National Aeronautics and Space Administration NASA
Space Technology Mission Directorate
300 E ST SW
Washington, D.C. 20546-0001

Next Space Technologies for Exploration Parnterships-3 (NextSTEP-3) Broad Agency Announcement (BAA)

Appendix A: Lunar Enabling Infrastructure Accelerator (LEIA)

Broad Agency Announcement No. 80GRC026R0008

Draft Solicitation Release: June 29, 2026
Final Solicitation Release: Fourth Quarter of Fiscal Year 2026
Proposals Due: Fourth Quarter of Fiscal Year 2026

Table of Contents

Acronyms **3**

1 Introduction and Background **4**

2 Acquisition Objectives **4**
2.1 Overview 4

3 General Information **5**
3.1 Solicitation Contents 5
3.2 Summary of Key Information 5
3.3 Proposals Due Date 5
3.4 Industry Day and Inquiries 6
3.5 Points of Contact 6
3.6 Optional Government Task Agreement (GTA) Requests 6

4 Eligibility Information **7**
4.1 Eligibility of Offerors 7

5 Intellectual Property **7**

6 Contract Structure **8**
6.1 Work Structure 8
6.2 Period of Performance 11

7 Proposal and Submission Information **11**
7.1 Instructions for Electronic Submission of Proposals 11
7.2 Proposal Format and Content Requirements 13

8 Proposal Review Information **18**
8.1 Proposal Review Information 19
8.2 Evaluation Criteria 19
8.3 Overall Evaluation for Award 22

9 Award Administration Information **23**
9.1 Award Provisions 23
9.2 Award Notices 23

10 References **24**

11 Attachments **24**

Acronyms

Acronym	Definition
BAA	Broad Agency Announcement
BOE	Basis of Estimate
CLIN	Contract Line Item Number
EAR	Export Administration Regulations
FAR	Federal Acquisition Regulation
FFP	Firm-Fixed-Price
FTE	Full Time Equivalent
GRC	Glenn Research Center
ISRU	In Situ Resource Utilization
ITAR	International Traffic in Arms Regulations
NASA	National Aeronautics and Space Administration
NextSTEP	Next Space Technologies Exploration Partnerships
NPR	NASA Procedural Requirements
PMAD	Power Management and Distribution
RPS	Radioisotope Power System
SSA	Source Selection Authority
STMD	Space Technology Mission Directorate
TRL	Technology Readiness Level

DRAFT

1 Introduction and Background

NASA's Space Technology Mission Directorate (STMD) (transitioning to Research and Technology Mission Directorate) is responsible for accelerating the technology readiness of key systems and closing capability gaps critical to near-term lunar surface and cislunar architecture. Paramount to this endeavor is a competitive and robust U.S. industrial base for which NASA relies upon as partners in the design, development, testing and evaluation of innovative, industry-driven solutions to U.S. space priorities. Consequently, STMD seeks risk reduction and demonstrations of new capabilities by U.S. institutions in areas of surface power, in-situ resource utilization, advanced manufacturing, and nanomaterials.

[End of Section]

2 Acquisition Objectives

2.1 Overview

The purpose of this solicitation is to acquire technology maturation, risk reduction, and capability demonstration efforts in five technology areas that address lunar and cislunar infrastructure technology gaps. These efforts are intended to generate the knowledge foundation NASA needs to support informed technical and programmatic decisions. The scope of this solicitation is derived from NASA Space Technology's Civil Space Shortfalls and focuses on near-term mission-relevant lunar and cislunar technology priorities.

The Government is seeking innovative solutions in the following five technology areas (hereafter referred to as "Topics"):

- **Topic 1:** Vertical Solar Array
- **Topic 2:** In Situ Resource Utilization (ISRU) Oxygen from Regolith Production System
- **Topic 3:** Stirling Radioisotope Generator System
- **Topic 4:** In Space Advanced Manufacturing
- **Topic 5:** Innovative Nanomaterials Production

Each Topic constitutes a separate competitive opportunity under this solicitation authority. All prime eligible Offerors under this solicitation will be permitted to submit one proposal per Topic. Offerors submitting proposals under more than one topic shall submit a separate, complete proposal for each individual topic.

These Topics are focused on technology and manufacturing maturation, as well as ground-based demonstration activities, to advance capabilities toward Technology Readiness Levels (TRLs) 5–6 and reduce technical, programmatic, integration and operational risk associated with future mission applications.

Through this acquisition, industry partners will be expected to design, develop and demonstrate prototype systems and generate validated performance data, analytical models, and operational insights through testing and demonstration activities. These efforts should provide evidence necessary to assess system performance and reduce technical, programmatic, integration and operational risks.

DRAFT

NASA anticipates active collaboration with selected Offerors through ongoing Government insight and oversight activities, including technical interchange meetings, milestone reviews, and deliverable assessments—to evaluate technical progress and support achievement of program objectives. Offerors are expected to apply independent scientific and engineering judgment in selecting approaches that best satisfy the objectives and outcomes identified for the Topic(s) to which they are proposing.

Topic-specific attachments provide additional technical objectives, desired performance outcomes, scope considerations, and reference requirements (see Section 11 Attachments). Offerors are strongly encouraged to review the applicable attachment(s) in their entirety prior to preparing and submitting proposals.

[End of Section]

3 General Information

3.1 Solicitation Contents

This solicitation is Appendix A of the Next Space Technologies for Exploration Partnerships -3 (NextSTEP-3) Broad Agency Announcement Omnibus (NextSTEP-3_Omnibus). The terms and conditions of this Appendix A shall take precedence over any conflicting terms and conditions of the NextSTEP-3_Omnibus.

Whereas a traditional Request for Proposal provides the Government's defined Statement of Work (SOW), this BAA relies on Offerors to submit a Work Plan in the form of a SOW as part of their proposal that, if selected, is intended to become the SOW included in Section C on any awarded contract(s). In addition, this BAA includes a Model Contract (see Attachment C) with all potential clauses that will be included in the final contract(s) to inform Offerors of NASA's expectations to expedite contract award at the conclusion of this BAA.

