

Enhanced Program Plan for ENERGY STAR Products

December 2, 2009

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List of Acronyms

A/C	Air Conditioning
AHRI	Air Conditioning, Heating and Refrigeration Institute
ASTM	American Society for Testing and Materials
CFL	Compact Fluorescent Lighting
CFR	Code of Federal Regulations
DOE	Department of Energy
EERE	Energy Efficiency and Renewable Energy
EPA	Environmental Protection Agency
HVAC	Heating, Ventilation, and Air Conditioning
IEC	International Electrotechnical Commission
IT	Information Technology
MOU	Memorandum of Understanding
OAR	Office of Air and Radiation
QPI	Qualifying Product Information
SSL	Solid State Lighting
VOIP	Voice Over Internet Protocol

1. Introduction

The ENERGY STAR products program has been very successful in helping Americans save energy and money, while reducing emissions of greenhouse gases and other air pollutants. It has grown to encompass products in more than 60 categories and is used by millions of Americans in selecting products that help them save money and protect the environment.

On September 30, 2009, the Department of Energy (DOE) and the Environmental Protection Agency (EPA) signed a new Memorandum of Understanding (MOU)¹ to enhance and expand Federal programs to advance energy efficiency. The new MOU describes the EPA/DOE partnership, defines roles and responsibilities in a way that capitalizes on the strengths of each Agency and outlines a set of key provisions that will build the value of the ENERGY STAR Program.

While the MOU provides details in terms of the changes in the way EPA and DOE will work together to implement the ENERGY STAR Program, this Enhanced Program Plan represents a first important step in advancing the partnership between EPA, DOE, and program stakeholders by engaging interested parties in a discussion of key program enhancements outlined in the MOU.

EPA and DOE welcome comment on the framework this document provides for enhancing the ENERGY STAR products program, consistent with the new MOU. The feedback provided will inform the Agencies' joint annual planning process and will be reflected in the 2010 Annual Plan, scheduled for release at the end of January, 2010. Comments should be submitted by January 8, 2010 to berringer.bryan@epa.gov.

2. Memorandum of Understanding

The EPA and DOE announced a new partnership on energy efficiency of products and buildings as an important step in strengthening the Administration's commitment to energy efficiency and addressing climate change, economic, and energy security issues.² The partnership addresses two programs for which each agency has important roles: the ENERGY STAR product program and the National Building Rating program.

Through the new MOU, which outlines the partnership, the EPA and DOE have agreed to:

- Expand and enhance Federal energy efficiency programs to improve the efficiency of a broad set of energy-using products and improve the efficiency of the nation's buildings;

¹ Memorandum of Understanding on Improving the Energy Efficiency of Products and Buildings Between the U.S. Environmental Protection Agency and the U.S. Department of Energy, 29 September 2009.

² This agreement discontinues the coordination between the Agencies as outlines in the 1996 EPA and DOE *Memorandum of Cooperation on Energy Efficient, Environmentally Beneficial Buildings* and becomes the primary applicable agreement on Agency roles and responsibilities as referenced in the Energy Policy Act of 2005, Section 131.

- Build upon the important roles of each Agency in advancing energy efficiency in products and buildings; and
- Realign program roles and responsibilities to most effectively implement these programs and systematize coordination across the two Agencies on energy efficiency so as to best utilize the expertise and resources of each Agency.

The EPA and DOE will coordinate to expand and enhance the ENERGY STAR products program and the National Building Rating program. The EPA will be the lead Agency on the ENERGY STAR Program, which will identify top performing, cost-effective products, homes, and buildings and DOE will be the lead Agency on the National Building Rating Program, which will provide efficiency ratings and assessments of cost-effective improvements for homes and buildings.³

2.1 Rationale

Greater investment in energy efficiency is critical to addressing the challenges of climate change, rising energy bills, energy security, and other issues. The two programs covered in the agreement – the ENERGY STAR program and the National Building Rating program – are key administration programs for guiding these investments. This new partnership, with clear Agency roles and responsibilities, will use the strengths and resources available at each Agency to effectively advance energy efficiency and enhance these two key administration programs. The two programs will accelerate the adoption and use of energy efficient technologies in the built environment.

2.2 Key Provisions

The key provisions in the MOU include the establishment of a Governing Council, enhancements in stakeholder outreach, establishment of a National Building Rating program, and enhancements to the ENERGY STAR products programs. The key enhancements are summarized below:

1. Establishment of a Governing Council

A Governing Council will be established, comprised of the DOE Assistant Secretary for Energy Efficiency and Renewable Energy (EERE) and the EPA Assistant Administrator for the Office of Air and Radiation (OAR). The Governing Council will:

- Oversee the collaborative effort to ensure it is effective, efficient, avoids duplication, communicates effectively with other Agencies and stakeholders, maximizes the use of resources, and builds upon Agency and stakeholder efforts to date;

³ The EPA will undertake the activities outlined in the MOU under the authorities of the Clean Air Act, Section 103(g); Pollution Prevention Act of 1990, Sections 6602, 6603, 6604, and Energy Policy Act of 2005, Section 131. The DOE will undertake the activities under the authorities of the Department of Energy Organization Act, Section 646, as amended; the Energy Policy and Conservation Act, Section 337, as amended; and Energy Policy Act of 2005, Section 131.

- Review annual plans and budgets, annual reports, and periodic program evaluations for each of the programs; and
- Meet quarterly to review progress and address management issues.

2. Enhanced Stakeholder Outreach

A specific provision of the MOU is additional outreach to stakeholders on the ENERGY STAR products program and National Building Rating Program. The Agencies will hold stakeholder meetings twice annually to present and discuss program plans. This outreach is in addition to stakeholder comment processes for the development of ENERGY STAR product specifications or other program tools and guidelines.

3. National Building Rating Program

A National Building Rating program will help building owners understand the efficiency of homes and buildings and the set of cost-effective steps they can take to improve that efficiency, and for accountability in measuring the energy savings. The National Building Rating program will include:

- A comprehensive whole building scale-based rating tool will be developed and promoted that reflects both the physical characteristics of a building (asset rating) and a way to compare the actual energy use of existing buildings with similar buildings.
- A labeling scheme will be developed to easily convey the energy use information from the whole building scale-based rating tool.
- The whole building scale-based rating tool will take into account the inherent building envelope, major energy-using equipment and appliances, and past performance based on utility bills.
- The whole building scale-based rating tool will be updated periodically to reflect improvements in building technology and analytical tools, and to enhance usability.
- The eligibility of buildings for the ENERGY STAR logo, as applied to buildings, will be based on the rating systems of the National Building Rating program.
- The criteria for the ENERGY STAR logo will be updated periodically to reflect improvements in building energy efficiency, diagnostic capability, and market appetite for energy efficiency, and will be based on established program principles for the ENERGY STAR brand.

