#### Gen III+ SMR Q&A

Updated 1/10/2025 *Italics denote new or updated questions.* 

#### General

#### Can DOE confirm which forms are required to be included with applications?

All required forms are specified in the solicitation. Since DOE is using its Other Transactions Agreement authority, the requirements in this solicitation are different than what is required for a Cooperative Agreement. Other Transaction Agreement awards are not considered financial assistance awards. Forms that are mandatory for financial assistance awards are not required for Other Transaction Agreement awards. Therefore, the solicitation does not prescribe use of the SF-424a or b.

As specified in the solicitation, all applications require:

- Project narrative
- *Financing explanation*
- Licensing and construction strategy
- Listing of management team and project partners
- A community benefits plan
- Impacted Indian tribe documentation
- Letters of commitment
- Resumes
- Transparency of foreign connections
- Potentially duplicative funding notice
- Disclosure of lobbying activities (SF-LLL)
- Disclosure of existing work relations with national laboratories.

Applicants should refer to the solicitation for more information regarding the requirements for the various sections listed above and any differences between Tier 1 and Tier 2 applications.

Is there a minimum amount of work that the prime applicant must perform to receive an award, and can DOE clarify the intent of the "Level of Effort" information requested within eXCHANGE?

Each award will consist of a single agreement with a single entity, the prime applicant. All applications need to identify, clearly, who is the prime and who are the sub-applicants, if any. There is no minimum percentage of work that must be performed by the prime applicant. Applicants will need to specify team members, and the proposed work split when applying in eXCHANGE. This "Level of Effort" information allows the DOE to understand how much effort each entity (prime, sub, other) proposes to perform which is valuable for evaluating submissions.

#### Do applicants have to go through ID.me starting Jan 1, 2025 to access OCED eXCHANGE?

Applicants will not have to use ID.me starting on Jan 1, 2025 and can still use Login.gov. Currently eXCHANGE is slated to undergo a system update for enhanced identity verification, however, the earliest the update will be released is the middle of January 2025. System administrators are currently considering changing the language on the login page to reflect the updated schedule. Login.gov accounts

that were verified only with an e-mail address will be requested to undergo enhanced verification sometime in early 2025, i.e., account holders will be requested to provide a state issued ID and an SSN. Existing Login.gov accounts can be updated with this information or an ID.me account can be created with the same e-mail address that was previously provided for the Login.gov account. System administrators are discussing options for account holders who are unable to provide this information.

### Can DOE clarify how application sections are to be submitted and how they affect the page count for each area?

Separate files, utilizing the naming conventions specified in the BAA, should be used. The page limit for the files is also specified in the BAA. For areas where the page limit covers multiple files, the applicant may use their own discretion on page number allocation. For example, the Technical Volume, which consists of a Project Narrative file, a Financing file, and a Licensing and Construction Strategy file, is limited to 40 pages for Tier 1 applications, 25 pages for Tier 2.1 and Tier 2.2 applications, and 10 pages for Tier 2.3 applications. Applicants are free to allocate those pages between the three separate files as they see fit provided the total page count for all three files combined does not exceed the limit specified above, i.e., 40 pages, 25 pages, or 10 pages as applicable. If the application contains business sensitive, trade secrets, proprietary, or otherwise confidential information that is exempt from public disclosure, the file name and page(s) within the associated file should be specified within the Cover Page file. If all pages of all files contain information exempt from public disclosure, a truncated statement such as, "All pages of the application may contain business sensitive, trade secrets, proprietary, or otherwise confidential information that is exempt from public disclosure" may be used.

#### How will the program policy factors in the other selection factors section be evaluated and scored?

The program policy factors listed in the BAA represent areas of interest to the DOE but are not mandatory, or necessary, to receive an award. Addressing these areas increase the attractiveness of the application but are not in and of themselves sufficient conditions for award.

#### Are applicants allowed to cross-reference between the Technical and Non-Technical volumes?

Applicants may cross-reference between the Technical and Non-Technical volumes provided that all information is appropriate to the applicable section. For example, the project narrative may reference letters of commitments contained in the Non-Technical volume vice reprinting excerpts from the letter of commitments. However, information which properly belongs in the project narrative cannot be included in the Non-Technical volume and referenced in the Technical volume to circumvent the page limit of the Technical volume.

# Should applicants list their Gen III+ SMR application as "pending support" in the "current and pending support" section of the application?