3.2 Summary of Key Information

Maximum duration of award:	3 years
Final day to submit clarifying questions:	5:00 PM EDT July 17, 2026 (Draft) 5:00 PM EDT Fourth Quarter of Fiscal Year 2026 (Final)
Submission due date:	5:00 PM EDT Fourth Quarter of Fiscal Year 2026 (Final)
Submission of proposals sent via:	See Section for NASA Box Submittal Instructions
Award type:	Firm Fixed Price
NASA points of contact (POC): NASA will post any Q&A on Sam.gov so that all Offerors will have access to the same Information.	Email Questions to: linda.m.nabors@nasa.gov Written responses will be posted on the www.sam.gov

3.3 Proposals Due Date

Proposals shall be submitted electronically in accordance with instructions detailed in Section 7.1 Instructions for Electronic Submission of Proposals, no later than Fourth Quarter of Fiscal Year 2026, 5:00PM EDT.

DRAFT

3.4 Industry Day and Inquiries

An industry day will not be held.

All questions and comments regarding this Draft Appendix shall be submitted via email to the Contracting Officer no later than 5:00 PM EDT July 17, 2026. The questions shall not contain proprietary or sensitive information. NASA will not provide evaluations, opinions, or recommendations regarding any suggested approaches or concepts. Inquiries shall identify the Company Name, Notice ID (80GRC026R0008), and the Topic(s) (if applicable) in the subject field of the email. The questions and answers will be posted to SAM.gov.

NASA will not issue paper copies of this Appendix or any documents in conjunction with this Appendix. Potential Offerors are responsible for monitoring www.sam.gov for any calls, updates, or amendments to this announcement. Updates will also be posted to the NextSTEP-3 website, https://www.nasa.gov/humans-in-space/nextstep/. In the event of a discrepancy between the two websites, www.sam.gov is the controlling website and will take precedence.

All other correspondence must go through the Contracting Officer via email.

3.5 Points of Contact

- **Responsible Headquarters Office:**

  NASA Space Technology Mission Directorate
  NASA Headquarters
  Washington, DC 20546

- **Source Selection Authority (SSA):** TBD

- **Contracting Officer:**

  Linda Nabors, Contracting Officer
  NASA Glenn Research Center
  Office of Procurement
  21000 Brookpark Road, Cleveland OH 44135
  Email:linda.m.nabors@nasa.gov

3.6 Optional Government Task Agreement (GTA) Requests

All draft Agreements proposed for inclusion in an Offeror's proposal shall be coordinated with the relevant NASA Center prior to proposal submission and submitted to the Contracting Officer, Linda Nabors, at linda.m.nabors@nasa.gov, no later than Fourth Quarter of Fiscal Year 2026, 5:00PM EDT (Final Proposal Due Date).

For purposes of proposal submittal and evaluation, draft Agreements received by NASA after this date and time may be discarded entirely by NASA at its discretion. The Offeror is responsible for obtaining NASA Center concurrence on any proposed agreement, including all required signatures from authorized NASA Center representatives or personnel with the authority to enter into such Agreements. Offerors seeking access to NASA resources may initiate engagement through NASA Front Door at frontdoor.nasa.gov.

Any subsequent GTA requested by the contractor after contract award will be entirely at the cost of the contractor.

[End of Section]

DRAFT

4 Eligibility Information

4.1 Eligibility of Offerors

Eligible Offerors under this Appendix include all categories of U.S. organizations, including educational institutions, industry, and not-for-profit institutions.

Participation by non-U.S. Organizations is not permitted at any level (prime, subcontractor, and/or team member).

NASA civil servants, Jet Propulsion Laboratory (JPL) employees, national laboratories, and Federally Funded Research and Development Centers (FFRDCs) shall not be proposed as a Prime Contractor on any effort associated with this announcement/solicitation. Support relationships between entities and FFRDCs are permitted, in separate agreements, outside of this solicitation. Offerors must ensure information and certifications provided in https://sam.gov/content/home are current at the time of proposal submission in order to ensure all eligibility requirements are met.

4.1.1 Assurance of Compliance – China Funding Restriction

Proposals must not include bilateral participation, collaboration, or coordination with China or any Chinese-owned company or entity, whether funded or performed under a no-exchange-of funds arrangement. By submission of a proposal, Offerors are certifying that the proposing organization has read and is in compliance with all the Certifications, Assurances, and Representations, including that proposals must not include bilateral participation, collaboration, or coordination with China or any Chinese-owned company or entity, whether funded or performed under a no-exchange-of funds arrangement.

For all proposals, the following applies – An Assurance of Compliance with restrictions:

(1) NASA is restricted from using appropriated funds to enter into or fund any agreement of any kind to participate, collaborate, or coordinate bilaterally with China or any Chinese-owned company, at the prime recipient level and at all sub-recipient levels, whether the bilateral involvement is funded or performed under a no exchange of funds arrangement.

(2) Definition: "China or Chinese-owned Company" means the People's Republic of China, any company owned by the People's Republic of China, or any company incorporated under the laws of the People's Republic of China, including universities.

(3) By submission of its proposal, the Offeror represents that the Offeror is not China or a Chinese-owned company, and that the Offeror will not participate, collaborate, or coordinate bilaterally with China or any Chinese-owned company, at the prime recipient level or any sub-recipient level, whether the bilateral involvement is funded or performed under a no-exchange or funds arrangement.

[End of Section]

5 Intellectual Property

Data Rights. Normally, the Government has unlimited rights in technical data created under a NASA agreement. Delivery or third-party licensing of proprietary software or data developed solely at private expense will not normally be required except as specifically negotiated in a

particular agreement to satisfy NASA's own needs or to ensure the commercialization of technology developed under a NASA agreement.

It is NASA's preference that all deliverables under the contract be provided to NASA with unrestricted/unlimited rights; thus, any restrictions must demonstrate a significant net benefit to the Government.

Patent Rights. The Government will have certain statutory rights in an invention that is conceived or first actually reduced to practice under a NASA award. 51 U.S.C. 20135 provides that title to such inventions vests in the United States, except where 35 U.S.C. 202 provides otherwise for nonprofit organizations or small business firms. However, NASA may waive all or any part of the rights of the United States subject to certain conditions.

