

Department of Energy

Washington, DC 20585

SEP PROGRAM NOTICE 10-06 EFFECTIVE DATE: MARCH 1, 2010

SUBJECT: DOE RECOVERY ACT REPORTING REQUIREMENTS FOR THE STATE ENERGY PROGRAM (SEP)

REFERENCES

- (1) OMB Memorandum M-09-21 *Implementing Guidance for the Reports on the Use of Funds Pursuant to the American Recovery and Reinvestment Act of 2009*, June 22nd, 2009
- (2) OMB Memorandum M-10-08 *Updated Guidance on the American Recovery and Reinvestment Act Data Quality, Non-Reporting Recipients, and Reporting of Job Estimates*, December 18th, 2009.
- **1.0 PURPOSE:** The purpose of this Program Notice is to provide guidance and information resources to recipients in several related areas:
 - Revised progress and performance reporting metrics for the State Energy Program (SEP) and related measurement tools;
 - American Recovery and Reinvestment Act (Recovery Act) Section 1512(c) reporting requirements, and
 - Recommended guidelines for state evaluations of SEP Recovery Act programs.

2.0 SCOPE: The provisions of this guidance apply to entities (i.e. States or Territories) named in a Notification of Grant Award as the recipients of financial assistance under SEP.

NOTE: This guidance applies solely to reporting associated with Recovery Act-supported SEP activities as reported to the Department of Energy (DOE) via the Windows Systems Approach to Grants Administration (WinSAGA). This guidance does not replace the guidance issued by the Whitehouse Office of Management and Budget (OMB) in Reference 1 & 2, nor does it satisfy the requirement to report to OMB in accordance with Section 1512 of the Recovery Act to FederalReporting.gov.

The monthly reporting requirements outlined by this guidance are authorized under a six-month emergency approval by OMB of an emergency Information Collection Request (ICR) which expires on June 30, 2010.

3.0 LEGAL AUTHORITY: SEP is authorized under the Energy Policy and Conservation Act, as amended (42 U.S.C. 6321 et seq.). All grant awards made under this program must comply with all applicable authorities, including the implementing regulations at 10 CFR part 420.

4.0 DEFINITIONS

- <u>Non-Federal funds</u>: Funds used in execution of a Recovery Act-supported project that do not come from DOE or any other federal entity. These funds should be:
 - 1. Cognizable and verifiably applied to the Recovery Act project, not assumed or projected
 - 2. Additional to Recovery Act funds (i.e. they would not have been applied to the project in the absence of Recovery Act funds)
- Obligation: refers to the binding commitment of Recovery Act funds by the recipient to other entities for the execution of projects. This figure is inclusive of funds already spent (i.e. outlays) and commitments outstanding but not invoiced or otherwise liquidated.
- <u>Prime Recipient:</u> refers to a non-federal entity (e.g. States and Territories) that receives Recovery Act funding as Federal awards in the form of grants, loans, or cooperative agreements directly from the Federal government.
- <u>Sub-Recipient:</u> refers to a non-federal entity that is awarded Recovery funding through a legal instrument from the prime recipient to support the performance of any portion of the substantive project or program for which the prime recipient received the Recovery funding.

5.0 BACKGROUND: The SEP funds provided by the Recovery Act represent an unprecedented investment of Federal funds in energy efficiency and renewable energy activities designed and implemented by Grantees. Concomitant with this investment, the Administration has pledged that transparency and accountability will be central aims throughout the grant process. Furthermore, the Administration must provide a means through which to effectively monitor and report the return on this investment in terms of jobs created and energy saved. Pursuant to these objectives, new reporting requirements have been put in place for all Federal Recovery Act programs. For SEP grantees, these requirements are fulfilled through reporting via two distinct but similar processes:

- 1. Quarterly reporting of Section 1512 data to OMB via FederalReporting.gov and
- 2. Quarterly and monthly reporting of data to DOE

In order to effectively track the pace of expenditure of ARRA funds, DOE is collecting a subset of required reporting data on a monthly basis. Monthly reporting for this subset of metrics will become effective in February 2010 with the first report due March 30th, 2010 (reporting on all activity taking place in February 2010). The full list of metrics to be reported on a quarterly basis is listed in Attachment 1, while the subset of metrics required on a monthly basis is listed in Attachment 2. All Recovery Act contracts will be revised by DOE procurement to include this reporting requirement change.

DOE will also gather "real-time" data on implementation issues, challenges, and activities from recipients as necessary. DOE is sensitive to the fact that these requests for information can be an interruption to the Grantees. DOE will use exercise discretion in making these requests and will minimize their frequency so as to minimize the burden of effort placed upon Grantees. All such requests will be coordinated through the Project Officers assigned to each Grantee for the purpose of grant performance monitoring and coordination.

The monthly program reporting does NOT eliminate quarterly DOE program reporting requirements, as the monthly reporting is only a subsection of the quarterly reports. The monthly reporting requirement is in addition to the quarterly DOE program reports and in addition to the OMB quarterly reporting requirements per Section 1512 of the Recovery Act that are submitted through www.FederalReporting.gov.

Please note: This guidance is ONLY applicable to ARRA grants. This reporting guidance is not applicable to SEP funds provided through annual appropriations.

6.0 GUIDANCE

The following sections detail how SEP Recipients will:

- 1. Report Section 1512 data to OMB quarterly
- 2. Report required data to DOE quarterly and monthly
- 3. Summarize the timing and process relationship between OMB and DOE reporting requirements

6.1 GUIDANCE (OMB QUARTERLY VIA FEDERALREPORTING.GOV)

6.1.1 Background

The Recovery Act, in Section 1512, establishes reporting requirements for all grantees. Section 1512 requires, in part, that recipients of Recovery Act funding submit quarterly reports that address (1) the total amount of recovery funds received; (2) the amount of recovery funds expended or obligated to projects or activities; (3) a detailed list of all projects or activities for which recovery funds were expended or obligated; and (4) information on any subcontracts or subgrants awarded by the recipient. Section 1512 can be found in its entirety at http://www.gpo.gov/fdsys/pkg/PLAW-111publ5/content-detail.html.