4. Enhancements to the ENERGY STAR Products Program

Several enhancements will be undertaken to maintain and build ENERGY STAR as a consumer trust mark for cost-effective energy-efficient products that offer consumers the features they are looking for. The ENERGY STAR products program will be enhanced in the following ways:

- The ENERGY STAR Program will be expanded to cover more products at a faster pace.
- Revisions to existing ENERGY STAR specifications will be undertaken more frequently so that the ENERGY STAR label continues to highlight top energy efficient products.
- A comprehensive program for product testing and verification of products earning the ENERGY STAR label will be developed and implemented.
- Enhanced testing procedure review, improvement, and development will occur.
- Quality installation programs in key product areas will be developed.
- Research related to a potential ENERGY STAR top-tier program will be conducted.

2.3 Scope of this Document: ENERGY STAR Products

This document outlines a framework for an initial set of enhancements to the ENERGY STAR products program, including:

- New ENERGY STAR products;
- Frequent updates to ENERGY STAR criteria;
- Enhanced testing procedure review, improvement, and development;
- Enhanced product verification, testing, and enforcement;
- Development of quality installation programs in key product areas; and
- Research related to an ENERGY STAR top-tier program.

The document includes rationale, initial affected products, and proposed processes for implementation.

Additional enhancements involving ENERGY STAR lighting specifications are outlined in a separate but related lighting integration proposal. The National Building Rating program work will be addressed as part of the 2010 Partnership Workplan. Additional detail related to all of the above will be available as part of the first annual Workplan, which will be available by January 2010.

3. New ENERGY STAR Products

3.1 Relevant Provisions in the MOU

The MOU states the following related to new ENERGY STAR products:

“Product coverage will be expanded to include new consumer products with high energy

saving potential.” (page 2)

“Broader Product Coverage. To build on the high national brand awareness, the program will aim to cover as many energy using consumer products as possible, with focus on product categories in widespread use and with significant energy consumption. A list of products to be added to the ENERGY STAR program will be developed as part of an annual planning process with the goal of doubling the annual addition of products from the current level, based on the availability of resources.” (page 4)

“EPA will develop a list of products to be added to the ENERGY STAR program each year, in consultation with DOE.” (page 5)

3.2 Description and rationale for enhancement

The ENERGY STAR program is undergoing an enhancement to build on the high national brand awareness, broaden product coverage, and increase energy savings. The greatest impact from the ENERGY STAR program will be from introducing more ENERGY STAR products and doing so at a faster rate than current operations. The aim is to cover as many energy-using consumer products as possible, with a focus on product categories in widespread use that offer a significant energy saving opportunity individually or collectively. A list of products to be added to the ENERGY STAR program will be developed as part of an annual planning process with the goal of doubling the annual addition of products from the current level, based on the availability of resources. The expanded coverage will allow for increased energy savings as more and more products with the ENERGY STAR label are purchased by consumers. Another goal is to improve the process so that new ENERGY STAR products are adopted as quickly and as easily as possible.

3.3 Agency roles and responsibilities

EPA will develop a list of products to be added to the ENERGY STAR products program each year, in consultation with DOE. DOE will provide technical information to support the selection of the candidate products drawing upon the DOE minimum standards program, testing procedure efforts, and its Building Technologies Program’s research into emerging products that could be ready for ENERGY STAR. This list will be developed, discussed, and refined as part of the annual planning process.

3.4 Process for implementing enhancements

To build on high national brand awareness of the ENERGY STAR label, the program will aim to cover as many energy-using products as possible, with a focus on product categories in widespread use and that offer a significant energy saving opportunity.

The focus areas for new products currently fall into one of three main product categories:

- Miscellaneous products and the networked home: The program will continue its focus on miscellaneous plug load – the myriad of products consumers plug in each day – more and more of which are connected to the network. It is particularly important to focus on the miscellaneous plug loads because although

they do not draw large loads independently, overall these products exceed the energy consumption of traditional electricity users, such as Heating Ventilation and Air Conditioning (HVAC).⁴

- **Enterprise products:** Enterprise products, such as products found in a data center, have a large and growing energy price tag associated with them.⁵ The program is working closely with key stakeholders – manufacturers and buyers/customers – to drive for efficiency in these products.
- **Commercial food service:** ENERGY STAR also covers a variety of commercial food service products. Opportunities to enhance this suite of product offerings will be capitalized upon to deliver greater savings to restaurant facilities.

EPA is planning to add many new products to ENERGY STAR across these priority areas by the end of 2010 (see Table 1). EPA and DOE will engage stakeholders in fleshing out the schedule beyond 2010, beginning with the Annual Workplan for 2010.

Table 1: New Product Completions and Planned Completions

2008	2009	2010	2011 and Beyond
N/A	CFS Ovens V1.0	Data Center Storage	Plan with Stakeholders
	CFS Griddles 1.0	Small Network Equipment	
	Servers	Uninterruptible Power Supplies	
		Pre-Rinse Spray Valves	
		Lab-Grade Refrigerators and Freezers	

4. Frequent updates to ENERGY STAR criteria

4.1 Relevant Provisions in the MOU

The MOU states the following related to frequent updates to ENERGY STAR criteria:

“Specifications will be set so that the ENERGY STAR logo is applied consistently with established program principles and with approximately only the top quartile of products eligible.” (page 2)

“Specification Levels. The performance levels for the ENERGY STAR for products will be set by EPA, with technical support provided by DOE, including technology analyses

⁴ *Annual Energy Outlook*, Energy Information Administration, 2006.

⁵ Koomey, Jonathan G. , *Estimating Total Power Consumption by Servers in the U.S. and the World*, February 15, 2007.

to help inform appropriate performance levels and program monitoring.” (page 3, 5)

“Program Design. The ENERGY STAR label will identify energy efficient products that offer meaningful energy savings (at an individual and/or national level) over those products typically purchased.

- Specifications will be established which overlay the consumer perspective and the need to consistently identify top performing products.
- Specifications will be set to recognize products that are cost-effective from the purchaser standpoint; offer at least equivalent functionality and features as standard products; and are proven and broadly available. Cost-effectiveness in terms of payback periods will be defined on a case-by-case basis, taking into account both the expected useful life of the product and the general desirability of shorter payback periods, but will in general be 3-5 years.
- To identify top performing products, ENERGY STAR specifications will be set to identify approximately the top 25% most efficient of models within a product class under the ENERGY STAR specification at the time that specification becomes effective, with consideration of expected improvements in product efficiency and market penetration trends of those products that will take place between establishing a specification and the specification becoming effective.”

“Up-to-date and More Stringent Specifications. Measures (as appropriate for the different types of products covered in the program) will be implemented, in accordance with applicable procedures for stakeholder notice and comments and international agreements, to ensure that ENERGY STAR specifications are tightened as necessary for ENERGY STAR to consistently represent top performing products.

