LOAN GUARANTEE
SOLICITATION ANNOUNCEMENT

U.S. Department of Energy
Loan Programs Office

FEDERAL LOAN GUARANTEES FOR
INNOVATIVE CLEAN ENERGY

Solicitation Number: DE-SOL-0007154
OMB Control Number: 1910-5134; OMB Expiration Date: (extension pending; see Burden Disclosure Statement (sec. VII.E., infra.))
Announcement Type: Amended and Restated as of April 18, 2022¹

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Last Part II Submission Due Date: March 16, 2025

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UNITED STATES
DEPARTMENT OF ENERGY

FULL ANNOUNCEMENT

Amended and Restated Loan Guarantee Solicitation for Applications for Innovative Clean Energy

Solicitation Number: DE-SOL-0007154

I. Purpose of Solicitation

Applicants are invited to apply for loan guarantees from the United States Department of Energy (“DOE”) under Title XVII of the Energy Policy Act of 2005, as amended (“Title XVII”). Title XVII authorizes the Secretary of Energy (“Secretary”) to make loan guarantees for projects that “avoid, reduce, utilize, or sequester air pollutants or anthropogenic emissions of greenhouse gases” and “employ new or significantly improved technologies as compared to commercial technologies in service in the United States.”

The DOE Loan Programs Office (“LPO”) has established a two-part application process for loan guarantees under Title XVII. In Part I of the process, the applicant is invited to provide the basis for the Project’s eligibility for a loan guarantee and explain the project’s readiness to proceed further into the application process. If LPO deems a project qualified under a Part I application, then the applicant will be invited to Part II of the process. In Part II of the Application, the applicant will provide further information that LPO will use to determine “reasonable prospect of repayment” of a potential loan to be guaranteed and to evaluate programmatic, technical, and financial and other factors. Applications that satisfy Part II review will be invited into due diligence, which is required in order for LPO to determine whether to issue a Conditional Commitment and a Loan Guarantee Agreement. This Solicitation describes the information requirements for Part I and Part II applications, as well as certain statutory and regulatory requirements and guidance under which LPO administers Title XVII.

Under this Solicitation, DOE will make available up to Three Billion Dollars ($3,000,000,000) of its loan guarantee authority.

Applicants must submit Applications in response to this Solicitation in accordance with the instructions provided in Section V, Attachment A, and Attachment B.

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2 42 U.S.C. §§16511-16515

3 This Solicitation is issued under Title XVII and the implementing regulations set forth in Part 609 under Chapter II of Title 10 of the Code of Federal Regulations (the “CFR”) (the “1703 Regulations”), and is subject to all of the terms and conditions thereof. Copies of the authorities cited herein may be found at https://www.energy.gov/lpo/title-xvii (the “Program Website”). Capitalized terms used herein but not otherwise defined have the meaning ascribed to them by the 1703 Regulations.

4 See Attachment F for loan guarantee authority based on annual appropriations.
II. **Eligibility Information**

A. **Project Eligibility**

An “**Eligible Project**” under this Solicitation is a Project that meets the following conditions:

1. is located in the United States at one location (unless the proposed multiple locations satisfy the requirements of clause (1) of the definition of “Eligible Project” in Section 609.2 of the 1703 Regulations),

2. employs New or Significantly Improved Technologies as compared to Commercial Technologies in service in the United States at the time the guarantee is issued, including projects that employ elements of Commercial Technologies in combination with New or Significantly Improved Technologies,

3. avoids, reduces, utilizes or sequesters air pollutants or anthropogenic emissions of greenhouse gases, and

4. is from any of the categories in the following list:\(^5\)

   a) renewable energy systems (“**Renewable Energy Projects**”);

   b) hydrogen fuel cell technology for residential, industrial, or transportation applications (“**Hydrogen Projects**”);

   c) carbon capture, utilization, and sequestration practices and technologies including agricultural and forestry practices that store and sequester carbon and synthetic technologies to remove carbon from the air and oceans (“**Carbon Capture Projects**”);

   d) efficient electrical generation, transmission, and distribution technologies (“**Efficient Electrical Projects**”);

   e) efficient end-use energy technologies (“**Efficient End-Use Projects**”);

   f) production facilities for the manufacture of fuel-efficient vehicles or parts of those vehicles, including electric drive vehicles and advanced diesel vehicles (“**Fuel-Efficient Vehicle Projects**”);

   g) Pollution control equipment (“**Pollution Control Projects**”);

   h) Energy storage technologies for residential, industrial, transportation, and power generation applications (“**Energy Storage Projects**”); or

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\(^5\) 42 U.S.C. §16513(b), other than the categories set forth in 42 U.S.C. §16513(b)(2) (advanced fossil energy technology) and 42 U.S.C. §16513(b)(4) (advanced nuclear energy facilities), which are the subject matter of Solicitation Number: DE-SOL-0006303 and Solicitation Number: DE-SOL-0007791, respectively. 42 U.S.C. §16513(b)(10) (refineries) and 42 U.S.C. §16513(b)(13) (critical minerals).
i) Technologies or processes for reducing greenhouse gas emissions from industrial applications, including iron, steel, cement, and ammonia production, hydrogen production, and the generation of high-temperature heat ("Industrial GHG Reduction Projects").

Eligible Projects under this Solicitation exclude projects falling with the listed categories but making use of technologies concerned or associated with fossil fuels or nuclear energy. Applicants for such projects should consult the Solicitation for Innovative Clean Energy: Fossil (Solicitation Number: DE-SOL-0006303) or the Solicitation for Innovative Clean Energy: Nuclear (Solicitation Number: DE-SOL-0007791) if Applicants believe that they fall within one of the categories in such Solicitations.

Further guidance related to (A)(2).

“New or Significantly Improved Technology” means a technology, or a defined suite of technologies, concerned with the production, consumption, or transportation of energy and that is not a Commercial Technology, and that has either: (i) only recently been developed, discovered, or learned; or (ii) involves or constitutes one or more meaningful and important improvements in productivity or value, in comparison to Commercial Technologies in use in the United States at the time the Term Sheet is issued.

“Commercial Technology” means a technology in general use in the commercial marketplace in the United States at the time the Term Sheet is offered by DOE. A technology is in general use if it is being used in three or more facilities that are in commercial operation in the United States for the same general purpose as the proposed project, and has been used in each such facility for a period of at least five years. The five-year period for each facility shall start on the in-service date of the facility employing that particular technology or, in the case of a retrofit of a facility to employ a particular technology, the date the facility resumes commercial operation following completion and testing of the retrofit. For purposes of this definition, facilities that are in commercial operation include projects that have been the recipients of a loan guarantee from DOE.

Regional Variation – Pursuant to the Energy Act of 2020, if regional variation significantly affects the deployment of a technology, DOE may make loan guarantees for up to 6 projects that employ the same or similar technology as another project, provided that no more than 2 projects that use the same or a similar technology are located in the same region of the United States notwithstanding (A)(2).

B. Distributed Energy Projects

Projects that are comprised of installations of systems, facilities, equipment, or technologies at multiple sites ("Distributed Energy Projects") must (i) satisfy the requirements under the definition of an Eligible Project under this Solicitation, and (ii) deploy a technology or a defined suite of technologies concerned with the production, consumption, or transportation of energy ("Distributed Technologies") pursuant to an integrated and comprehensive business plan.
C. Supply Chain Projects
Projects that involve the manufacturing of components with end-uses that fall within one or more of the categories in II.(A)(4) and that can result in end-use life-cycle greenhouse gas emissions savings (i.e., avoidance or reduction) or air pollutants reduction may be eligible under this Solicitation. This can encompass components that incorporate New or Significantly Improved Technology in the manufacturing process. The Application should clearly describe the end-market application and include supporting market data such that LPO can accurately determine the full life-cycle GHG savings or air pollutants reduction resulting from the manufacturing process of the component and/or of the end-use of the components, as appropriate. Applicants with components that are not inherently limited to only GHG saving or air pollutants reduction end-uses may find this to be a challenging requirement and may want to consult with LPO before preparing an application.

D. Eligible Lender
Under the 1703 Regulations, the Federal Financing Bank (FFB) is an Eligible Lender. Applicants should indicate in their application their intent to use the FFB or an alternative lender or lenders for the proposed loan guarantee for their Eligible Project. The FFB is the only lender where DOE is permitted to guarantee 100% of the principal and interest on a loan. Lenders other than the FFB, i.e., commercial lenders, seeking to be Eligible Lenders on a loan transaction that is proposed to be partially guaranteed by DOE must meet regulatory and programmatic requirements for eligibility to the satisfaction of DOE. In particular, all such commercial lenders, when reviewing and evaluating a proposed Eligible Project, must at all times exercise the level of care and diligence that a reasonable and prudent lender would exercise when reviewing, evaluating, and disbursing a loan made by it without a Federal guarantee.

III. Application Requirements
Applicants are required to submit timely and sufficiently responsive information to support a thorough analysis of the Project’s compliance with the requirements established by this Solicitation, as well as rigorous underwriting criteria. All information that DOE collects will be used and stored in accordance with DOE policies and procedures.

