PSRP Name: Innovative Technology Loan Guarantee Program		
PSRP Lead Program Office and/or Laboratory/Site Office: Loan Guarantee Program Office (LGPO)		
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Does this program align with an existing PART program? N

Does this program align with an existing CFDA program? N

Program Title: Innovative Technology Loan Guarantee Program (Section 1705 Recovery Act)

1. Objectives:
Program Purpose
The main purposes of the Recovery Act portion of Title XVII Loan Guarantee Program are to create a temporary program for rapid deployment of renewable energy (including leading edge biofuels) and electric power transmission projects while ensuring that there is a reasonable prospect of repayment of the principal and interest on the obligation by the borrower.

Public Benefits
Projects secured with the program's loan guarantees lead to the creation and retention of jobs throughout their execution life-cycles. The projects will expand electricity power transmission, help to increase renewable energy deployment (including leading edge biofuels) and will support avoiding and reducing greenhouse gases and air pollutant emissions that contribute to global climate change. Projects will also support national economic and energy security through reducing national dependence on fossil fuels.

2. Projects and Activities:
Kinds and scope of projects and activities to be performed
As detailed in the table below, the Innovative Technology Loan Program is authorized to make almost $6 Billion in appropriated credit subsidy available to support the following categories of projects:

1. Renewable energy systems including incremental hydropower that generate electricity or thermal energy, and facilities that manufacture related components.

2. Electric power transmission systems including upgrading and reconductoring projects.

3. Leading edge biofuel projects that use technologies currently at the pilot or demonstration scale that are likely to become commercial technologies and will produce transportation fuels that substantially reduce life-cycle greenhouse gas emissions compared to other transportation fuels.

The table below lists the funding amounts for the Program by GPRA unit	
GPRA Unit / Program Name	Total Funding ($M)
N/A Section 1705 Credit Subsidy	$5,965
N/A Section 1705 Administration	$25
N/A Advanced Technology Vehicle Manufacturing (ATVM) Administration	$10

List of Projects and Activities
The Recovery Act Loan Guarantee program will focus on projects that are investments for the rapid deployment of renewable energy generation, biofuels production and electric transmission enhancements. These projects include:

1. Renewable energy systems, including incremental hydropower, that generate electricity or thermal energy, and facilities that manufacture related components.
2. Electric power transmission systems, including upgrading and reconductoring projects.
3. Leading edge biofuel projects that will use technologies performing at the pilot or demonstration scale that the Secretary determines are likely to become commercial technologies and will produce transportation fuels that substantially reduce life-cycle greenhouse gas emissions compared to other transportation fuels.

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LGPO activities will encompass all of the typical activities in the life cycle of a loan including initial project screening, due diligence, structuring, approval, documentation, funding and finally monitoring until full repayment. All efforts will be made to accelerate the review and decision making process while ensuring that all statutory and regulatory requirements are met and that all loan guarantees issued by the LGPO provide a reasonable prospect of repayment.

The first step of the loan review process is an initial project screening. This screening is a merit-based evaluation of the application that ensures the project meets the LGPO's basic regulatory and credit requirements. After the initial project screening, the LGPO will commence due diligence and structuring. These steps will be done in parallel with the purpose of structuring the project and related loan that provides a reasonable prospect of repayment over the life of the loan. After the due diligence and structuring stage, the project and proposed loan structure are presented for approval. If the project is approved, the project documents and LGPO loan documents will be completed and funding will occur when all funding conditions in the loan agreement are met. Finally, once funding occurs, the project and loan will move into the monitoring stage. In this last step, the LGPO will monitor the construction and operation phases of the project to ensure that it operates as anticipated and ultimately repays the loan in full.

Recovery Act Sections 1703 and 1705

The principal differences between existing Title XVII Section 1703 and the objectives of Title XVII Section 1705, which is funded under the Recovery Act, are that Section 1705:

- Expands LPGO efforts for renewable and transmission projects beyond innovative technologies to include more mature technologies.

- Uses appropriated subsidy to lower barriers to entry for 1705 sectors and allows the LGPO to better leverage the human and financial capital available in the private debt markets.

- Employs sunset provisions which require a rapid deployment of funds to meet Recovery Act objectives.