- Product shipment data for ENERGY STAR qualifying products will be collected from manufacturers and analyzed on an annual basis to determine which specifications warrant updating.
- For product categories with longer-lived product models (e.g. heating and cooling, home appliances), specifications will be reviewed for a possible revision at a minimum of every three years or once the market share for ENERGY STAR qualifying products reaches about 35%.
- For product categories with rapidly evolving product models (e.g., consumer electronics, office equipment), specifications will be updated about every two years, including the use of out-year criteria that anticipate improving energy efficiency performance based on market trends.
- For product categories with large variations in product size (with impacts on energy use), overall limits for energy use may be incorporated into ENERGY STAR specifications.” (page 4-5)

4.2 Description and rationale for enhancement

Revisions to ENERGY STAR specifications will be undertaken more frequently so that the ENERGY STAR label continues to highlight top energy efficient products while targeting products that are appealing from a consumer standpoint. Increasing the level of performance will provide greater energy savings in the future and maintain the credibility of the ENERGY STAR label as technologies and markets evolve. A number of technology, market, policy, and other factors can lead to the need and opportunity for a specification revision, including but not limited to:

- Change in the Federal minimum efficiency standards;
- Technological advancements;
- Product availability limitations;
- Issues with consumers realizing expected energy savings;
- Performance or quality issues;
- Issues with test procedures; and
- High market share.

4.3 Agency roles and responsibilities

EPA will review the ENERGY STAR product categories each year in terms of the market share of ENERGY STAR products. To perform this review, EPA will collect product shipment data from manufacturers of ENERGY STAR qualifying products. Using the guidelines in the MOU, EPA will develop a list of product categories for possible specification revision. Workplans outlining the work necessary, as part of the specification revision, will be developed as part of the annual planning process. The performance levels for ENERGY STAR products will be set by EPA, with technical support provided by DOE, including technology analyses, to help inform appropriate performance levels.

4.4 Process for implementing enhancements

In addition to developing specifications for additional new products, EPA will ensure that existing specifications highlight top performing products in the marketplace through timely revisions to ENERGY STAR specifications with technical support from DOE. This will be accomplished by:

- Collecting and analyzing product shipment data for ENERGY STAR qualifying products on an annual basis to determine which specifications warrant updating;
- Using the guidelines in the MOU as appropriate for longer-lived or rapidly evolving product categories; and

- Developing workplans for each product category undergoing a revision that includes the work to be pursued by each Agency.

Assuming adequate resources, and consistent with the principles outlined above, as many as nine specification revisions will be completed by the end of 2010, including Game Consoles, Geothermal Heat Pumps, Light Commercial HVAC Equipment, Set-Top Boxes, Servers, Gas Furnaces, Water Coolers, Commercial Fryers, Room Air Conditioners and others. To allow time for manufacturers to transition, several of these specifications will not go into effect until 2011. As many as six additional specification revisions may be initiated. A snapshot of current plans, as well as revisions completed in the recent past, are included in Table 2. It is important to note that all existing specifications remain in effect until EPA works with stakeholders through an open and transparent specification development process to finalize changes.

Looking forward,

- EPA plans to collect shipment data across all ENERGY STAR product categories for calendar year 2010. To collect the data necessary to support this enhancement, EPA will continue to work with third party entities that are able to provide shipment data on behalf of their members. EPA also expects to make use of other existing sources of aggregated product shipment data.
- A plan for specification revisions, to be shared with stakeholders, using the guidelines outlined above, will be developed annually by EPA, with technical support from DOE, as part of the annual Workplan.

Table 2: Revised Specification Completions and Planned Completions

2008	2009	2010	2011 and Beyond
External Power Supplies	Commercial Fryers Commercial Refrigerator/Freezer V2.0	Game Consoles	Plan with Stakeholders
Telephony	Audio / Video Products	Set-Top Boxes Tier 2	
TVs 3.0		Servers Tier 2	
Imaging Equipment	TVs 4.0 and 5.0	Light Commercial HVAC Equipment Geothermal Heat Pumps	
Computers	Displays V5.0	Servers	
Set Top Boxes		Gas Furnaces	
Furnaces		Commercial Dishwashers	
		Windows, Doors and Skylights	
		Water Heaters	

2008	2009	2010	2011 and Beyond
		Room Air Conditioners	
		Dehumidifiers	
		Battery Chargers	
		Ceiling Fans	
		Telephony	

5. Enhanced testing procedure review, improvement, and development

5.1 Relevant Provisions in the MOU

The MOU states the following related to enhanced testing procedure review, improvement, and development:

“Testing for Program Purposes... DOE will lead the development of product testing procedures and metrics with EPA assisting where necessary.” (page 3, 5) “Additional Technical Work on Testing Procedures. The ENERGY STAR program will also be enhanced by drawing upon research commissioned to review and improve existing test procedures for energy use and other performance requirements as well as other performance related issues, in accordance with applicable procedures for stakeholder notice and comments.” (page 5)

“Building on the skills and knowledge acquired through its statutory responsibilities in setting standards for certain energy-using products, DOE will provide technical support in the areas of test procedure and metric development, review, and improvement...” (page 5)

5.2 Description and rationale for enhancement

Test procedures that are fair, clear, and reflective of actual product use are critical to the success of the ENERGY STAR program. The ENERGY STAR program will be enhanced by drawing upon additional research commissioned to review and improve existing test procedures for energy use and other performance requirements as well as other performance related issues, in accordance with applicable procedures for stakeholder notice and comments.

5.3 Agency roles and responsibilities

DOE will lead the development of product testing procedures and metrics, with EPA assisting where necessary.

5.4 Activities, milestones, and process for implementing enhancements

Currently, for products covered by Federal minimum efficiency standards, the ENERGY STAR program mirrors the testing protocols used by the Federal Standards program, and places additional qualification requirements where applicable. Test procedures for these

products are developed and maintained by DOE. For products not covered by Federal Standards, the ENERGY STAR program makes use of testing protocols developed by standards bodies, such as the International Electrotechnical Commission (IEC), Ecma International, Air Conditioning, Heating and Refrigeration Institute (AHRI), American Society for Testing and Materials (ASTM), and others.

Absent an available test procedure developed by a standards body, DOE will develop and vet with all interested stakeholders a test procedure for use by the ENERGY STAR products program. This development effort includes testing the effectiveness of the procedure and maintaining its effectiveness over time.

At DOE, the Appliances and Commercial Equipment Standards Program in the Building Technologies Program will be responsible for development and update of test procedures. DOE will establish a priority list of test procedure developments and updates to be conducted based on the immediate need for an updated test procedure as well as develop test procedures for non-covered products.

EPA and DOE, through their annual planning process, will identify products that will need test procedure development in the coming years. The current Workplan for reviewing test procedures aligns with the dates shown in Table 3.