In June 2009, the Office of Management and Budget (OMB) issued guidance on the reporting requirements for recipients of Recovery Act funds (Reference 1) and issued amendments in December 2009 (Reference 2). The OMB Guidance: (1) answers questions and clarifies issues related to the mechanics and chronology of recipient reporting required by the Recovery Act; (2) provides clarification on what information will be required to be reported on the central reporting site at www.FederalReporting.gov and what information will be presented on www.Recovery.gov; (3) instructs recipients on steps that must be taken to meet these reporting requirements, including addressing sub-grantee reporting; and (4) establishes a common framework for Federal agencies and recipients to manage a data quality process associated with these reporting requirements.

6.1.2 OMB Reporting Guidelines for SEP grants

FederalReporting.gov is the central government-wide data collection system for recipients of Federal awards. Recipients must access FederalReporting.gov in order to fulfill their reporting obligations under Section 1512 of the Recovery Act. Recipients are required to submit data on a quarterly basis for grants, loans, and federally awarded contracts under the Recovery Act. Recipients must report the information described in Section 1512 of the Recovery Act using the reporting instructions and data elements provided on-line at http://www.FederalReporting.gov.

A subset of topics at this site include the following (which are also summarized in the instructions at DOE's Recovery Act Recipient and Contractor Reporting website):

- Who is required to report (responsibilities of the prime and sub-recipients)
- Reporting timeframe and registration
- Overview of the Required Reporting Data Elements and Metrics
- Required jobs reporting
- What information must be reported
- Timetable for submitting, viewing, and editing reports
- Process for downloading and uploading files
- Process for making corrections to reports

6.1.3 Resources to assist recipients with OMB reporting:

- DOE Recovery website: complete guidance for Section 1512 reporting and instructions is provided at DOE's Recovery Act Recipient and Contractor Reporting website: http://www.energy.gov/recovery/ARRA Reporting_Requirements.htm
- DOE has published a central list of codes and other reporting elements by award to assist Recipients in completing their reports. That list can be found at http://www.energy.gov/recovery/documents/Federal Reporting Recipient Information.x
- DOE Recovery Act Clearinghouse: https://recoveryclearinghouse.energy.gov or 1-888-363-7289 for answers to questions about OMB reporting requirements
- A full description of these requirements is published on the <u>Recipient Reporting Information</u> section of the www.Recovery.gov Web site.
- FederalReporting.gov User Guide
- Additional training for OMB Recovery Act Reporting is available at: http://www.whitehouse.gov/Recovery/WebinarTrainingMaterials/

6.1.4 Who is Required to Report

Prime recipients of Recovery Act funds under the SEP Program are responsible for reporting the information required by Section 1512 of the Act and as provided in the OMB Guidance. A prime recipient is defined as a non-federal organization receiving Recovery Act funding (grants, loans, or cooperative agreements) directly from the Federal Government.

The prime recipient is ultimately responsible for the reporting of all data required by Section 1512 of the ARRA and the OMB Guidance. Prime recipients may delegate certain reporting requirements to sub-recipients. A sub-recipient is a non-Federal entity that expends Federal awards received a prime recipient to carry out a Federal program but does not include an individual who is a beneficiary of such a program.

The OMB Guidance does not provide for such a delegation to vendors. A vendor is defined as a dealer, distributor, merchant, or other seller providing goods or services that are required for the conduct of a Federal program.

Complete guidance on who is required to report under the Recovery Act is provided in section 2.2 of Reference 1. The policy regarding delegation of reporting by the prime recipient is further

described in Section 2.3 of Reference 1. The responsibilities of prime recipients and sub-recipients are discussed also in section 2.3 of Reference 1.

6.1.5 Reporting Timeframe and Registration

The report to FederalReporting.gov is due no later than ten calendar days after the calendar quarter in which the recipient received this grant and subsequent quarters until full expenditure of funds.

- Reporting through Federalreporting.gov requires recipients to register on the system. To register as a recipient in the FederalReporting.gov, you will need:
 - o Email Address, Award Letter, DUNS Number, CCR Number
- Recipients will be able to submit their reports 1 to 10 days after the end of every fiscal quarter starting with Q4 FY 2009. (i.e. October 1 - October 10, 2009 for work performed in July, August and September 2009)
- Days 11 -21 are available for recipients to review and edit the data loaded by the 10th

The reporting process is discussed in full in Section 3 of Reference 1.

6.1.6 Overview of the Required Reporting Data Elements and Metrics

For reporting into FederalReporting.gov, recipients will input 31 data elements. For a complete list of all data elements, please see Required Data on page 10 of Reference 1. These elements comprise primarily organizational, financial and jobs related information, and do not include performance metrics, which will be covered in program specific reporting. Some key data elements include:

- Amount of award which is the total dollar amount of Recovery funds received from DOE in Block 13 of the Assistance Agreement.
- Award number which is the identifying number assigned by DOE in Block 1 of the Assistance Agreement.
- <u>Total amount of Recovery Act expenditure</u> which is the cumulative total dollar amount of Recovery Act funds spent on the project.
- <u>Total federal Recovery Act infrastructure expenditure</u> which is the total dollar amount of Recovery Act funds spent on infrastructure project, if relevant
- Total number of sub-awards issued and total amount paid to sub-recipients during the last quarter
 - o Basic data elements for any sub-awards over \$25,000
 - o Total number and amount of sub-awards.
- Total number and amount to payments to vendors < \$25,000
 - o Basic data elements for any purchases more than \$25,000
 - o Total number and amount of payments to vendors less than \$25,000.
- Number and description of jobs created or retained (by both prime and sub-recipients).
 - o Included in the description are labor categories, job titles and general descriptions of work to be performed in newly created jobs.
- <u>Primary place of performance</u> which is the place where the majority of the work and activities will be performed for this project.
- <u>Top five highly compensated officers</u> which is the name of the individuals who received the highest amount of compensation in the previous fiscal year, if three

conditions are met: \$25 million, 80 percent of all revenues from federal government, no other Federally-required public reporting (e.g. – SEC filings).