In addition to renewable projects, Section 1705 also includes electronic transmission and leading edge biofuels. Electric power transmission systems include upgrading and reconductoring projects for intra and interstate transmission lines. Leading edge biofuel projects are projects designed to produce transportation fuels from biomass and similar sources that substantially reduce life-cycle greenhouse gas emissions compared to other transportation fuels and that employ new or significantly improved pilot stage or later biofuel technologies.

The detailed activities required to support process to award loan guarantees under Sections 1703 and 1705 are well underway. One conditional commitment has been awarded to Solyndra in the solar (renewables) market segment for $535 Million. Current applications and awards such as Solyndra's were received under Section 1703 which has the necessary rulemaking to use authority in place. Certain projects that meet the criteria may be transferred to the Section 1705 program.

ATVM

The Advanced Technology Vehicle Manufacturing (ATVM) program provides loans to automobile and automobile part manufacturers for the cost of re-equipping, expanding, or establishing manufacturing facilities in the United States to produce advanced technology vehicles or qualified components, and for associated engineering integration costs. While the ATVM Program is not part of the Loan Guarantee Program, the Recovery Act directed the transfer of $10 M of Administrative funds from the Loan Guarantee Recovery Program funding to support administration of the ATVM Program. That transfer occurred in April 2009.

3. Characteristics:

Types of Financial Awards to be used

The decision to issue loan guarantees will depend on the merits and benefits of particular project proposals and their compliance with statutory and regulatory requirements. The following estimate reflects a placeholder estimate based on illustrative examples unrelated to any specific project. The Loan Guarantee Program plans to award an estimated $48.6 Billion in loan guarantees based on the $5.965 Billion in credit subsidy authority for the Section 1705 activities.

A total of $35 Million has been allocated for Administrative support activities ($25 Million for the Section 1705 and $10 Million for the Advanced Technology Vehicle Manufacturing Program

Administration). The funds will be used for legal, marketing, engineering and other support contracts and administrative costs to accelerate the process to issue the loan guarantees.

Type of Recipient
The loan guarantees will target commercial recipients ranging from small businesses to large corporations that apply for the renewables, advanced biofuels and electricity transmission awards.

Type of Beneficiary
The loan guarantee recipients will directly benefit as will various partners, contractors and subcontractors who support the construction phase of the projects and suppliers of materials and supplies used during that phase. These are project specific beneficiaries. The administrative funds are planned for use for short-term service contractor support such as legal, marketing, financial analysis, project management, and engineering services. While the initial focus is on the short-term direct benefits for various beneficiary groups, over the long-term, there will also be indirect beneficiaries in the local, regional and national economies that benefit as funds ripple through the economy based on a multiplier effect.

4. **Major Planned Program Milestones:**

Loan guarantee amounts per quarter are unknown at this time. Total estimate for loan guarantees is $48.6 Billion.

Milestones	Date	Value
Announced loan guarantee (1703) solicitation	10/02/08	
Received application for first conditional commitment	11/19/08	
Closed renewables solicitation	2/26/09	
Sign the first conditional commitment (Solyndra) (Q2 FY2009)	3/20/09	
Accelerate processes and complete a minimum of 4 conditional commitments (Q3 FY2009)	06/30/09	
Complete a minimum of 6 additional conditional commitments(Q4 FY2009)	09/30/09	
Complete a minimum of 10 additional conditional commitments(Q1 FY2010)	12/31/09	
Complete a minimum of 12 additional conditional commitments (Q2 FY2010)	03/31/10	
Complete a minimum of 12 additional conditional commitments (Q3 FY2010)	06/30/10	
Complete a minimum of 12 additional conditional commitments (Q4 FY2010)	09/30/10	
Complete conditional commitments totaling $34 B for Section 1705 loan guarantees.	09/30/10	

5. Monitoring and Evaluation:

Agency Wide

Recovery Leadership & Operations
The DOE Recovery Office is the central point for implementation and execution of Recovery Act activities. A recovery operations team will oversee implementation management, such as monitoring project status, evaluating cost and schedule progress, ensuring thorough reporting, coordinating with external entities, and holding monthly performance and review meetings with senior departmental managers on the implementation status of specific recovery projects.

Recovery Funding Oversight, Performance
In addition to DOE's standard funds control mechanisms, Recovery Act funds are subject to additional process controls to ensure funds are not co-mingled, are tracked to enable reporting, and are spent responsibly. DOE recovery funds are released for implementation in a staged approach. Programs develop initial project plans which include performance metrics which require management approval.