Table 3: Test Procedure Development Plan

2008	2009	2010	2011 and Beyond
N/A	Data Center Storage	Small Network Equipment	Plan with Stakeholders
	Lab Grade Refrigeration Equipment	Computer Servers	
	Internal Power Supplies	Uninterruptible Power Supplies	
		Projectors	
		Data Center Networking Equipment	
		Water Coolers (Version 2.0)	
		Home Energy Management Devices	

2008	2009	2010	2011 and Beyond
		(Programmable Thermostats and other devices)	
		Commercial Dishwashers	
		Pre Rinse Spray Valves	
		Battery Chargers	
		Ice Machines	
		Pumps	

6. Enhanced product verification, testing, and enforcement

6.1 Relevant Provisions in the MOU

The MOU states the following related to enhanced product verification, testing, and enforcement:

“Verification of compliance with program requirements will be increased and efforts will be enhanced to identify and address product performance issues.” (page 2)

“Testing for Program Purposes. EPA will maintain product testing results data with support from DOE as agreed by the Agencies. DOE will lead the development of product testing procedures and metrics with EPA assisting where necessary.” (page 2, 5)

“Verification of ENERGY STAR Qualifying Products. Verification of ENERGY STAR qualifying products will be enhanced in two ways:

- All products will be required to be tested in an accredited laboratory and qualifying product information be submitted to the government before the product can be qualified as ENERGY STAR.
- Enhanced “off-the-shelf” product testing will be instituted across the full suite of ENERGY STAR covered product categories through a combination of EPA/DOE testing, manufacturer funded/EPA-DOE administered testing, or other third party testing.” (page 5)

“Building on the skills and knowledge acquired through its statutory responsibilities in setting standards for certain energy-using products, DOE will provide technical support in the areas of ... product testing and verification.” (page 5)

“EPA will provide support and cooperation through the ENERGY STAR program to

DOE enforcement efforts under the Federal minimum energy efficiency standards for appliances, as appropriate.” (page 7)

6.2 Description and rationale for enhancement

The ENERGY STAR products program has grown to encompass products in more than 60 categories and is used by millions of Americans in selecting products that help them save money and protect the environment. To ensure that ENERGY STAR remains a trusted symbol for environmental protection through superior efficiency, EPA and DOE plan to pursue enhancements for product qualification and verification. These include: qualification prior to labeling, laboratory qualification, and comprehensive verification testing.

DOE and EPA will respond promptly and aggressively to instances of non-compliance revealed by these verification and testing enhancements. In conjunction with these enhancements, DOE and EPA may review and update the dispute resolution provisions in the ENERGY STAR partnership agreements. With the support and coordination of EPA through the ENERGY STAR program, DOE is also ramping up enforcement for Federal minimum energy efficiency standards for appliances to ensure a level playing field for manufacturers and promote the development of energy-efficient products that will save energy and reduce costs for millions of consumers.

6.3 Agency roles and responsibilities

EPA and DOE will work together to establish a comprehensive verification program that includes qualification prior to labeling, laboratory qualification, and verification testing. DOE will hold the lead role in implementing product verification testing. EPA will lead implementation of qualification testing. EPA will maintain a database of product testing results.

6.4 Activities, milestones, and process for implementing enhancements

Qualification Prior to Labeling: For nearly all ENERGY STAR product categories currently, manufacturers have up to one year to submit to the government data that supports their labeling of a product. This scenario could lead to consumer confusion, as products labeled on retail shelves are not listed on an ENERGY STAR qualified product list. In addition, pre-qualification allows for earlier review of qualification data. Thus, EPA and DOE are proposing to pursue a requirement that before a partner claims a product is qualified and uses the ENERGY STAR label, the product must be tested in an accredited laboratory and the resulting data must be shared with the ENERGY STAR program. Manufacturers would be allowed to participate in an approved third party certification program to satisfy this requirement. Manufacturers will continue to pay for the pre-qualification testing.

Laboratory Qualification: DOE and EPA propose to pursue a requirement that testing for both qualification and verification take place in laboratories that are accredited. The government will consider ISO 17025 where appropriate recognizing that other accreditations may be appropriate for some products and that third party certification programs can serve this function.

Comprehensive Verification Testing: The ultimate goal of verification is comprehensive testing across all product categories, leveraging an infrastructure of certification programs and accredited laboratories (market-based testing programs), to ensure regular and robust testing of products. EPA/DOE anticipate that the testing approach will vary depending on the nature of the product category, following two basic designs. Under each of these, if an ENERGY STAR rated product fails verification testing, the resulting action may be its disqualification from the ENERGY STAR program.

Third-party verification: Products in this category would need to be verified to the appropriate product’s qualifying criteria by third party organizations that administer ongoing verification testing in accredited laboratories meeting EPA/DOE criteria. EPA/DOE anticipate requiring third-party verification for appliances, HVAC equipment, windows/doors/skylights, commercial food service equipment, and other building related products with medium to long-range product lifetimes. Under this scenario, a third-party certification program:

- Selects products for verification testing on a regular basis.
- Obtains and tests the products using appropriate test procedures.
- Shares information with the ENERGY STAR program.

Manufacturer-funded verification testing in qualified laboratories: A subset of qualified products will be selected by EPA/DOE each year for testing in accredited laboratories. Manufacturers will be required to enter into agreements with accredited laboratories to test products within a certain timeframe as required by EPA/DOE. Products, such as electronics and IT, may be best for this approach as they have shorter lifetimes and multiple configurations. As another example, tailored quality assurance testing requirements have been implemented for CFL fixtures and lamps that require manufacturers to fund ongoing product testing in accredited laboratories. In the case of these lighting products, a third-party administrator coordinates all the testing and reports on results. EPA/DOE are proposing to continue this testing and extend it to cover a broader range of ENERGY STAR qualifying technologies.

As EPA and DOE work to put in place a comprehensive verification-testing program as outlined above, off-the-shelf testing of select product categories by the government will continue. The government will continue this off-the-shelf testing as a compliment to the testing proposed above. In light of the enhanced verification expectations, DOE is building on its capabilities to test a range of products for the ENERGY STAR program and for the Minimum Standards Program.

A summary of planned verification testing is included below in Table 4.

Table 4: Planned Verification Testing

Product Types	Qualification Prior to Labeling	Verification Testing	Other Testing
Appliances HVAC Equipment	Yes, can be completed by third party certification	Third-party verification	Testing of select product categories by the government

Product Types	Qualification Prior to Labeling	Verification Testing	Other Testing
Windows/Doors/Skylights Commercial Food Service Equipment External Power Supplies and Battery Charges Other building related products with medium to long range product lifetimes	entities		
Consumer Electronics Information Technology Other products with shorter lifetimes and multiple configurations	Yes, can be completed by accredited lab	Manufacturer-funded verification testing in qualified laboratories	
Lighting	Yes, continue to be conducted by accredited, third party lab	Manufacturer-funded verification testing in qualified laboratories	

Next Steps in Developing Plan for Verification Enhancements: In light of the enhanced verification expectations, DOE is building on its capabilities to test a range of products for the ENERGY STAR program and for the Minimum Standards Program. In early 2010, EPA and DOE will invite stakeholders to participate in a stakeholder process specific to verification testing.