The "current and pending support" section is intended for current and pending support outside of the Gen III+ SMR program. The Gen III+ SMR application does not need to be listed as "pending support" within the Gen III+ SMR application.

# Why did DOE change the output rating for a single unit Gen III+ SMR from 700 MWe to 350 MWe?

The intent of the Gen III+ SMR definition within the Notice of Intent (NOI) was to define a total output power rating, in equivalent megawatts electric (MWe), for the entire Gen III+ SMR plant independent of the number of units within the plant and whether the plant was producing electricity, process heat, or both.

However, upon review DOE discovered that the wording used within the NOI inadequately captured the original intention, and that the original language may unduly restrict potential plant designs that utilize numerous smaller SMR units. To address these concerns, the definition of 50-350 MWe equivalent output power per unit was adopted and no restriction on total plant power was adopted in the solicitation. The range of 50-350 MWe was selected to differentiate from micro-reactors and large power reactors based on DOE's experience.

# Are Gen III+ reactors that produces a net electrical output exceeding 350 megawatts electrical at maximum efficiency eligible for the Gen III+ SMR Pathway to Deployment Program?

Single unit Gen III+ reactors which produce more than 350 MWe at peak efficiency are not eligible for the Gen III+ SMR Pathway to Deployment Program. DOE recognizes there is subjectivity in making the determination of what constitutes a Small Modular Reactor (SMR) versus a Micro Reactor or Large Power Reactor. The limits chosen for this program were based on DOE experience for SMRs in general.

# Can Gen III+ SMRs which produce 350 megawatts electrical (MWe) and an additional heat load be considered an eligible design?

DOE acknowledges that reactor thermal capacity is a less ambiguous measure of overall reactor power output, however, reactor thermal capacity is not the common convention used within the commercial nuclear power industry to discuss plant size. Plant output, measured in megawatts electric (MWe) is more common and is the standard DOE will use to measure plant output. To be considered eligible, total plant output, including process heat loads, must be converted to MWe, using typical heat to electricity conversion factors or plant specific conversion factors if available, and must be below 350 MWe.

#### Can the applicant use color in their graphics, tables, headings, headers, and footers?

Yes

## Can larger page sizes, e.g., 11 x 17 inch (tabloid) pages, be used for complex design graphics and the detailed milestone schedule?

Larger page sizes may be used for design graphics and schedules but may not contain text unassociated with the graphic or schedule. All pages submitted in the application will be counted against the respective page limit for the applicable section.

# Can people interested in the Gen III+ SMR Pathway to Deployment program or Gen III+ SMRs in general still request meetings with the Gen III+ SMR team?

Unfortunately, as of November 25, 2024, the Gen III+ SMR Pathway to Deployment program team has entered a quiet period where DOE will no longer communicate directly with potential applicants prior to the application submission date of January 17th, 2025. Specific questions may still be submitted to <a href="mailto:gen3plussmr@hq.doe.gov">gen3plussmr@hq.doe.gov</a> and responses will be posted to the <a href="mailto:Q&A document on OCED eXchange">Q&A document on OCED eXchange</a>. We also encourage you to visit our program website, <a href="mailto:Generation III+ Small Modular Reactor Program">Generation III+ Small Modular Reactor Program</a> |
<a href="mailto:Department of Energy">Department of Energy</a>, which contains links to helpful resources including the solicitation, webinars and associated slides, and materials from Industry Day held in August. Inquires related to regulatory considerations should be sent directly to the Nuclear Regulatory Commission.

#### Will DOE provide any extension to the January 17, 2025, application submission date?

Unfortunately, no extension to the submission date will be granted at this time. DOE understands that a lot of work goes into preparing a submission and recognizes that there are four federal holidays between

the solicitation publication date of October 16, 2024, and the submission date of January 17, 2025. However, DOE published a Notice of Intent for this program on June 17, 2024, and conducted an Industry Day on August 14-15, 2024, prior to releasing the solicitation. The information provided in these events are available on-line and should provide all applicants with the necessary information sufficient to prepare a comprehensive application.

# How should an applicant specify commitments, recipient versus sub-recipient, regarding the community benefits plan?

The community benefits plan will be evaluated as a whole for each project. The application should specify which team members will perform the commitments relative to the community benefits plan. Successful execution of the community benefits plan remains the responsibility of the primary applicant/awardee.