[End of Section]

6 Contract Structure

NASA reserves the right to award one, multiple, or none, firm-fixed-price (FFP) contract(s) from each Topic under this Appendix A solicitation. Offerors shall propose performance-based milestone payments. Proposals shall include separate FFP pricing for each CLIN (base and/or optional).

Awards under this BAA are subject to the availability of funds.

6.1 Work Structure

The contract shall be structured with a Base period and Option period(s) (if applicable) by Work Areas as described below.

Each phase shall incorporate a continuation review prior to the completion of the phase to assess progress against technical objectives, verify achievement of planned outcomes, and support the government's decision to exercise the subsequent Option.

NASA will determine whether to exercise any Options. The decision to exercise an Option, thereby authorizing work, is at the sole discretion of the Government. No guarantee is made that any Option will be exercised, even if option pricing is evaluated as part of contract award. NASA intends to transition from the Base period to subsequent Option periods without interruption in contractor performance.

The scope of each Topic will be organized by CLINs using the following CLIN structure.

6.1.1 Topic 1: Vertical Solar Array Work Areas

Base CLIN 0001: Concept Development and Design

Activities may include concept development, requirements analysis, preliminary design activities, manufacturing process development, technology risk reduction, and initial validation efforts intended to establish technical feasibility and support technology maturation planning.

Priced Option CLIN 0002: Prototype Development and System Integration

Activities may include subsystem development, prototype fabrication, hardware and software integration, manufacturing process implementation, integration testing, control system

development, and other activities intended to mature integrated system capabilities and reduce technical and manufacturing risks.

Priced Option CLIN 0003: Demonstration, Testing, and Operational Validation

Activities may include experimental demonstrations, integrated system testing, relevant environmental testing, performance characterization, manufacturing validation and other activities intended to reduce operational, integration, and mission implementation risks.

6.1.2 Topic 2: ISRU Oxygen from Regolith Production System Work Areas

Base CLIN 0001 (Phase 1): Design and Hardware Modifications

This phase focuses on definition and maturation of the system design and necessary hardware modifications.

Activities may include identification and refinement of required hardware modifications, development of interface control documents (ICDs), iterative design reviews leading to system-level definition.

Priced Option CLIN 0002 (Phase 2): Hardware Procurement and Fabrication

This phase transitions the design into hardware procurement, facility preparation and model development.

Activities may include procurement and fabrication of modified hardware ready for system integration, test facility preparation for integrated system testing, component models ready for system-level model integration.

Priced Option CLIN 0003 (Phase 3): System Integration and Testing

This phase executes system integration, verification testing, and performance validation of the assembled system in a relevant test environment.

Activities may include integration of modified hardware into test facility, execution of test campaign, model validation, collection and analysis of test data to support model validation and performance assessment.

6.1.3 Topic 3: Stirling Radioisotope Generator System Work Areas

Base CLIN 0001 (Phase 1): System Concept Design and Technology Planning

This phase executes the initial conceptual design of the Stirling Radioisotope Generator (RSG) system and establishes the foundational technology development strategies.

Activities may include the development of the initial design to meet Key Performance Parameters (KPPs), identification of critical technologies, and preliminary planning for heat rejection interfaces.

Priced Option CLIN 0002 (Phase 2): Detailed Design, Procurement and Technology Development

This phase executes subsystem-level risk reduction, finalizes the detailed design based on Phase 1 feedback, and initiates necessary procurements to enable the system demonstration.

DRAFT

Activities may include implementing design changes from Phase 1, functional demonstration of critical technologies at the subsystem level, and executing prototype hardware procurements suitable for TRL 6.

Priced Option CLIN 0003 (Phase 3): System Integration, Demonstration, and Final Delivery

This phase executes system integration, verification testing, and performance validation of the electrically-heated RSG operating on a simulated spacecraft bus in a lab environment.

Activities may include system hardware integration, execution of test plans to characterize performance during simulated lunar mission concept of operations and fault scenarios, and the drafting of regulatory process documentation.

6.1.4 Topic 4: In Space Advanced Manufacturing Work Areas

Base CLIN 0001: Concept Development and Design

Activities may include concept development, requirements analysis, preliminary design activities, manufacturing process development, technology risk reduction, and initial validation efforts intended to establish technical feasibility and support technology maturation planning.

Priced Option CLIN 0002: Prototype Development and System Integration

Activities may include subsystem development, prototype fabrication, hardware and software integration, manufacturing process implementation, integration testing, control system development, and other activities intended to mature integrated system capabilities and reduce technical and manufacturing risks.

Priced Option CLIN 0003: Demonstration, Testing, and Operational Validation

Activities may include experimental demonstrations, integrated system testing, relevant environmental testing, performance characterization, manufacturing validation and other activities intended to reduce operational, integration, and mission implementation risks.

6.1.5 Topic 5: Innovative Nanomaterials Production Work Areas

Base CLIN 0001: Concept Development and Design

Activities may include concept development, requirements analysis, preliminary design activities, manufacturing process development, technology risk reduction, and initial validation efforts intended to establish technical feasibility and support technology maturation planning.

Priced Option CLIN 0002: Prototype Development and System Integration

Activities may include subsystem development, prototype fabrication, hardware and software integration, manufacturing process implementation, integration testing, control system development, and other activities intended to mature integrated system capabilities and reduce technical and manufacturing risks.

Priced Option CLIN 0003: Demonstration, Testing, and Operational Validation

Activities may include experimental demonstrations, integrated system testing, relevant environmental testing, performance characterization, manufacturing validation and other activities intended to reduce operational, integration, and mission implementation risks.

6.2 Period of Performance

The anticipated total period of performance, including options, for contracts awarded under this solicitation is no greater than three (3) years.

[End of Section]

7 Proposal and Submission Information

See the NextSTEP-3 Omnibus BAA (https://sam.gov/workspace/contract/opp/613a1c06edce4e9299fce9465dc58e50/view) for general instruction for proposal preparation. The specific instructions in this section are in addition to or supersede the general instructions in the NextSTEP-3 Omnibus BAA and apply to this Appendix only.

