

Topic Area 8 Office Hours Q&A

Q: In the past this area has funded nuclear data that goes into the modeling and simulation codes. Would that be something considered this year?

A: It might be more applicable in the specific reactor type area or a blue sky area but there's nothing in this topic area that would make it out of bounds as written.

Q: MSR fuel cycle simulation was mentioned with this topic area. I know the point is to keep the topic broad, but what specifically is that referring to? Also, is the pebble bed reactor modeling a topic of interest for this call?

A: For this topic area, if what you're proposing is developing modeling and simulation capability it fits in this area now. The remarks about MSR were about what the NEAMS program specifically has worked on and what they are working on. Separate that from what the call is because the call is not specific to the NEAMS program. The pebble bed modeling is within the scope. Whether or not it's of programmatic interest for the NEAMS program is not relevant for what fits under the scope. If it's novel and impactful it's up to you to define that and tell us why it's important.

Q: Suppose I am proposing to use some developed MGI and simulation tools and codes to design new materials for nuclear energy applications that can be synthesized using additive manufacturing, that covers three different topics. How do I know which one to submit to?

A: From a holistic standpoint for CINR, look at what the core task structure is that you're proposing. For example if you've got 5 tasks and 3 of them are really materials development then that should probably go in the materials area. If a proposal is cross cutting in some way, we do involve subject matter experts for multiple areas to make sure the perspective is covered. Additionally, if you put it in a topic area and a program manager feels like it would do better in a different topic area then it can be moved if approved by the principal investigator.

Q: During the training for force models in April the IES team described the simulation of financial and economic models. Is the simulation of finance and or economic models within the scope of topic area 8?

A: If it doesn't fit cleanly somewhere else, then yes. The intent of this call is to be as broad as possible. If it's something that is within the NE mission, it's up to you to again define and defend why it's important, why it's impactful, why it fits within the NE mission. If it's modeling and simulation, it can go under this topic. That is done under the integrated Energy Systems program, but these topics are not specific to programs.

Q: If there is DOE NE code and we want to propose an extension or improvement of its capabilities for, say, two phase flow or multispecies modeling or even particle transport and deposition modeling for different types of nuclear reactor, for instance. Would that fall under the scope of topic Area 8?

A: It definitely would, and to the extent that folks want to work hand in hand with the program we would welcome that. We can't factor that into our decision, but we welcome you to reach out to the technical area folks within the NEAMS program or any other program and work on those things collaboratively.

Q: In previous years benchmark development proposals had a smaller award size. Do you have a recommended size of the project for benchmark applications?

A: No, as long as it's within what the FOA dictates. Additionally, there's no favor given to awards that request the maximum award amount compared to those that don't.

Q: The time limit in the FOA is 3 years and 2 months, is there a set start date or is it up to the PI?

A: With the accelerated schedule the intended start date is August 1st to allow for those projects to end like they always have on September 30th. The earlier start is intended to support project startup and graduate student recruitment.

Q: What is the expectation in this topic area for the new REU program?

A: The research experience for undergraduates program is new for this year and is again intentionally broad. The \$100,000 supplement is on top of your requested R&D budget and is intended to either support students on campus to supplement your research, or to bring in students from outside like other universities that may not have NEUP projects, for instance for a summer program or something like that. The details of what you want to do with the REU funding should be outlined in your plan submitted in your full application. We do encourage you to consider disadvantaged or underrepresented groups as you design these programs.

Q: Is the REU description required for the pre-application?

A: In the pre-application there is an indication if you'd like to participate in the REU program and a description would be a positive thing, but it's not required for the pre-application.