#### Can DOE confirm which forms are required to be included with applications?

All required forms are specified in the solicitation. Since DOE is using its Other Transactions Agreement authority, the requirements in this solicitation are different than what is required for a Cooperative Agreement. The solicitation does not prescribe use of the SF-424a or b. As specified in the solicitation, all applications require a project narrative, financing explanation, licensing and construction strategy, listing of management team and project partners, a community benefits plan, impacted Indian tribe documentation, letters of commitment, resumes, transparency of foreign connections, potentially duplicative funding notice, disclosure of lobbying activities (SF-LLL), and disclosure of existing work relations with national laboratories. Applicants should refer to the solicitation for more information regarding the requirements for the various sections listed above and any differences between Tier 1 and Tier 2 applications.

# Will successful applicants to the Gen III+ SMR solicitation be able to receive DOE cost shared funds for pre-award costs expended on scope that is within the proposed project?

Some pre-award finalization costs may be considered. Expenses incurred, for award scope, prior to DOE's selection of an application for award will not be considered allowable when negotiating the fee payments for project milestones or the 50% required cost-share from non-federal sources. Expenses incurred, for award scope, after DOE's selection of an application for award, but prior to award finalization, may be considered allowable when negotiating the fee payments for project milestones or the 50% required cost-share from non-federal sources. However, the determination is made on a case-by-case basis, and only upon the appropriate authorization from the DOE's awards officer.

# Can applicants provide attachments or appendices to applications in excess of the application page count specified in the solicitation?

As stated in the Broad Agency Announcement, the page limits for the technical volume of an application to be submitted for initial evaluations on January 17, 2025, are 40 pages for Tier 1 applications, 25 pages for Tier 2.1 and Tier 2.2 applications, and 10 pages for Tier 2.3 applications. These page limits may not be exceeded or supplemented with additional attachments or appendices. However, during the two-stage evaluation process, if an application is selected to proceed to the 2<sup>nd</sup> stage, DOE may request additional information in support of its final evaluations. All requests for supplemental information will be detailed in writing to applicants selected for 2<sup>nd</sup> stage evaluations.

#### What technologies are eligible for this solicitation?

This solicitation is limited to Gen III+ Small Modular Reactors which, for this solicitation, are defined as nuclear fission reactors that: (1) use light water as a coolant and low-enriched uranium (LEU) as a fuel; (2) has a single unit net electrical power output between 50 – 350 mega-watts electric (MWe) as part of a single-unit or multi-unit plant with no restriction on the total plant power output; (3) maximizes factory fabrication approaches; and (4) include significant improvements compared to reactors operating on December 27, 2020. The formal definition is included in the solicitation.

# The Notice of Intent (NOI) definition for a small modular reactor (SMR) states that the power level should be between 50 - 700 MW. Is this megawatt (MW) electric, MW thermal, and does this refer to Gross or Net?

The SMR definition for this solicitation identifies the expected net power range for any single-unit to be between 50 MWe - 350 MWe. No restriction will be placed on the total anticipated power output for the plant due to the potential use of multiple units. The net power level for any single-unit should exclude hotel loads.

# Will applicants be able to propose spend plans for their projects that front-load government cost share payments above the 50% limit, with the intent to have the total project cost share to the government at 50% or less?

At no point during the performance of the award will DOE pay more than 50% of costs incurred. DOE and the selectee(s) will negotiate all milestone payments.

# Are applicants able to apply and be selected for Tier 1 and Tier 2 as part of different teams and applications?

Yes, provided that the scopes of the projects are distinct and that there are no interdependencies between the applications necessary to successfully complete the scope of the award. For example, a Tier 1 application must not be dependent upon a successful Tier 2 Early Site Permit or only be manufacturable if a specific supply chain partner receives a Tier 2 award. As another example, a Tier 1 application cannot include an early site permit milestone for a specific site when the same site is applying for an early site permit under Tier 2.

# Is there a programmatic conflict if an applicant is applying for both the Gen III+ and Office of Nuclear Energy (NE) LEU supply chain funding?

There should be no conflict so long as there is no overlap in scope between the proposed work for the two independent programs.

#### Does the Department plan a second round of Gen III+ opportunities in 2025?

As of now, DOE has no plan to issue a second round for this Gen III+ opportunity. However, if none of the projects submitted are selected, or if additional funds are made available, DOE may consider a second round or a new solicitation in 2025.