A. Required Information and Materials
Attachment A and Attachment B provide the Part I and Part II information and materials, respectively, that DOE requires from an applicant to demonstrate compliance with the information collection requirements.
In addition to information requested in this Solicitation, each Applicant may also be required to submit additional information subsequently requested by DOE in order to clarify an Application.

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6 See Section 609.2 of the 1703 Regulations.
7 See Section 609.8(c)(1) of the 1703 Regulations.
9 As stated in 10 CFR Part 609.
B. Compliance with NEPA Regulations

The National Environmental Policy Act (“NEPA”) requires federal agencies to consider the potential environmental impacts of their proposed actions. DOE must complete a NEPA review before it makes a decision to provide a loan guarantee. Compliance is integrated into LPO’s decision-making procedures to ensure that a Project’s environmental impacts are properly considered. Additional information on the NEPA process for loan guarantee projects and required application material is available in Attachment D.

Additional information on the NEPA process for loan guarantee projects is available on the Program Website at:


C. Davis-Bacon Requirements

All laborers and mechanics employed by contractors and subcontractors in the performance of construction work financed in whole or in part by a loan guaranteed under Title XVII must be paid wages at rates not less than those prevailing on projects of a character similar in the locality as determined by the Secretary of Labor in accordance with subchapter IV of chapter 31 of title 40, United States Code (the “Davis-Bacon Act”). Each Borrower will be required in the Loan Guarantee Agreement to make representations and warranties, agree to covenants, and satisfy conditions precedent to closing and to each disbursement that, in each case, relate to its compliance with the Davis-Bacon Act and all applicable Davis-Bacon Act regulations, including all requirements set forth in 29 CFR Part 5 and the wage determination schedule(s) applicable to the Project. Borrowers are advised that, in accordance with the Davis-Bacon Act and its implementing regulation at 29 CFR 1.6(g), the Davis-Bacon Act obligations described above for construction work financed in whole or in part with a Title XVII loan guarantee must be complied with beginning with the “construction, prosecution, completion or repair” (as defined in 29 CFR 5.2(j)) of such Project, regardless of whether the closing of the DOE loan guarantee has occurred. An exception to the requirement to comply prior to closing of the DOE loan guarantee is available if the Administrator of the Wage and Hour Division, Employment Standards Administration, United States Department of Labor (“DOL”) finds that it is necessary and proper in the public interest to prevent injustice or undue hardship and there is no evidence of intent to apply for federal funding or assistance prior to the start of construction. Applicants should visit the DOL website at http://www.dol.gov/whd/govcontracts/dbra.htm and the Program Website for additional guidance regarding the Davis-Bacon Act and its related acts.

D. Cargo Preference Act of 1954 Requirements

All Projects that receive a loan guarantee under this Solicitation must comply with the Cargo Preference Act of 1954¹⁰, which establishes certain requirements for the use of U.S. flagged vessels in the movement of cargo in international waters. These requirements may apply to shipments contracted for or made prior to receiving a loan guarantee. DOE urges Applicants to contact the Maritime Administration directly to ensure that relevant Project agreements provide for compliance with the Cargo Preference Act.

General information on cargo preference can be found at the Maritime Administration’s web site: https://www.maritime.dot.gov/ports/cargo-preference/cargo-preference. Questions on cargo preference may

IV. Evaluation Process

A. Summary of Application Evaluation Process

DOE will review each Part I submission to determine whether or not such submission meets the Project eligibility requirements provided in II.A. If deemed eligible and ready to proceed further into the application process, Applicants will be invited to submit Part II. If (i) DOE determines that the Project does not meet the eligibility requirements provided in II.A, or (ii) that the Application does not demonstrate the Project’s readiness to proceed, or (iii) the Applicant does not respond in a timely manner to the information requests from DOE, DOE may deny the Application. DOE may also offer the Applicant the opportunity to withdraw the Application. An Applicant may resubmit a withdrawn Application.

DOE’s decision not to proceed with any Application shall be final and non-appealable, but will not prevent the Applicant from applying for a loan guarantee under another existing Solicitation that is accepting Applications or applying for a guarantee in respect of a different proposed project pursuant to another, separate application under this Solicitation.

An invitation to submit a Part II Application is not an assurance that DOE will invite the Applicant to the due diligence and term sheet negotiation process.

DOE will consider the following factors (the “Part II Factors”) in evaluating Part II submissions.12

<table>
<thead>
<tr>
<th>Criteria</th>
<th>Weighting</th>
</tr>
</thead>
<tbody>
<tr>
<td>Financial Factors: Creditworthiness</td>
<td>45%</td>
</tr>
<tr>
<td>Technical Factors: Technical relevance, merit, technical approach, work plan, and construction plan</td>
<td>35%</td>
</tr>
<tr>
<td>Environmental Factors: Environmental impacts, review, and compliance</td>
<td>20%</td>
</tr>
<tr>
<td>Total</td>
<td>100.0%</td>
</tr>
</tbody>
</table>

11 Section 609.5(c) of the 1703 Regulations

12 See Section 609.5 of the 1703 Regulations for a more detailed description of the factors. In addition to the weighted financial, technical, and environmental factors as provided above, DOE will review the Project’s legal structure and legal and regulatory risks.
B. **Review of Policy Factors**

In addition to the Part II Factors, DOE may also evaluate the extent to which an Application for a Project achieves DOE’s policy objectives,\(^\text{13}\) including (i) job quality, (ii) responsible contractor standards, (iii) workforce diversity, equity, inclusion, and accessibility goals for individuals who belong to underserved communities, such as Black, Latino, and Indigenous and Native American persons, Asian Americans and Pacific Islanders and other persons of color; members of religious minorities; lesbian, gay, bisexual, transgender, and queer (LGBTQ+) persons; persons with disabilities; persons who live in rural areas; and persons otherwise adversely affected by persistent poverty or inequality and business and contracting with businesses owned by such persons, (iv) underservered or disadvantaged community hiring goals, and (v) creating quality jobs, spurring economic revitalization, remediating environmental degradation, and supporting energy workers in communities whose members are or were engaged in providing, or have been affected by the provision of, energy-intensive goods and services.

C. **Determination to Proceed to Due Diligence and Term Sheet Negotiation**

DOE will make decisions as to whether to select a Project for due diligence and term sheet negotiation after evaluation of the Part II submission. An invitation to begin due diligence is not an assurance that the Applicant will be offered a term sheet, a Conditional Commitment, or a loan guarantee, or that any offer of a term sheet, a Conditional Commitment, or a loan guarantee will be on terms or conditions proposed by the applicant.

If DOE reviews a submission and decides not to proceed, DOE will inform the Applicant in writing of the reason(s) for not moving forward.\(^\text{14}\) DOE’s decision not to proceed with any Application shall be final and non-appealable, but will not prevent the Applicant from applying for a loan guarantee pursuant to the terms of any other existing Solicitation that is accepting Applications or applying for a guarantee in respect of a different proposed project pursuant to another, separate application under this Solicitation.

DOE reserves the right, without qualification, to reject any or all Applications received in response to this Solicitation or select any Application for due diligence review or negotiation of a term sheet.

V. **Fees and Expenses**

DOE will charge the following fees and expenses:\(^\text{15}\)

A. **Third Party Expenses**

DOE may utilize independent technical, financial or other consultants and outside legal counsel in the due diligence of projects and structuring of transactions and drafting of term sheets and financing documents. These third party expenses will accrue and shall be payable by the Applicant on and after the closing date of a Loan Guarantee Agreement.

\(^{13}\) See 609.5(b) of the 1703 Regulations.

\(^{14}\) Section 609.5(c) of the 1703 Regulations.

\(^{15}\) 42 U.S.C. §16512(h)(1); Section 609.11 of the 1703 Regulations.
B. **Facility Fee:**

On the closing date of a Loan Guarantee Agreement, all Applicants must pay a non-refundable facility fee (the “**Facility Fee**”) in an amount equal to 1.0% for the portion of the principal amount of the Guaranteed Obligation that does not exceed $150,000,000. For applications as to which the principal amount of the Guaranteed Obligation exceeds $150,000,000, Applicants pay an amount equal to 1% for the portion of the principal amount of the Guaranteed Obligation that does not exceed $150,000,000 plus, and an additional .60% for the portion of the Guaranteed Obligation that exceeds $150,000,000. For example, an Applicant for a Guaranteed Loan in the principal amount of $250,000,000 would pay $1,500,000 (1.0% of the first $150,000,000) plus $600,000 (.60% of the amount over $150,000,000) for a total Facility Fee of $2,100,000.

C. **Maintenance Fee:**

Applicants must pay a non-refundable annual maintenance fee (the “**Maintenance Fee**”) to cover DOE’s administrative expenses in servicing and monitoring the Loan Guarantee Agreement from the execution of the Loan Guarantee Agreement by the Borrower through payment in full of the Guaranteed Obligation in connection with such Loan Guarantee Agreement. The amount of the Maintenance Fee is expected to be up to $500,000 per calendar year. The Maintenance Fee shall be paid each year in advance, commencing with payment of a pro-rated annual payment prior to the financial closing date of the Loan Guarantee Agreement, on or prior to the date and in the amount specified in the Loan Guarantee Agreement.