7. Development of quality installation programs in key product areas

7.1 Relevant Provisions in the MOU

The MOU states the following related to the development of quality installation programs:

“Product-specific installation and maintenance programs (e.g. ENERGY STAR Quality Installation of HVAC equipment) will be developed and expanded where necessary to

pursue the full energy savings potential of the ENERGY STAR qualifying products.”
(page 5)

7.2 Description and rationale for enhancement

Quality installation is a new energy efficiency service being developed, which uses the ENERGY STAR label to bring improved services to homeowners. Quality installation affects not only the homeowner but also the contractor, utilities, state, and local governments. Poor installation is one of the major reasons for technician call-backs to the home. Utilities, state, local governments, and others that implement energy efficiency programs are finding proper installation to be cost-effective. Many product categories will be evaluated to determine the need for improved installation procedures and programs as appropriate and as resources are available.

7.3 Agency roles and responsibilities

EPA will be the lead Agency on the development of quality installation programs, with technical and other support from DOE, including support through its Building America program.

7.4 Process for implementing enhancements

EPA will evaluate additional product categories for the need for improved installation procedures and programs and develop a list of products as appropriate and as resources are available.

8. Top-tier program (Super Star)

8.1 Relevant Provisions in the MOU

The MOU states the following related to the ENERGY Super Star program:

“An ENERGY Super Star program will be nested within the ENERGY STAR program to enable consumers to identify the top performing products.” (page 2)

Program Design. The Super Star program will promote a “top-tier” of energy efficient products in a given category; it will cover approximately 5% of products in a given category and will, when appropriate, be supportive of products that have a longer payback period than those products under the main ENERGY STAR logo.

- The Super Star program will promote advanced technologies to drive market acceptance of these “top-tier” efficient products and technologies.
- These advanced products and technologies will meet consumer needs for performance, cost effectiveness, and additional environmental benefits, as appropriate to effectively target a meaningful segment of the broad consumer market
- The need and opportunity for incentives linked to these “top-tier” products will be

assessed and pursued as appropriate, and as permitted under law.

- In terms of labeling and brand identity, the Super Star program will be “nested” within the ENERGY STAR program. A marketing and brand analysis will be undertaken to provide the most effective options.
- Efforts will also be developed through a process consistent with this MOU, to explore and advance products and technologies that are likely candidates for the ENERGY STAR / Super Star program that may with some additional assistance meet the criteria for these programs.
- Recommendations on key program elements and resource needs will be part of the annual program plan, or identified as needed, and will be made to the Governing Council for concurrence.” (page 6)

“Agency Roles and Responsibilities

- Super Star will be nested within the existing ENERGY STAR program, and EPA will be the brand manager of the effort. These brand management responsibilities include marketing, education and outreach, partner relationships, program integrity functions (e.g., logo use and monitoring), and specification development.
- EPA will determine performance levels for products to qualify for the ENERGY STAR logo, with support from DOE. Building on the skills and knowledge acquired through its statutory responsibilities in setting standards for certain energy-using products, and its role in developing and deploying cutting edge technologies, DOE will provide technical support to Super Star in the areas of test procedure and metric development, review, and improvement as well as product testing and verification. DOE will lead the development of testing procedures and metrics, with assistance from EPA where necessary.
- EPA will maintain a database of product testing results, with support from DOE as agreed to by the Agencies.
- EPA will develop a list of products to be added to the ENERGY Super Star program, in consultation with DOE.
- Recommendations on key program elements and resource needs will part of the annual program plan or as needed and will be made to the Governing Council for concurrence.” (page 6)

“EPA and DOE shall jointly commission a marketing analysis to assess the market position of the ENERGY STAR brand and assist in design of the Super Star program.” (page 7)

8.2 Description and rationale for enhancement

Advancing the market for “top-tier” efficient products and technologies could play an important role in driving market acceptance for advanced technologies. Doing so in a way that identifies advanced products and technologies meeting the needs and expectations of a meaningful segment of the broad consumer market could ultimately contribute significantly to energy savings and greenhouse gas emission reductions.

8.3 Agency roles and responsibilities

The EPA will manage the new ENERGY STAR top-tier program, in consultation with DOE. EPA and DOE will collaborate on related research and the process for implementing enhancements.

The new top-tier program will be explored in the coming months. This exploration will involve market research with expert input from brand strategy consultants. These efforts will aid in understanding the marketplace in which this label might live, identify the target demographic(s) for such an effort, and shape how to best potentially structure, market, and name this effort in a way that complements the existing ENERGY STAR program. Stakeholders will have an opportunity to provide feedback into this process.

9. Next Steps

For each of the enhancements outlined in this document, including adding new products, revising existing specifications, and implementing a comprehensive verification process, EPA and DOE will be proceeding through a stakeholder process seeking feedback by way of a series of documents, comment periods, and discussions. In January 2010, EPA and DOE will release an ENERGY STAR Partnership Workplan for 2010 that will lay out a more detailed schedule for advancing these activities.

10. Appendices

10.1 Memorandum of Understanding

**Memorandum of Understanding on
Improving the Energy Efficiency of Products and Buildings
Between
The U.S. Environmental Protection Agency
and
The U.S. Department of Energy**

I. Overview and Purpose

- Purpose: Enhanced and expanded Federal programs to advance energy efficiency are critical to addressing climate change, economic, and energy security issues.
- Common Goals and Objectives: The U.S. Environmental Protection Agency (EPA) and the U.S. Department of Energy (DOE) are agreeing to:
 - Expand and enhance Federal energy efficiency programs so as to improve the efficiency of a broad set of energy-using products and improve the efficiency of the nation's buildings,
 - Build upon the important roles of each Agency in advancing energy efficiency in products and buildings, and
 - Realign program roles and responsibilities to most effectively implement these programs and systematize coordination across the two Agencies on energy efficiency so as to best utilize the expertise and resources of each Agency.
- Scope: The EPA and the DOE will coordinate to expand and enhance the ENERGY STAR program and the National Building Rating Program.
 - The ENERGY STAR label will identify top performing, cost-effective products, homes, and buildings.
 - The National Building Rating program will provide efficiency ratings and assessments of cost-effective improvements for homes and buildings.
- Collaborative Structure: The DOE will be the lead Agency on the National Building Rating program and EPA will be the lead Agency on the ENERGY STAR program. A Governing Council will be established comprised of the DOE Assistant Secretary for Energy Efficiency and Renewable Energy and the EPA Assistant Administrator for Air and Radiation. The Governing Council will:
 - Oversee the collaborative effort to ensure it is effective, efficient, avoids duplication, communicates effectively with other Agencies and stakeholders, maximizes the use of resources, and builds upon Agency and stakeholder efforts to date,
 - Review annual plans and budgets, annual reports, and periodic program evaluations for each of the programs,