Proposals received by the Government after the due date and time as defined in this solicitation will be considered late and therefore not accepted for evaluation. Hard copies will not be accepted.

7.1 Instructions for Electronic Submission of Proposals

Proposal Marking and Delivery Through NASA's EFSS Box (MAY 2026)

(a) The offeror must submit its proposal via NASA's Enterprise File Sharing and Sync Box (EFSS Box), a FedRAMP Moderate certified platform. Electronic submissions must not contain hidden formulas, tables, be locked, be password protected, or contain links to data not included in the electronic copy. All electronic submissions should be searchable and should not contain scanned documents, except those documents that must be provided in their native format (e.g., signature pages, prior award fee letters for past performance, DCAA/DCMA approval letters, as applicable). The Offeror must ensure documents are free from viruses and malware, as documents determined by NASA to contain a virus or malware will not be opened or evaluated. Subcontractors may submit their required proposal information separately using the instructions in this provision. The offeror must ensure subcontractor submissions are made no later than the date and time specified for proposal submission and comply with all solicitation instructions.

(b) Prior to the submission of proposal files, offerors interested in submitting a proposal in response to this solicitation should notify Linda Nabors of their intent to submit a proposal at least 48 hours prior to the intended submission date, at the following email address: linda.m.nabors@nasa.gov. The Offeror must courtesy copy (cc) Ian Park at ian.park@nasa.gov on this communication. Offerors, especially those that have not previously submitted a proposal utilizing NASA's EFSS Box, should coordinate the submission of a test file with Linda Nabors no less than five (5) days in advance of the proposal due date specified in the solicitation to allow time to work through any submission issues.

(c) The Offeror must submit all proposal files to:

Table 6.1-1 EFSS Box Link per Topic

Topic	Link to EFSS Box
Topic 1 - Vertical Solar Array	Link will be provided in Final BAA
Topic 2 - In Situ Resource Utilization (ISRU) Oxygen from Regolith Production System	Link will be provided in Final BAA
Topic 3 - Stirling Radioisotope Generator System	Link will be provided in Final BAA
Topic 4 - In Space Advanced Manufacturing	Link will be provided in Final BAA
Topic 5 - Innovative Nanomaterials Production	Link will be provided in Final BAA

The offeror must follow instructions regarding proposal submission found at https://www.hq.nasa.gov/office/procurement/other/EFSS-Box-Offeror-Proposal-Submission-Instructions.pdf.

(d) Offerors should electronically submit their proposals not later than 5:00 p.m. EDT one working day prior to the date specified for receipt of proposals, if offerors seek to coordinate with the contracting officer regarding the proposal's receipt. NASA is not required to verify proposal receipt prior to the submission deadline.

(e) Offerors are encouraged to include all individual proposal files within a single .zip file. Electronic file names must be limited to letters, numbers, dashes, and single spaces, except for the period that is required before the file extension (e.g., .zip, .pdf), in order to successfully upload and download files from the EFSS Box system. The offeror must not use special characters "/" or "\" in file names. The Offeror must sequentially number each file and clearly label the contents of the file and include the name of the Offeror and subcontractor name (if applicable) in the individual file name. Examples of acceptable individual file names are as follows (not specific to this solicitation):

For Prime offeror Submissions:

Prime offeror name – 80GRC026R0008 - Topic#.pdf

Prime offeror name - 80GRC026R0008 - Topic# Price Volume.xlsx

For Subcontractor Submissions (if applicable):

Prime offeror name - Subcontractor Name -80GRC026R0008 - Topic# Price Volume.xlsx

Individual files cannot exceed 150GB per file. Submitted files must not include password protection. Unless specifically authorized by the solicitation instructions, alternate proposal submissions must not be submitted.

(f) Immediately after all files have been uploaded and the proposal has been submitted in its entirety, the offeror is requested to notify Linda Nabors at the following email address: linda.m.nabors@nasa.gov with a listing of all documents by filename that were submitted via

EFSS Box. The offeror should courtesy copy (cc) Ian Park at ian.park@nasa.gov on this communication. If any problems are experienced with the EFSS Box system (e.g., login, file transfer), please contact Linda Nabors and provide a cc copy to Ian Park via e-mail as soon as possible.

(g) The Offeror is responsible for ensuring its proposal reaches the Government office designated in the solicitation by the date and time specified in the solicitation. The Government is not responsible for any failure attributable to the transmission or receipt of documents. Please note that uploading documents via EFSS Box and the transmission of the files from the offeror to the Government may not be instantaneous. To ensure timely delivery, the Offeror is encouraged to submit its proposal at least 24 hours prior to the due date specified in the solicitation. The electronic submission of the proposal must contain all information required by the solicitation to be determined responsive.

7.2 Proposal Format and Content Requirements

This section provides the required format and content requirements for proposals, which should describe proposed work that will be evaluated based upon its technical merit, relevance, and price. All proposals must be organized according to the structure outlined in Table 7.2.1-1 below, with page limitations strictly enforced. Offerors should ensure that all required information is complete and clearly presented, as the Government will evaluate proposals based solely on the information provided.

7.2.1 General Format Requirements

The proposal format and content requirements as outlined in this section are specific to this Appendix and supersede the instructions in the omnibus BAA or the *NASA Guidebook for Proposers*. All proposals must be submitted as a single searchable (with the exception of the Price Volume), unlocked PDF file with edit permission enabled. Proposal attachments must be separate files. Offerors must comply with all format and page limit requirements described herein, as well as any additional attachments specified for the specific proposal submission instructions. Pages exceeding the specified limits for each section will not be evaluated. A page is defined as one side of an 8½" x 11" sheet with minimum one-inch margins on all sides, using 12-point font minimum, Times New Roman type, with the exception of tables and figures, which may use 8-point font minimum. Any font that the Government determines smaller than the minimum amounts will not be evaluated.

