



US DEPARTMENT OF ENERGY  
OFFICE OF CODES AND STANDARDS

# Building Standards and Guidelines Program

## *1998 State Grant Summaries*



## **Table of Contents**

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Foreword . . . . .	iv
Summary . . . . .	v
American Samoa . . . . .	1
Arkansas . . . . .	3
California . . . . .	4
Colorado . . . . .	6
District of Columbia . . . . .	8
Florida . . . . .	9
Iowa . . . . .	10
Kansas . . . . .	11
Louisiana . . . . .	12
Maine . . . . .	13
Maryland . . . . .	14
Mississippi . . . . .	15
Nebraska . . . . .	16
New York . . . . .	17
Oklahoma . . . . .	18
Oregon . . . . .	19
Republic of Palau . . . . .	20
Rhode Island (Expand Rhode Island Energy Code Compliance and Enforcement) . . . . .	21
Rhode Island (The Northeast Building Energy Codes Project) . . . . .	22
South Carolina . . . . .	23

Utah .....	24
Washington .....	25
Wisconsin .....	26
1998 Incentive Grant Matrix .....	27

## Foreword

*This report is one in a series of documents describing activities in support of the U.S. Department of Energy (DOE) Building Standards and Guidelines Program (the Program.) The Pacific Northwest National Laboratory (PNNL) provides technical support for the Program.*

*The primary issue addressed by the Program (and other programs at DOE) is that new commercial and residential buildings being designed, built and occupied do not use currently available, technically feasible, and economically justified technologies and practices to eliminate the wasteful use of energy. The Program seeks to advance the energy-conserving design and construction of buildings by promoting and assisting the development and implementation of energy efficient codes and standards that are technically feasible, economically justified and environmentally beneficial. These activities are required of DOE by Title III of the Energy Conservation and Production Act as amended by the Energy Policy Act of 1992 of 1992 (EPAAct).*

*The long-term goal of the Program is to make sustainable, energy-efficient building design and construction common place.*

*The Program's approach to meeting this goal is to initiate and manage individual research, standards and guidelines development efforts that are planned and conducted in cooperation with representatives from throughout the buildings community. Current projects involve practicing architects and engineers, professional societies and code organizations, industry representatives, and researchers from the private sector and national laboratories. Research results and the technical justification for standards criteria are provided to standards development and model code organizations and to federal, state, and local jurisdictions as a basis to update their codes and standards. This approach helps to ensure that the standards incorporate the latest research results to achieve maximum energy savings in new buildings, yet remain responsive to the needs of the affected professions, organizations and jurisdictions. It also assists in the implementation, deployment, and use of the codes and standards.*

*The Program works in cooperation with DOE's "Energy Partnerships for a Strong Economy," which is an innovative approach to environmental quality and economic growth designed to leverage Federal dollars through partnerships with private industry. These activities do not duplicate, but rather complement, existing Federal and State programs and accelerate their benefits. Located under the umbrella of "Energy Partnerships for a Strong Economy," Action 10 of the Climate Change Action Plan, Update State Building Codes, builds on Section 101 of the EPAAct to further address the use and enforcement of building energy codes. Under Section 101, States are required to update their commercial building energy codes to meet or exceed the American Society of Heating, Refrigerating and Air Conditioning Engineers/Illuminating Engineers Society (ASHRAE) Standard 90.1-1989 and to consider whether to update their residential codes to meet or exceed the 1993 Model Energy Code. DOE is required to provide technical assistance and incentive funding to States to respond to the legislative requirements of EPAAct.*

## Summary

*This document contains summaries of Building Standards and Guidelines Program incentive grants for FY 1998. The summaries provide background information on the status of the state code, outline state project descriptions, cost data, partners, transferability to other states, and value of the incentive grants to the Building Standards and Guidelines Program. The funding will help develop codes where they do not exist, and strengthen existing building codes. In addition, the assistance will help enable builders, states and consumers to make buildings more efficient and cost effective.*

*During FY 1998, 22 states and territories received grants totaling approximately \$4 million to update and implement the energy efficiency provision of their building codes. The grants were awarded on a competitive, cost shared basis. Some of the states have existing energy codes but need additional support to expand or enhance their code to equal or exceed the 1993 Model Energy Code and Standard 90.1-1989.*

*The Model Energy Code is an energy performance standard for low-rise residential buildings and the ASHRAE/IES Standard 90.1-1989 is an energy performance standard for commercial and multi-family high-rise buildings. The Model Energy Code and Standard 90.1-1989 are benchmark residential and commercial standards under the Energy Policy Act of 1992.*

## Background

Currently, American Samoa utilizes the 1964 Uniform Building Code (UBC) as minimum construction requirements for commercial buildings. Legislation to adopt the 1994 UBC has been introduced and tabled twice in the past year for language modifications. The next time the legislation can be introduced is July 1998. The American Samoa Department of Public Works believes that the 1994 UBC update will be adopted at that time. The Building Energy Code (BEC) will be introduced to the legislation after the 1994 UBC is adopted.

## Purpose

The proposal seeks funding for the incremental costs to demonstrate to target groups how the BEC process will work from building conception through building occupancy. The objective of the project is to gain support of, and familiarize building construction stakeholders with the American Samoa BEC and the design, plan review, bidding, construction, and inspection processes necessary to ensure the end product is constructed as planned. This project intends to demonstrate that the process is relatively straightforward and will not burden a project with regulatory delays, complicated formulas, and required construction materials that drive up costs.

## Project Description

- Form a project committee initiated by the Territorial Energy Office (TEO) to oversee the project comprised of the American Samoa Power Authority, the Department of Public Works, the Contractor's Association, the building owner, and the building contractor. The committee will be responsible for developing the guidelines used in the BEC process, coordinating plan review and inspector basic training, developing tour schedules and soliciting guests, and identifying and reconciling

potential problems with the BEC process.

- Select an appropriate building that is already in the conceptual stage but where design work has not started.
- Committee will work with the building owner on design and selection of materials utilizing the proposed American Samoa Building Energy Code. The use of alternative materials will be encouraged and analyzed for cost effectiveness. Final design will be computer modeled using DOE2 and compared to the base case used in the American Samoa Building Energy Code Impact Analysis and Life Cycle Cost Analysis.
- Identify specific needs of the Public Works Department to ensure simple, accurate and thorough plan review. This will entail developing a BEC compliance report that is submitted with the owner's blueprints and a plan check procedure to ensure the BEC compliance report is accurate.
- When the building is completed, mechanical systems will be commissioned to ensure proper operation at the specified performance.
- Energy consumption will be monitored and collected for six months through instrumentation installed during construction. Sufficient data will be collected on the energy consumption and building performance to compare to the base case studies that were performed over the past two years. A report will also be developed that will include a project journal, collected building energy data and analysis and a project success analysis, including plans for future needs to ensure a substantial program when the BEC is finally adopted.