- Meet quarterly to review progress and address management issues, and
- Hold meetings twice annually with stakeholders.
- **Relationship to Past Agreements:** This agreement discontinues the coordination between the Agencies as outlined in the 1996 EPA and DOE Memorandum of Cooperation on Energy Efficient, Environmentally Beneficial Buildings, consistent with the transition established under section V., and becomes the primary applicable agreement on Agency roles and responsibilities as referenced in the Energy Policy Act of 2005, Section 131.
- **Communication and Outreach:** EPA and DOE will jointly explain the agreement to other Agencies, stakeholders and Congress and provide opportunities for stakeholder comments on these programs.
- **Agency Authorities:** The EPA undertakes the activities outlined in this agreement under the authorities of the Clean Air Act, Section 103(g); Pollution Prevention Act of 1990, Sections 6602, 6603, 6604, and Energy Policy Act of 2005, Section 131.

The DOE undertakes the activities outlined in this agreement under the authorities of the Department of Energy Organization Act, Section 646, as amended; the Energy Policy and Conservation Act, Section 337, as amended; and Energy Policy Act of 2005, Section 131.

II. Overview of Programs

This agreement applies to the following two programs in which the Agencies both have important roles. The Agencies will work to enhance these programs through the roles and responsibilities as outlined below for each Agency. These programs will be implemented in coordination as appropriate with other efficiency programs at each Agency and consistent with each Agency's applicable existing international or domestic agreements.

ENERGY STAR Products Program

- ***Program design:*** The ENERGY STAR products program will be enhanced in the following ways:
 - (1) Specifications will be set so that the ENERGY STAR logo is applied consistently with established program principles and with approximately only the top quartile of products eligible.
 - (2) Product coverage will be expanded to include new consumer products with high energy saving potential.
 - (3) Verification of compliance with program requirements will be increased and efforts will be enhanced to identify and address product performance issues.
 - (4) An ENERGY Super Star program will be nested within the ENERGY STAR program to enable consumers to identify the top performing products.
- ***Roles and Responsibilities:***
 - 1) Management. The EPA will manage the ENERGY STAR products program and the new Super Star program, in consultation with DOE.

- 2) Testing for Program Purposes. EPA will maintain product testing results data with support from DOE as agreed to by the Agencies. DOE will lead the development of product testing procedures and metrics with EPA assisting where necessary.
- 3) Specification Levels. The performance levels for the ENERGY STAR for products will be set by EPA, with technical support provided by DOE, including technology analyses to help inform appropriate performance levels and program monitoring.

National Building Rating Program

- **Program design:** The National Building Rating program will be enhanced in the following ways:
 - 1) A comprehensive whole building scale-based rating tool will be developed and promoted that reflects both the physical characteristics of a building (asset rating) and a way to compare the actual energy use of existing buildings with similar buildings.
 - 2) A labeling scheme will be developed to easily convey the energy use information from the whole building scale-based rating tool.
 - 3) The whole building scale-based rating tool will take account of the inherent building envelope, major energy-using equipment and appliances, and past performance based on utility bills.
 - 4) The whole building scale-based rating tool will be updated periodically to reflect improvements in building technology and analytical tools, and to enhance usability.
 - 5) The eligibility of buildings for the ENERGY STAR logo as applied to buildings will be based on the rating systems of the National Building Rating Program.
 - 6) The criteria for the ENERGY STAR logo will be updated periodically to reflect improvements in building energy efficiency, diagnostic capability, and market appetite for energy efficiency, and will be based on established program principles for the ENERGY STAR brand.
- **Roles and Responsibilities:**
 - 1) Management. DOE will manage the National Building Rating program including the development of the whole building scale-based rating tool and associated labeling scheme, in consultation with EPA. EPA will continue its efforts to encourage key stakeholders to build new buildings to ENERGY STAR levels and improve existing buildings.
 - 2) Testing for Program Purposes. DOE will maintain building performance data with support from EPA as agreed to by the Agencies. EPA will support various aspects of the program and assist DOE with input to help inform development of the framework, tools, and updates of the rating schemes
 - 3) Specification Levels. The performance levels for the ENERGY STAR when applied to buildings will be set by EPA, with technical input provided by DOE and the National Building Rating Tool, consistent with established principles for the program.

Overall program coordination

- DOE and EPA will periodically evaluate and as appropriate modify their program efforts to ensure that the ENERGY STAR and National Building Rating programs are mutually reinforcing and coordinated.

III. Specifics on ENERGY STAR Program

The specifics of the enhanced program, roles and responsibilities and coordination mechanisms are provided below for the enhanced ENERGY STAR products program and one enhancement in particular -- a new “Super Star” element of the ENERGY STAR program.

Enhanced ENERGY STAR Products Program

- **Program Design.** The ENERGY STAR label will identify energy efficient products that offer meaningful energy savings (at an individual and/or national level) over those products typically purchased.
 - Specifications will be established which overlay the consumer perspective and the need to consistently identify top performing products.
 - Specifications will be set to recognize products that are cost-effective from the purchaser standpoint; offer at least equivalent functionality and features as standard products; and are proven and broadly available. Cost-effectiveness in terms of payback periods will be defined on a case-by-case basis, taking into account both the expected useful life of the product and the general desirability of shorter payback periods, but will in general be 3-5 years.
 - To identify top performing products, ENERGY STAR specifications will be set to identify approximately the top 25% most efficient of models within a product class under the ENERGY STAR specification at the time that specification becomes effective, with consideration of expected improvements in product efficiency and market penetration trends of those products that will take place between establishing a specification and the specification becoming effective.
- **ENERGY STAR Products Program Enhancements**
 - **Broader Product Coverage.** To build on the high national brand awareness, the program will aim to cover as many energy using consumer products as possible, with a focus on product categories in widespread use and with significant energy consumption. A list of products to be added to the ENERGY STAR program will be developed as part of an annual planning process with the goal of doubling the annual addition of products from the current level, based on the availability of resources.
 - **Up-to-date and More Stringent Specifications.** Measures (as appropriate for the different types of products covered in the program) will be implemented, in accordance with applicable procedures for stakeholder notice and comments and international agreements, to ensure that ENERGY STAR specifications are tightened as necessary for ENERGY STAR to consistently represent top performing products.
 - Product shipment data for ENERGY STAR qualifying products will be collected from manufacturers and analyzed on an annual basis to determine which specifications warrant updating.