D. **Credit Subsidy Cost.**

The Credit Subsidy Cost is the net present value of the estimated cash flows from the government minus estimated cash flows to the government, excluding fees and expenses collected by DOE, over the life of the loan as determined under the applicable provisions of the Federal Credit Reform Act of 1990, as amended (“**FCRA**”). The Credit Subsidy Cost is expressed as a percentage of the Guaranteed Loan amount. DOE makes no representation regarding the amount of any particular applicant’s Credit Subsidy Cost.

Section 1702(b) of Title XVII provides that the cost of a guarantee shall be paid by the Secretary using an appropriation made for the cost of the guarantee, subject to the availability of such an appropriation, and if sufficient appropriated funds to pay the cost of a guarantee are not available, then the guarantee shall not be made unless (A) the Secretary has received from the Borrower a payment in full for the cost of the guarantee and deposited the payment into the Treasury, or (B) a combination of one or more appropriations and one or more payments from the borrower has been made that is sufficient to cover the cost of the guarantee.

DOE will allocate appropriated funds to pay the Credit Subsidy Cost of loan guarantees as and when the closing of such loan guarantees occur, subject to the availability of appropriated funds. Therefore, to the extent that appropriated funds are insufficient or not available, Borrowers must make payments sufficient to cover the Credit Subsidy Cost of their loan guarantee prior to, or at the time of, closing. The source of payments received from Borrowers for the Credit Subsidy Cost cannot be a loan or other debt obligation that is made or guaranteed by the Federal government. More information can be found under “LPO Guidance on Paying Credit Subsidy Cost for Title 17 Borrowers” on the Program Website.

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16 See also OMB Circular No. A-11, Preparing, Submitting, and Executing the Budget, Section 185.2.
Under the 1703 Regulations, LPO has authority to include a risk-based charge that, together with the principal and interest on the guaranteed loan, or at such other times as DOE may determine, is payable on specified dates during the term of the guaranteed loan. The risk-based charge is intended to make DOE’s charges and costs consistent with the commercial markets and other federal credit programs. The risk-based charge, while distinct from the Credit Subsidy Cost, may affect the Credit Subsidy Cost by impacting expected cash flows to the government that are considered in calculating the amount of the Credit Subsidy Cost.

VI. Application Instructions

Applicants must file Part I and Part II submissions via the DOE Loan Program’s online Application portal (“Application Portal”). Supporting documents for Applications will be accepted only in the following formats: Microsoft Excel or Adobe PDF. Do not encrypt, compress, or zip any files.

A. Application Portal Submission Process:

LPO offers pre-application consultations to prepare prospective applicants for the application process. Prospective applicants can begin the consultation process by sending an email to LPO@hq.doe.gov with the subject line containing the prospective applicant’s name and ‘Request for Consultation.’ If you have already had pre-application consultations with LPO, please email or call your LPO staff contact for instructions on how to access the Application Portal.

The Application Portal provides a process for making corrections to an Application if substantive changes or additions are required after it has been submitted.

B. Portal Registration

To apply electronically via the Application Portal, Applicants must complete the following:

1. obtain a Dun and Bradstreet Data Universal Numbering System (“DUNS”) number (plus 4 digit extension if applicable);\(^{17}\)

2. obtain a North American Industry Classification System (“NAICS”) code;\(^{18}\) and

3. register with the System for Award Management (“SAM”).\(^ {19}\)

C. Formatting Instructions

Applicants should provide all requested information in the following format:

1. Documents supporting and forming any part of an Application should:

\(^{17}\) See https://fedgov.dnb.com/webform/displayHomePage.do to request or search a DUNS number.

\(^{18}\) See http://www.census.gov/eos/www/naics/ to request or search for a NAICS code.

\(^{19}\) See https://www.sam.gov/SAM/ to register with SAM. SAM registration must be completed and active before a payment can be made.
a) Be typed in 11 point or greater font;

b) Conform to the outlines given in Appendix A and Appendix B. Adhere to a format consisting of standard 8.5” x 11” paper; and

c) Have at least 1” margins (top, bottom, left and right) with exceptions for charts, graphics, and similar materials.

2. Applicants should provide a “short name” or other identifier that will allow for easy identification of the Project.

3. The file naming standard that DOE will use for uploaded files is specified in Table 1. Certain documents uploaded through the Application Portal will be renamed automatically to conform to this convention, as shown in the example that follows Table 1.

<table>
<thead>
<tr>
<th>Table 1</th>
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<tr>
<td><strong>Order #</strong></td>
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<tr>
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<tr>
<td>3</td>
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<td>4</td>
</tr>
<tr>
<td>5</td>
</tr>
<tr>
<td>6</td>
</tr>
</tbody>
</table>
Example:

ProjectABC.I.D. Technical Information.1,2,3,4,5,6,7,8.V1.pdf

D. Status Updates

LPO has taken efforts to streamline the application process and accelerate the review of applications. LPO encourages early engagement and is a valuable partner to applicants throughout the application process. In connection with an invitation to Part II of the application process, the Applicant will be provided a primary point of contact for any questions that the Applicant may have regarding the Application. Additionally, if DOE does not make a final decision on an Application by the date that is 180 days after receipt of a complete Part II Application, the Applicant may request, not more than once every 60 days thereafter, the current status of the Application, a summary of any factors that are delaying a final decision on the Application, a list of what items are required in order to reach a final decision, citation to authorities stating the reasons such items are required, and a list of actions the Applicant can take to expedite the process, and an estimate of when a final decision on the Application will be made.20

VII. Additional Provisions

A. Commitment of Public Funds

DOE shall not be bound by oral representations made during the Application stage or during any negotiations. No binding commitment, agreement, obligation, or right of any kind may be assumed or enforced by any Applicant or Project Sponsor against DOE other than in accordance with a duly and validly executed Loan Guarantee Agreement.

20 42 U.S.C. §16512(n).
B. **Procurement or Financial Assistance Award**

Neither a procurement action under Title 48 of the CFR nor a financial assistance award under 10 CFR Part 600 is contemplated by this Solicitation.

C. **Warning**

It is a crime to knowingly make false statements to a federal agency. Misrepresentation of material facts may be the basis for denial of an Application for a loan guarantee from DOE. Penalties upon conviction may include fine and imprisonment. For details, please refer to 18 U.S.C. §1001.

D. **Restrictions on Disclosure and Use of Information**

Title XVII authorizes the collection of the information requested in this Solicitation. This information will aid DOE in its review of Applications for loan guarantees pursuant to Title XVII.

Confidential business information shared with the LPO is subject to Federal laws, regulations and DOE policies. As a matter of policy, LPO and its Federal employees do not enter into Non-Disclosure Agreements. Application materials may become federal records and subject to disclosure statues such as the Freedom of Information Act.21 To the extent practicable DOE will protect confidential business information from public release.

Patentable ideas, trade secrets, proprietary and confidential commercial or financial information, disclosure of which may harm the Applicant, should be included in an Application only to the extent that such information is necessary to convey an understanding of a Project. The use and disclosure of such data will be restricted, to the extent consistent with applicable law, provided the Applicant specifically identifies and marks such data in accordance with 10 CFR 600.15, as described below:

1. Upload the following legend on a separate page when submitting Part I and Part II of the Application (be sure to specify the section number(s) from the Application that contain(s) such data):

   “Applicant submits this Application based on DOE’s assurance that the Application will be kept confidential to the extent consistent with applicable law. Applicant hereby certifies that Section(s) [___] of this Application contain(s) trade secrets or commercial or financial information that is privileged or confidential and is exempt from public disclosure. Such information shall be used or disclosed only for evaluation purposes or in accordance with the loan guarantee agreement, if any, entered in response to this Application. If Applicant is issued a loan guarantee under Title XVII of the Energy Policy Act of 2005, as amended, as a result of, or in connection with, the submission of this Application, DOE shall have the right to use or disclose the data contained herein, other than such data that have been properly declared in the loan guarantee agreement to be trade secrets or commercial or financial information that is privileged or confidential and is exempt from public disclosure.”

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21 5 U.S.C. §552 (“FOIA”)
2. Include the following legend on the first or cover page of each document or electronic file submitted that contains such data (be sure to specify the page numbers from such document or electronic file that contains such data):

   “Notice of Restriction on Disclosure and Use of Data

   Pages [___] of this document contain trade secrets or commercial or financial information that is privileged or confidential and is exempt from public disclosure. Such information shall be used or disclosed only for evaluation purposes or in accordance with a financial assistance or loan agreement between the submitter and the Government. The Government may use or disclose any information that is not appropriately marked or otherwise restricted, regardless of source.”

3. Include the following legend on each page containing trade secrets or commercial or financial information that is privileged or confidential:

   “Contains trade secrets or commercial or financial information that is privileged or confidential and exempt from public disclosure.”