## **Cost Data**

Federal	\$ 95,800
Local	\$ 35,991
Total	\$131,791

## **Transferability**

This project will lend itself to excellent technical transfer opportunities in that a final report will be developed, complete with photographs and actual consumption data compared to the computer base case data. The report can be made available on diskette for easy transfer to interested entities. For states and territories with limited resources like American Samoa, the report from this demonstration project can be used to foster interest in their own region.

## Background

In Arkansas, the state developed residential code is based on the 1992 Model Energy Code, and is mandatory statewide. The commercial energy code is ASHRAE/IES 90.1, which is mandatory statewide. The Arkansas Energy Office was awarded a DOE FY 1996 Special Projects grant to assist with implementation of the Code. Thus far this project has been relatively successful as measured by the increase in compliance. However, the Arkansas Energy Office believes that its implementation strategy can be improved with refined approaches for quantifying and communicating the value of building energy efficiency.

## Purpose

The Arkansas Energy Office desires to building on current code implementation activities with an information/training initiative to develop, produce, and distribute two new compliance publications: a comprehensive Arkansas Builder's Guide to Energy Efficient Homes and fact sheets designed to convey information about the economic impact of code implementation on local communities.

## Project Description

Arkansas proposes to do the following:

- Prepare and publish fact sheets to show the economic impact of code implementation in each local jurisdiction. A fact sheet of common format would be produced for each community based on building, climate, and economic data specific to that community.
- Develop, produce, and distribute the Arkansas Builder's Guide to Energy Efficient Homes, which will serve as a builder and inspector training manual.
- The AEO will prepare, coordinate and conduct four builder/inspector training

workshops in order to disseminate the Builder's Guide.

- A fact sheet of common format would be produced for each community based on building, climate, and economic data specific to that community.

## Cost Data

Federal	\$ 63,000
State	\$ 21,000
Total	\$ 84,000

## Partners

Arkansas Energy Office  
Arkansas Home Builders Association  
Mortgage Bankers Association of Arkansas

## Transferability

The results of the proposed Arkansas projects are directly applicable to other states. In addition, the home building marketplace is in need of tools and information that will encourage improved building (energy) practices, product selection, and performance and stimulate energy related financing products (EEMs) and marketing approaches; and the Arkansas approach does not require huge resource commitments in order to develop or replicate tools and economic data products that would accomplish the same goals for other states.



(Multistate with Nevada)

## Background

The California Energy Commission energy code continues to be refined to minimize residential energy growth despite California's increasing population. The residential Standards have evolved from simple envelope prescriptions to sophisticated systems-analysis compliance pathways. The Commission's philosophy of flexibility, accessibility, and cost-effectiveness of the standards require thorough review and explanation of its energy code. This program is a continuation of the three-year builder training program previously funded by DOE with additions and extensions that improve and extend its effectiveness. The program provides training to production buildings in California and Nevada.

## Purpose

The objective of the training program is to raise the level of understanding and compliance with the state energy code (Model Energy Code or California Title 24), and achieve the program goal of measurably increasing the energy efficiency of new homes in California and Nevada.

An additional task includes determining the value of training to the insurance industry and providing technical assistance to other states. Under this task the Building Industry Institute (BII) is working with the insurance industry to develop value for the training program, such as reduced rates and increased insurance availability.

## Project Description

The builder training program includes:

- Review and critique current compliance documentation. Each builder will be asked to provide plans and documentation for two master plans (two model homes). The documentation is either California Title 24

forms or Model Energy Code systems analysis documentation or component performance calculations. This information will be reviewed and critiqued by an energy compliance analyst.

- Following the evaluation of compliance documentation, builders attend classroom training. The training will begin with approximately four hours of classroom training for builders' Vice President of Construction, purchasing agents and contracts personnel. The training will be expanded to include information on the work that is being done with the insurance industry to develop value for the training program (i.e., reduced rates and increased insurance availability) helping builders realize the economic value of the training and a section on the DOE and EPA Energy Star Home program.
- Following the classroom session, on-site training of field superintendents is performed. The instructors go with the builders to their own construction sites and examine the homes under construction. Often, subcontractors and purchasing personnel attend the on-site session.
- Approximately six months after the training sessions, another trip will be used to go back to builders that have been through classroom and on-site training. This training is used to measure and evaluate the effectiveness of the training.

## Cost Data

Federal	\$400,000
State	\$103,020
Total	\$503,020

## Partners

California Energy Commission  
Building Industry Institute

## **Transferability**

Because the training program was developed for both California and Nevada, it is quickly exportable to other states. Within the scope of this grant, California will evaluate this program to determine its most effective components and how they can be adapted to other states. It will also learn how this type of program overcomes market barriers and transforms the market.

## Background

Since 1995, Energy Rated Homes of Colorado (ERHC) has developed a network of local area "E-Star Industry Operating/Support Committees." These committees, already operating in each of the six regions targeted by the state's International Conference of Building Officials (ICBO) chapter for inclusion in this proposal, are modeled on the statewide Energy Rated Homes of Colorado Industry Operating/Support Committee. Each committee is co-chaired by representatives of the Board of Realtors and the Colorado Mortgage Lenders Association and includes development, HBA, utility and other representatives. This project will utilize the existing network to build support for local code officials desiring to implement the permit-fee-reduction code option.

## Purpose

The Colorado Chapter of the International Conference of Building Officials (ICBO) and Energy Rated Homes of Colorado (ERHC), a program of the Colorado Housing and Finance Authority, in cooperation with the Colorado Office of Energy Conservation (OEC), propose to jointly implement a statewide effort to promote the adoption at the local level of voluntary per-fee-reduction "code options." These options will encourage, through the use of incentives, the construction of Model Energy Code equivalent or better building practices in Colorado.

## Project Description

Colorado proposes to do the following:

- Develop overall project marketing strategy, technical issues development, and code option presentation materials to showcase the Ft. Collins program and linkages to energy mortgage benefits to local officials at six regional meetings.
- Communicate to all Colorado chapter ICBO member jurisdictions the scope of the project

through statewide chapter meetings, mailings and personnel contact with jurisdiction's representatives.

- Contact key regional building official personnel in six regions to initiate planning for regional education/information sharing sessions.
- Hold six regional sessions. Identify jurisdictions interested in pursuing the code option.
- Succeed in getting those building jurisdictions with the greatest volume of residential construction taking place, to adopt incentive based per-fee-reduction code options.
- Develop information presentations and prepare relevant materials in support of interested jurisdictions.
- Develop model ordinance language and/or transfer language from existing participating jurisdictions.
- Facilitate various market partnerships with E-Star industry partners at the local level who can help the local jurisdiction's process by introducing a variety of energy mortgage incentives as a means of supporting and enhancing the local jurisdiction's code option process.
- Support the adoption of the code option in county or city council deliberations through direct expert testimony or in other required ways in specific jurisdictions.
- Assist jurisdictions in recruiting builders to utilize the code option through the provision of marketing material design support to the participating jurisdictions for builder information brochures and other marketing materials needed to inform the builder and encourage voluntary builder participation.