- For product categories with longer-lived product models (e.g. heating and cooling, home appliances), specifications will be reviewed for a possible revision at a minimum of every three years or once the market share for ENERGY STAR qualifying products reaches about 35%.
 - For product categories with rapidly evolving product models (e.g., consumer electronics, office equipment), specifications will be updated about every two years, including the use of out-year criteria that anticipate improving energy efficiency performance based on market trends.
 - For product categories with large variations in product size (with impacts on energy use), overall limits for energy use may be incorporated into ENERGY STAR specifications.
- Verification of ENERGY STAR Qualifying Products. Verification of ENERGY STAR qualifying products will be enhanced in two ways:
 - All products will be required to be tested in an accredited laboratory and qualifying product information be submitted to the government before the product can be qualified as ENERGY STAR.
 - Enhanced “off-the-shelf” product testing will be instituted across the full suite of ENERGY STAR covered product categories through a combination of EPA/DOE testing, manufacturer funded/EPA-DOE administered testing, or other third party testing.
- Product-specific performance improvement programs. Product-specific installation and maintenance programs (e.g. ENERGY STAR Quality Installation of HVAC equipment) will be developed and expanded where necessary to pursue the full energy savings potential of the ENERGY STAR qualifying products.
- Additional Technical Work on Testing Procedures. The ENERGY STAR program will also be enhanced by drawing upon additional research commissioned to review and improve existing test procedures for energy use and other performance requirements as well as other performance related issues, in accordance with applicable procedures for stakeholder notice and comments.
- Program planning. Recommendations on key program elements and resource needs will be part of the annual program plan, or identified as needed, and will be made to the Governing Council for approval and concurrence.
- Agency Roles and Responsibilities.
 - EPA will be the brand manager of the ENERGY STAR products program consistent with the program design. These brand management responsibilities include marketing, education and outreach, partner relationships, program integrity functions (e.g., logo use and monitoring), and specification development.

- EPA will establish the performance levels for the ENERGY STAR for products programs, with technical support provided by DOE. Building on the skills and knowledge acquired through its statutory responsibilities in setting standards for certain energy-using products, DOE will provide technical support in the areas of test procedure and metric development, review, and improvement as well as product testing and verification. DOE will lead the development of testing procedures and metrics, with assistance from EPA where necessary.
- EPA will maintain a database of product testing results, with support from DOE as agreed to by the Agencies.
- EPA will develop a list of products to be added to the ENERGY STAR program each year, in consultation with DOE.
- Recommendations on key program elements and resource needs will be part of the annual program plan, or identified as needed, and will be made to the Governing Council for approval and concurrence.

ENERGY STAR “Super Star” Program

- Program Design. The Super Star program will promote a “top-tier” of energy efficient products in a given category; it will cover approximately 5% of products in a given category and will, when appropriate, be supportive of products that have a longer payback period than those products under the main ENERGY STAR logo.
 - The Super Star program will promote advanced technologies to drive market acceptance of these “top-tier” efficient products and technologies.
 - These advanced products and technologies will meet consumer needs for performance, cost effectiveness, and additional environmental benefits, as appropriate to effectively target a meaningful segment of the broad consumer market
 - The need and opportunity for incentives linked to these “top-tier” products will be assessed and pursued as appropriate, and as permitted under law.
 - In terms of labeling and brand identity, the Super Star program will be “nested” within the ENERGY STAR program. A marketing and brand analysis will be undertaken to provide the most effective options.
 - Efforts will also be developed through a process consistent with this MOU, to explore and advance products and technologies that are likely candidates for the ENERGY STAR / Super Star program that may with some additional assistance meet the criteria for these programs.
 - Recommendations on key program elements and resource needs will be part of the annual program plan, or identified as needed, and will be made to the Governing Council for concurrence.
- Agency Roles and Responsibilities
 - Super Star will be nested within the existing ENERGY STAR program, and EPA will be the brand manager of the effort. These brand management responsibilities include marketing, education and outreach, partner relationships, program

integrity functions (e.g., logo use and monitoring), and specification development.

- EPA will determine performance levels for products to qualify for the ENERGY STAR logo, with support from DOE. Building on the skills and knowledge acquired through its statutory responsibilities in setting standards for certain energy-using products, and its role in developing and deploying cutting edge technologies, DOE will provide technical support to Super Star in the areas of test procedure and metric development, review, and improvement as well as product testing and verification. DOE will lead the development of testing procedures and metrics, with assistance from EPA where necessary.
- EPA will maintain a database of product testing results, with support from DOE as agreed to by the Agencies.
- EPA will develop a list of products to be added to the ENERGY Super Star program, in consultation with DOE.
- Recommendations on key program elements and resource needs will part of the annual program plan or as needed and will be made to the Governing Council for concurrence.

Coordination Mechanisms

- EPA and DOE shall coordinate on communication of enhancements to the ENERGY STAR Program so as to ensure stakeholders have sufficient time to comment on and to adopt these enhancements.
- EPA and DOE shall jointly commission a marketing analysis to assess the market position of the ENERGY STAR brand and assist in design of the Super Star program.
- An annual planning meeting between key Agency staff shall be held to review priorities and establish annual work plans with regard to the ENERGY STAR program and the Super Star program.
- Quarterly progress updates shall be delivered to the Governing Council.
- EPA will provide support and cooperation through the ENERGY STAR program to DOE enforcement efforts under the Federal minimum energy efficiency standards for appliances, as appropriate.

IV. Specifics on National Building Rating Program

The specifics of the enhanced program, roles and responsibilities and coordination mechanisms are provided below for the National Building Rating program.

- Program Design. The National Building Rating program will provide guidance for building energy retrofits based on state-of-the-art cost and performance data and a national, comprehensive energy efficiency rating system for both residential and commercial buildings.
 - The program's rating system will address the building's physical characteristics (the "asset measurement") and past energy performance (the "operational measurement") as well as its performance relative to other similar buildings

(“benchmarking”). These measurements build upon existing tools, including EPA’s commercial and residential building benchmarking tools.