Table 7.2.1-1 Proposal Submission Content

Section No	Proposal Section	Page Limit
	Title Page	1
	Table of Contents	1
I	Executive Summary	2
II	Proof of Eligibility	2
III	Past Experience	5
IV	**Technical Proposal** Overall Technical Approach Proposed Work Plan (Statement of Work) Organizational Capability Essential Personnel	 10 10 4 4

	Implementation Feasibility and Risk	3
V	Price Volume - Attachment D-Price Template	No Limit
VI	**Business Volume** Summary of Exceptions, Signed Model Contract, Representations and Certifications, Waiver of Rights to Inventions, Government Contriubuted Resources, and Government Task Agreement and Center Level of Intent	150

7.2.1.1 Title Page

- Include any Notice of Restriction on Use and Disclosure of Proposal Information
- An optional graphic image may be included
- The title of the Offeror's proposal or proposed project
- The title and solicitation Number (80GRC026R0008)
- The Topic and Topic # being proposed to
- Date of the proposal
- Offeror's name, CAGE code, address (including 9-digit ZIP+4 code, if applicable)
- Type of Organization (e.g. other than small, educational, small business, minority, women-owned, etc.)
- Offeror's Point of Contact name, title, e-mail address, and phone number
- Proposal validity period (maximum of 120 days from proposal submission)

7.2.1.2 Section I -Executive Summary

The Offeror shall describe the proposal's prominent and distinguishing features. The Executive Summary shall provide an overview of the proposed effort that is suitable for release through a publicly accessible archive should the proposal be selected.

7.2.1.3 Section II-Proof of Eligibility

The Offeror shall provide information showing that the Offeror and all team members (if applicable) are eligible participants as stipulated in Section 3 of the omnibus BAA and Section 4 of this Appendix. Describe compliance with eligibility requirements as needed.

7.2.1.4 Section III- Past Experience

The Offeror shall provide a narrative of maximum of three (3) relevant past contracts and/or agreements completed within the last five (5) years that are relevant to the scope outlined in this solicitation, that demonstrates your organization's relevant past experience. For each reference, describe the scope of the work, technical accomplishments, contract value, contract number, period of performance, complexity, a brief description of the technical achievements and performance outcomes, and how the work performed demonstrates the offeror's ability to successfully execute the proposed work.

7.2.1.5 Section IV- Technical Proposal

7.2.1.5.1 Overall Technical Approach

The Offeror shall describe the proposed technical solution and a plan for technology maturation, including the current Technology Readiness Levels (TRLs)/Manufacturing Readiness Levels (MRLs) of the overall system or key technologies. The description shall include the major

technical activities to be performed, the overall technical approach to execution, planned maturation path, and expected technical outcomes. The Offeror shall describe the proposed technical solution meets the Topic objectives and requirements, define measurable performance metrics or success and criteria for the proposed effort.

The Offeror shall identify advancement over the state of the art, any novel technologies, tools, techniques, processes, or innovations proposed for use and explain their contribution to achieving the stated objectives. The proposal shall also describe existing capabilities, lessons learned, or technology maturity relevant to the proposed effort.

7.2.1.5.2 Proposed Work Plan (Statement of Work)

The Offeror shall provide a proposed work plan written as a Statement of Work (SOW) that includes a detailed work breakdown structure, schedule, description of major tasks, major milestone title, description and number, and deliverables.

Schedule (Included in SOW)

The Offeror shall provide a notional schedule depicting the planned progression of the effort and progression of technical maturity. The schedule shall identify major phases of work, key activities, demonstrations, reviews, tests, and other significant events necessary to achieve the proposed objectives. The schedule shall demonstrate the realism and feasibility of the proposed execution approach.

Major Milestones and Deliverables (Included in SOW)

The Offeror shall describe the major technical and programmatic milestones associated with the proposed effort and identify the principal deliverables to be produced. Milestones should represent meaningful progress toward achievement of the proposed objectives. Detailed milestone definitions, work breakdown structures, deliverables, and associated payment milestones shall be provided. Offerors shall propose milestones and deliverables appropriate to the maturity, scope, and technical approach of their proposed efforts. Milestones and deliverables are expected to provide sufficient technical evidence demonstrating progress toward stated objectives and performance outcomes.

7.2.1.5.3 Organizational Capability

The Offeror shall describe the organizational capabilities that will be applied to the effort. The proposal shall identify the facilities, infrastructure, partnerships, equipment, corporate contributions (if proposed) and other resources available to support successful execution. The Offeror shall explain how these capabilities increase the likelihood of successfully achieving the proposed objectives.

Claims regarding facilities, infrastructure, equipment, partnerships, or other organizational resources shall be supported, as appropriate.

7.2.1.5.4 Essential Personnel

The Offeror shall identify the Essential personnel proposed for the effort and describe their roles and responsibilities. Summarize the qualifications, relevant experience, expertise, and availability of each essential individual and explain how their experience supports successful performance of the proposed work.

DRAFT

7.2.1.5.5 Implementation Feasibility and Risk

The Offeror shall describe the overall execution strategy for performing the proposed work. The proposal shall identify significant technical, schedule, resource, integration, or programmatic risks, organizational/management approach, and describe the planned mitigation strategies. Offerors shall explain why the proposed approach represents a reasonable and achievable path to successful execution.

7.2.1.6 Section V- Price Volume

Price Volume shall consist of a completed Attachment D - Price Template. The Offeror shall complete the required Price Form in Attachment D– Price Template to this solicitation. The price evaluation will be focused on the completed Form.

An Offeror's failure to comply with all Price Volume instructions (including those for electronic submissions) may result in rejection of its proposal.

The price proposal shall include the overall firm fixed price for the capability/technology development project.

It is anticipated that Adequate Price Competition will exist; therefore, the submission of certified cost or pricing data is not likely (FAR 15.403-2). However, in order for the Government to determine price reasonableness, limitations on subcontracting, and future modification(s) to the resultant contract, the Offeror shall submit Data Other than Certified Cost or Pricing Data pursuant to FAR 15.403-1. The Government reserves the right to request certified cost or pricing data if the following scenarios occur: proposed prices appear unreasonable; there are concerns the Contractor may default; and/or if the Government does not receive two or more priced offers that satisfy the Government's expressed requirement from two or more responsible Offerors competing independently (FAR 15.403-2(c)).

The Government reserves the right to request additional information if more information is required to determine reasonableness.

The Offeror shall prepare the price proposal in a manner consistent with its current accounting system.