- Work with E-Star local HBA partners to enlist their support in educating their members on the availability and benefits of utilizing the energy rating and code option.

### **Cost Data**

Federal	\$276,000
Other	\$ 69,000
Total	\$345,020

### **Partners**

Energy Rated Homes of Colorado  
Energy Star Training Partnerships  
Colorado Mortgage Lenders Association  
Colorado Chapter of the Appraisal Institute  
Colorado Association of Realtors  
Colorado Real Estate Commission  
Colorado Association of Homebuilders  
Metropolitan-Denver Home Builder's Association

### **Transferability**

The materials developed by ERHC, the ICBO chapter and consultants will be made available to benefit other states, particularly those states developing and wishing to support voluntary "code option" implementation at the local level. The code option adoption documentation will be available to assist other states in their process should they choose to emulate this project in their state.

## Background

The 1998 DC Building Codes, under DC law 6-216 adopts both 1995 CABO MEC and ASHRAE 90.1-1989 as the model energy standards as part of its building compliance and enforcement mandate, for which all commercial and 1-2 family residential buildings will have to meet.

## Purpose

The goal of this project is proliferate implementation of the 1995 CABO/MEC (1993) and ASHRAE 90.1 Standards as the DC Energy Codes Supplement to the new 1998 DC Building Codes and to provide comprehensive technical assistance. An additional objective is to coordinate and conduct builder and stakeholder training in partnership with neighboring and/or other states and stakeholder organizations, perform comprehensive outreach and advocacy, and update the DCMEC provisions of the DC Building Codes, under the existing updating provisions of DC Law 6-216.

## Project Description

The District of Columbia proposes to do the following:

- Contract with BOCA, Inc. to provide certification training in 1996 BOA Basic Codes and ASHRAE/IESNA 90.1/CABO 95 MEC.
- Conduct a series of five community-based training workshops and one-wrap-up

conference on building MEC compliance under 1998 DC Codes for builders, architects, stakeholders. Prepare, print, and disseminate energy information material.

- Procure ASHRAE-IESNA 90.1/CABO '95 training materials and codes reference handbooks for certification training participants.
- Contract with provider to develop, set-up and maintain a technical assistance hotline for builders, etc., on building science and code compliance.

## Cost Data

Federal	\$ 20,000
State	\$ 8,429
Total	\$ 28,429

## Partners

Building and Land Regulation Administration  
DC Building Codes Advisory Committee  
DC Building Industry Association

## Transferability

The District of Columbia proposes to develop effective inter-jurisdictional partnerships and delivery networks within the District of Columbia and with neighboring building code official associations and Northern Virginia and Maryland, etc., regarding training and technology transfer initiatives.

## Background

Florida adopted ASHRAE 90.1 as its Code standard in 1994 and implemented a computer program based on the Systems Performance Method of that standard and utilizing the ASEAM computer program to perform an annual energy analysis. Although more capable of modeling most of the energy-consuming systems of large commercial buildings than national code compliance programs, use of this DOS-based program has frustrated the design engineers and architects doing business in Florida. Consequently, the Florida Department of Community Affairs asked the Florida Solar Energy Center to redevelop the program using DOE2.1E as the engine in a Windows® format. That effort has progressed but has been frustrated by the need for more resources to complete it.

## Purpose

The goal of this proposal is to improve commercial building energy-efficiency in Florida through code-based mechanisms, including the administrative adoption process.

## Project Description

Florida proposes to do the following:

- Create hierarchal building and system input that will alleviate user burden.
- Create Windows based graphical user interface using the latest available tools and technology to allow users to interact with the software using both applications.
- Maintain an extensive set of building, envelop, systems, spec load, lighting, utility cost libraries that cover most user needs not only for the state of Florida but with built-in ability to include other states.

- Provide both pre-built and user-buildable systems that will more realistically represent actuality to arm the user with the tools to

define a wide spectrum of existing and evolving HVAC systems.

- Create a database oriented storage and retrieval that will facilitate audits, statistical analyses and quickly provide feedback to users.

## Cost Data

Federal	\$100,000
State	\$ 25,000
Total	\$125,000

## Partners

Florida Department of Community Affairs  
Florida Solar Energy Center

**Background**

Iowa's residential energy code is the 1992 Model Energy Code, which is mandatory statewide. The commercial energy code is ASHRAE/IES 90.1, which is mandatory statewide.

**Purpose**

This project is designed to develop localized, Iowa specific workbooks and training manuals for local building officials addressing the importance and functional components of Iowa's building energy codes. The project will deliver targeted training sessions, ranging from group workshops to one-on-one to local building officials who are responsible for enforcing Iowa's building energy codes. The goal of the project is to move the market to building more energy efficient homes.

**Project Description**

Iowa proposes to do the following:

- Research existing marketing tools that can be used to help home builders construct and sell energy efficient homes. These tools include: the DOE MECcheck computer program; the U.S. EPA Energy Star Program with Homecalc computer program; the Iowa Home Energy Rating System (HERS); MidAmerican Energy Company and other utility rebate programs for energy efficient homes, Energy Efficient Building Association (EEBA) materials, etc.
- Establish an Advisory Committee to provide guidance to develop marketing tools for builders. The development of new marketing tools may include:
  - Summary of existing marketing tools showing how builders can best use these tools
  - Presentation materials for home builder workshops
  - Information on financing programs such as energy efficient mortgages (EEMs),

rebates and other financing incentives available for energy efficient homes

- Information on average payback periods for energy efficiency measures
- Handout brochures that could be used at home shows and other promotions
- New releases/public service announcements about buying energy efficient homes.
- Promote marketing tools to builders through one-on-one training, workshops, and through builder allies and associations.
- Establish a pilot test study with the Home Builders Association of Greater Des Moines to evaluate these marketing tools, builder training, and the use of these tools in marketing energy efficient homes.

**Cost Data**

Federal	\$ 50,000
Other	\$ 12,500
Total	\$ 62,500

**Partners**

Home Builders Association of Greater Des Moines  
Energy Rated Homes of Iowa  
Energy Efficient Building Association  
Mid American Energy  
U.S. EPA

**Transferability**

Marketing tools developed from the Iowa study may be replicated by other states without building energy efficiency training programs and/or states having problems educating builders about building energy codes.

## Background

Compliance with the Model Energy Code (MEC) 1993 and ASHRAE Standard 90.1-1989 (Standard 90.1) are required by law in Kansas as a result of 1997 legislative action. The Kansas Corporation Commission (KCC) initiated a residential and commercial building energy standards training program in 1996 with State Energy Conservation Program funds. This program, upgrade to reflect requirements of legislation and lessons learned from the 1996 effort, has continued with funding from the U.S. Department of Energy's (DOE) FY 1997 Codes and Standards Special Projects initiative.

## Purpose

The purpose of the grant is as follows: 1) achieve maximum cost effective building construction for residential and commercial buildings; 2) inform the Kansas residential and commercial building community of the legal status of standards; 3) maximize the consumer benefit of adoption of the Kansas building energy efficiency statute; 4) remove barriers to adopting cost effective building practices and code implementation; and 5) promote the design construction and financing options that go beyond basic compliance.