4. In addition, each line or paragraph containing trade secrets or commercial or financial information that is privileged or confidential should be marked with brackets or other clear identification, such as highlighting.

For more guidance regarding the treatment of confidential information, please refer to the Treatment of Confidential Materials fact sheet and DOE’s regulations implementing the Freedom of Information Act (10 C.F.R. 1004).

E. Federal Support Restrictions

Subject to limited exceptions that are set forth in the 2009 Appropriations Act\(^\text{22}\) and the 2011 Appropriations Act\(^\text{23}\), DOE may not be able to issue loan guarantees to projects using funds appropriated under those acts that will benefit directly or indirectly from certain other forms of federal support (“Federal Support Restriction”). Examples of such federal support include grants or other loan guarantees from federal agencies or entities, including DOE, federal agencies or entities as a customer or off-taker of the Project’s products or services, or other federal contracts, including acquisitions, leases and other arrangements, that support the Project. Otherwise allowable Federal income tax benefits are expressly excluded from the Federal Support Restriction.

Under the 2007 Appropriations Act\(^\text{24}\) DOE may be able to issue loan guarantees under this solicitation to projects that will benefit from some limited federal support (“Federally Supported Projects”). Under federal budgeting practices, the credit subsidy cost of a Federally Supported Project with a significant degree of Federal support is likely to be higher, and possibly substantially higher, than the credit subsidy cost of an equivalent project that is not a Federally Supported Project. DOE encourages potential Applicants with

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Projects that may be subject to federal support to arrange a pre-application conference to better understand the potential impact to any loan guarantee issued under this Solicitation.

F. Burden Disclosure Statement

This data is being collected by DOE’s Loan Programs Office for the purpose of evaluating the eligibility of loan guarantee applications for projects seeking such financing under the Title XVII program. Applying for such benefit is voluntary, but if you choose to apply, your application must contain the data described in this Solicitation.

Public reporting hour burden for this collection of information is estimated to be 132.5 hours per response, including the time for reviewing instructions, searching existing data sources, gathering and maintaining the data needed, and completing and reviewing the collection of information. Send comments regarding this burden estimate or any other aspect of this collection of information, including suggestions for reducing this burden, to Office of the Chief Information Officer, Enterprise Policy Development & Implementation Office, IM-22, Paperwork Reduction Project OMB Control Number 1910-5134, U.S. Department of Energy, 1000 Independence Ave SW, Washington, DC, 20585-1290; and to the Office of Management and Budget, OIRA, Paperwork Reduction Project OMB Control Number 1910-5134, Washington, DC, 20503.

A three-year extension of the foregoing Office of Management and Budget (“OMB”) control number is pending with OMB. 87 Fed. Reg. 17077 (March 25, 2022) https://www.federalregister.gov/documents/2022/03/04/2022-04595/agency-information-collection-extension. Comments may be submitted as described above. While the extension is pending, LPO is authorized to, and is accepting and evaluating applications without interruption.

Notwithstanding any other provision of the law, no person is required to respond to, nor shall any person be subject to a penalty for failure to comply with a collection of information subject to the requirements of the Paperwork Reduction Act unless that collection of information displays a currently valid OMB control number. Applying for benefits under Title XVII is voluntary, but if you choose to apply, your application must contain the information described in this Solicitation.

G. Multiple Applications

Applicants may apply more than once under this Solicitation, but an Applicant may only submit one Application for a Project using a particular technology. An Applicant may not submit an Application for multiple Projects using the same technology. An Applicant may submit a single Application for multiple Projects using different technologies; however, DOE may require the Applicant to separate such Projects into multiple Applications at anytime during the application process.

H. Questions

Questions regarding this solicitation or requests for a printed copy may be submitted to:

U.S. Department of Energy, Loan Programs Office
Attn: Innovative Clean Energy Applications
1000 Independence Avenue, SW
Washington, DC 20585
You may also send questions or other correspondence to LPO.REEESolicitation.Questions@hq.doe.gov. Please include “RE: Innovative Clean Energy Question -” and a short title describing the question in the subject line. For Applications that have been formally submitted through the Part I or Part II process, DOE will assign a single point of contact for all subsequent questions and/or discussions regarding the Application.

VIII. Required Certification

The following certification must be included with each Application:

The undersigned certifies that the data and information submitted and the representations made in this Application and any attachments to this Application are true and correct, to the best of the Applicant’s knowledge and belief after due diligence, and that the Applicant has not omitted any material facts.

The undersigned acknowledges that neither it nor its affiliates may issue any press release or otherwise disclose the status of the Application or the contents of any communications with DOE without DOE’s prior written consent.

The undersigned further certifies that [s]he has full authority to bind the Applicant.

________________________________________
Applicant (Organization Name)

________________________________________
Name of Applicant’s Authorized Officer
(will fulfill on-line certification)

________________________________________
Signature of Authorized Officer
(for paper copy only)

________________________________________
Title of Authorized Officer
Date: _________________________________
The intent of the Part I Application is to determine the Project’s eligibility and readiness to proceed through the application process. The Part I Application may be submitted at any time. LPO recommends that the Applicant engage in a pre-application consultation with LPO staff prior to submission.

Refer to Section VII.D of the Solicitation for the steps an Applicant must take in order to restrict the use and disclosure of certain data submitted in the Application.

The information requested in Part I Section A is to be entered directly into the text fields provided in the Application Portal. The information requested in Part I Sections B through H can be provided in detail as a narrative following the outline provided below or through the inclusion of supporting documentation or through a combination of both. Applicants should tailor their narrative responses based on their reasonable judgement of the Project characteristics and responsiveness to the information requested. Applications should avoid duplication of information and excessive detail to allow LPO to conduct an efficient evaluation of the Part I Application. A typical Part I Application should be approximately 25 pages. LPO will contact the Applicant if there are any questions or if additional information is required. Additional detail will be requested in the Part II Application.

Sections that are addressed through supporting documentation should include specific references by document name, section, and page to facilitate review of the Application. Submissions should be provided in PDF or Excel documents uploaded through the Application Portal.

I. Submission Requirements

A. Application Information (to be submitted on the Application Portal website)

1. Project Information:
   a) Project name
   b) Applicable technology category (from the drop-down menu)
   c) Project/generation capacity (in Megawatts, Gallons per Year, Tons per Year, or Other)

2. Project Location: Street address, city, state, zip code for all Project locations.

3. Project Sponsor(s): For each Project Sponsor with equity of five percent (5.0%) or more indicate the lead sponsor (must have one lead sponsor), and entity name, website address, mailing address, city state, postal code, contact first name, contact last name, contact title/position, contact phone, and contact email for all sponsors.

4. Applicant Information: Applicant entity name, website address, mailing address, city, state, postal code, DUNS number, NAICS code, primary contact information including first name, last name, title/position, phone, and email.

5. Preliminary Questions: Answer the following questions. If the answer to any of these questions is “No” include an explanation of the circumstances that cause the answer to be “No” in the space provided.
a) Do you confirm you have read and understand the Amended and Restated Loan Guarantee Solicitation Announcement from the U.S. Department of Energy Loan Programs Office regarding Federal Loan Guarantees for Innovative Clean Energy?

b) Is the Applicant legally authorized to enter into loan guarantee transactions and in good standing with the U.S. Department of Energy and/or any other federal agency loan guarantee program?

c) Is the Applicant current on payment of all amounts owed to the federal government?

d) Will the Project be built and operated entirely within the United States or its territories?

e) Do you confirm that to the best of the Applicant’s knowledge, after making diligent inquiry, that no Project participant has been charged with or convicted of a misdemeanor or felony (other than routine traffic violations) or been involved in any securities litigation?

6. Summary of Loan Guarantee Request: Provide the information in the table that appears on the portal: requested period of guarantee (years), total Project Costs, proposed guarantee amount, debt, and equity. The sum of the amount entered for debt and the amount entered for equity should equal the amount entered for total Project Costs.

B. Organization

1. Key Staff: List the full names (including middle name or initial) of key staff to be involved with the Project and one paragraph professional bio’s.

2. Applicant Organizational Chart: Provide a current Applicant organizational chart indicating key staff names and functions.

3. Project Organizational Chart: Provide a current or proposed Project organizational chart showing the Applicant’s relationship to each Project Sponsor, the Project, and to any subsidiaries or affiliates. Include the legal structure (e.g., corporation, partnership, or LLC) of each entity listed in the organizational chart. Include a short narrative description of the chart indicating the status and plans, if any, to create any entity.

4. Evidence of Authority: Submit evidence that the signatory of the Application has authority to bind the Applicant to the commitments and representations made in the Application and attests as to the accuracy of the information provided in the Application process. Potential examples of authority include corporate resolutions, bylaws, or entity agreements.
C. Project Description

1. **Executive Summary**: Provide a description of the nature and scope of the Project, including the technology, brief overview of business plan with a focus on the revenue model, brief overview of financing plan with a focus on sources and uses as well as plan for and current status of equity raise, site, environmental resources affected, purpose, size, capacity, design features, key metrics, and key milestones. Include target dates for:

   a) financial close of the Loan Guarantee Agreement;

   b) commencement of site preparation and construction;

   c) commercial operation; and

   d) marketing the output.

