

Request for Information (RFI) Special Notice (SN) Amendment

- Announcement Type: Amendment 01
- Special Notice Number: DARPA-SN-26-21: On-orbit Nuclear Power Concepts
- Changes Made: All changes highlighted in yellow throughout Special Notice (SN)
 - **NEW WORKSHOP DATE** - The workshop will now be held on **April 21 and 22, 2026** (No Change to location). See pages 2 and 5.
 - **NEW SUBMISSION RESPONSE DATE**- Submissions of white papers are now due to DARPA no later than 4:00 p.m. Eastern Time (ET), **February 20, 2026**. See pages 2, 3 and 4.
 - **NEW SELECT/NON-SELECT FOR WORKSHOP RESPONSE DATE**- Respondents (Selectable and Non-Select to attend the Workshop will be notified by **March 24, 2026**. See pages 4 and 5.



Request for Information (RFI)
DARPA-SN-26-21
On-orbit Nuclear Power Concepts

Responses Accepted: Until 4:00 p.m. Eastern Time (ET) on **February 20, 2026**

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OVERVIEW

The Defense Advanced Research Projects Agency (DARPA) Tactical Technology Office (TTO) is requesting information regarding technologies, spaceflight qualification testing, safe handling, and applications for on-orbit satellite nuclear power systems. Our focus is on producible, cost-effective nuclear reactors – not bespoke designs suited for a one-time demonstration.

DARPA TTO and the Department of Energy (DOE) will also hold a workshop to establish a common understanding of on-orbit nuclear power technology and challenges, facilitate community interactions and collaboration, and identify key technology risk areas that, if addressed, would enable practical implementation of on-orbit nuclear power. The workshop will be held on **April 21-22, 2026** at the **DARPA Conference Center (DCC), 675 N Randolph Street, Arlington, VA 22203**.

REQUESTED INFORMATION

This RFI seeks responses that address the following key challenges:

1. Information and insights into use cases / mission applications, including power levels, that demonstrate significant advantages for on-orbit nuclear power over solar power systems.
2. Information and insights into nuclear reactor design and technologies best suited for use in orbital space applications.
3. Information and insights into efficient power conversion approaches and technologies.
4. Information and insights related to the technical challenges of design, build, test, and integration of a nuclear reactor and power conversion system that can survive the launch environment and then operate in the space environment.
5. Information and insights into innovative approaches for development, spaceflight qualification testing, spacecraft integration, and launch site processing of a nuclear

reactor compatible with nuclear safety requirements as stated in National Security Presidential Memorandum-20 and Space Policy Directive-06.

6. Concepts and insights into objectives for an initial technology demonstration, e.g., what data needs to be collected and what instrumentation should be installed in a test nuclear power system.

Submissions of white papers in response to this RFI are preferred to be non-proprietary and must be received by DARPA no later than 4:00 p.m. ET, **February 20, 2026**. See below for further instructions on submissions.

SUBMISSION FORMAT

General Guidelines:

- Respondents to this special notice are encouraged to be as succinct as possible, while also providing actionable insight.
- All submissions must be written in English.
- White papers shall not exceed eight (8) single-sided written pages using 11-point font with 1" margins all around. Smaller font may be used for figures, tables, and charts.
- Electronic submittal shall be in Microsoft Word, Microsoft PowerPoint, or PDF format.
- All documents submitted must be clearly labeled with the DARPA special notice number, respondent organization, and white paper title.
- To the maximum extent possible, respondents are encouraged to send non-proprietary information. The intent behind this request is to ensure that selected respondents can engage in an open exploration and discussion of the topics raised at the workshop. Therefore, proprietary information is acceptable as a response to this Special Notice, but non-proprietary information is the preferred basis for the selection of workshop participants.
- Respondents are responsible for clearly identifying proprietary information. Submissions containing proprietary information must have the cover page and each page containing such information clearly marked with a label such as "Proprietary" or "Company Proprietary." NOTE: "Confidential" is a classification marking used to control the dissemination of U.S. Government National Security Information as dictated in Executive Order 13526 and should not be used to identify proprietary business information.
- Do not include elaborate brochures or marketing materials; only include information relevant to the Key Challenges identified above.
- Use of a diagram(s) or figure(s) to depict the essence of the response is permitted and counted towards page count.
- Send unclassified submissions to DARPA-SN-26-21@darpa.mil. **DO NOT SUBMIT CLASSIFIED INFORMATION TO THIS ADDRESS.** Please see *Attachment 1 - Security* to this notice for instructions on submitting classified information.
- Submissions must be received no later than 4:00 p.m. ET, **February 20, 2026**. Submissions sent through other mediums, channels, or after the prescribed deadline will not be considered.