## Project Description

Kansas proposes to do the following:

- Continue distribution of new home buyer educational brochure.
- Conduct additional Model Energy Code compliance training workshops for builders.
- Conduct more foundation insulation workshops for builders and distribute training materials.
- Promote the use of HERS as an alternative

strategy for determining compliance with the MEC and provide access to energy efficient mortgages.

- Assess code compliance of new residential construction.
- Refine and deliver additional Standard 90.1 training for architects and engineers.
- Assess Standard 90.1 compliance of new commercial buildings by evaluating actual energy performance.
- Develop case studies of commercial buildings to encourage the use of the energy cost budget method of compliance and greater energy efficiency than required by Standard 90.1.

## Cost Data

Federal	\$259,000
State	\$106,422
Total	\$356,422

## Partners

Kansas Corporation Commission  
Kansas State University Engineering Extension  
Coriolis  
Kansas Building Science Institute

## Transferability

The foundation insulation training workshop portion of the grant will provide Midwestern home builders with a better level of technical understanding of available residential foundation materials, methods and their costs and benefits. Since resistance to foundation insulation is a regional issue, workshop promotion will be expanded through state energy offices in Nebraska, Oklahoma, Missouri, Colorado and Iowa.



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## Background

In 1997, the Commercial Building Energy Conservation Code (ASHRAE/IES 90.1) was adopted for all commercial and multi-family residential construction greater than three stories. The 1995 MEC was adopted for all multi-family construction of three stories or less.

## Purpose

To lay the groundwork and build support for the inclusion of energy provisions in Louisiana's residential building code with the impending automatic adoption of the IBC Standard Building Code.

## Project Description

Louisiana proposes to do the following:

- Build support among Louisiana code officials and encourage local adoption. Under this task, an additional 32 residential building inspection/permitting departments and parish and municipal governing bodies will be contacted and encouraged to adopt the Model Energy Code.
- Build support among and provide 1995 MEC training for Louisiana shelter industry professionals. Louisiana will conduct a minimum of two, half-day workshops in 1995 CABO MEC and MECcheck per year. These workshops will be for home builders and single-family residential design professionals.
- Build support among and provide Model Energy Code exposure for Louisiana home owners and home buyers. Louisiana will: conduct a minimum of eight, one-hour workshops for consumers in energy efficient residential construction; conduct a minimum of eight, half-hour subject-specific workshops for consumers on various topics related to energy efficient home design and related indoor air quality; and maintain an in-state, toll-free hotline for persons seeking

information on energy efficient residential construction and the Model Energy Code.

## Cost Data

Federal:	\$129,000
State:	\$ 43,000
Total:	\$172,000

## Partners

Louisiana Department of Natural Resources

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## Background

In Maine, there is a state developed code that does not meet the 1992 Model Energy Code, which is mandatory statewide. The commercial energy code is ASHRAE/IES 90.1, which is mandatory statewide.

## Purpose

The goal of the project is to raise the current energy conservation practices in residential and commercial construction to meet MEC 1993 or higher standards. This will be accomplished through the support of private sector delivery of high standard building design and construction services, guided by a new model energy code.

## Project Description

Maine proposes to do the following:

- Phase one will require the preparation of a program plan for state support for the development of private sector infrastructure and capacity to put into practice higher building energy standards. The plan will identify training needs, outline an education program, consider the promotion of the

model code for adoption/use by contractors, etc. Phase two will involve implementation of a program.

- Promote and support private sector use of higher energy conservation standards and practices, based on a State model code.
- Conduct information/educational outreach sessions to provide information and listening opportunities for design engineers, architects, builders and others on new code developments, and appropriate standards for Maine.

## Cost Data

Federal	\$100,000
State	\$ 25,000
Total	\$125,000

## Partners

Maine Department of Economic and Community Development

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## Background

The State of Maryland has made significant strides in its efforts to develop a statewide energy code. In 1993, a basic building code, the Maryland Building Performance Standards Act, (MBPS) was passed by the legislature. In order to insure compliance with EPACK, the Maryland Department of Housing and Community Development (DHCD) updated the Energy Conservation Building Standards Act to reference the 1995 CABO Model Energy Code. In addition, the MBPS legislation required DHCD to establish a computer data base system that would include the latest edition of the BOCA National Building Code.

## Purpose

The goal of this project is to continue to work toward a statewide comprehensive codes training program for home builders, contractors, architects, engineers, codes inspectors, and other professionals who might benefit from such training.

## Project Description

Maryland proposes to do the following:

- Expand the existing training effort so that it is conveniently available to all interested

individuals on a statewide basis.

- Continue to coordinate this training program with other already established training programs offered by the Codes Administration in order to achieve a high degree of efficiency among programs. Special attention will be paid to coordinating training programs with the Maryland Building Officials Association.
- Continue to develop and conduct energy code certification examinations.
- Continue to incorporate the instructional system, which can be implemented through the community college system and vocational schools to provide training on a regional basis.

## Cost Data

Federal	\$100,000
Applicant	\$ 5,000
State	\$ 34,000
Other	\$ 5,000
Total	\$144,000

(Multi-State with Alabama, Georgia, Kentucky, Mississippi, North Carolina and Texas)

## Background

In 1997, the Southern State Energy Board (SEEB) launched a Residential Energy Efficiency Project. The purpose of the project is to draw on the experiences and strengths of the southern state energy offices to improve the delivery of building energy code programs and to influence emerging national/international building code developments which will ensure considerations of the Southern region are addressed.

## Purpose

The Mississippi Department of Economic and Community Development (MDECD) proposes to facilitate through its partners, a regional training and technical assistance program aimed at improving the energy efficiency of new homes in Alabama, Georgia, Kentucky, Mississippi, North Carolina, South Carolina and Texas and develop support region wide for building energy code adoption and implementation.

## Project Description

Mississippi proposes to do the following:

- Evaluate past Model Energy Code training that has taken place in Alabama, Georgia, Kentucky, North Carolina and South Carolina.
- Develop training materials for builders, lenders, real estate agents, trade allies and consumers on the benefits of the Model Energy Code and the market demand for homes that are energy efficient in Mississippi and Texas.

- Conduct a minimum of two training sessions to housing industry stakeholders in Mississippi and Texas.

## Cost Data

Federal	\$100,000
State	\$ 40,000
Other	\$ 25,000
Total	\$165,000

## Partners

Mississippi Department of Economic and Community Development - Energy Division  
Southern States Energy Board  
Residential Energy Services Network  
Energy Rated Homes of Mississippi  
Southface Energy Institute

## Transferability

The project will assist the southern region with its dynamic housing markets and its similar climate in implementing and adopting residential building energy codes that meet or exceed the Model Energy Code 1993. By coordinating the seven state activities, the project will broaden the resource and public support available to upgrade existing building energy codes and improve implementation. The training materials and implementation strategies developed are immediately exportable to states with similar climates, political conditions, and dynamic housing markets.