Please note: Submitting information to DOE does NOT fulfill the OMB reporting requirement. DOE cannot forward the information to OMB on the Grantee's behalf – the Grantee must submit the information directly. Significant reporting errors or omissions can be corrected from the 11th until the 21st of the month following the end of the quarter. Specific instructions for making these adjustments can be found at the www.FederalReporting.gov site.

6.2 GUIDANCE (DOE QUARTERLY AND MONTHLY)

6.2.1 Reporting Timeline

6.2.1a Quarterly Reporting

Attachment 1 lists all of the metrics that are required to be reported on quarterly basis to DOE. The deadline for reporting these quarterly metrics will be the on the 30th of the month following the close of the quarter for which data is being reported (e.g. April 30th for data from January-March 2010).

DOE recognizes that as more accurate data becomes available, recipients may need to amend their quarterly reports after submission. Recipients will coordinate post-submission corrections of quarterly reports through their respective Project Officers.

6.2.1b Monthly Reporting

In addition to the quarterly reporting of metrics, a subset of key metrics will be reported on a monthly basis. These metrics, listed in Attachment 2, are required to be reported on a more frequent basis in order to track progress and report success in key areas, to identify where additional assistance may be needed, and to maintain transparency and accountability regarding the use of Recovery Act funds. Monthly reports will be due on the 30th of the month following the month for which data is being reported¹. The first monthly reporting deadline will be March 30th, 2010, reporting data for February 2010. As all of the monthly metrics overlap with a subset of the quarterly metrics, there will be several instances when both monthly and quarterly figures are required for the same metrics in the same month. In those months where monthly and quarterly reporting dates coincide (e.g. April 2010), both data required for the month and quarter will be submitted.

DOE recognizes that as more accurate data becomes available, recipients may need to amend their monthly reports after submission. Recipients will be able to freely edit monthly reports at any time during the reporting quarter in which the monthly reports are submitted. After the close of this quarter, recipients will coordinate post-submission corrections of monthly reports through their respective Project Officers.

In addition to these reports, DOE has collected projections on monthly outlays and specific performance metrics from Grantees. This information, gathered by respective Project Officers, will allow DOE to effectively track grant performance and ensure the ARRA investment is on track with planned activity. Recipients may edit these

¹ For monthly reports on January each calendar year, the deadline will be either February 28th or 29th as applicable

projections for future months on a quarterly basis through coordination with their respective Project Officers.

6.2.2 Reported Metrics

The three types of metrics below are broad descriptions of the categories in Attachment 1. In determining these metrics, recipients should consider the impact of funds for the entire project, including non-Federal ("leveraged") funds in addition to SEP funds. In this manner, DOE will be able to accurately measure the full impact of Recovery Act funding.

6.2.2a Jobs

To ensure the number of jobs is being reported consistently, SEP Program Notice 10-07 provides detailed instruction on how to calculate and report job creation and retention. Recipients should use the methodology in SEP Program Notice 10-07 to calculate job creation for monthly and quarterly reporting to DOE and quarterly reporting to OMB. Through adherence to this standard methodology, consistency between the jobs figures reported to both DOE and OMB can be maintained. Examples of the types of jobs to be covered by this methodology include (but are not necessarily limited to): Crew member, Crew chief, Record keeper, Auditor, Estimator, Monitor, Program Staff and Administrative Staff.

6.2.2b Standard Programmatic Metrics

This category of metrics allows DOE to monitor progress on scope of work identified by recipients in each market title. Accordingly, recipients will be required to report on the set of metrics associated with the market title identified on each narrative information worksheet submitted with the SEP application. In accordance with Attachments 1 & 2, outlays (i.e. Recovery Act funds spent, expended, and/or costed by the Grantee), obligations (i.e. Recovery Act funds encumbered by the Grantee) and a subset of other specific metrics will be required on a monthly and quarterly basis. All other metrics will be required on a quarterly basis only. Recipients are only required to report on standard programmatic metrics associated with the market titles that they are implementing (e.g. If State XX is conducting building retrofits, they will be required to report on outlays, obligations, number and square footage of buildings retrofitted). Recipients are not responsible for reporting on metrics not associated with their market titles.

6.2.2c Critical Metrics

This category of metrics allows DOE to assess the true impact of the project activities submitted by recipients and encompasses energy savings, energy cost savings, renewable energy generation, and emissions reductions. Accordingly, recipients will be required to report on the applicable set of metrics included Attachment 1. Under the assumption that the determination of these metrics is both accurate and relatively easy, DOE prefers that recipients utilize their own methodology for the determination and reporting of critical metrics. However, it is understood that determination of these metrics can prove difficult for some Grantees. To address this eventuality, DOE has developed a tool to help recipients estimate these metrics from a simple list of user-defined inputs.

Recipients are not required to utilize the tool to determine critical metrics; the tool is meant only to facilitate determination of critical metrics as necessary. This tool will be available online in .xls format at:

http://apps1.eere.energy.gov/state_energy_program/docs/arra_benefits_reporting_calculator.xls

Please note: This benefits (i.e. critical metrics) calculator supersedes all previous editions of benefit calculators. Only the calculator posted at the link above should be used for the purposes of reporting critical metrics to DOE for Recovery Act-supported projects.

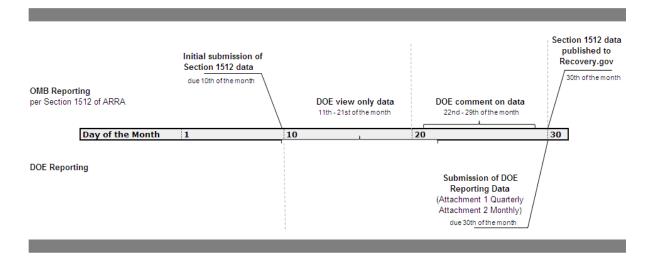
6.2.3 Reporting tool

WinSAGA is the windows-based platform currently used by SEP to electronically submit and manage grant performance and financial information. By April 2010, reporting functionality for SEP will be transitioned to The Performance and Accountability for Grants in Energy (PAGE). PAGE is the online site (www.page.energy.gov) that will provide all DOE recipients with the ability to electronically submit and manage grant performance and financial information. A host of training tools to familiarize users with PAGE are readily accessible from the front page of the site, including a weekly webinar series and a number of training videos created to guide recipients through each of the necessary reporting steps.

