered electrolysis with the development and demonstration of a specific hydrogen end-use. The focus is on applications that offer potential for significant greenhouse gas emission reduction as well as cost competitive market potential. End use applications may include, but are not limited to, using hydrogen for transportation applications, such as heavy-duty hydrogen fuel cell applications or drop-in/synthetic fuels; power generation and energy storage; and/or industrial and chemical applications such as ammonia, metals, or oxygen utilization. Prototype hydrogen systems may be used for verification of chemical conversion or manufacturing efficiencies, development of fully autonomous plant controls, or demonstrating technical and economic viability. Although low temperature proton exchange membrane (PEM) electrolyzers for hydrogen production or gas turbines for end-use applications may be considered as part of a larger application, these specific topics would not be eligible for project funding (neither Federal nor applicant cost share) as DOE is already supporting work in this area.

#	Question	Answer
	<p>It is expected that these first-of-a-kind activities will support and lead to an eventual demonstration of thermal energy extraction, distribution, and control at the 20 to 300 MWth levels. The resulting information produced from these activities will be used to benefit all U.S. nuclear plants through data sharing and by providing a basis for the development of regulatory requirements and eventual licensing. It is also expected that any demonstration activities would engage local communities and support DOE’s environmental and energy justice priorities, including providing benefits to disadvantaged communities.</p> <p>5. ART seeks applications to support activities related to microreactor development and future demonstration. Other reactor types will not be considered for this funding.</p> <p>6. ART seeks applications for the research and development of advanced isotope separation processes needed to support development and future demonstrations of molten salt reactors (MSR). Potential activities could include: development of novel isotope separation processes, maturation of current isotope separation processes and activities to support scale-up of current processes to produce isotopes at levels required for commercial MSRs. Proposals focused on chlorine isotope (Cl35/Cl37) separation will be a priority. Although this FOA supports research and development activities to develop isotope separation processes, activities to establish commercial production will not be considered. Finally, this FOA does not support activities related to the routine production and processing or sale of any isotopes. The Office of Science’s Isotope Program Office (DOE IP) has the lead Departmental responsibility for R&D for isotope production and processing methods and commercialization of isotope production to the domestic private sector. Applications will be coordinated with the DOE IP and should not duplicate efforts supported by the DOE IP.</p> <p>7. TRISO seeks applications to support activities related to TRISO fuel and graphite qualification, fabrication of TRISO fuel, use of TRISO fuel in advanced reactors, and closing regulatory gaps associated with the qualification and use of TRISO fuel and graphite in advanced reactors.</p> <p>8. NRIC seeks applications to support activities to enable advanced reactor development, testing, and demonstration.</p> <p>9. Advanced Reactor Regulatory Development seeks applications to support activities to establish a regulatory framework and licensing technical requirements for advanced reactors and perform targeted research to reduce the regulatory risks associated with advanced reactors.</p> <p>10. DOE will not execute additional cycles in FY 2022. Accordingly, the NE Industry FOA (#DE-FOA-0001817) will permanently close upon completion of Cycle 2022-1. Analysis and planning for follow on engagements between NE and United States Industry is underway and outcomes will be communicated separately.</p>	
	Added August 30, 2022	
181	<p>While we expect all the work done directly under the DOE grant funding to be conducted in the United States, we were considering using a U.K. university research partner as part of our cost-share obligation. Could you please let us know if we’d still need to submit a waiver request for work done outside of the United States if the services procured <u>do not</u> directly use DOE funding but is part of the 20% cost-share obligation?</p>	<p>Yes, a waiver is required for any work performed outside of the United States, please refer to section IV, L (see below).</p> <p>L. PERFORMANCE OF WORK IN THE UNITED STATES</p> <p>1. Requirement <i>All work performed under DOE Awards must be performed in the United States. This requirement does not apply to the purchase of</i></p>

#	Question	Answer
		<p><i>supplies and equipment; however, the Prime Recipient should make every effort to purchase supplies and equipment within the United States. The Prime Recipient must flow down this requirement to its subrecipients.</i></p> <p><i>2. Failure to Comply</i> <i>If the Prime Recipient fails to comply with the Performance of Work in the United States requirement, DOE may deny reimbursement for the work conducted outside the United States and such costs may not be recognized as allowable recipient cost share. The Prime Recipient is responsible should any work under this Award be performed outside the United States, absent a waiver, regardless if the work is performed by the Prime Recipient, subrecipients, contractors or other project partners.</i></p> <p><i>3. Waiver</i> <i>There may be limited circumstances where it is in the interest of the project to perform a portion of the work outside the United States. To seek a waiver of the Performance of Work in the United States requirement, the applicant must submit a written waiver request to DOE. See Appendix B for a list of the necessary information that must be included in a request to waive the Performance of Work in the United States requirement.</i></p> <p><i>The applicant must demonstrate to the satisfaction of DOE that a waiver would further the purposes of the objectives set forth in this FOA and is in the economic interests of the United States. DOE may require additional information before considering a waiver request. Save the waiver request(s) in a single PDF file titled "Control Number Performance of Work Waiver". The applicant has no right to appeal DOE's decision concerning a waiver request.</i></p>