Office of Internal Review (OIR)
DOE's OIR helps programs ensure that internal controls are in place, effective, and support the risk based approach to managing Recovery Act activities. OIR programs are being implemented or expanded to ensure the Recovery Act objectives are met and DOE managers and partners are both held accountable for successful execution and also have the appropriate tools to ensure that success. These programs include coordinating DOE's "Internal Control Acknowledgment" program, conducting agency wide assessments and analyses and performing oversight of Recovery Act programs, including site and field visits. OIR worked with key impacted programs to produce initial vulnerability assessments identifying potential program specific and cross-cutting risks to ensure successful execution.

Program Specific

The LGPO plans to track and report program cost and performance information from all recipients to support effective monitoring of Recovery Act activities. We also will use a Program Management contract as part of the delegated lending strategy to collect the required data elements for both internal and external reporting from each project recipient to meet the Recovery Act Section 1512 reporting requirements. This system will document recipients' use of funds in eligible activity categories.

The Portfolio Management Division of the LGPO will conduct site visits on a regular basis as part of their normal surveillance activities for each loan or guarantee. Monthly reports and periodic program reviews will support portfolio management and operations and programmatic audits. The normal Portfolio Management and Operation includes tracking of actual expenditures to verify that funds are used for their intended purposes.

Since these are new programs at DOE, there are no baselines at LGPO or ATVM such as for typical time to process a loan guarantee.

As part of the evaluation process and after the merit-based reviews, DOE uses a Credit Committee and a Credit Review Board as part of the governance process to support broad and thorough reviews of policy, credit terms, and individual projects.

The LGPO has a formal risk management program to support effective managerial oversight. This program addresses the major technical, credit, operational, and market risks that occur in the energy sector as well as policy and accountability risks, and schedule risks from various sources. While each risk is assessed in terms of probability as well as likely impact, they are also have one or more risk management strategies (mitigation, acceptance, sharing, or avoidance) developed. The mitigation strategies include best practices that have been successful in the past with other government organizations that provide loan guarantees like Overseas Private Investment Corporation (OPIC), NOAA or Export-Import Bank.

6. **Measures**:

1. Text: Percentage of projects receiving DOE loan guarantees that have achieved and maintained commercial operation.

Type: Efficiency

Frequency: Once per project (Quarterly)

Direction: +

Unit: Percent

Explanation: Calculate the percentage.

2. Text: Contain the loss rate of guaranteed loans to less than 11.81% in FY 2009 (11.85% for FY 2010 and 2011) on a long-term portfolio basis.

Type: Outcome

Frequency: Once per project (Annual)

Direction: -

Unit: Percentage

Explanation: From a portfolio point of view, apply business judgment that results in projects that have the best probability of economic success so that the loss rate of guaranteed loans is held to less than the target percentage of the overall program portfolio.

3. Text: Newly installed generation capacity from power generation projects receiving DOE loan guarantees.

Type: Output

Frequency: Once per project (Annual)

Direction: +

Unit: Mw

Explanation: Calculate the increase in newly installed generation capacity.

4. Text: Average cost per MWh for projects receiving DOE loan guarantees.

Type: Output

Frequency: Once per project (Annual)

Direction: -

Unit: $/MWh

Explanation: From a portfolio point of view, calculate the average cost per megawatt hour of power generation.

5. Text: Forecasted greenhouse gas emissions reductions from projects receiving loan guarantees compared to 'business as usual' energy generation.

Type: Outcome

Frequency: Once per project (Annual)

Direction: -

Unit: Percentage reduction

Explanation: Greenhouse gas emission reductions are to be determined. Forecasted greenhouse gas emission reductions compared to 'business as usual' energy generation will be collected and verified by an outside consultant for each project that submits a loan guarantee application.

6. Text: Forecasted air pollutant emissions (NOx, SOx, and particulates) reductions from projects receiving loan guarantees compared to 'business as usual' energy generation.

Type: Outcome

Frequency: Once per project (Annual)

Direction: -

Unit: Percentage reduction

Explanation: Air pollutant gas emission reductions are to be determined. Forecasted air pollutant emission reductions compared to 'business as usual' energy generation will be collected and verified by an outside consultant for each project that submits a loan guarantee application. . These measures complement the critical green house gas metrics and are not combined.