2. **Project Category**: Provide an explanation of how and to what extent the Project falls under a category of Eligible Projects (see II.A. of the Solicitation and II.B. and II.C. as applicable).

3. **Project Sponsors’ Capabilities**: Describe each Project Sponsor’s prior experience as it relates to carrying out undertakings similar to the one being proposed, financial strengths, investment in the venture to date and as anticipated during the construction and operation phases of the venture (i.e., continuing financial support), and proposed equity investment in the Project, as well as the Project’s strategic significance to each Project Sponsor.

D. Technical Information

1. **Description of Project Design**: Provide a technical description of the project, including key outputs, inputs and processes involved in the Project design.

2. **Description of New or Significantly Improved Technology**: Provide a description of the New or Significantly Improved Technology to be used in the Project, and a description of how and why the technology is new or significantly improved compared to technology already in general use in the commercial marketplace in the United States. Describe the commercial feasibility of the technology(ies) and how the Project intends to employ such technology(ies) and how the Applicant assures, to the extent possible, that success of the Project will lead to further commercial availability of the technology(ies) in the United States.

3. **Diagrams**: Provide conceptual level diagrams with descriptions outlining general plant layout, process and materials flows, and operating parameters and throughputs for key processes. Include also any supporting photos, maps or drawings.

4. **Acquisition Strategies**: Provide a description of key raw material, equipment, and component supply chain acquisition strategies.

5. **Critical Path Agreements Status**: Provide a status for each critical path contract and agreement, such as a front-end engineering agreement, technology license and teaming agreements, Engineering, Procurement and Construction ("EPC") contract, long-lead contracts, feedstock agreements, and plant off-take or sales agreements. Use the table below; expand or modify as needed.
<table>
<thead>
<tr>
<th>Agreement</th>
<th>Status</th>
<th>Comment</th>
</tr>
</thead>
<tbody>
<tr>
<td>Front-End Engineering Design (FEED)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Technology Licensing</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Teaming Agreement/</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Engineering, Procurement and Construction</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Long-Lead Equipment Contracts</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Feedstock Agreements</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Off-Take or Sales Contracts</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Status: 1. Not started, 2. Initiated, 3. Completed, 4. N/A (for items marked 1 or 2, please identify the estimated completion date in the “Comments” column).

6. **Planning Documents Status**: Provide a status of the construction plan, operation and maintenance plan, waste disposal plan, and preliminary risk management plan. Use the table below and expand or modify needed.

<table>
<thead>
<tr>
<th>Document</th>
<th>Status</th>
<th>Comment</th>
</tr>
</thead>
<tbody>
<tr>
<td>Construction Plan</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Operation and Maintenance Plan</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Waste Disposal Plan</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Risk Management Plan</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Status: 1. Not started, 2. Initiated, 3. Completed, 4. N/A (for items marked 1 or 2, please identify the estimated completion date in the “Comments” column).

7. **Emissions Information**: Provide an explanation of how and to what extent the Project avoids, reduces, or sequesters air pollutants or anthropogenic emissions of greenhouse gases, including a discussion of assumptions made and the comparison to the baseline or business-as-usual case.

Attachment C, Summary Lifecycle GHG Emissions Data Worksheet, is intended to account for all system inputs and outputs so that a comprehensive GHG life cycle analysis can be performed on the proposed system, and then compare the proposed system to the “business as usual” case in order to confirm projected emissions reductions. Attachment C must be completed by Applicants for projects that provide product-based outputs (such as chemicals, fuels, and manufacturing projects), industrial process projects, or other projects that require non-clean energy inputs in order to
function. The Applicant may also provide supplemental reports, including those done by an independent company or government agency, to allow LPO to assess the GHG emissions from the proposed project. LPO will use these at its discretion and to the degree that they conform to its accepted standards for GHG emissions analysis.

Applicants do not need to complete Attachment C, Summary Lifecycle GHG Emissions Data Worksheet for the following types of projects:

- **Renewable Electricity Generation** – for such projects, LPO will calculate the emissions avoided through the Environmental Protection Agency’s Emissions & Generation Resource Integrated Database (eGRID).

- **Energy Storage Projects** – for such projects, LPO will perform a qualitative analysis, and take into consideration the means by which the project contributes to more efficient operation of the grid, and/or facilitating the greater penetration and utilization of variable renewable resources. Applicants are encouraged to specifically address this aspect in the Part I application.

- **Energy Efficiency Projects** – Applicants should provide sufficient information regarding the proposed energy efficiency solution and/or system (such as hardware, software, artificial intelligence or cloud computing), and clearly identify the innovative features employed that achieved energy efficiency savings. Quantitative assessments are encouraged.

- **LPO recognizes there is a wide range of clean energy solutions eligible for financing, and that there will be projects that do not fit squarely into the above scenarios. As such, Applicants are encouraged to address the specific emissions information required during a pre-application conference with LPO.**

### E. Legal and Regulatory Information

1. **Status and Timelines for Regulatory Approval:** Provide as a table the status and timelines for application and expected completion or receipt of all required federal, state or local permits, approvals, or reviews, including as to environmental matters.

2. **Federal Support:** If the Project will benefit directly or indirectly from certain other forms of federal support, such as grants or other loan guarantees from federal agencies or entities, including DOE, federal agencies or entities as a customer or off-taker of the Project’s products or services, or other federal contracts, including acquisitions, leases and other arrangements, that support the Project, provide a description of each such federal support. The Applicant should separately identify any previous Federal Support that the project or related technologies has received.

3. **Other Governmental Support:** If the Project relies on non-federal governmental (including state) incentives or other assistance, including grants, tax credits and other loan guarantees to support the financing, construction and operation of the Project, provide a description of each such non-federal support, including indicating whether any such incentives or assistance are subject to clawback and the circumstances under which a clawback could occur. The Applicant should separately identify any previous Other Governmental Support that the project or related technologies has received.

### F. Application Certifications
1. **Lobbying, Debarment, and Related Certifications and Assurances:** In submitting an Application for a loan guarantee under Title XVII, Applicants must provide certain certifications and assurances contained in the form entitled “Certifications for Use with Applications for Department of Energy Loan Guarantees under title XVII of the Energy Policy Act of 2005” which form may be downloaded from the Program Website: [http://energy.gov/sites/prod/files/Certifications%20for%20Use%20with%20Doe%20Loan%20Guarantees.pdf](http://energy.gov/sites/prod/files/Certifications%20for%20Use%20with%20Doe%20Loan%20Guarantees.pdf)

2. **Letter of Commitment:** For an Application to be considered under this Solicitation, Part I must include a letter of commitment signed by an authorized representative of the Applicant in the form provided on the final page of Attachment A – Part I Submission.

3. **Penalty of Perjury Statement:** The following certification must be included with each Application:

The undersigned certifies that the data and information submitted and the representations made in this Application and any attachments to this Application are true and correct, to the best of the Applicant’s knowledge and belief after due diligence, and the Applicant has not omitted any material facts. The undersigned further certifies that [s]he has full authority to bind the Applicant.

_________________________________
Applicant (Organization Name)

_________________________________
Name of Applicant’s Authorized Officer
(will fulfill on-line certification)

_________________________________
Signature of Authorized Officer
(for paper copy only)

_________________________________
Title of Authorized Officer

_________________________________
Applicant (Organization Name)

_________________________________
Date
[SAMPLE LETTER OF COMMITMENT]

[DATE]

Director
U.S. Department of Energy, Loan Programs Office
Attn: Innovative Clean Energy Applications
1000 Independence Avenue, SW
Washington, DC 20585

Dear Director:

This letter confirms our intent to seek a loan guarantee pursuant to the Amended and Restated Solicitation No. __________ dated __________, 20__ (the “Solicitation”).

We have met all requirements as specified in the Solicitation, including all attachments to the Solicitation.

We are committed to diligently implementing the project as described in our application, including initiating and completing the project in a timely manner with a view to closing the financing on or about xx/xx/20__.

If we decide to withdraw from consideration for a loan guarantee at any time, we will notify DOE in writing of that decision as soon as possible.

Sincerely,

_________________________
Signature of Authorized Officer

[Name]
The Part II submission may be filed at any time after DOE invites an Applicant to submit its Part II submission. The Part II submission consists of the items summarized below and in Attachment A as well as other information that may be requested to facilitate DOE’s continued review. Projects eliminated by any of the requirements provided in Attachment B will not receive any further consideration.

Refer to Section VII.D of the Solicitation for the steps an Applicant must take in order to restrict the use and disclosure of certain data submitted in the Application.

The intent of the Part II Application is to determine the Project’s readiness to proceed into due diligence based on programmatic, technical, and financial evaluation. Information requested in Sections I and III is required in the format described. For Section II, the Applicant has the option to provide the required information for each Section II element by submitting documentation that is responsive to the information requested or to provide a narrative response or some combination for each element.