The Offeror is responsible for ensuring the accuracy of formulas and figures. The Form must contain no macros or hidden cells. The Form, or any supporting Price information provided, shall not be locked/protected, or secured by passwords in part or in whole. Offerors must tailor the Forms to conform to their estimating and accounting systems. The Offeror's Price Volume shall encompass all costs associated with the requirements of this solicitation and shall comply with applicable Federal Acquisition Regulation (FAR), NASA FAR Supplement (NFS), and governing statutory requirements.

Payment Milestones

The Offeror shall provide a list of payment milestones with no fewer than two payment milestones: at contract start plus 30-90 days and at contract completion using the appropriate tab in Attachment D– Price Template.

7.2.1.7 Section VI-Business Volume

Offeror shall provide the below information:

7.2.1.7.1 Summary of Exceptions

Include a statement of acceptance or list all specific exceptions to any terms and conditions included in the model contract and all contract attachments.

Include the reasons for any exception, new terms, conditions, and/or clauses, including any proposed benefit to the Government. This list must include all exception(s), deviation(s) and/or conditional assumptions taken and be supported by sufficient justification to permit evaluation.

Offerors may take exception to, or have unique interpretations of, any Model Contract clauses. These exceptions and/or unique interpretations shall be listed clearly in the Summary of Exceptions, noted above. Note, taking exception to, or having unique interpretations of any required clauses MAY have a negative impact on potential selection.

7.2.1.7.2 Signed Model Contract

A Model Contract is provided in Attachment C of this announcement. A Model Contract shall be provided for each proposal, signed by an official authorized to contractually bind the Offeror. This can be done by signing the attached SF33 on the first page of the Model Contract. Please be advised that all sections designated with the text [OFI] represent "Offeror Fill-Ins". Offerors shall fill in [OFI]'s and submit as part of the signed Model Contract with the proposal submittal. Additionally, sections designated with the text [TBD] stand for "To Be Determined". Offerors should not fill in the [TBD]'s. The Government will update these prior to contract award. Each proposal shall provide a Data Rights Assertions Table as an attachment to the Model Contract.

Consistent with FAR 52.227-15(b), each Offeror shall identify and list any Limited Rights Data and Restricted Computer Software proposed to be delivered in performance of the contract in the Table included in section (b) of clause *Identification and Representation of Limited Rights Data and Restricted Computer Software (Combined Clause)*, which is included in the Model Contract provided as Attachment C to this Announcement.

7.2.1.7.3 Representations and Certifications

The Offeror shall fill in the applicable provisions and certifications in Attachment E that are not otherwise available on SAM.gov.

7.2.1.7.4 Waiver of Rights to Inventions

This solicitation contains NFS clause 1852.227-70, "New Technology—Other than a Small Business Firm or Nonprofit Organization" and NFS provision 1852.227-71, "Request for Waiver to Rights to Inventions". Any petitions for advance (prior to contract execution) waiver of rights to inventions shall be included in this volume.

7.2.1.7.5 Government-Contributed Resources

Offerors may include requests for access to Government resources such as Government Furnished Property (GFP), to utilize facilities, and expertise resident at NASA centers to supplement their own capabilities in fulfilling contract requirements. Government engagement, including the provision of NASA subject matter expertise, facilities access, and collaborative technical support, is expected to be limited and subject to availability. Offerors must clearly identify the nature,

estimated level of effort, duration and scope associated with any requested NASA participation or Government-furnished support.

Provision of NASA on-site resources, facilities access, and/or personnel for collaborative activities will be defined, executed and managed through Government Task Agreements (GTAs). GTAs are reserved strictly for circumstances where the contractor needs access to unique Government capabilities, facilities, or infrastructure (e.g., specialized test stands, vacuum chambers, or other high value or unique assets) that are not commercially available or would be cost-prohibitive to independently develop.

Award recipients that require access to NASA facilities and/or systems must work with NASA program staff to ensure proper credentialing.

7.2.1.7.6 Government Task Agreement and Center Letter of Intent

The Offeror shall submit a draft GTA that describes the government engagement expected throughout the period of performance, the facilities and capabilities resident at NASA centers to supplement an offeror's capability to fulfill contract requirements, why they are necessary, what their cost and impact is to contract execution. Offerors shall include a Basis of Estimate (BOE) for resources identified by FTE and any Center procurement dollars and description of capabilities (FTE, LOE) requested. An FTE is a unit of civil servant workload, where 1.0 FTE is equivalent to 2,080 work hours. The Offeror shall include a Statement of Intent signed by the contributing Center. If the Contractor intends to use multiple NASA Center resources, the Contractor shall provide a draft GTA and Center Letter of Intent for each contributing Center.

7.2.1.7.7 Subcontracting Plan

In accordance with FAR 52.219-9, a subcontracting plan shall be required for the apparent successful offeror(s) with any proposal over $900,000 unless a small business is proposing as a prime contractor. If no subcontracting opportunities exist, the offeror shall provide a detailed statement as to why no such opportunities exist. Subcontracting Plan, if required, will be requested during negotiations.

Organizational Conflicts of Interest Plan:

The Offeror shall submit an OCI Plan that covers the Offeror and its teaming partners. This review is separate from the proposal evaluation. As such, the Government may communicate, outside of negotiations, with any Offeror at any time during the review of their OCI Plan; however, substantive omissions and OCIs that cannot be effectively mitigated may result in the proposal being ineligible for award. Please see Attachment G of this solicitation for instructions for submission.

[End of Section]

8 Proposal Review Information

Each proposal will be evaluated by a NASA panel to assess the Offeror's relevant experience, proposal's relevance to the Topic's Statement of Objectives, technical merit, and its price reasonableness. These factors will also go into evaluating the proposal's best value to the agency and funding availability. Each proposal will be evaluated and scored on its own merits using the criteria described below.

This procurement will be solicited using Federal Acquisition Regulation (FAR) part 35 BAA procedures and will support full and open competition in accordance with FAR part 6.101(b)(3).