7. Text: Average review time of applications for Section 1705 guarantees

Type: Efficiency

Frequency: Annual

Direction: -

Unit: Working days

Explanation: This measure will support oversight of the review process, early detection of bottlenecks and expedite the award process for worthy projects.

8. Text: Percent of conditional commitments issued to qualified applicants relative to plan

Type: Efficiency

Frequency: Quarterly

Direction: +

Unit: Percent

Target: 100% of $34B in estimated loan guarantees by September 30, 2010

Year: Reported data begin in calendar year 2009 for all milestones for LGPO.

Original Program Target: Zero (0)
There are no programs' planned targets without the additional Recovery Act Administration Funds. This is a new program.

Revised Full Program Target: TBD
The programs' complete revised target with the additional Recovery Act funding is the same as the increment from each project since there is no baseline target.

Target (incremental change in performance): TBD
The incremental change in performance will be the increment from each project since there is no baseline target for this new program.

Actual: Actual metrics will be updated as frequently as collected by DOE based on the Measure Frequency. No loan guarantees have been issued and one conditional commitment for $535 Million is underway.

Goal Lead: David Frantz, Director of the Loan Guarantee Program Office.

7. Transparency and Accountability:
Agency-Wide
DOE leverages its existing corporate systems to track and report on Recovery Act activities and to ensure effective funds management. The DOE's iManage Data Warehouse (IDW) is a corporate enterprise system integrating financial, budgetary, procurement, personnel, and program information to monitor and organize project execution. Each Recovery Act program is tracked using unique Treasury Appropriation Fund Symbols (TAFS), and each component project is identified by a unique Project Identification Code (PIC).

IDW is a central data warehouse linking common data elements from each of the Department's corporate business systems and serving as a "knowledge bank" of information about portfolios, programs or projects including budget execution, accumulated costs, performance achieved, and critical milestones met. The IDW contains information from multiple corporate systems and will be a tool used to meet information needs for Recovery Act oversight and reporting to Recovery.gov.

The Performance Measure Manager (PMM) is the Department's performance tracking system. PMM tracks high-level budgetary performance and is being expanded to accommodate Recovery Act performance tracking needs. Performance evaluations will be organized and reported along with results from the Department's annual budgetary activities in the Annual Performance Report (APR) and posted on: www.energy.gov/recovery/syperfsz. Performance results will be uploaded into the IDW for required agency reporting. Performance results from DOE's Recovery Act activities will also be monitored through OMB's PARTweb.

See DOE's Agency Wide Recovery Plan (www.energy.gov/recovery/xylkjsz) for additional information on DOE's financial and performance tracking mechanisms.

Program Specific
The management practices and procedures that will be used to maintain accountability and transparency with respect to Loan Guarantee Program Recovery Act activities will include, but are not be limited to:

- Regular management review meetings at multiple levels of the organization,
- Performance plan elements within individual performance contracts,
- Variance analysis of cost, schedule and performance of each project,
- Use of strong internal management controls, and
- Independent audits by GAO and the DOE Inspector General.

DOE also will continue an extensive outreach and communications with the governors, state, city and municipal governments, private industry, and the general public leveraging the internet technologies. To support national outreach and communications efforts, the Loan Guarantee Program will make use of its home page on the DOE website to provide information on the Section 1705 program including application instructions, press leases, program updates, and other relevant information such as copies of solicitations. The LGPO will also implement other aspects of its Communications Plan such as to provide information for the speaker's bureau, sponsor webinars, and provide content for various media and channels of distribution to all stakeholders.

8. **Federal Infrastructure Investments**:

This program does not include any Federal Infrastructure Investments.

9. **Barriers to Effective Implementation**

Regulatory:

Other: Required administrative funding may not be appropriated to continue required project surveillance after loan origination activities cease. The plan is to continue working with OMB and Congress as part of the budget formulation process to address this risk.

10. **Environmental Review Compliance**

DOE will determine the appropriate level of NEPA review consistent with its regulations (10 CFR Part 1021) for individual projects, which will be proposed by applicants in response to DOE funding opportunity announcements. DOE will similarly comply with other environmental requirements in the context of particular proposals.