Applicants should tailor their narrative responses based on their reasonable judgement of the Project characteristics and responsiveness to the information requested. Applications should avoid duplication of information and excessive detail to allow LPO to conduct an efficient evaluation of the Part II Application. LPO will contact the Applicant if there are any questions or if additional information is required. It is expected that additional detail will be requested in due diligence and LPO will specify those requirements upon successful completion of the Part II review.

Outline sections that are addressed through supporting documentation should include specific references by document name, section, and page. Supporting documentation should be provided as PDF or Excel documents uploaded through the Application Portal.

At any time after delivery of a Part II submission, to the extent that there are any material changes in the information provided to DOE in such Part II submission, the Applicant must provide timely notification to DOE after becoming aware of any such change by requesting approval from DOE to update their Part II submission via the Application Portal. Failure to provide this may significantly impact DOE’s processing of the Part II submission and any subsequent timelines. Furthermore, DOE may determine that lack of a timely response indicates that the Application does not demonstrate the Project’s readiness to proceed, in which case DOE may offer the applicant the opportunity to withdraw the Application or DOE may deny the Application.

I. Project Summary

A. Executive Summary: Provide a description of the nature and scope of the Project, including the technology, business plan, site, environmental resources affected, purpose, size, capacity, design features, financing plan, status of major agreements, key metrics, and key milestones. Include target dates for:

1. financial close of the Loan Guarantee Agreement;

2. commencement of site preparation and construction;

25 The required information for this determination is listed in Section 609.4(d) of the 1703 Regulations.
3. commercial operation; and
4. marketing the output.

**B. Total Project Costs:** Provide an estimate of Project Costs in accordance with generally accepted accounting principles and practices. Include a breakdown by cost category, year of expenditure and basis for amounts, and include a description of the methodology and key assumptions used to make each estimate. Also include costs for escalation and contingencies, and indicate whether each cost is firm or subject to change. Distinguish between eligible and ineligible Project Costs as described in Section 609.10 of the 1703 Regulations.

**C. Update Part I Information:** For information not covered in the Executive Summary above in I.A.1, update the information in the Part I submission by providing a description of all material changes, amendments, modifications, and additions to the information provided in Part I of the Application, including any changes in the Project’s financing structure or other terms, the rationale for such changes and the expected impact on the Project. Please note that changes to the Part I submission may impact DOE’s determination of the Project’s eligibility and readiness to proceed.

**II. Project Description**

**A. Key Contracts and Agreements:** Provide key term sheets, contracts and agreements (whether draft or signed) relevant to the design, engineering, construction, startup commissioning, shakedown, operations and maintenance of the Project, and Project sales, including, as applicable:

1. EPC contract(s);
2. Long-term contracts for materials, components and equipment to be used in the Project;
3. Any leases, operating, or maintenance contracts;
4. Sales, distribution or off-take contracts; and
5. Any additional relevant contracts or commitments.

If copies of terms sheets, or draft or completed contracts and agreements are unavailable, provide a brief description of the planned contracts and agreements that includes counterparties and, as applicable, target cost and performance milestones, performance guarantees, performance bonds or other credit support, liquidated damages provisions, labor agreements, and equipment warranties to the extent defined, along with the expected date when documentation will be available.

**B. Technical Information**

1. **Site Description:** Describe the Project site and rights-of-way, easements, and logistical considerations (e.g., roads, water, highway, and rail). Provide the status and milestones for site access and, as appropriate, purchase or lease terms, zoning approvals or operating restrictions. Provide a description of required improvements for the Project (e.g., utility access).

2. **Project Construction Plan:** Provide a description of each of the following:

   a) Description of prior successful implementation of similar project plans for projects of this scale by the Applicant or any Project Sponsor. Applicants that are not able to include examples of successful implementation of similar project plans for projects of this scale should provide a
description of the prior and related experience that they believe are sufficient to demonstrate to DOE that they have the expertise that would be evidenced in examples of successful implementation of similar project plans for projects of this scale;

b) Description of each step of the proposed project processes;

c) Fully sourced or cited material and energy balance, including system simulation for processes, using industry standard software;

d) Unique equipment requirements;

e) Rights or licenses necessary to use processes proposed and acquisition status;

f) An integrated schedule or Project work plan that encompasses time periods for design, procurement (including long-lead procurements), construction (including mobilization, testing and start-up), and commissioning. The schedule should identify any Project external dependencies such as regulatory approvals or scheduling (e.g., interconnection), land-use agreements, environmental permits, licenses, or site improvements (e.g., utility service).

g) Project cost analysis including analysis based on minimum design specifications coupled to process flow diagrams and cost estimates.

h) Project management plan and use of tools, such as Gantt charts, Monte-Carlo and other variance analysis, resource-based scheduling or other methods to assess and track progress;

i) Staffing plans, including identification of costs and resources to design, engineer, and construct the Project;

j) Project risks and mitigation strategies, including risk related to construction cost and schedule, scale-up and commissioning, procurement, obtaining skilled labor and avoiding labor strife, etc. and the potential Project impact and mitigation of such risks.

k) Contingency plans to address cost overruns and schedule slippage.

3. **Operating and Maintenance Plan:** Provide the following:

a) The plan for plant operations, proposed providers, expected staffing requirements, anticipated parts inventory and acquisition plans, major maintenance schedules and procedures, estimated annual downtime and any performance guarantees and related liquidated damages provisions;

b) The plans for commissioning and initial operations (taking into account the construction schedule, the establishment of material supply chains, the hiring and training of management and operating personnel, logistics, potential bottlenecks, and delays, financing for contingencies and working capital) and information concerning the management experience of each officer or key person associated with the Project;

c) Any plans for expanding capacity over initial operations and the Applicant or the Project Sponsor’s experience with comparable ramp-ups.

4. **Decommissioning Plan:** Provide a description of the Project decommissioning, deconstruction, and disposal plans (including any hazardous waste disposal plans), including anticipated costs and arrangements that have been made to ensure that funding will be available as necessary.
5. **Engineer’s Report**: Provide an independent engineer’s report that includes a review, evaluation, analysis, and recommendations in the following areas:

   a) base technology readiness for deployment, including previous commercial or pre-commercial demonstration,

   b) engineering and design approach;

   c) integrated Project schedule, including the schedule for completion;

   d) cost estimates and technical input to the financial model;

   e) contractual requirements and arrangements;

   f) proposed supply chain;

   g) Project construction and operating risks, including mitigation activities and milestones;

   h) direct labor requirements during construction and operation;

   i) siting and permitting;

   j) testing and commissioning;

   k) operation and maintenance; and

   l) decommissioning plan and costs.

C. **Legal and Regulatory Information**

   1. **Permits and Approvals**: Provide a list and status of federal, state, and local permits, licenses, and approvals required to site, construct, implement, and operate the Project, including environmental authorizations or reviews necessary to commence construction.

   2. **Background and Legal Structure**:

      a) Provide a current Project organizational chart, with any updates from the Part I submission, showing the Applicant’s relationship to each Project Sponsor, the Project, and to any subsidiaries or affiliates. Include the legal structure (e.g., corporation, partnership, or LLC) of each entity listed in the organizational chart. Include a short narrative description of the chart indicating the status and plans, if any, to create any entity.

      b) Include copies of the organizational documents of the Applicant, the Borrower, and each Project Sponsor (such as certificates of incorporation and bylaws) and copies of the good standing certificates for each such entity.

      c) Provide copies of any legal opinions and other legal reports, analyses, and reviews related to the Project that have been delivered prior to the submission of any part of the Application.

   3. **Litigation and/or Conflicts**: Disclose any current, threatened (in writing), or pending litigation involving the Applicant, a Sponsor, or, to the Applicant’s knowledge, any other relevant party, related to permitting, public involvement, environmental issues, construction defects, fraud,
D. Business Plan

Provide a business plan that demonstrates the Applicant’s expertise, financial strength, and management capability to undertake and operate the Project as proposed.

1. **Output:** Provide a description of the Project’s output in terms of product or a service, and any unique features of its business model.

2. **Market Analysis:** If available, provide a market study/report for the Project’s output from an independent consultant. If such study/report is unavailable, provide the following:
   
   a) An analysis of the current and projected market for the Project’s output. Discuss the prevailing economic and demographic trends in the target market, both on a macroeconomic basis and for the Project’s output. Identify the market’s dependency on tax benefits or other government policy. Provide a justification for revenue projections (price and volume) and costs. Describe the Project’s projected customer base.
   
   b) Describe the Applicant’s current and potential competitors for the Project’s output.
   
   c) Provide a description of any competitive advantages.
   
   d) Provide an analysis of the operating and market-related risks associated with the Project (e.g., market factors, price volatility, etc.) and mitigation strategies to be employed (e.g., sales contracts and reserves).

3. **Marketing and Sales Plan:**
   
   a) For signed or draft contracts provided in II.A, provide an analysis of the creditworthiness of counterparties who are, or are expected to be, party to such agreements if not included in the independent market study/report.
   
   b) To the extent that the Project’s output is not contracted, provide, as appropriate, a plan and status to identify and capture customer sales opportunities, including geographic and segment targeting, use of focus groups or other approach to determine customer preferences, market demonstrations and sampling plans, customer purchase qualification processes, use of sales and distribution channel partners or direct sales, and advertising, warranties and discounting related to the revenues to be generated;
   
   c) Provide, as appropriate, the plan for marketing and sales staffing, including communications, inside and outside sales, account management, and after-sales service.