## Background

In Nebraska, the residential energy code is ASHRAE 90A-1980 and 90B-1975, which are mandatory statewide. The commercial energy code is ASHRAE 90A-1980 and 90B-1975, which is mandatory statewide.

## Purpose

This proposed project will build on the initial success of Nebraska's 1997 Special Project grant. It will utilize funding incentives to increase the awareness of building standards exceeding the 1995 Model Energy Code and to incorporate these standards in the construction of new affordable housing units.

## Project Description

Nebraska proposes to do the following:

- Utilize low cost loans through private lenders to fund the incremental cost of construction to reduce housing unit energy consumption 30% below the 1995 MEC.
- Educate builders and developers through a market pull mechanism in which energy efficiency design features can lead to more energy efficient housing units that are more affordable.

- Revolve the funds to continue to provide low cost incremental financing.

## Cost Data

Federal	\$400,000
State	\$400,000
Other	\$ 5,000
Total	\$805,000

## Partners

Nebraska Department of Economic Development  
Nebraska Investment Finance Authority  
U.S. Department of Housing and Urban Development  
U.S. Department of Agriculture - Rural Development

## Transferability

The Nebraska Energy Office will demonstrate to other states how the market-pull mechanism can encourage the construction of housing units to exceed the 1995 MEC and accelerate the effective use of the MEC standards by the building industry. The Energy Office will provide technical assistance to other states desiring to establish a low cost financing program which will lead to the adoption of MEC standards in building practices.

(Multi-State with Massachusetts and Vermont)

## Background

Considerable momentum is building in New York State for improvements in energy codes. The New York State (NYS) Department of State is to report on a comparison of the current energy code to the Model Energy Code by November 15, 1998. The New York State Energy Research and Development Authority's (NYSERDA) technical analysis of alternate code standards, conducted with 1997 DOE grant funds, will be instrumental in New York's efforts to adopt improved energy codes.

## Purpose

This proposal provides for the development of a training and education program that allows for the incorporation of not just a single specific code standard, but to benchmark a number of code standards. In this way, the training provides the next steps to New York's code development process, unconstrained by the specific code changes that will occur, promotes energy efficiency and builder education, and creates a broad-base of support for an ongoing service to the state. In addition, the New York model could be replicated across the country.

## Project Description

New York proposes to do the following:

- Support the ongoing process of updating the current New York State Energy Code (Energy Code), drawing in significant non-Federal funds.
- Provide direct funding and contractual support to the New York State Department of State to improve energy code training for over 1,800 building code officials.
- Develop training and deliver over 40 additional code-based workshops to builders, designers and energy-efficiency organizations throughout the three-state region.
- Develop and provide 2 workshops on

building commissioning in commercial buildings.

- Provide the framework for an ongoing energy code upgrade process that focuses on more frequent, incremental advances rather than larger, more infrequent changes.
- Provide for the implementation and widespread demonstration of Energy Star standards in residential construction with the New York State Builders Association.
- Provide the framework for the development of a second tier of advanced energy standards for over 195 million square feet of New York facilities, to be implemented and evaluated on a pilot basis.
- Cost-effectively coordinate with and build upon the training, research and outreach efforts in Vermont and Massachusetts.

## Cost Data

Federal:	\$400,000
State:	\$ 35,000
Other:	\$375,000
Total:	\$810,000

## Partners

New York State Energy Research and Development Authority  
New York State Department of State  
New York State Builders Association  
New York State Building Officials Conference  
Governors Office of Regulatory Reform  
Northeast Energy Efficient Partnership (NEEP)

## Transferability

This training and implementation effort is intended as a pilot effort, to be sustained beyond the pilot phase through the support of the energy-efficiency and building industry. In cooperation with NEEP, NYSERDA plans to pursue the transferability of a building science training program, with flexible code benchmarks, throughout the region.

## Background

In Oklahoma, the residential energy code is the 1995 Model energy Code, which is mandatory for jurisdictions that do not adopt their own code and for state owned and leased facilities. The commercial energy code is ASHRAE/IES 90.1 for all state owned and leased facilities.

## Purpose

The goal of this proposal is to provide a measurable increase in the knowledge of the energy standards. Increased knowledge will result in consistent and effective application of energy codes. An extended curriculum on residential and nonresidential standards will be taught using teleconferencing and videotaping in addition to the standard presentations.

## Project Description

Oklahoma proposes to do the following:

- Provide two, three day seminars on a bi-monthly basis for building personnel that would cover the Oklahoma Statutes of standards for non-residential and residential buildings.
- Seek innovative and interactive ways to pursue training.
- Using a questionnaire/survey, information will be gathered from the various personnel selected regarding preliminary logistics information on the level of expertise of the group and local personnel's expectations.
- Collect and review all training materials developed by and for the committee on the most current energy efficiency codes to be

used, if appropriate, as the basis of developing new materials.

- Develop a schedule to coordinate training to minimize cost and travel time.
- Conduct training sessions approximately two time per month for approximately 24 months for residential and nonresidential curriculum.
- Prepare a final report on the outcome of the training.

## Cost Data

Federal:	\$100,000
State:	\$ 63,676
Total:	\$163,676

## Partners

Oklahoma Department of Commerce  
Division of Community Affairs and  
Development  
Oklahoma Association of Community Action  
Agencies  
Oklahoma Building Officials  
Oklahoma Home Builders Association

## Transferability

This training will be specific to Oklahoma's requirements on energy efficiency measures. The Model Energy code is used in other states. Energy code advantages differ from state to state, but all demonstrate how to save money by having an energy efficient residence, and how to increase profits in commercial buildings. On this basis, portions of the materials developed under this proposal can be modified and used in other states.

**Background**

Oregon has mandatory, state-developed residential and commercial building energy codes that meet or exceed the 1995 MEC and ASHRAE/IES 90.1.

**Purpose**

The goal of the project is to expand Oregon's fire, life and safety code compliance reviews of jurisdictions to include an automated and thorough energy code review. The project will also refine energy codes, code manuals and compliance forms, solve application problems and regionalize software to make the non-residential code easier to use.

**Project Description**

Oregon proposes to do the following:

- Increase code compliance by incorporating energy-code compliance reviews into routine Oregon Building Codes Division audits of local enforcement procedures.
- Incorporate Oregon's Simplified Trade-Off Approach to code compliance into Comcheck Plus, which will improve regional and national compliance flexibility and

reduce costs of maintaining state software packages.

- Maintain technical support and training necessary to keep the energy code relevant, responsive and easy to use for a changing building construction market.
- Identify the most compelling reasons why an owner, insurer, financier, manager, or tenant would want to ensure buildings are code-compliant and implement a promotion and education strategy based on those motivations to increase compliance.

**Cost Data**

Federal:	\$400,000
State:	\$100,000
Total:	\$500,000

**Transferability**

Moving toward a common regional or national energy-code compliance software will make it easier for designers and builders to comply with energy codes. Products resulting from the project will be shared and integrated with activities in Washington, Idaho and Montana through a regional planning initiative sponsored by the Northwest Energy Efficiency Alliance, a consortium of Northwest electric utilities.