Each proposal will be evaluated on its own individual merits and on the information presented in the Offeror's proposal. Data previously submitted, or presumed to be known (e.g., data or services previously submitted or performed for NASA), will not be considered as part of the proposal unless entirely incorporated into and contained within the proposal. Offerors are reminded that the Government may evaluate proposals and award a contract without conducting negotiations or post-selection negotiations with Offerors. Therefore, each Offeror shall submit only one proposal per Topic which represents its best approach to meeting the objectives of the solicitation. The Government reserves the right to conduct post-selection negotiations if the Contracting Officer later determines them to be necessary.

8.1 Proposal Review Information

8.1.1 Compliance Review

Proposals that are submitted after the due date and time as defined within this solicitation will be rejected without further evaluation. Proposals which fail to meet the minimum administrative requirements may be rejected without further review. Proposals are reviewed to determine if they meet the minimum administrative requirements. These requirements include but are not limited to these factors:

- Proposal was submitted by due date and time;
- Offeror is eligible to submit a proposal;
- Proposal meets the page, font, and spacing limits;
- Proposal was submitted with a SIGNED Model Contract;
- Proposal was submitted with a Work Plan in a Statement of Work format; and
- Proposal was submitted with all required information.

8.2 Evaluation Criteria

8.2.1 Past Experience (Acceptable/Unacceptable)

NASA will evaluate the proposals to determine the relevance of the Offeror's (inclusive of experience of, sub-contractors and academic partners) past experience relative to the required effort. Failure to show experience performed in the past five (5) years on a maximum of three (3) projects that are of a similar size, scope, and complexity to the effort proposed will receive an "unacceptable" rating and the proposal will be disqualified from any further evaluation for contract award.

Rating	Description
Acceptable	Based on the Offeror's relevant experience record, NASA has a reasonable expectation that the Offeror is technically capable of performing the required effort
Unacceptable	Based on the Offeror's lack of relevant experience record, NASA has no reasonable expectation that the Offeror is technically capable of performing the required effort

8.2.2 Proposal Relevance (Acceptable/Unacceptable)

The Government will evaluate the relevance of the Technical Proposal (Section IV) to determine whether it meets the overall objectives and requirements of the Topic under which the proposal was submitted. As a minimum, the proposal must:

- Clearly address the technical problem identified in the Topic; and
- Demonstrate relevance of proposed work to the stated objectives, with clear traceability to the Topic objectives and intended outcomes.

A proposal failing to show relevance will receive an Unacceptable rating and be disqualified from any further evaluation for contract award.

Rating	Description
Acceptable	NASA determines the proposal is relevant to the overall objectives and requirements of the Topic.
Unacceptable	NASA determines the proposal is not relevant the overall objectives and requirements of the Topic.

8.2.3 Technical Evaluation

Section IV- Technical Merit

Each of the Technical Merit sub-factors will be evaluated based on the criteria in Table 8.2.3-1.

Elements of the Offeror's proposal that merely meet the Government's objectives will not be eligible for either a finding of a strength or a weakness.

The Government will assign an overall adjectival rating and corresponding numerical score for Technical Merit in accordance with the definitions and percentile ranges set forth at NFS Companion Guide 1815.23(b)(1).

The Technical Merit rating will be based on the assessment of strengths and weaknesses identified across the subfactors. Subfactors will not receive separate adjectival ratings or numerical scores; rather, strengths and weaknesses identified within each subfactor will be considered collectively in determining the overall Technical Merit rating. The subfactors are of approximately equal importance.

Once all proposals are evaluated, an adjectival rating and corresponding numerical score will be assigned to each proposal based on the documented findings. Numerical scores are used to facilitate comparison among proposals within the same adjectival rating category and do not represent an independent evaluation criterion.

DRAFT

Table 8.2.3-1 Definitions of Strengths, Weaknesses, and Deficiencies

Ratings	Definition
Significant Strength	An aspect of the proposal that greatly enhances the potential for successful contract performance and/or that appreciably exceeds specified performance or capability requirements in a way that will be advantageous to the Government during contract performance.
Strength	An aspect of the proposal that will have some positive impact on the successful performance of the contract and/or that exceeds specified performance or capability requirements in a way that will be advantageous to the Government during contract performance.
Weakness	A flaw in the proposal that increases the risk of unsuccessful contract performance.
Significant Weakness	A flaw in the proposal that appreciably increases the risk of unsuccessful contract performance.
Deficiency	A material failure of a proposal to meet a Government requirement or a combination of significant weaknesses in a proposal that increases the risk of unsuccessful contract performance to an unacceptable level.

Table 8.2.3-2 Adjectival Scale for Evaluation

Adjectival Rating	Definitions	Percentile Range
Excellent	A comprehensive and thorough proposal of exceptional merit with one or more significant strengths. No deficiency or significant weakness exists.	91-100
Very Good	A proposal having no deficiency and which demonstrates overall competence. One or more significant strengths have been found, and strengths outbalance any weaknesses that exist.	71-90
Good	A proposal having no deficiency which shows a reasonably sound response. There may be strengths or weaknesses, or both. As a whole, weaknesses not off set by strengths do not significantly detract from the offeror's response.	51-70
Fair	A proposal having no deficiency and which has one or more weaknesses. Weaknesses outbalance any strengths.	31-50
Poor	A proposal that has one or more deficiencies or significant weaknesses that demonstrate a lack of overall competence or require a major proposal revision to correct.	0-30

8.2.3.1.1 Overall Technical Approach

The Government will evaluate the Offeror's understanding of the objectives, the soundness and completeness of the proposed methodology, the technical feasibility of the approach, advancement over the state of the art, credible metrics for assessing performance, and the likelihood of successfully achieving the desired outcomes.

8.2.3.1.2 Proposed Work Plan

The Government will evaluate the proposal to determine the suitability, reasonableness, and effectiveness of the overall Work Plan to be written as a SOW including proposed detailed work breakdown structure, schedule, a description of major tasks, major milestones and deliverables. The Government will consider whether proposed milestones are outcome-based, independently verifiable, and represent meaningful, measurable indicators of technical progress.

8.2.3.1.3 Organizational Capability

The Government will evaluate the reasonableness and effectiveness of the Offeror's proposed capability to successfully execute the proposed work, the adequacy of facilities, infrastructure, partnerships, equipment, corporate contributions, and other available resources, and overall ability necessary to perform the proposed work.