6.3 GUIDANCE (TIMELINE AND PROCESS FOR REPORTING TO OMB AND DOE)

Per Reference 1, in the 1-10 day window following the end of the reporting quarter, prime recipients and selected sub-recipients will enter and edit OMB reporting data as necessary. During this time, DOE will be unable to review the data unless explicitly submitted for review by the recipient. During the 11-21 day window (following submission of OMB not later than the 10th) DOE will be able to review the submitted data but not provide official feedback to grantees. In this window, recipients will still be able to freely correct their submissions.

During the 21-29 day window, DOE will be able to review and comment on information submitted to OMB. In this window, submitted reports will not be editable by recipients unless specifically unlocked by DOE via FederalReporting.gov. On the 30th day, a separate submission of quarterly data is required to DOE in accordance with guidance above. The respective OMB and DOE reporting timelines are illustrated below:



In one instance, both DOE and OMB are requiring submission of the same data over the quarterly reporting window. The DOE metric "Total Outlays (Recovery Act funds)" and the OMB metric "Total amount of Recovery Act expenditure" are equivalent. Recipients should endeavor to minimize any discrepancy between the reports of this metric made to DOE and OMB. It is understood that as time passes from the close of the reporting period, grantees are able to obtain an increasingly accurate picture of grant performance during the reporting period.

If information on Total Outlays (Recovery Act funds)/Total amount of Recovery Act expenditure is updated after 21st of the month, the recipient should contact the Project Officer to coordinate correction of the report submitted to FederalReporting.gov and ensure consistency with the report to be submitted to DOE. In cases where the recipients (e.g. State agencies) have relegated the ability to report via FederalReporting.gov to a higher authority (e.g. State Recovery Act office) and receives updated information on Total Outlays or Jobs Created through Recovery Act funds, they should request that the higher authority make the necessary changes to the report in FederalReporting.gov.

In any situation, grantees should prioritize the accuracy of data submitted to DOE over the consistency of data being submitted to various sources.

7.0 GUIDELINES FOR STATE RECOVERY ACT EVALUATIONS

Attachment 3 provides suggested guidelines for recipients planning to evaluate the impacts of their Recovery Act programs. It includes recommendations for effectively managing and administering evaluation studies, as well as technical evaluation standards for study design, measurement and verification, attribution of results, and other related issues. The guidelines and recommendations are consistent with the approach being used in the design of the SEP National Evaluation.

8.0 CONCLUSION

The Recovery Act provides States and Territories an unprecedented opportunity to continue to demonstrate why they are considered the "laboratories of change" when it comes to energy policy and programs. DOE looks forward to a tremendous record of accomplishment by the recipients and an equally outstanding performance with respect to the transparency and accountability provisions of the Recovery Act.

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Energy Efficiency and Renewable Energy

Attachment 1: SEP Quarterly Reporting Metrics (Recovery Act) Attachment 2: SEP Monthly Reporting Metrics (Recovery Act) Attachment 3: SEP Evaluation Guidelines (Recovery Act) SEP Program Notice 10-07 Attachment 1: SEP Quarterly Reporting Metrics (Recovery Act)

	nment 1: SEP Quarterly Reporting Metrics (Recovery Act)
Jobs	N. C.
Metric Activity	Metric
Hours worked	Total hours worked through Recovery Act funds
Hours worked	Total hours worked through Non-Federal funds
Standard Programmatic Metrics	
Metric Activity	Metric
Building Retrofits	Outlays (Expenditure of Recovery Act funds)
Building Retrofits	Outlays (Expenditure of Non-Federal funds)
Building Retrofits	Obligations (Recovery Act funds encumbered)
Building Retrofits	Number of buildings retrofitted, by sector
Building Retrofits	Square footage of buildings retrofitted, by sector
Loans and Grants	Outlays (Expenditure of Recovery Act funds)
Loans and Grants	Outlays (Expenditure of Non-Federal funds)
Loans and Grants	Obligations (Recovery Act funds encumbered)
Loans and Grants	Number of loans given
Loans and Grants	Number of grants given
Loans and Grants	Total Monetary value of loans given
Loans and Grants	Total Monetary value of grants given
Renewable Energy Market Development	Outlays (Expenditure of Recovery Act funds)
Renewable Energy Market Development	Outlays (Expenditure of Non-Federal funds)
Renewable Energy Market Development	Obligations (Recovery Act funds encumbered)
Renewable Energy Market Development	Number of solar energy systems installed
Renewable Energy Market Development	Total capacity of solar energy systems installed (kW)
Renewable Energy Market Development	Number of wind energy systems installed
Renewable Energy Market Development	Total capacity of wind energy systems installed (kW)
Renewable Energy Market Development	Number of solar thermal systems installed
Renewable Energy Market Development	Total capacity of solar thermal systems installed (square feet)
Renewable Energy Market Development	Number of ground source geothermal systems installed
Renewable Energy Market Development	Total capacity of ground source geothermal systems installed (tons)
Renewable Energy Market Development	Number of biomass (non-transport) systems installed
Renewable Energy Market Development	Total capacity of biomass (non-transport) systems installed (kW)
Renewable Energy Market Development	Number of biofuel systems installed
Renewable Energy Market Development	Total capacity of biofuel systems installed (gallons per year)
Renewable Energy Market Development	Number of hydropower systems installed
Renewable Energy Market Development	Total capacity of hydropower systems installed (kW)
Renewable Energy Market Development	Number of other systems installed
Renewable Energy Market Development	Total capacity of other systems installed (BTU/h)
Renewable Energy Market Development	Number of other systems installed
Renewable Energy Market Development	Total capacity of other systems installed (kW)
Building Codes and Standards	Outlays (Expenditure of Recovery Act funds)
Building Codes and Standards	Outlays (Expenditure of Non-Federal funds)
Building Codes and Standards	Obligations (Recovery Act funds encumbered)
Building Codes and Standards	Name of new code adopted
Building Codes and Standards	Name of old code replaced
Building Codes and Standards	Number of new and existing buildings covered by new code
Clean Energy Policy	Outlays (Expenditure of Recovery Act funds)
Clean Energy Policy	Outlays (Expenditure of Non-Federal funds)
Clean Energy Policy	Obligations (Recovery Act funds encumbered)
Clean Energy Policy	Number of alternative energy plans developed or improved
Clean Energy Policy	Number of renewable portfolio standards established or improved
Clean Energy Policy	Number of interconnection standards established or improved
Clean Energy Policy	Number of energy efficiency standards established or improved
Clean Energy Policy	Number of policies established or improved that align utility financial
Class Faarmy Policy	incentives with consumer energy efficiency
Clean Energy Policy	Number of other policies developed or improved