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## **Background**

Palau is currently in the midst of a period of unprecedented growth, due to its becoming an independent nation several years ago. The cost to produce electric power in the Republic is variously estimated at between 20 and 25 cents per kilowatt hour (KWH), while it is being sold to consumers at rates of 9 to 12 cents per KWH. The Republic can no longer afford to subsidize electric power to that extent, and the electric utility is expected to increase rates to the cost of production over the next several years. Those increases will negatively impact the economy of each consumer of power, and implementation of an effective energy code will permit building owners and managers to reduce the cost of power.

## **Purpose**

The proposed project will develop an Energy Code for the Republic of Palau. It will use as a model the Energy Code recently developed for the Territories of Guam and American Samoa, which is based on ASHRAE Standard 90.2.

## **Project Description**

The Republic of Palau proposes to do the following:

- Conduct a meeting between the Energy Office staff, the consultants team, the electric utility, and the Ministry to discuss the goals, schedule and methodology of the project.
- Collect information and assemble databases on which to base and analyze the code.
- Produce a report that will identify the energy conservation measures and design strategies that will have the most impact on the Republic.
- Prepare a life-cycle cost analysis focusing on significant measures and design strategies previously identified.
- Develop a draft code for review by the project team members and the public based

on the results of the life cycle cost analysis and the savings opportunities analysis.

- Conduct a series of public meetings and hearings at appropriate stages during the development of the draft code, collect responses from attendees and others to whom the draft code would be distributed, and respond to those comments appropriately.
- Modify the draft code on the basis of the input received from the public and reviewers.
- Work with the legislature of the Republic to have the code adopted by legislation, and with the Public Works Department and the relevant state departments, once the code is modified to an acceptable format, to ensure its implementation and use.

## **Cost Data**

Federal:	\$ 63,800
Republic:	\$ 16,000
Total:	\$ 79,800

## **Partners**

Palau Energy Office  
Ministry of Resources and Development  
Public Works Department  
Public Utilities Commission

## **Transferability**

The proposed Palau Energy Code will be written in such a manner as to make it accessible to and useful for the public, building industry and government of the country. It will be applicable to many other small island communities and nations in the Pacific basin, such as the four states of the Federated States of Micronesia (Yap, Pohnpei, Chuuk, and Kosrae), as well as other English-language islands. It is intended that copies of the code will be disseminated to the governments of those islands for their consideration, possible modification and adoption.

Expand Rhode Island Energy Code  
Compliance and Enforcement

**Background**

In Rhode Island, the residential energy code is the 1995 Model Energy Code, which is mandatory statewide. The commercial energy code is ASHRAE/IES 90.1, which is mandatory statewide.

**Purpose**

The goal of the proposal is to localize energy code enforcement and to increase participation at the grass root level with the use of state-of-the-art technology. The proposal will provide funding for a pilot project for partners to provide computers in several Rhode Island cities , create a Code Enforcement web site and provide monthly technical training and support services.

**Project Description**

Rhode Island proposes to do the following:

- Provide desk top computer equipment to several cities and towns in Rhode Island, to be used by the Building Office, design professional and public. The equipment will be used to perform energy conservation analyses.
- Provide technical support to set-up and install all the associated software and

computer hardware. The software includes MECcheck, COMcheck-EZ and COMcheck Plus.

- Provide small classes in each city and town to teach all of the code compliance software packages, how to access WEB sites that are associated with energy and energy conservation and print relevant information.
- Create a tracking system to determine the number of people using the equipment and software in each of the locations.
- Create a demographic chart to determine the number of people using the equipment and software in each of the locations.
- Create a Rhode Island State Building Code Web site.

**Cost Data**

Federal:	\$ 80,000
State:	\$ 40,000
Total:	\$120,000

**Partners**

Rhode Island State Energy Office  
Rhode Island State Building Commission

## The Northeast Building Energy Codes Project (Multi-State with Connecticut, Delaware, Maine, Massachusetts, New Hampshire, New Jersey, New York and Vermont)

### Background

In Rhode Island, the residential energy code is the 1995 Model Energy Code, which is mandatory statewide. The commercial energy code is ASHRAE/IES 90.1, which is mandatory statewide.

In 1997, U.S. DOE awarded the Rhode Island Energy Office and the Northeast Energy Efficiency Partnership \$116,375 from FY 1997 SEP funding to undertake an initial regional project for a fifteen-month period with \$35,000 matching funds from NEEP's regional partners for a total budget of \$151,375. Several New England states and the State of New York were proposed initial focus for these activities.

### Purpose

The goal of this project is to expand effort from the FY 1997 grant to include participation in additional activities to assist the evolution of the Multi-State Commercial Code project to meet Northeast states' needs and interests, and (2) an overall expanded level of effort to meet the project objectives. This proposal also requests funding for continuing the regional project in 1999 and the first six months of 2000. The focus of these continuing activities is to continue the work towards the overall project goals including implementation of recommendations resulting from the 1998 project activities.

### Project Description

Rhode Island proposes to do the following:

- Develop mechanism to upgrade energy code standards on a regional basis to reflect changes in common practice in the region.
- Improve building energy code implementation in the region, using user-friendly software driven codes and tools that have already been developed.
- Facilitate regional training and technical support for code implementation and improved building design practices.

- Secure utility partnership support for building energy code upgrades and improved code administration and compliance.
- Link utility energy efficiency programs with building energy code upgrades and improved implementation.
- Facilitate the establishment of and widespread use of practical energy efficiency financing mechanisms and products that encourage energy efficiency in residences, support residential building energy code upgrades and improve housing affordability.

### Cost Data

Federal:	\$313,514
State:	\$104,505
Total:	\$418,019

### Partners

Rhode Island State Energy Office  
Northeast Energy Efficiency Partnerships, Inc.  
(NEEP)

### Transferability

This regional project will assist the entire Northeast region in adopting residential and commercial building energy codes that exceed CABO MEC 1995 and the provisions of ASHRAE 90.1R. It will coordinate individual state efforts, including utilities' participation and linking ratepayer-funded energy efficiency programs for new construction to building energy codes. In addition, NEEP will expand outreach activities to other Northeast states including New Jersey and Delaware and establish working relationships with other states, i.e., Maryland, Pennsylvania, and Virginia. Materials will be developed to facilitate regional communications, including an interactive website and mailings.

## Background

In South Carolina, the residential energy code is the 1995 Model Energy Code, which is mandatory statewide. The commercial energy code is ASHRAE/IES 90.1, which is mandatory statewide. The Governor signed a statewide building code bill in 1997 that mandates the latest building and energy codes (1995 MEC and 97 SBCCI codes). The new code will become effective June 1998.

## Purpose

The goal of this program is to further educate the building community on the building energy code requirements of the 1995 Model Energy Code and uniform enforcement procedures.