- The program will use a labeling scheme that conveys building energy use information from the rating system to residential and commercial building owners, energy managers, purchasers and other stakeholders
- The program will provide information on specific, actionable and cost-effective energy retrofit measures for residential and commercial buildings to owners, energy managers and purchasers. These measures will be based on a comprehensive energy model of the building’s physical characteristics.
- The program will support continuous improvement of building energy-efficiency by enabling tracking of costs and impacts of energy-efficiency improvements in residential and commercial buildings, including work funded by the DOE Weatherization Assistance Program (WAP), State Energy Program (SEP), and the Energy Efficiency and Conservation Block Grant (EECBG) Program programs.
- Program Enhancements. The program will be developed and enhanced as follows:
 - A new database will be developed on baseline energy-use and implemented retrofits for residential and commercial buildings receiving Recovery Act funding. This database will be developed to be maximally compatible, to the extent practicable, with EPA’s existing datasets, and the energy-related information of the datasets integrated into one master dataset.
 - A database of retrofit measure impacts and costs will be expanded, and methodologies for evaluating new and existing retrofit technologies will be upgraded, building upon ongoing DOE research in building science as well as the results of field installation of these measures. Retrofit measure effectiveness will be refined through analysis of the master buildings dataset discussed above. As new technologies and analytical methods become available, these databases will be updated accordingly.
 - Free, online software tools (web applications) will be made available to enable various user groups to analyze whole-building energy use, taking into account contributions from envelope, major equipment, appliances and past performance. These tools will generate recommendations for specific, actionable retrofit measures based on information in the retrofit databases discussed above. These tools will target several different user groups, with appropriate levels of sophistication and access rights.
 - A labeling scheme will be developed to convey the building rating information.
 - Certification standards and training programs for home contractors and other home improvement professionals will be developed, maintained, and improved, building upon industry efforts and EPA and DOE program experience.
 - Auditing programs will be developed to ensure recommendations arising from the National Building Rating Tool are undertaken well.
 - A variety of efforts will be undertaken to improve the availability of energy billing data and to more broadly promote building retrofits beyond those buildings receiving assistance through Recovery Act funding.

- The most energy efficient buildings, based on the rating systems of the National Building Rating Program, may be eligible to be recognized with the ENERGY STAR logo. The criteria for the ENERGY STAR logo will be updated periodically to reflect improvements in building energy efficiency and based on established program principles for the ENERGY STAR brand.
- Agency Roles and Responsibilities
 - DOE will collect information on all commercial buildings receiving energy-efficiency retrofit funding under SEP and EECBG Program and residential buildings receiving weatherization assistance under the WAP program, including energy consumption data and basic building information.
 - DOE will maintain and continuously upgrade data on the cost and performance of building equipment and retrofit measures, drawing on EPA data sets when appropriate. This will include regionally adjusted actual costs.
 - DOE will develop, validate, and update software tools for both asset rating and benchmark ratings, in consultation with EPA based on EPA's substantive experience in building benchmarking and to ensure consistency across the tools, as appropriate. These tools will provide information to owners on whole-building comparative energy use, and additionally provide decision assistance about retrofits. DOE will maintain all relevant databases used by the software tools and develop data sharing mechanisms with EPA.
 - DOE and EPA will assess options for improving the implementation of key building practices and technologies as part of improving building rating systems and promoting improved building practices through appropriate mechanisms of each agency.
 - DOE will develop training and certification programs for certifying energy auditors (including building inspectors) in the use of DOE energy audit software.
 - DOE will oversee an audit program to ensure appropriate use of the building rating tools and recommendations.
 - DOE, in collaboration with EPA, will develop certification criteria, training programs, retrofit guidance documents and manuals, and certification programs for contractors delivering whole building performance upgrades, and quality assurance / quality control requirements for assessing the quality of contractor retrofit work.
 - DOE and EPA will maintain and make publicly accessible a list of Federal financial incentives for home retrofits as well as information to help make claiming them easy. DOE and EPA will also promote the use of other retrofit incentives such as those from utility programs, cap and trade program allowances, and state and local tax credits.
 - DOE and EPA will promote the programs outlined in this section.
 - DOE, in conjunction with its Recovery Act programs and consistent with all applicable law, will work with utilities to encourage a common data format for reporting utility bills and a method for easily downloading billing data into software that will benchmark individual buildings and validate models run to

estimate a building's energy use. DOE will coordinate with EPA on methods using utility data in Portfolio Manager.

- EPA will establish the performance levels for the ENERGY STAR when applied to buildings, with technical input provided by DOE and its National Building Rating Program, consistent with established principles for the program.
- EPA will periodically evaluate and as appropriate modify its ENERGY STAR program and other outreach, recognition, and certification efforts, to ensure that they are not only consistent with, but supportive of, the National Building Rating Program, as outlined in this document.
- Recommendations on key program elements and resource needs will part of the annual program plan, or identified as needed, and will be made to the Governing Council for approval and concurrence.

Coordination Mechanisms

- EPA and DOE shall coordinate on communication of enhancements to the National Building Rating Program so as to ensure stakeholders have sufficient time to comment on and to adopt these enhancements.
- An annual planning meeting between key Agency staff shall be held to review priorities and establish annual work plans with regard to the National Building Rating Program.
- Quarterly progress updates shall be delivered to the Governing Council.
- DOE and EPA will periodically evaluate and as appropriate modify program efforts to ensure that the ENERGY STAR and National Building Rating programs are mutually reinforcing and coordinated

V. Transition of Activities Between Agencies.

The implementation of this agreement will lead to the transition of certain activities between the Agencies. The specific activities and timing will be detailed through the development of annual work plans by the Agencies and reviewed by the Governing Council.

VI. LIMITATIONS

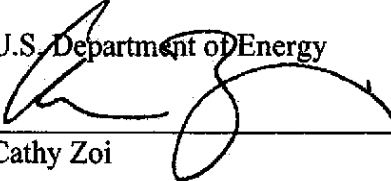
- A. All commitments made in this MOU are subject to the availability of appropriated funds and each Agency's budget priorities. Nothing in this MOU, in and of itself, obligates DOE or EPA to expend appropriations or to enter into any contract, assistance agreement, interagency agreement, or other financial obligation.
- B. This MOU is neither a fiscal nor a funds obligation document. Any endeavor involving reimbursement or contribution of funds between the parties to this MOU will be handled in accordance with applicable laws, regulations, and procedures, and will be subject to separate subsidiary agreements that will be effected in writing by representatives of both parties. Nothing in this MOU authorizes or is intended to obligate the parties to expend, exchange, or reimburse funds, services, or supplies, or transfer or receive anything of value.
- C. This MOU is strictly for internal management purposes for each of the parties. It is not legally enforceable and shall not be construed to create any legal obligation on the part of either party. This MOU shall not be construed to provide a private right or cause of action for or by any person or entity. This document does not create any right or benefit, substantive or procedural, enforceable by law or equity against DOE or EPA, their officers or employees, or any other person. This MOU does not direct or apply to any person outside DOE and EPA.
- D. This MOU in no way restricts either of the parties from participating in any activity with other public or private agencies, organizations or individuals.

VII. MODIFICATION/DURATION/TERMINATION

This MOU will be effective when signed by all parties. This MOU may be amended at any time by the mutual written consent of the parties. The parties will review this MOU every 5 years to determine whether it should be revised, renewed, or cancelled. This MOU may be terminated by either party at anytime by one party notifying the other party in writing 90 days in advance of the termination date.

VIII. APPROVAL

U.S. Department of Energy


Cathy Zoi

Date 9/30/2009

U.S. Environmental Protection Agency


Gina McCarthy

Date 9/30/2009