# Would DOE consider a 'multiple prime' scenario where multiple entities have individual scopes of work and engage directly with DOE but are otherwise connected?

No. The Applicant must function as one entity with one prime responsible for the performance of the entire scope of the agreement. All federal cost share funding will flow through the prime, and they will be responsible for making payment to any project subrecipients or subcontractors.

#### Would an applicant be able to win both a Tier 1 and Tier 2 award?

Yes, all eligible applications may be selected for award even if the same applicant applied under both Tier 1 and Tier 2.

#### Tier 1

For a Tier 1 application, can DOE clarify what information should be placed on the "Total DOE Funding Request (\$M USD):", "Total Non-Federal Cost Share (\$M USD):", and "Total Project Costs (\$M USD):" lines on the sample, optional cover page template in the solicitation?

If applicants choose to use the optional cover page template provided in the solicitation, the "Total DOE Funding Request (\$M USD):" line should represent the total funds the applicant will be requesting from DOE in the form of milestone payments. This amount cannot exceed \$800M USD.

The "Total Non-Federal Cost Share (\$M USD):" line should represent the applicant's contribution to the work scope for which milestone awards will be requested. This amount cannot be less than the amount on the "Total DOE Funding Request (\$M USD):" line as this would represent a non-federal cost share of less than 50 percent.

The "Total Project Costs (\$M USD):" line should include the total cost of the project from the time of application to operational deployment including both the amount the federal government would supply, the non-federal cost share, and any subsequent funding the applicant requires to complete the project. This amount should include any planned financing either from the Loan Programs Office (LPO) or other sources. For example, if the applicant estimates the total cost to complete the project is \$8B USD, has already expended \$1B USD prior to application, seeks \$600M USD from this program, and plans on a 50 percent cost share, then the "Total DOE Funding Request (\$M USD)" would be 600, the "Total Non-Federal Cost Share (\$M USD)" would be 600, and the "Total Project Costs (\$M USD)" would be 7,000 (\$8B less the \$1B already expended prior to application).

DOE notes that within the financing section of the technical volume, the applicant must supply details on how the project is expected to be funded in its entirety to completion including non-award funding sources including LPO loans or other sources of funding.

Can the primary applicant/awardee be changed to a defined project partner after award notification once the full project team is fully defined so long as the primary applicant is still part of the project team?

Changes in primary applicant/awardee may be allowed subject to approval by DOE on a case-by-case basis. If a change is anticipated, due to lack of formal agreement prior to application, then the initial primary applicant/awardee should clearly identify in the application when and how the change will be proposed to DOE for consideration and what formal agreements will exist between team members before and after any potential change is made. DOE also notes that all primary applicants/awardees must meet the eligibility criteria specified within the solicitation.

For the Tier 1 \$800M SMR funding, I understood it to be 50/50 cost share between the proposal team and DOE. Is the \$800M meant to be a 50/50 cost share?

DOE has up to \$800M available in federal funds for its portion of the cost share. The requirement is that DOE cannot contribute more than 50% of the overall project cost; therefore, the total award value will be no less than \$1.6B, if the full government share is awarded.

This means that DOE will pay out based on previously agreed milestone amounts upon their completion. The agreed upon milestone payment from DOE cannot account for more than 50 percent of the project costs incurred in completing the milestone.

# Would DOE consider awarding to a coordinating entity to manage the funds among separate scopes of work?

Yes, so long as there is a single entity which meets the eligibility definition in the funding opportunity. Under such an approach, the single coordinating entity would be responsible for managing the performance of the sub-recipients and coordinating with the Department to ensure that the objectives of the project are met. The Awardee lead will be responsible for the successful completion of the agreed upon milestones. The structure of the award team itself is up to the applicant but must include a commercial utility as defined by the solicitation.

### Will applicants be required to identify a commercial operational milestone as part of the Tier 1 award?

Tier 1 applicants will not be required to identify an operational milestone. However, since the intent of the program is to have a deployed capability, if the project proposal expects to apply Department funding through commercial operation, the applicant shall define milestones spanning the full scope of the project through commercial operation.

#### For Tier 1 awards, how will the funds be split if one or two awards are made?

Based on the quality and responsiveness of the applications, the Department may select one, two, or no awards. The number of awards made is at the discretion of the Department at the conclusion of the merit review process and the funding splits will be assessed based on project requirements and subject to negotiations.