## Project Description

South Carolina proposes to do the following:

- Enhance current opportunities for building officials and professionals to receive training related to building energy efficiency standards.
- Coordinate with the Building Codes Council of the South Carolina Department of Labor, Licensing and Regulation to assure building code officials/workshop participants receive required certification and/or continuing education credit.
- Coordinate with various professional organizations to ensure attendance at the training workshops to be conducted around the State.
- Provide six certification and training workshops to building officials in

conjunction with the certification and continuing education programs developed by the Building Codes Council of the South Carolina Department of Labor, Licensing and Regulation.

- Provide eight training workshops for other building industry professionals, such as licensed architects and engineers, to promote understanding and application of standard building energy efficiency measures.
- Coordinate with regional states professional organizations to promote attendance and accessibility to workshops and workshop materials.
- Procure services of a videographer to videotape training sessions and make videotapes available to building officials and professionals in South Carolina.

## Cost Data

Federal:	\$ 66,000
State:	\$ 22,000
Total:	\$ 88,000

## Partners

South Carolina Energy Office  
Building Codes Council  
South Carolina Department of Labor, Licensing and Regulation

## Transferability

Videotapes of training sessions will be made available to professionals outside of South Carolina so that innovative training techniques may be shared throughout the Southeast.

(MultiState with Arizona and Nevada)

## Background

In Utah, the residential energy code is the 1993 Model Energy Code (MEC), which is mandatory statewide. The commercial energy code is ASHRAE/IES 90.1, which is mandatory statewide.

## Purpose

The primary goal of the proposal is to complete the process of implementing the adoption and enforcement of the MEC in three states (Utah, Arizona and Nevada). Another goal is to begin the process of implementing new construction techniques that meet higher efficiency standards than the MEC requires, result in fewer performance problems for occupants and builders, and which cost the same as current practices.

## Project Description

Utah proposes to do the following:

- Achieve full region wide penetration and training with user friendly MEC compliance software materials with trained building energy code compliance inspectors.
- Uniformly educate builders about MEC compliance and other key housing industry groups and the general public that the MEC is a required standard for financing new construction. The physical and economical

benefits of residential energy efficiency will also be promoted.

- Establish new building practices in the states that result in higher quality homes which exceed the MEC and cost the same to construct as current building practice.

## Cost Data

Federal:	\$248,500
State:	\$ 62,125
Total:	\$310,625

## Partners

Utah Energy Conservation Coalition  
Nevada State Energy Office  
Arizona Department of Commerce

## Transferability

This project offers promise for expanded regional implementation due to the characteristics of the western housing market. Many home builder companies that the Utah Office of Energy Services will be partnered with are currently using quality building techniques and have divisions in other states. For example, Lewis Homes builds homes in California as well as Nevada and Arizona; Watt Homes has divisions in Arizona, Colorado, Hawaii, Nevada and Utah; and Pulte Homes is the largest volume home builder in the nation.

## Background

The Washington State Energy Code (WSEC) establishes efficiency requirements for new and altered residential and commercial buildings in Washington State. The residential portion of the WSEC is nearly equivalent to the Model Energy Code (MEC). The basis of the commercial code is ASHRAE 90.1-1989. Since the establishment of the 1991 WSEC, utility sponsored support for the construction of ultra high efficiency site built structures has declined to only a handful per year. The WSEC has virtually become the "high bar" for energy efficient construction.

## Purpose

The goal of the project is to increase the use of highly energy efficient, "alternative" technologies. This project will focus on implementing new code language for ultra-efficient alternatives to wood frame construction.

## Project Description

Washington proposes to do the following:

- Identify the barriers, both energy code and market related, to the use of alternate ultra-energy efficient construction methods. The research will consist of a literature search, interviews, site visits and analysis.
- Develop and implement strategies for two to four specific technologies that are most

likely to benefit from assistance. Implementation may involve the development of energy code amendments, partnering with manufacturers or builders, making presentations, writing fact sheets and distributing educational materials.

- Create a final report that will include all interviews, analysis, materials and code language developed under the project.

## Cost Data

Federal:	\$120,000
State:	\$ 40,000
Other:	\$160,000

## Partners

Washington Department of Community, Trade,  
and Economic Development  
Washington State University  
Washington State Building Code Council

## Transferability

Improved regulatory acceptance of alternative methods and materials will result in the construction of more "above national standard" structures. The methods and materials promoted through this project will be cost effective and ultra energy efficient.

**Background**

In Wisconsin, the process to update the Uniform Dwelling Code (UDC) is underway. The UDC code changes that are in progress contain provisions from the 1995 Model Energy Code, such as the requirement for National Fenestration Rating Council (NFRC) rated windows and increased insulation levels. Public hearings were conducted during December 1997 on the proposed changes. The proposed code effective date is December 1, 1998.

**Purpose**

A Uniform Dwelling training component will be developed to address the energy code provisions that will become effective on December 1, 1998. The primary objective is to streamline residential code compliance by forming partnerships with builders through UDC training.

**Project Description**

Wisconsin proposes to develop and conduct

training for Wisconsin's UDC that will become effective December 1, 1998. A one-day training session will be conducted at four locations throughout the state. The sessions will target builders, HVAC and insulation contractors, code compliance officials and architects. The workshops will target areas of perceived difficulty in code compliance and offer clarifications, interpretations and solutions to overcome the specific problems.

**Cost Data**

Federal	\$	50,000
State	\$	12,500
Total	\$	62,500

**Partners**

Wisconsin Energy Bureau  
Department of Commerce, Safety and Buildings  
Division  
Energy Center of Wisconsin  
Wisconsin Energy Conservation Corporation

1998 Incentive Grant Matrix  
for Building Standards and Guidelines Program

State	State Contact	Telephone	Purpose
American Samoa	Jeff Shively Assistant Director for Technical Services American Samoa Government Territorial Office Pago Pago, AS 96799 Energy	(684) 699-1101	To demonstrate to target groups how the Building Energy Code process will work from building conception through building occupancy.
Arkansas	Morris Jenkins Director Arkansas Energy Office One State Capitol Mall Little Rock, AR 72201	(501) 682-7377	To build on current code implementation activities with an information/training initiative to develop, produce, and distribute an Arkansas Builder's Guide to Energy Efficient Homes and new fact sheets.
California	Eurlyne Geiszler California Energy Commission Grants and Loans Office 1516 Ninth Street, MS-1 Sacramento, CA 95814	(916) 654-4052	To raise the level of understanding and compliance with the state energy code (Model Energy Code or California Title 24) and thereby achieve the program goal of measurably increasing energy efficiency of new homes in California and Nevada.
Colorado	Ann Sauer Colorado Office of Energy Conservation 1675 Broadway, Suite 1300 Denver, CO 80202-4613	(303) 620-4292	This proposal focuses on two levels of education and potential partnerships to encourage Model Energy Code equivalent (or better) construction practices at the local level.
District of Columbia	Sharon Y. Cooke DC Energy Office 2000 14th Street NW, Suite 300 Washington, DC 20009	(202) 673-6710	To proliferate implementation of the 1995 CABO/MEC (1993) and ASHRAE 90.1 Standards as the DC Energy Codes Supplement to the new 1998 DC Building Codes and to provide comprehensive technical assistance by coordinating and conducting builder and stakeholder training in partnership with neighboring and/or states and stakeholder organizations, comprehensive outreach and advocacy, and updating the DCMEC provisions of the DC Building Codes, under existing updating provisions of DC Law 6-216.
Florida	Alexander Mack Florida Energy Office 2555 Shumard Oak Boulevard Tallahassee, FL 32399-2100	(850) 922-6093	To improve commercial building energy-efficiency in Florida through code-based mechanisms, including the administrative adoption process.