#	Question	Answer
182	Will the cooperative agreements awarded under the FOA be firm-fixed-price awards?	<p>The awards issued under the FOA are financial assistance awards and awarded as either grants or cooperative agreements (Section II.A).</p> <p>The awardee is reimbursed for the Government portion of the actual expenses of the project (not to exceed the award ceiling), and the applicant must follow the applicable cost principles. For financial assistance awards, refer to 2 CFR Part 200 as amended by 2 CFR Part 910.</p>
183	Will Technology Investment Agreements (TIA) be contemplated to increase the involvement of high-technology commercial companies (startups)?	No, section II.A specifies that “DOE anticipates awarding cooperative agreements and grants to U.S. nuclear industry partners under this announcement.”
184	The table titled “Nuclear Energy Industry FOA Funding Sources” in the Q&A shows \$2M for funding of microreactors under ART. We intend to submit a microreactor application but are unsure what Pathway we should be filing under? Specifically what performance period, cost sharing and page requirements would apply to our application?	Please refer to Section III C. COST SHARING and Appendix C. The appropriate pathway to apply under is determined by the Technology Readiness Level of the project.
185	As a follow-up question to question 184 about the microreactor Pathway, how many microreactor awards are expected to be granted? Is the \$2M listed in the table titled “Nuclear Energy Industry FOA Funding Sources” in the Q&A the maximum amount of an individual award or the total aggregate amount of all awards?	The number of awards under any funding source is contingent on the number of applications submitted. The \$2M listed for microreactors (or any other source listed on the table) may fund one or more awards depending on the request from applications. The value listed on the table is the funding available for government cost share, not the award size.
186	We noticed that the \$20M of funding for the Advanced Reactor RD&D went to \$0. Did the amendment actually intend not to seek proposals for advanced reactor research and development? Any insight would be helpful (this was the area our proposal was focused on – to support domestic, near-net shape large forgings).	Due to the limited availability of funding, the Advanced Small Modular Reactor (SMR) RD&D topic was reduced from \$20.6M to \$0. No proposals are being sought for this topic area at this time. Funding remains available for Advanced Reactor Technologies (ART) related to microreactor development and future demonstration as well as advanced isotope separation processes needed to support development and future demonstrations of molten salt reactors (MSR). Additionally, funding is available to support advanced reactor development and demonstration through the National Reactor Innovation Center.

#	Question	Answer
187	Does the lead applicant have to be a nuclear company or can the applicant be a company (such as Dow) who wants to use the electricity/process heat from a nuclear company?	The lead applicant does not have to be a nuclear company. Please refer to Section III D. PERCENTAGE COMPLETED BY APPLICANT, where it specifies that the “applicant is required to perform a minimum of 35 percent of the total project cost.”
188	<p>The division of the FOA’s budget allocation into three pathways seemed to be a clear open-ended call.</p> <p>The addition of the Nuclear Energy Industry FOA Funding Sources tables starting in May 2022 throws a great deal of confusion into the proposal formulation process; let alone the change of emphasis (and budget) that occurred 3 months apart between Questions 179 and 180.</p> <p>This raises many questions for the industry community, some of which are formulated below, and others are sure to come:</p>	
	A. What is the correlation between the funding sources and the pathways?	<p>There is no correlation between the funding sources and the pathways with the exception of the LWR funding source (Funding Table Note 4) that provides the expectation of applying under the first-of-a kind (Pathway 1).</p> <p>An applicant must make a determination of what pathway to apply under based on the Technology Readiness Level of the project.</p>
	B. If a proposal submitted under Pathway X incorporates elements from multiple categories (NEAMS, ASI, etc.), how would the funding sources influence proposal selection?	A project may be funded from multiple funding sources. The Selection Official considers the amount of funds available in each category when determining funding amounts for an award.
	C. Has DOE devised a proposal evaluation strategy to compare proposals that integrate multiple categories, or is the expectation that proposals would have to be written to each category separately?	<p>The Selection Official considers the technical merit, the merit review board’s recommendation(s), program policy factors, and the amount of funds available in each category when determining the selections for award.</p> <p>Applications may focus on one or more categories (funding sources).</p>