Building Energy Audits Building Energy Audits Outlays (Expenditure of Recovery Act funds) Outlays (Expenditure of Non-Federal funds) Building Energy Audits Floor space audited by sector Building Energy Audits Auditors projection of energy savings by sector Energy Efficiency Rating and Labeling Outlays (Expenditure of Recovery Act funds) Outlays (Expenditure of Non-Federal funds)	
Building Energy Audits Floor space audited by sector Building Energy Audits Auditors projection of energy savings by sector Energy Efficiency Rating and Labeling Outlays (Expenditure of Recovery Act funds)	
Building Energy Audits Auditors projection of energy savings by sector Energy Efficiency Rating and Labeling Outlays (Expenditure of Recovery Act funds)	
Building Energy Audits Building Energy Audits Floor space audited by sector Auditors projection of energy savings by sector Energy Efficiency Rating and Labeling Outlays (Expenditure of Recovery Act funds)	
Building Energy Audits Auditors projection of energy savings by sector Energy Efficiency Rating and Labeling Outlays (Expenditure of Recovery Act funds)	
Energy Efficiency Rating and Labeling Outlays (Expenditure of Recovery Act funds)	
Energy Efficiency Rating and Labeling Outlays (Expenditure of Non-Federal funds)	
Energy Efficiency Rating and Labeling Obligations (Recovery Act funds encumbered)	
Types of energy-consuming devices for which energy-effic	iency rating
Energy Efficiency Rating and Labeling and labeling systems were endorsed by grantee	
Government, School, Institutional Procurement Outlays (Expenditure of Recovery Act funds)	
Government, School, Institutional Procurement Outlays (Expenditure of Non-Federal funds)	
Government, School, Institutional Procurement Obligations (Recovery Act funds encumbered)	
Number of units purchased, by type (e.g. vehicles, office ed	quipment,
Government, School, Institutional Procurement HVAC equipment, streetlights, exit signs)	
Industrial Process Efficiency Outlays (Expenditure of Recovery Act funds)	
Industrial Process Efficiency Outlays (Expenditure of Non-Federal funds)	
Industrial Process Efficiency Obligations (Recovery Act funds encumbered)	
Industrial Process Efficiency Reduction in natural gas consumption (MMcf)	
Industrial Process Efficiency Reduction in fuel oil consumption (gallons)	
Industrial Process Efficiency Reduction in electricity consumption (MWh)	
Financial Incentives for Energy Efficiency and Other Outlays (Expenditure of Recovery Act funds)	
Covered Investments	
Financial Incentives for Energy Efficiency and Other Outlays (Expenditure of Non-Federal funds)	
Covered Investments	
Financial Incentives for Energy Efficiency and Other Obligations (Recovery Act funds encumbered)	
Covered Investments	
Financial Incentives for Energy Efficiency and Other Monetary value of financial incentive provided, by sector	
Covered Investments	
Financial Incentives for Energy Efficiency and Other Total value of investments incentivized, by sector	
Covered Investments	
Technical Assistance Outlays (Expenditure of Recovery Act funds)	
Technical Assistance Outlays (Expenditure of Non-Federal funds)	
Technical Assistance Obligations (Recovery Act funds encumbered)	
Number of information transactions contacts (for example,	webinar, site
Technical Assistance visit, media fact sheet) in which energy efficiency or renew	able energy
measures were recommended, by sector	
Transportation Outlays (Expenditure of Recovery Act funds)	
Transportation Outlays (Expenditure of Non-Federal funds)	
Transportation Obligations (Recovery Act funds encumbered)	
Transportation Number of alternative fuel vehicles purchased	
Transportation Number of conventional vehicles converted to alternative for	uel use
Transportation Number of new alternative re-fueling stations emplaced	
Transportation Number of new carpools and vanpools formed	
Transportation Number of energy efficient traffic signals installed	
Transportation Number of street lane miles for which synchronized traffic s	signals were
installed	
Workshops, Training, and Education Outlays (Expenditure of Recovery Act funds)	
Workshops, Training, and Education Outlays (Expenditure of Non-Federal funds)	
Workshops, Training, and Education Obligations (Recovery Act funds encumbered)	
Workshops, Training, and Education Number of workshops, training, and education sessions he	
Workshops, Training, and Education Number of people attending workshops, training, and education sessions, by sector	ation

SEP Program Notice 10-07 Attachment 1: SEP Quarterly Reporting Metrics (Recovery Act)