4. **Feedstock Supply Plan:** If not covered separately in Section II.B.3, Operations and Maintenance Plan:
   
   a) Provide the Project’s forecast for feedstock (availability and costs) and sales capacity;
   
   b) Provide a analysis of the market for the Project’s feedstock, identifying any expected market supply risks or shortages;
c) Provide a description of the Project’s plans for ensuring an adequate supply of key or unique materials, equipment, and components as needed for successful operation. Provide drafts or executed copies of all material supply contracts for the Project or other risk management strategy such as futures contracts; and

d) Provide an analysis of the creditworthiness of counterparties who are party to supply agreements if not included in the independent market study/report.

5. **Insurance Coverage**: Provide a description of the proposed insurance coverage for the Project, together with a report from an insurance consultant that addresses the appropriateness and adequacy of such coverage.

6. **Jobs Created/Retained**: Provide a brief description of the number and types of jobs expected to be created or retained in the United States if the Project were to proceed as proposed in the Application. The types of jobs may be expressed using job titles, broad labor categories, or the Applicant’s existing practice for describing jobs provided that the descriptions so provided are commercially identifiable. The number of jobs shall be expressed as full-time equivalent, calculated cumulatively as all hours worked divided by the total number of hours in a full-time schedule, as defined by the Applicant. Applicants should include in their narrative the information used to calculate the full-time equivalent figure.

E. **Financial Plan**

1. **Financial Statements**: Provide unaudited financial statements for the Applicant or majority Sponsor for the three immediately preceding fiscal years (or since inception if the Applicant or majority Sponsor has not been in existence for at least three years), prepared in accordance with generally accepted accounting principles in the United States (“U.S. GAAP”). Include all associated notes and describe business and financial interests of controlling or commonly controlled organization or persons, including parent companies, subsidiaries, and other affiliated entities or partners of the Applicant or Sponsors.

2. **Project Financial Model and Analysis**:

   a) Provide a working financial model (with formulas) with pro-forma financial statements for the Project. List the major assumptions in a separate worksheet within the model.

      (i) Include assumptions and calculations broken down monthly through the Commercial Operating Date (COD) plus two (2) years and quarterly for the balance of the proposed tenor of the Guaranteed Obligation, plus two (2) years.

      (ii) Include detailed linked income statements, balance sheets, cash flow statements, and waterfall statements, with the ability to vary Project debt levels.

      (iii) Include financial ratios (e.g., interest coverage ratios, fixed charge coverage ratios, debt-to-capital ratios, asset coverage ratios, and working capital ratios (including high and low points)) and other relevant terms in the proposed term sheet. Highlight those periods during construction and operation in which non-compliance with the proposed financial ratios is most likely.

      (iv) Include sensitivity analyses that demonstrate the Project’s performance under appropriate stress scenarios, including low sales prices, reduced Project performance, loss of major customers, high input material prices, and the impact of future competing technologies.
(v) Include cost assumptions based on compliance with the Davis-Bacon Act and the Cargo Preference Act, as applicable.

(vi) Include a complete description of the operational and financial assumptions and methodologies incorporated in the financial model.

b) The financial analysis should demonstrate that there is reasonable prospect that the Applicant will be able to repay the principal and interest on the Guaranteed Obligation and any other Project debt incurred. Discuss the principal factors that could impair the Applicant’s ability to meet its debt service obligations, including the Guaranteed Obligation.

3. **Financial Plan**: Provide a financial plan narrative for the Project, consistent with U.S. GAAP.

   a) List all proposed sources of expected equity and debt funding by provider, type, and aggregate amount, and, to the extent available, provide copies of all material agreements, whether entered into or proposed, relevant to the investment and financing of the Project and the financial closing checklists for each financing.

   b) Describe uses, timing, and amount of expected equity and debt funding.

   c) For each party associated with the Project, provide a description of their projected liabilities over the term of the Loan Guarantee Agreement.

   d) Include a summary of any funding intended to be procured through the use of special purpose entities. Summarize each tranche of funding (e.g., amount, maturity, amortization schedule, the proposed loan guarantee percentage, and whether it is a fixed- or floating-rate tranche).

   e) Include a summary of any funding that will be tax-advantaged debt to which Section 149(b) of the Internal Revenue Code may be applicable. Summarize measures that will be taken to avoid (i) effective subordination of federally guaranteed debt to tax-advantaged debt, (ii) the use of any federal guarantee as collateral to secure tax-advantaged debt, and (iii) any linkage of federally guaranteed debt with tax-advantaged debt.

   f) Include a schedule indicating all anticipated short term financing or credit facilities required for on-going operations of the Project, including all working capital facilities, performance bonds and similar forms of financing available to or anticipated to be available to the Project. Describe the nature of the security or collateral that is intended to be made available to secure these working capital and other short term facilities.

4. **Credit History**: Provide the credit history of the Applicant and any business entity owning or controlling a five percent (5%) or greater interest in the Project or the Applicant, the offtaker(s), the feedstock supplier, if applicable, and the EPC contractor. Provide the full name of the entity, address, and date of organization.

5. **Collateral**: Provide a listing, description, and value of all assets associated, or to be associated, with the Project and any other assets that will serve as collateral for the Guaranteed Obligations, including any intellectual property necessary for the operation of the Project. Valuations must be supported by independent, third-party appraisals for existing assets and commercial cost substantiation for assets to be constructed for the purpose of the Project, and in all cases acceptable to DOE. An appraisal of real property must be performed by a licensed or certified appraiser consistent with the Uniform Standards of Professional Appraisal Practice promulgated by the Appraisal Standards Board of the Appraisal Foundation. The appraisal should include information...
on the useful life of all physical assets expected to serve as collateral, including a depreciation schedule (prepared in accordance with U.S. GAAP).

6. **Consideration of Pari-Passu Status**: Provide information and financing documents regarding any existing senior secured debt of any party providing a guarantee or other credit support.

7. **Preliminary Credit Assessment**: For proposed projects where the estimated total Project Costs exceed $25 million, provide a preliminary credit assessment from a nationally recognized rating agency for the proposed project without a loan guarantee.

8. **Other Financial Information**: Include any other information about the Applicant and any Project Sponsor that provides a comprehensive summary of the Applicant or Project Sponsor’s business and financial situation, including specific information relevant to analyzing historical cash flow on a secular, normalized basis.

### III. Certifications

**A. Lobbying, Debarment, and Related Certifications and Assurances**: In submitting an Application for a loan guarantee under Title XVII, Applicants must provide certain certifications and assurances contained in the form entitled “Certifications for Use with Applications for Department of Energy Loan Guarantees under title XVII of the Energy Policy Act of 2005” which form may be downloaded from the Program Website:


**B. Applicant Validation Statement**: Provide a written statement and supporting analysis attesting that, based on the information provided to DOE, there is a reasonable prospect that all debt of the Project (including the Guaranteed Obligation) will be repaid on time and in full (including interest) from cash flow generated by the Project and in accordance with the terms proposed in the Application.

As part of the Project evaluation process, DOE may require that Applicants provide additional certifications or supporting documentation. DOE is not authorized to issue a loan guarantee to any party that is delinquent on federal debt, including federal tax debt.

**C. Penalty of Perjury Statement**: The following certification must be included with each Application:

“The undersigned certifies that the data and information submitted and the representations made in this Application and any attachments to this Application are true and correct, to the best of the Applicant’s knowledge and belief after due diligence, and the Applicant has not omitted any material facts. The undersigned further certifies that [s]he has full authority to bind the Applicant.

____________________________________________________

Applicant (Organization Name)

____________________________________________________

Name of Applicant’s Authorized Officer

(will fulfill on-line certification)
_________________________________

Signature of Authorized Officer

(for paper copy only)

_________________________________

Title of Authorized Officer

_________________________________

Date
ATTACHMENT C - SUMMARY LIFECYCLE GHG EMISSION DATA WORKSHEET

The attached Lifecycle GHG Emissions Data Worksheet is to be filled out and provided as part of the Part I Application. The Applicant may also provide reports, including those done by an independent company or government agency, to allow LPO to assess the GHG emissions from the proposed project. LPO will use these at its discretion and to the degree that they conform to its accepted standards for GHG emissions analysis.

I. **Background**

All applications for projects pursuant to Title XVII are subject to review under the National Environmental Policy Act (NEPA). The NEPA review process begins once the Applicant has accepted LPO’s invitation into the continued due diligence phase following the Part II review. DOE evaluates the Project to determine the appropriate level of NEPA review required, unless a NEPA review is being or has been prepared for the Project by another federal agency. The Applicant, with DOE oversight, is responsible for providing all necessary analysis and documentation to comply with NEPA and the applicable implementing regulations in 40 CFR 1500-1508 and 10 CFR 1021. The NEPA review must be completed before a loan guarantee can be issued.