#	Question	Answer
	D. As we approach the proposal due date, can we assume that the target has stopped moving, or should we expect further refinements to the funding source table?	At this time, we do not expect any updates to the funding table.
Added October 4, 2022		
189	<p>WEBINAR DATE AND TIME – Section VII.C of iFOA Amendment 14 states: “DOE conducted its first webinar on January 9, 2018 covering project details and FOA application instructions. A two-day Industry Day webinar was conducted on October 29 and 30, 2019 covering application document training and lessons learned. All webinars can be viewed at https://www.id.energy.gov/.”</p> <p>The link above only provides the October 29 & 30, 2019 presentations and October 30, 2019 webinar.</p> <p>Also, on the August 11, 2022 Final Q&A document, question 44 (added January 4, 2018) asks:</p> <p>“Will there will [sic] be a meeting or webinar to expand on the FOA and provide an opportunity for potential participants to ask questions?” The response states: “The DOE Office of Nuclear Energy will hold an informational webinar on the Industry FOA on January 9, 2018, from 1:00 – 3:00 pm ET. The link to the webinar can be found here: https://attendee.gotowebinar.com/register/7675161096076116995.”</p> <p>Question 55 of the August 11, 2022 Final Q&A document also refers to the https://www.id.energy.gov/ site for the January 9, 2018 webinar.</p>	The information provided in the first webinar on January 9, 2018, was removed from the website as it was outdated, and it was replaced with the most current webinar available. The 2018 webinar is not currently available and if another amendment is issued to the Q&A document or the FOA, the information referencing the webinars will be updated accordingly.

#	Question	Answer
	Is the January 9, 2018 webinar still available and what is the best way to obtain it?	
190	<p>Commitment Letters from Third Parties Contributing to Cost Sharing – The instructions for Pathway 3 in Section VII.F item 14 (p. 35) of iFOA Amendment 14 state: “If applicable, at the time the application is submitted it must include a letter from each third party (i.e., a party other than the organization submitting the application). The letter must state that the third party is committed to providing a specific minimum dollar amount of cost sharing. Submitting the application provides assurance that the letters of commitment have been signed. In an appendix to the Budget Justification, the following information for each third party contributing to cost sharing must be identified: (1) the name of the organization; (2) the proposed dollar amount to be provided; (3) the amount as a percentage of the total project cost; and (4) the proposed cost sharing - cash, services, or property.” Is there a page limit for this section (14)? If so, does this suggested appendix count in the page limit?</p>	There is no page limit for commitment letters.
191	Can the Principle Investigator (PI) be a citizen of a generally authorized destination as listed under 10CFR810 Appendix A?	Yes, provided all other IFOA eligibility criteria are met and applicant/recipient complies with all U.S. export control regulations and laws.
192	<p>Project Summary/ Abstract – The instructions for Pathway 3 in Section IV.F item 3 (p. 30) of iFOA Amendment 14 state: “The project summary must not exceed one (1) page when printed using standard 8.5" by 11" paper with 1" margins (top, bottom, left and right) with Times New Roman font no smaller than 11 point. The template is available at the application site document library.” However, the template from the application site document library has 0.5" margins (top, bottom, left, and right) and uses Calibri font. Do we use the template as is, or change the margins and font to comply with the instructions?</p>	Please follow all document and font size limitations as specified in the FOA. An updated template can be found at the IFOA website.

#	Question	Answer
193	Current and Pending Support – The instructions for Pathway 3 in Section VII.F item 9 (p. 34) of iFOA Amendment 14 state: “As requested by the submission form, PI(s), subrecipients, and other senior/key persons for ongoing and pending applications shall identify all federal funding sources by agency source, project name, monetary amount (total award amounts for entire project period, including indirect costs), and length of term, person-months per year to be devoted to the project by the senior/key persons that are pending or currently in place for the PI or collaborators within the past five years.” Does this apply to collaborators and (unpaid) advisors or just collaborators?	Yes, this applies to collaborators, see chart on page 28. It does not apply to unpaid advisors.
194	Can an identical Excel version of SF424A be submitted in lieu of the .pdf version provided?	No, please utilize the provided pdf form.
195	Is it possible that the DOE would provide 100% of the funding for an application without any recipient cost share?	No, DOE will not consider providing 100% of the funding for a project as recipient cost share is required and specified in EAct 2005 Section 988.