Other Activities Not Previously Defined	Outlays (Expenditure of Recovery Act funds)
Other Activities Not Previously Defined	Outlays (Expenditure of Non-Federal funds)
Other Activities Not Previously Defined	Obligations (Recovery Act funds encumbered)
Other Activities Not Previously Defined	Pertinent metric information for any activity not defined above should be
	captured and included as needed
Critical Metrics	
Metric Activity	Metric
Energy Savings	Reduction in natural gas consumption (MMcf)
Energy Savings	Reduction in electricity consumption (MWh)
Energy Savings	Reduction in electricity demand (MW)
Energy Savings	Reduction in fuel oil consumption (gallons)
Energy Savings	Reduction in propane consumption (gallons)
Energy Savings	Reduction in gasoline and diesel fuel consumption (gallons)
Energy Cost Savings	Dollars Saved
Renewable Energy Capacity and Generation	Amount of electricity generated from wind systems (MWh)
Renewable Energy Capacity and Generation	Amount of electricity generated from photovoltaic systems (MWh)
Renewable Energy Capacity and Generation	Amount of electricity generated from other renewable sources (MWh)
Emissions Reductions	Amount of green house gases reduced (CO2 equivalents) ¹
Emissions Reductions	Amount of criteria air pollutants reduced (tons) ²

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 $^{^{1}}$ In addition to CO₂, DOE requires reporting of the following Greenhouse Gases (with associated Global Warming Potentials over a 100-yr timeframe): CH₄ (25), N₂0 (298). All GHG should be converted into CO₂ equivalents and reported as an aggregate number.

² DOE requires reporting of the following Criteria Pollutants: SO_x, NO_x, CO

SEP Program Notice 10-07 Attachment 2: SEP Monthly Reporting Metrics (Recovery Act)

Standard Programmatic Metrics	
Metric Activity	Metric
Building Retrofits	Outlays (Expenditure of Recovery Act Funds)
Building Retrofits	Obligations (Recovery Act funds encumbered)
Building Retrofits	Number of buildings retrofitted, by sector
Building Retrofits	Square footage of buildings retrofitted, by sector
Loans and Grants	Outlays (Expenditure of Recovery Act Funds)
Loans and Grants	Obligations (Recovery Act funds encumbered)
Loans and Grants	Number of loans given
Loans and Grants	Number of grants given
Loans and Grants	Total Monetary value of loans given
Loans and Grants	Total Monetary value of grants given
Renewable Energy Market Development	Outlays (Expenditure of Recovery Act Funds)
Renewable Energy Market Development	Obligations (Recovery Act funds encumbered)
Renewable Energy Market Development	Number of solar energy systems installed
Renewable Energy Market Development	Total capacity of solar energy systems installed (kW)
Renewable Energy Market Development	Number of wind energy systems installed
Renewable Energy Market Development	Total capacity of wind energy systems installed (kW)
Renewable Energy Market Development	Number of solar thermal systems installed
Renewable Energy Market Development	Total capacity of solar thermal systems installed (square feet)
Renewable Energy Market Development	Number of ground source geothermal systems installed
Renewable Energy Market Development	Total capacity of ground source geothermal systems installed (tons)
Renewable Energy Market Development	Number of biomass (non-transport) systems installed
Renewable Energy Market Development	Total capacity of biomass (non-transport) systems installed (kW)
Renewable Energy Market Development	Number of biofuel systems installed
Renewable Energy Market Development	Total capacity of biofuel systems installed (gallons per year)
Renewable Energy Market Development	Number of hydropower systems installed
Renewable Energy Market Development	Total capacity of hydropower systems installed (kW)
Renewable Energy Market Development	Number of other systems installed
Renewable Energy Market Development	Total capacity of other systems installed (BTU/h)
Renewable Energy Market Development	Number of other systems installed
Renewable Energy Market Development	Total capacity of other systems installed (kW)
Building Codes and Standards	Outlays (Expenditure of Recovery Act Funds)
Building Codes and Standards	Obligations (Recovery Act funds encumbered)
Clean Energy Policy	Outlays (Expenditure of Recovery Act Funds)
Clean Energy Policy	Obligations (Recovery Act funds encumbered)
Building Energy Audits	Outlays (Expenditure of Recovery Act Funds)
Building Energy Audits	Obligations (Recovery Act funds encumbered)
Energy Efficiency Rating and Labeling	Outlays (Expenditure of Recovery Act Funds)
Energy Efficiency Rating and Labeling	Obligations (Recovery Act funds encumbered)
Government, School, Institutional Procurement	Outlays (Expenditure of Recovery Act Funds)
Government, School, Institutional Procurement	Obligations (Recovery Act funds encumbered)
Industrial Process Efficiency	Outlays (Expenditure of Recovery Act Funds)
Industrial Process Efficiency	Obligations (Recovery Act funds encumbered)
Financial Incentives for Energy Efficiency and	Outlays (Expenditure of Recovery Act Funds)
Other Covered Investments	Oddays (Experience of Necovery Act Funds)
Financial Incentives for Energy Efficiency and	Obligations (Recovery Act funds encumbered)
Other Covered Investments	Sugarior (1.000 for fried and only find the form
Technical Assistance	Outlays (Expenditure of Recovery Act Funds)
Technical Assistance	Obligations (Recovery Act funds encumbered)
Transportation	Outlays (Expenditure of Recovery Act Funds)
Transportation	Obligations (Recovery Act funds encumbered)
Workshops, Training, and Education	Outlays (Expenditure of Recovery Act Funds)
Workshops, Training, and Education	Obligations (Recovery Act funds encumbered)
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SEP Program Notice 10-07 Attachment 2: SEP Monthly Reporting Metrics (Recovery Act)

Households Weatherized/Retrofitted	Outlays (Expenditure of Recovery Act Funds)
Households Weatherized/Retrofitted	Obligations (Recovery Act funds encumbered)
Other Activities Not Previously Defined	Outlays (Expenditure of Recovery Act Funds)
Other Activities Not Previously Defined	Obligations (Recovery Act funds encumbered)

It is important that the results achieved with funds provided by the American Recovery and Reinvestment (Recovery Act) be documented and assessed. These guidelines are provided to assist States in planning and conducting evaluations of their State Energy Program (SEP) Recovery Act programs. This evaluation guidance is divided into two parts. The first part is intended to guide the states' administrative and management efforts while the second part presents technical standards pertaining to the methods used to conduct program evaluations.