#### Tier 2

# For Tier 2.2 proposals, can a domestic entity who is the prime applicant partner with a foreign owned company?

All eligible Tier 2.2 applicants who wish to partner with a foreign entity should submit a foreign waiver request. DOE will evaluate the foreign waiver requests on a case-by-case basis.

#### Would U.S.-based EPC contractors be considered eligible for a Tier 2.2 award?

U.S. Engineering, Procurement, and Construction (EPC) companies who have experience with nuclear power plant projects are eligible for Tier 2.2 awards. DOE will evaluate all applications based on their merits regarding their support for the Gen III+ SMR supply chain. All applications should comply with the requirements of the solicitation and the explanations provided in this document including providing foreign waiver requests if the EPC wishes to team with a foreign entity.

#### For Tier 2.1 proposals, is a utility required to lead the proposal?

Tier 2.1 applicants must be planned U.S. owners or utilities for domestic Gen III+ SMR deployment projects. Neither a teaming structure nor a utility is required for Tier 2.1 applications. If the applicant is a planned U.S. Gen III+ SMR owner, then utilities, reactor technology vendors, fuel manufacturers, supply chain vendors, EPC contractors or other domestic nuclear industry entities may support the applicant but are not required.

### Is a Gen IV liquid-fueled, salt-cooled, 1 MW thermal reactor eligible to apply for funding to get certifications under the Tier 2.2?

No, a Gen IV liquid-fueled, salt-cooled, 1 MW thermal reactor would not be eligible to apply for funding to get certifications under the Tier 2.2 portion of the solicitation.

# Can applicants who are submitting Tier 2 applications have access to applicants who are submitting Tier 1 applications?

Unfortunately, DOE cannot share the identity of applicants without their consent. However, applicants may view the attendees list from the Gen III+ SMR Pathway to Deployment Industry Day that was held in August. A link to the list is available at <u>Generation III+ Small Modular Reactor Program Engagement Opportunities | Department of Energy</u>. Individuals on this list agreed to share their name and company affiliation. DOE also suggests that potential Tier 2 applicants contact U.S. Gen III+ SMR reactor technology developers as an introduction to potential Tier 1 application teams.

# How committed should a Tier 2 applicant be to a specific Gen III+ technology at the time of initial application?

While commitment of a Tier 2 project to a specific Gen III+ technology would add some certainty to the applicant's proposal, there will be no specific requirement for an applicant to commit to a specific Gen III+ technology. However, if it is not specific to a technology, the application should show that it provides generic benefit to a spectrum of Gen III+ technologies (such as an early site permit that is done under a plant parameter envelope) or how the proposal can successfully pivot to support the designs that are moving forward at a faster pace.

#### For Tier 2, what are the award limits under each of the categories?

The Department has not established monetary limits for the amount of funding that will be applied under each of the sub-tiers. The Department will need to evaluate the number and types of applications that are submitted and select the best projects and funding amounts that make the largest impact. As usual, these project funding amounts will be subject to negotiations.

#### For Tier 2, what is the max award that will potentially be awarded?

This remains to be determined and will depend on the number and quality of applications that are submitted to each sub-tier. DOE expects to make at least one award in each Tier 2 sub-tier.

#### National Environmental Policy Act

# What are the DOE-specific NEPA requirements for Early Site Permits (ESPs) if an applicant is looking to obtain ESPs on multiple sites?

It depends. DOE is required to complete NEPA (and related requirements including Section 106 of the National Historic Preservation Act) for all federally funded projects before any work can begin. A NEPA determination is very project specific, site specific, and time specific. DOE intends to coordinate with the NRC and the successful applicant to avoid duplication of efforts or delays.

#### What is the approach to early project development activities that do not yet involve site work?

DOE is required to complete NEPA for all activities proposed for funding. Pre-site development activities including planning, engineering, design, paper studies, etc. may be categorically excluded from further NEPA review. Early coordination with DOE is recommended to avoid duplication of efforts or delays.

#### How is NEPA used when federal funds are used for pre-construction?

DOE is required to complete NEPA for all activities proposed for funding. A NEPA strategy is tailored based on the specifics of a project and DOE NEPA will be engaged for the pre-construction scope of work prior to the NRC docketing for a construction permit or a combined license application. Therefore, DOE and the NRC work together to prevent duplication of activities and to incorporate areas already reviewed into each agency's NEPA process.