8.2.3.1.4 Essential Personnel

The Government will evaluate the essential personnel's qualifications, relevant experience, expertise, and availability of proposed essential personnel to successfully perform their assigned roles and contribute to achievement of the objectives.

8.2.3.1.5 Implementation Feasibility Risk

The Government will evaluate the overall execution strategy for performing the proposed work. The Government will also evaluate the proposal on the reasonableness of their risk mitigation strategies. Lower-risk approaches are not inherently favored; however, proposals should demonstrate a reasonable and achievable path to successful execution.

8.2.4 Section V- Price Volume

Although the Price Factor is not numerically scored nor receives an adjectival rating, it is important in determining that the Offeror understands the solicitation and the resources required.

The Government will perform a price analysis of all acceptable proposals received (see NFS Companion Guide 1815.305-70) in accordance with FAR 15.305(a)(1) and FAR 15.404-1, Proposal Analysis Techniques.

Consistency between the Technical Merit and the Price Factor section will be considered in determining if the offeror's proposed price is fair and reasonable. Additionally, failure by an offeror to provide all required Excel Pricing Model data (e.g., labor rates for all labor categories for all years of performance) could adversely impact the offeror's technical merit score or result in a determination that the proposal is unacceptable (see NFS 1815.305-70(a)(3)). Price information provided in this section will constitute the offeror's proposal submission for price comparison purposes. The total price will be presented to the Source Selection Authority (SSA).

8.2.5 Section VI- Business Volume

Although the Business Volume is not numerically scored nor receives an adjectival rating, it is important in determining that the Offeror understands the objectives of the Topic. Risks identified from the Business Volume evaluation will be presented to the Source Selection Authority (SSA) for consideration in making the source selection decision.

8.3 Overall Evaluation for Award

NASA will present the results of the proposal evaluation to the SSA. The SSA will review the proposal findings against the evaluation criteria and select a portfolio of proposal(s) for each Topic area that best

meets the objectives of this BAA as described in Section 2 and represents the best value for the Government. The Government will consider Technical Merit to be significantly more important than evaluated Price. Considerations regarding the selection of the portfolio will include programmatic balance across top areas, risk spread, price and available NASA funding. The SSA may select proposals other than the most highly rated for the portfolio selection in order to achieve the objectives of the BAA.

NASA reserves the right to select for award one, multiple, or none of the proposals received in response to this Appendix.

Any proposal with a "Poor" rating for Technical will not be eligible for award.

8.3.1 Partial Awards

NASA reserves the right to select only a portion of a proposed activity, (i.e. a level of support reduced from that requested in the original proposal), and/or to select a portfolio of proposals that best meets the objectives of Appendix A, as described herein. Offerors shall specify if a proposal is offered as a non-separable package of work. Additionally, NASA may decide to make an award for less than the full period of the proposal. In these cases, the Offeror will be given the opportunity to accept or decline such selection. If the Offeror accepts such an offer, a revised budget and SOW may be required before funding availability on the proposal can be initiated. If the Offeror declines the offer of a partial selection, the offer of selection may be withdrawn in its entirety by NASA.

[End of Section]

9 Award Administration Information

9.1 Award Provisions

NASA is under no obligation to make any awards in response to proposals submitted. NASA reserves the right to award all, some, or none of a particular proposal. The funded amount and period of performance for each proposal selected for award may vary depending on the funding availability, technology area and the technical approach pursued by the Offeror.

9.2 Award Notices

NASA will provide written notice of selection for award to successful offerors. Offerors not selected for award will be notified in accordance with applicable law, regulation, and the terms of this solicitation.

9.2.1 Award Authority and Performance Authorization

For all awards, performance shall not begin until the contract is signed by both parties. NASA Warranted Contracting Officers are the only personnel with the authority to award NASA contracts and obligate Government funds.

9.2.2 Debriefing and Feedback

This solicitation is an Appendix under a BAA. Accordingly, NASA is not required to hold debriefs with Offerors who submit proposals in response to this solicitation (see Section 6.1 of Omnibus BAA). Following contract award, NASA will provide informal feedback to any Offeror upon request. However, no formal "debriefing" (see FAR 15.301) will be provided.

[End of Section]

10 References

1. NextSTEP-3 Omnibus
2. NPR 8715.1, NASA Safety and Health Programs
3. NextSTEP Reference Website
4. NASA Civil Space Technology Shortfalls: Civil Space Shortfalls

[End of Section]

11 Attachments

This solicitation includes multiple Topic-specific attachments in addition to attachments which apply to all Topics. To simplify organization and cross-referencing, attachments are identified using a letter and number convention. The letter designates the attachment-type and the number identifies the Topic. For example: "A5" refers to the Statement of Objectives of Topic 5.

Table 11-1 Attachments Table

Applicable Topic(s)	Attachment Letter	Title	Document Type
Topic 1: Vertical Solar Array	A1	Topic 1 -Statement of Objectives	PDF
	B1	EHP-10069_Power_RevA_Final CUI	PDF - Controlled
Topic 2: In Situ Resource Utilization (ISRU) Oxygen from Regolith Production System	A2	Topic 2- Statement of Objectives	PDF
	B2	Topic 2-Technical Performance Measures	PDF
Topic 3: Stirling Radioisotope Generator System	A3	Topic 3-Statement of Objectives	PDF

DRAFT

Topic 4: In Space Advanced Manufacturing	A4	Topic 4-Statement of Objectives	PDF
	B4	Topic 4-System Requirements	PDF
Topic 5: Innovative Nanomaterials Production	A5	Topic 5-Statement of Objectives	PDF
All Topics	C	Model Contract	PDF
All Topics	D	Pricing Template	Excel
All Topics	E	Representations and Certifications	PDF
All Topics	F	LEIA Export Control Request Form	PDF
All Topics	G	DRD Title: Organizational Conflicts of Interest (OCI) Plan	PDF
All Topics	H	Eligibility Certification and Supplemental Information	PDF

[End of Section and Solicitation]

DRAFT