ADMINISTRATIVE AND MANAGEMENT STANDARDS

The following recommended evaluation administrative and management standards apply to the SEP national evaluation, and are provided for use by the States who elect to conduct their own SEP/ARRA evaluations. These standards allow evaluation efforts to be implemented using a number of research approaches, provide flexibility in determining how SEP/ARRA evaluation results reporting¹ objectives are met, and avoid the necessity for states to acquire significant new staff resources or evaluation management capabilities.

- 1. **Evaluation Metrics:** All projects supported by SEP/ARRA funds should be evaluated via an evaluation process that focuses on reporting metrics which reflect the principal objectives of the State Energy Program. The national evaluation will focus on the following list of metrics, and we recommend that the States focus on them as well, adding others as desired to reflect individual priorities:
 - a. Energy and demand savings
 - b. Renewable energy capacity and generation
 - c. Carbon emissions reductions
 - d. Job creation (including number, type, and duration)

Other possible metrics include, but are not limited to, economic impacts (in addition to job creation) and the adoption of new technologies.

- 2. **Independent Evaluations**: Programs must be evaluated independently in order to obtain reliable results. SEP Recovery Act evaluations should be conducted by independent evaluators who have no financial or management interests in the projects being evaluated. The evaluators should be independent professionals who do not benefit, or appear to benefit, from the study's findings, and the state program managers and administrators should have no influence on the findings of the study that is conducted.
- 3. **Attribution of Effects:** Evaluations of SEP Recovery Act-funded efforts should document the resulting effects (energy savings, renewable generation, carbon reductions and job creation) that are above and beyond the effects that would have been achieved without those funds. That is, studies should focus on net effects of the SEP Recovery Act initiatives. The effects of jointly funded initiatives, such as when SEP Recovery Act funds are combined with funds from other programs or financial offerings, will be

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¹ Evaluation results reporting are separate from SEP/ARRA progress reporting metrics.

allocated to the Recovery Act in proportion to the percentage of those funds in relation to total program or project funding.

- 4. **Evaluation Budgeting**: Evaluation budgets should be sufficient to ensure that reliable results are generated and reported. Typically, outcome evaluations require the allocation of between 2% and 8% of the program/project budget depending on the size and type of program/projects being evaluated. However, evaluation budgets also depend on the level of research rigor applied to those studies. For planning purposes, we recommend that states allocate 5% or less of their SEP Recovery Act funds for evaluation.
- 5. **Timing of the Evaluation:** Planning for an evaluation (identification of key metrics, research questions, date requirements, etc.) should begin at the same time that project activities are initiated. For many states, the services of an independent evaluator may not be immediately available upon project start-up, meaning that there may be a lag in the collection of baseline data regarding some important metrics. However, such data collection should begin as soon as possible and record-keeping on project expenditures and activities should start immediately. Evaluations should be structured to provide information to program managers as early as possible while still providing necessary rigor and reliability. It would be extremely helpful to the national SEP evaluation if State evaluations are structured so that initial study results are available within 12 months of the start of the evaluation.

TECHNICAL EVALUATION STANDARDS

The following technical standards are recommended for the evaluation studies to be performed on SEP Recovery Act-funded programs. The recommendations are presented in two sections. The first section presents general design and objectivity standards that focus on establishing objective and reliable approaches. The second section contains more detailed recommendations that are to be used within the evaluation research approaches applied to individual studies.

General Design and Objectivity Standards

- 1. **Study Design:** The development of the evaluation approach should be independent of project administrators and implementers and should be capable of being implemented within the evaluation budget available for the study. The independent evaluator should work with project administrators to understand the project and its operational processes and establish an evaluation approach that is reliable and cost conscious.
- 2. Study Rigor and Reliability: The study results should be reliable. This means that the study approach must be rigorous and capable of accurately assessing impacts using the relevant SEP metrics. The studies should be designed to fit within the evaluation budget without budget overruns, and should be conducted at the highest possible level of research rigor within that budget. The evaluation community has established a number of evaluation protocols that give substantial guidance on reliable evaluation approaches. These include the National Energy Efficiency Program Impact Evaluation Guide of November 2007, the US DOE Impact Evaluation Framework For Technology

Deployment Programs of July 2007, and the California Evaluation Protocols of April 2006. These documents provide guidance on establishing evaluation approaches that represent state-of-the-art evaluation approaches. There are several other protocols that can be used to guide the design and implementation of the evaluation efforts². The evaluation approach should be designed in a way that provides findings with the highest level of reliability achievable with the available research budget.

- 3. Threats to Validity: The independent evaluator should assess the various threats to validity for the study design and analytical approach and develop a study plan that minimizes those threats and reduces the associated level of uncertainty. Both the evaluation plan and the study report should identify these threats and describe how the evaluation approach minimizes threats to the validity of the study findings.
- 4. **Alternative Hypotheses:** To the extent possible, the study design should be developed in a way that addresses alternative hypotheses regarding how observed effects may have occurred.
- 5. **Ability to Replicate:** The methodological description of the study should be sufficiently detailed to allow the research design to be assessed for appropriateness by outside reviewers. The description should also be sufficiently detailed to allow the study to be replicated by other evaluation professionals.
- 6. State-of-the Art Analysis: The study approach should, to the extent possible, use current state-of-the-art evaluation approaches that maximize the use of technical advancements and the most current analytical approaches.
- 7. **Unbiased Assessment:** The evaluation design, data collection efforts, analytical approach, and reporting of results should be objective and unbiased. Unsubstantiated claims or unsupported conclusions or personal points of view should be excluded and the study results should be based on objective data/information analysis.
- 8. **Attribution of Effects:** The study should focus on identifying the outcomes of the project in question and identify the net effects that can be attributed to the State Energy Program's implementation and support efforts.