Once DOE initiates the NEPA review process, Applicants should consult with DOE before commencing any work on the Project site (beyond preliminary design activities). Such consultation is necessary as certain actions that could cause adverse environmental impacts or limit the choice of available alternatives for the Project may not be allowable during the NEPA review process and could result in discontinuing consideration of an Application or terminating an outstanding Conditional Commitment.

There are three possible levels of NEPA review for an Applicant’s Project:

a. Environmental Impact Statement (EIS): For projects expected to have significant effects on the quality of the human environment (biological, physical, and socio-cultural resources). An EIS typically requires an 12-24 month processing time;

b. Environmental Assessment (EA): For projects with the potential to significantly impact biological, physical, and socio-cultural resources. An EA typically requires 6-9 months to process; and

c. Categorical Exclusion (CX): For projects that meet the conditions for excluding the requirement to prepare an EA or EIS because prior analysis of similar actions determined such actions will not have significant impacts (e.g., re-equipping and retooling within existing facilities). A CX typically requires less time to process than an EA.

Examples of projects normally requiring an EA or an EIS can be found in the DOE NEPA implementing regulations at 10 CFR 1021, Appendix C and D to Subpart D, respectively. A list of actions potentially eligible for categorical exclusion to the EA or EIS requirements can be found at 10 CFR 1021 Appendix B to Subpart D.

II. **Information to be Submitted to DOE in an Application**

Under Section III.B of this Solicitation, an Application must include a report containing an analysis of the potential environmental impacts of the Project that will assist DOE in assessing whether the Project will comply with all applicable environmental requirements and will enable DOE to complete any necessary reviews under NEPA. Accordingly, each Applicant should submit the following information to assist DOE in determining the appropriate level of NEPA review, and in preparing an EA or EIS if necessary. For projects involving multiple sites, the data listed in Sections A-C below should be submitted for each site, as applicable. However, if a NEPA document has already been prepared by a Federal agency, and encompasses the full
scope of the Project contained in the Application, that NEPA document may be submitted in lieu of the following information:

**A. Description of Project Facilities, Site, and Surrounding Area:** Describe and, as appropriate, identify and quantify:

1. A map showing the location of the Project site, and a site layout map showing the Project facilities and associated infrastructure;

2. Site address, and description of site control and ownership (under Federal, State, Tribal or local ownership);

3. Purpose of the Project facility and materials produced or services provided;

4. Description of new facilities to be constructed, any modifications of existing facilities, and any new infrastructure or facilities necessary for the construction or operation of the Project (e.g., access roads, laydown areas, off-site parking areas, railroad links, docks, water outfalls and intakes, pipelines, electrical transmission, waste treatment facilities, etc.);

5. Footprint of the new and modified facilities;

6. Adjacent land uses (e.g., industrial, commercial, agricultural, residential, recreational);

7. Areas with special designation both on the Project site and surrounding area, including national forests, historic or culturally significant sites, wetlands, floodplains, critical habitat for designated threatened or endangered species or the presence of those species, prime and unique farmland;

8. Extent of necessary ground disturbance for the Project (e.g., site clearing, fill and excavation);

9. Expected Project lifetime, including any planned expansion of initial Project at the proposed site and to other sites;

10. Existing transportation infrastructure (e.g. rail, waterways, roads) and utility infrastructure (e.g., electricity, natural gas, water, and wastewater) that would be utilized by the Project;

11. Ambient air quality; and

12. Near-by human populations and demographics (including minority and low-income and methods used for identifying those populations).

**B. Resource Consumption Rates and Effluent Emissions Streams and Impacts:**

1. Present an overall schematic process diagram that identifies all material inputs and outputs;

2. For both construction and operation, describe and, as appropriate, identify and quantify:
   a. Material resources to be used, including how they would be transported;
   b. Source(s) and rates of water consumption and adequacy of water supply sources;
c. Onsite and offsite emissions and discharges (e.g. air emissions, including carbon dioxide and criteria pollutants, wastewater effluents and other liquid waste streams; hazardous waste streams, and odors), including their rate and duration;

d. Onsite and offsite waste treatment and disposal; and

3. Identify a spectrum of scenarios that could result from process upsets, accidents, or human error.

4. Analysis of potential impacts to physical, biological, cultural, and socioeconomic resources from facility construction and operation, including any mitigating measure(s) to be used or considered to be used to reduce environmental impacts, or any adverse effects that cannot be avoided.

C. Status of other environmental and regulatory reviews: Status reports should include, but not be limited to:

1. If the Project would require review or permitting by another federal agency or by a state, Tribal, regional, or local agency, identify the required reviews and permits and the status of each; and

2. If an environmental impact review (e.g., NEPA documentation or agency consultations) has been prepared (or is in the process of being prepared or is anticipated) for the Project (by another federal agency or a state agency), provide a summary or copy of the review.

3. Whether a Phase 1 Environmental Site Assessment has been completed, if so, summarize results.
ATTACHMENT E - BURDEN DISCLOSURE STATEMENT

The OMB Control Number for this collection of information is 1910-5134 (extension pending; see below).

This data is being collected by DOE’s Loan Programs Office for the purpose of evaluating the eligibility of loan guarantee applications for projects seeking such financing under the Title XVII program. Applying for such benefit is voluntary, but if you choose to apply, your application must contain the data described in this Solicitation.

Public reporting hour burden for this collection of information is estimated to be 132.5 hours per response, including the time for reviewing instructions, searching existing data sources, gathering and maintaining the data needed, and completing and reviewing the collection of information. Send comments regarding this burden estimate or any other aspect of this collection of information, including suggestions for reducing this burden, to Office of the Chief Information Officer, Enterprise Policy Development & Implementation Office, IM-22, Paperwork Reduction Project OMB Control Number 1910-5134, U.S. Department of Energy, 1000 Independence Ave SW, Washington, DC, 20585-1290; and to the Office of Management and Budget, OIRA, Paperwork Reduction Project OMB Control Number 1910-5134, Washington, DC, 20503.

A three-year extension of the foregoing Office of Management and Budget (“OMB”) control number is pending with OMB. 87 Fed. Reg. 17077 (March 25, 2002) https://www.federalregister.gov/documents/2022/03/04/2022-04595/agency-information-collection-extension. Comments may be submitted as described above. While the extension is pending, LPO is authorized to, and is accepting and evaluating applications without interruption.

Notwithstanding any other provision of the law, no person is required to respond to, nor shall any person be subject to a penalty for failure to comply with a collection of information subject to the requirements of the Paperwork Reduction Act unless that collection of information displays a currently valid OMB control number. Applying for benefits under Title XVII is voluntary, but if you choose to apply, your application must contain the information described in this Solicitation.
The following information is subject to change, including, *inter alia*, with respect to legislative developments and DOE’s allocation of appropriated funds.

**Innovative Clean Energy Projects**

Loans for Projects in the categories listed in the Solicitation for Federal Loan Guarantees for Innovative Clean Energy can be guaranteed from funds available pursuant to any of the following Appropriations Acts.

The amount of funds available under the 2007 Appropriations Act is $1,500,000,000.

The amount of funds available under the 2009 Appropriations Act is $317,000,000.

The amount of funds available under the 2011 Appropriations Act is $1,183,000,000.

**Innovative Clean Energy: Nuclear Projects**

Loans for Projects in the categories listed in the Solicitation for Federal Loan Guarantees for Innovative Clean Energy: Nuclear can be guaranteed from funds available pursuant to the following Appropriates Acts.

The amount of funds available under the 2007 Appropriations Act is $2,000,000,000.

The amount of funds available under the 2009 Appropriations Act is $8,922,136,906. Of the latter amount, $2,000,000,000 is available exclusively for advanced nuclear facilities for the “front-end” of the nuclear fuel cycle and $6,922,136,906 is available for any category under the Solicitation (including front-end facilities). An aggregate amount of $10,922,136,906 under the 2007 Appropriations Act and the 2009 Appropriations Act is available under that Solicitation.

**Innovative Clean Energy: Fossil Projects**

Loans for Projects in the categories listed in the Solicitation for Federal Loan Guarantees for Innovative Clean Energy: Fossil can be guaranteed from funds available pursuant to the following Appropriates Acts.

The amount of funds available under the 2007 Appropriations Act is $500,000,000.

The amount of funds available under the 2009 Appropriations Act is $8,000,000,000.
A. The Program Website is located at https://www.energy.gov/lpo/title-xvii. Statutes and regulations for which a link is not provided below may be found at the Program Website.

B. This Solicitation was developed pursuant to the following statutes and regulations:


D. 10 CFR Part 609 Loan Guarantees for Projects That Employ Innovative Technologies (December 4, 2009)\(^{26}\)


H. Davis-Bacon Act and related acts located at http://www.dol.gov/whd/govcontracts/dbra.htm


J. Council for Environmental Quality (CEQ) Regulations at 40 CFR 1500-1508 located at: https://ceq.doe.gov/laws-regulations/regulations.html


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