- Respondents selected for workshop attendance will be notified in writing by **March 24, 2026.**
- Respondents not selected for workshop attendance will be notified in writing by **March 24, 2026.**

All white papers shall contain the following sections which are included in the page count:

- A. Cover Sheet. Provide the following information:
 - a. Response Title
 - b. Technical point of contact name, organization, telephone number and email address
 - c. Indicate the Key Challenge(s) addressed by this response
 - d. Indicate classification level of response (e.g., Unclassified, Unclassified/CUI, Secret Collateral)
- B. Technical Description that addresses one or more of the six key challenges listed earlier in this document. Graphics within the technical descriptions are encouraged to the extent that they aid in succinctly describing the concepts.
- C. Individual biography for each proposed workshop attendee (maximum of 3) describing their relevant background and qualifications to participate effectively in the technical discussion.
- D. Graphic Overview Slide. If desired, include a single PowerPoint slide that graphically depicts the main ideas of the response.
- E. Bibliography/References

SUBMISSION INSTRUCTIONS AND CONTACT INFORMATION

All responses to this RFI must be emailed to DARPA-SN-26-21@darpa.mil. Responses will be accepted until 4:00 p.m. ET on **February 20, 2026**. Early responses are encouraged.

All technical and administrative correspondence and questions regarding this RFI should also be sent to the same email address. Emails sent directly to the DARPA Program Manager may result in a delayed or no response.

ELIGIBILITY

DARPA invites white paper submissions from all those engaged in related research activities and appreciates responses from all capable and qualified sources, including, but not limited to, universities, university-affiliated research centers (UARCs), Federally-Funded Research and Development Centers (FFRDCs), private or public companies, and Government research laboratories.

Disclaimers and important notices

- This is an RFI issued solely for information and new program planning purposes; it does not constitute a formal solicitation for proposals. In accordance with Federal Acquisition

Regulation 15.201(e), responses to this RFI are not offers and cannot be accepted by the Government as such.

- Responses do not bind DARPA to any further actions related to this topic, including requesting follow-on proposals from respondents to this RFI.
- Submission is voluntary and is not required to propose to a subsequent solicitation (if any) on this topic.
- DARPA will not provide reimbursement for costs incurred in responding to this RFI.
- Respondents are advised that DARPA is under no obligation to acknowledge receipt of the information received or provide feedback to respondents with respect to any information submitted under this RFI.
- DARPA will disclose submission contents only for the purpose of review. Submissions may be reviewed by the Government (DARPA and other Government partners), FFRDCs, and Scientific, Engineering and Technical Assistance (SETA) support contractors bound by appropriate non-disclosure agreements.

WORKSHOP

DARPA and DOE plan to hold a follow-up in-person workshop on **April 21-22, 2026** at the DCC, 675 N Randolph Street, Arlington, VA 22203, for the purpose of reviewing and discussing current and future research relevant to this RFI, discussing the submissions received, developing new insights, and identifying challenges. Consistent with Federal Acquisition Regulation (FAR) part 10 Market Research, information discussed at this workshop may assist in the formulation of possible future areas of DARPA research related to on-orbit nuclear power technologies, operations, and related matters. Topics and discussion will range from Unclassified to Secret Collateral on Day 1, with potential to elevate classification up to TS/SCI on Day 2.

Workshop space is limited. Those who submit compliant white papers will be invited to attend based on 1) the relevance of their submission to at least one of the six points in the requested information section above, and 2) relevance to DARPA's mission to create and prevent technological surprise for national security. If a prospective attendee does not have their white paper selected, feedback will be provided upon request.

The workshop format will be a combination of group discussion and formal presentations. Based on DARPA's interests and RFI submissions, DARPA may invite white paper submitters to provide further information in formal presentations at the workshop. DARPA intends to provide further details on the workshop via email to the RFI respondents selected for workshop attendance by **March 24, 2026**.

It is anticipated that discussions will range from unclassified up to TS/SCI. As the content evolves toward controlled information, including information that is International Traffic in Arms (ITAR) restricted, attendance will be correspondingly limited up to individuals who are U.S. Citizens representing U.S. companies and academia and in possession of the proper clearances only. Details on the classification levels will be provided to selected attendees in the **March 24, 2026** information release.