² US EPA (1995). Conservation Verification Protocols: A Guidance Document for Electric Utilities Affected by the Acid Rain Program; FEMP (2000). Federal Energy Management Program (FEMP) M&V Guidelines: Measurement and Verification for Federal Energy Projects. Federal Energy Management Program. September. Version 2.2, DOE/GO-102000-0960; ASHRAE (2002). Measurement of Energy and Demand Savings, Guideline 14. American Society of Heating, Refrigeration and Air Conditioning Engineers: Atlanta, GA.; Nexant and Lawrence Berkeley National Laboratory (2002). Detailed Guidelines for FEMP M&V Option A. Federal Energy Management Program.; AIS, SRC International (2001). European Ex-post Evaluation Guidebook for DSM and EE Services Programmes. International Energy Agency. April.; Xenergy, ADM Associates, VACom Technologies and Partnership for Resource Conservation (2001). 2001 DEER (Database for Energy Efficiency Resources) Update Study. California Energy Commission. Study ID 3001.; Violette, Daniel (1995). Evaluation, Verification, and Performance Measurement of Energy Efficiency Programs. International Energy Agency.

- 9. **Use of Skilled Professionals:** The evaluation should employ and be led by evaluation professionals who are trained, skilled, and practiced within the area of research associated with the study being conducted.
- 10. **Conflict of Interest:** Evaluators must disclose any real or perceived conflicts of interest that they might have.

Study Design and Application Standards

- 1. **Evaluation Expertise:** The evaluation planning and implementation efforts should be directed, managed and implemented by skilled evaluation professionals experienced in the specific areas of evaluation to which they are being used to support the SEP Recovery Act evaluation efforts. Inexperienced staff should be well supervised and their work reviewed by experienced evaluation professionals for objectivity and accuracy.
- 2. **Study Plan:** Each evaluation should have a detailed study plan that identifies how the evaluation is to be conducted, specifying the individual tasks within the study to be completed. The study plan should also specify how data will be collected, describe processes to assure objectivity and accuracy, and identify the analysis approach to be applied for each of the four types of evaluation metrics (jobs created, carbon saved, energy generated and energy saved).
- 3. **Study Report:** The study report should be provided to the DOE Headquarters SEP Program Manager, with a copy to the appropriate SEP PO, and include an Executive Summary of the results of the study. The Executive Summary should contain a table presenting:
 - a. The net energy savings impacts for each year over the effective useful life of the actions attributable to the energy programs and projects supported by SEP Recovery Act funds
 - **b.** The renewable capacity installed and the annual renewable energy generated and projected to be generated each year over the effective useful life of the installed capacity;
 - **c.** The net tons of carbon not released into the atmosphere over the effective useful life of the projects implemented;
 - **d.** The number and type of short term and long term full time and part time jobs generated as a result of the programs and projects supported by SEP Recovery Act funds; and
 - **e.** The results of the SEP Recovery Act cost effectiveness test applied to the energy impacts achieved.

The study report should include the contact information for the independent evaluation contractor directing or managing the study and include their name, mailing address, telephone number and e-mail address. The selection of the evaluation contractor does not need to be approved by the US DOE/EERE/SEP manager;

- 4. **Sampling:** All studies that rely on sampling approaches for collecting data to drive the impact analysis objectives should, to the extent possible, use procedures that minimize bias and maximize the sample's representativeness of the targeted population. Sampling should be structured to be no less rigorous than a 90% level of precision with a confidence limit of plus or minus 10% for the key attributes on which the sample is being selected.
- 5. **IPMVP Field Efforts**: Field measurements of equipment baseline and post-retrofit or post installation operations should be conducted using one of the four primary data collection protocols specified in the IPMVP (International Performance Measurement and Verification Protocol). This protocol describes the types of field data collection typically used by the evaluation industry to obtain measurements needed to calculate energy impacts. This protocol describes IPMVP options A, B, C, & D for both single project end use and whole building actions. The IPMVP requires that key performance indicators that drive the estimates of program impacts should be collected via on-site metering, monitoring and verification efforts. The protocol requires measurements to be collected that represent key savings calculation indicators.
- 6. **Survey and Interviews**: When surveys and interviews are used to collect data from which impacts are calculated, the questions should be objective, unbiased and non-leading. Closed-ended, scaled, or quantitative response questions should be structured to allow a full range of applicable responses. Open-ended questions should be single subject response questions that allow for a complete response. Complex questions that require a preamble to set a stage for a response consideration should be avoided to help assure that the response is objective and not guided toward a specific outcome.
- 7. Cost Effectiveness Test: The SEP Recovery Act Financial Assistance Funding Opportunity Announcement of March 12, 2009 published by the USDOE specifies that "Each state portfolio of projects funded by SEP ARRA grants should seek to achieve annual energy savings of at least 10 million source BTUs for each \$1,000 of total investment.3" This cost effectiveness test means that, on average across each state's portfolio of programs, the energy impacts to be achieved should be no less than 10 million source BTUs4 per year per \$1,000 of SEP Recovery Act funds spent. These energy savings will recur each year over the effective useful life of the actions induced by the state's portfolio. The evaluations conducted using SEP Recovery Act Funds should calculate and report the results from this test for the projects evaluated. The evaluation report should present the results of this cost effectiveness test in the Executive Summary of the report and present the calculation approach in the test in enough detail that the test can be replicated from the information presented in the evaluation report. This test is called the SEP Recovery Act Cost Test (SEP-RAC test). There are no other cost

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³ See: Energy Savings, Section 5.7, Page 28.

⁴ Source BTU: The energy content of the fuel needed to supply the energy saved, For example, end use natural gas savings has a BTU content of about 100,000 BTUs per therm; the BTU content of electric savings will depend on the fuel source of the energy saved and the generation efficiency of the power plant to which the savings apply. A coal fired plant that is about 33% efficient would save about 10,000 BTUs per kWh saved. A savings of electricity from a hydroelectric power plant would have no BTU savings and no carbon savings because carbon fuel is not burned to provide the kWh saved.

effectiveness test requirements for SEP Recovery Act project portfolios. The cost effectiveness test normally required within state regulatory environments that are focused on least cost net present value energy supplies do not apply to the SEP Recovery Act projects. DOE's objective is to achieve deep lasting savings that provide net energy efficiency, renewable energy, carbon reductions and job impacts well into the long-term future of the United States.

8. Comments and questions relating to the above standards (both administrative and technical) should be addressed to Faith Lambert at 202-586-2319 or faith.lambert@ee.doe.gov.