1998 Incentive Grant Matrix  
for Building Standards and Guidelines Program

State	State Contact	Telephone	Purpose
Iowa	Larry L. Bean Iowa Department of Natural Resources Wallace Building Polk County Des Moines , IA 50319-0034	(515) 281-4308	The goal of this project is to assist Iowa's home builders to: 1) construct more energy efficiency homes and understand the value of cost-effective energy efficiency measures; 2) help home builders understand and use the Iowa building energy code; and 3) assist builders in marketing more energy efficient homes.
Kansas	Jim Ploger Energy Program Manager Kansas Corporation Commission 1500 S.W. Arrowhead Road Topeka, KS 66604-4027	(785) 271-3349	To continue the Kansas Corporation Commission's program to: 1) provide training on standards requirements and compliance options; 2) evaluate standards compliance by assessing actual energy performance of recently constructed buildings; and 3) develop commercial building case studies to encourage use of the energy cost budget method.
Louisiana	Cheryl Bennett Contracts and Grants Administration Louisiana Department of Natural Resources P.O. Box 94396 Baton Rouge, LA 70804	(504) 342-4539	To build support for the Council of American Building Officials Model Energy Code (CABO MEC) prior to the International Building Code changeover process. Under this program, training will be held for home builders across the state in CABO MEC and local code enforcement entities will be exposed to, and encouraged to adopt the CABO MEC.
Maine	Shirley Bartlett Maine Department of Economic and Community Development 59 State House Station Augusta, Maine 04333	(207) 287-8462	To raise the current energy conservation practices in residential and commercial construction to meet the 1993 MEC or higher standards, through the support of private sector delivery of high standard building design and construction services guided by a new model energy code.
Maryland	David W. Cronin Maryland Energy Administration 45 Calvert Street Annapolis, MD 21401	(410) 974-5454	To continue to work toward a statewide comprehensive codes training program for home builders, contractors, architects, engineers, codes inspectors and other professionals who might benefit from energy code training.
Mississippi	Chester B. Smith Director Energy Division Mississippi Department of Economic and Community Development P.O. Box 850 Jackson, MS 39205-0850	(601) 359-6600	To facilitate a regional training and technical assistance program aimed at improving the energy efficiency of new homes in Alabama, Georgia, Kentucky, Mississippi, North Carolina, South Carolina and Texas and develop regionwide support for code adoption and implementation.

1998 Incentive Grant Matrix  
for Building Standards and Guidelines Program

State	State Contact	Telephone	Purpose
Nebraska	John Osterman Nebraska Energy Office P.O. Box 95085 Lincoln NE 68509-5085	(402) 471-2867	To utilize financing incentives to increase the awareness of building standards exceeding the 1995 Model Energy Code (MEC), and to incorporate those standards in the construction of new affordable housing units.
New York	Jeffrey J. Pitkin Controller New York State Energy Research and Development Authority Corporate Plaza West 286 Washington Avenue Extension Albany, NY 12203-6399	(518) 862-1090 ext.3223	To develop and conduct energy-efficiency training to serve the commercial and residential building community in the three-state region of New York, Vermont, and Massachusetts. The training will emphasize strategies to meet or exceed energy code standards, and target above-code implementation strategies in NY State facilities with selected residential audiences.
Oklahoma	Brenda Williams Oklahoma Division of Community Affairs and Development P.O. Box 26980 Oklahoma City, OK 73126-0980	(405) 815-5352	To provide two, three day seminars on a bi-monthly basis for building personnel. These seminars will cover the Oklahoma Statutes of standards for non-residential and residential buildings.
Oregon	Christopher Dymond Oregon Office of Energy Conservation Division 625 Marion Street NE Salem, Marion County, OR 97310-0830	(503) 378-8325	To expand Oregon's fire, life and safety code compliance reviews of jurisdictions to include an automated and thorough energy code review. To increase demand for code compliant buildings through education and marketing focusing on the motivations of owners, managers, financiers, tenants and insurers.
Republic of Palau	Greg Decherong Palau Energy Office Koror, Palau 96940	(680) 488-1281	Develop an energy code for the Republic of Palau and work with the legislature to have the code adopted by legislation.
Rhode Island	Janice McClanaghan Rhode Island State Energy Office 1 Capitol Hill Providence, RI 02908	(401) 222-3370	To localize energy code enforcement and to increase participation in at the grass roots level with the use of state-of-the-art technology. Rhode Island seeks to enable the partners to provide computers in every city and town, create a Code Enforcement "Web" site, and provide monthly technical training and support services.

1998 Incentive Grant Matrix  
for Building Standards and Guidelines Program

State	State Contact	Telephone	Purpose
Rhode Island	Janice McClanaghan Chief, Energy & Community Services RI State Energy Office 1 Capitol Hill Providence , RI 02908	(401) 222-3370	To assist the entire Northeast region in adopting residential and commercial building energy codes that exceed CABO MEC 1995 and the provisions of ASHRAE 90.1R.
South Carolina	Janet Lockhart Program Coordinator South Carolina State Energy Office State Budget and Control Board 1201 Main Street, Suite 820 Columbia, SC 29201	(803) 737-8030	The South Carolina Energy Office will promote continued understanding and enforcement of the energy efficiency code for construction of residential and commercial structures by providing additional training workshops for building officials and other industry related professionals.
Utah	Joe Waller Program Manager Utah Office of Energy Services Division of Community Development 324 S State Suite 500 Salt Lake City, UT 84111	(801) 538-8656	To complete the process of implementing the adoption and enforcement of the Model Energy Code in three states (Utah, Nevada, Arizona). Another goal is to begin the process of implementing new construction techniques that meet higher efficiency standards than the MEC requires.
Washington	John Devine Washington State University Cooperative Extension Energy Program P.O. Box 43165 Olympia, WA 98504-3165	(360) 956-2095	To increase the use of highly energy efficient, "alternative" technologies focusing on implementing new code language for ultra-efficient alternatives to wood frame construction.
Wisconsin	Norman Bajr Wisconsin Energy Bureau 101 East Wilson Street P.O. Box 7868 Madison, WI 53707-7868	(608) 266-5827	To develop and conduct code training for Wisconsin's Uniform Dwelling Code that will become effective December 1, 1998.