the Naval Training Center's closure, and is consistent with President Clinton's Five-Part Plan for revitalizing base closure communities, which emphasizes local economic redevelopment of the closing military facility and creation of new jobs as the means to revitalize these communities. 32 CFR Parts 90 and 91, 59 FR 16,123 (1994). Under the direction of Federal, State and local regulatory authorities, the acquiring entity can mitigate the resultant environmental impacts.

The City's proposed Reuse Plan strikes a reasonable balance between the redevelopment proposals advanced in Alternatives 2 and 3, in its impact on the environment, its compatibility with the current uses of adjacent property, and its use of the existing physical characteristics of the Naval Training Center properties. Although the ''No Action'' alternative has less potential for causing adverse environmental impacts, this alternative would not constitute the highest and best use of the Naval Training Center properties. It would not take advantage of the properties' physical characteristics and the current uses of adjacent properties. It is not compatible with the LRA's Reuse Plan. It would not foster local economic redevelopment of the Naval Training Center properties and would not create new jobs.

Accordingly, Navy will dispose of Naval Training Center Orlando in a manner that is consistent with the City of Orlando's Reuse Plan for the properties.

Dated: November 15, 1996.

William J. Cassidy, Jr.,

Deputy Assistant Secretary of the Navy (Conversion and Redevelopment).

[FR Doc. 96–31030 Filed 12–5–96; 8:45 am]

BILLING CODE 3810–FF–M

DEPARTMENT OF ENERGY

Office of Energy Efficiency and Renewable Energy

Building Energy Standards Program: Determination Regarding Energy Efficiency Improvements in the 1995 CABO Model Energy Code for Low-Rise Residential Buildings

AGENCY: Office of Energy Efficiency and Renewable Energy, Department of Energy (DOE).

ACTION: Notice.

SUMMARY: The Department of Energy (DOE or Department) today determines that the 1995 version of the Council of American Building Officials (CABO) Model Energy Code (Model Energy Code or MEC) would achieve greater energy efficiency in low-rise residential buidings than the 1993 version of the MEC. This Notice also provides guidance and procedures covering State Certifications, Statements of Reasons and Requests for Extensions of Deadlines.

DATES: Certifications, Statements of Reasons, or Requests for Extensions with regard to the 1995 Model Energy Code are due on or before December 6, 1998.

ADDRESSES: Certifications, Statements of Reasons, or Requests for Extensions of Deadlines for Certification Statements by States should be directed to the Assistant Secretary for Energy Efficiency and Renewable Energy, Office of Codes and Standards, Mail Station EE–43, 1000 Independence Avenue, SW, Washington, D.C. 20585–0121. Envelopes or packages should be labeled, ''State Certification of Residential Building Codes Regarding Energy Efficiency''.

FOR FURTHER INFORMATION CONTACT: Stephen Turchen, U.S. Department of Energy, Office of Energy Efficiency and Renewable Energy, Forrestal Building, Mail Station EE–43, 1000 Independence Avenue, S.W., Washington, D.C. 20585–0121, Phone: 202–586–6262, FAX: 202–586–4617.

SUPPLEMENTARY INFORMATION:

I. Introduction

A. Statutory Requirements

Title III of the Energy Conservation and Production Act, as amended (ECPA), establishes requirements for the Building Energy Standards Program. 42 U.S.C. 6831–6837.

ECPA requires each State, not later than October 24, 1994, to certify to the Secretary of Energy (Secretary) that it has reviewed the provisions of its residential building code regarding energy efficiency and made a determination as to whether it is appropriate for such State to revise its residential building code provisions to meet or exceed the 1992 Model Energy Code. The determination is to be: (1) made after public notice and hearing; (2) in writing; (3) based upon findings included in such determination and upon evidence presented at the hearing; and (4) available to the public. 42 U.S.C. 6833(a)(1) and (a)(2). In addition, if a State makes a determination that it is not appropriate to revise its residential building code, the State is required to submit to the Secretary, in writing, the reasons for that determination, which is to be made available to the public. 42 U.S.C. 6833(a)(4).

ECPA also provides that whenever the 1992 Model Energy Code, or any successor to that code, is revised, the Secretary must make a determination, not later than 12 months after such revision, whether the revised code would improve the energy efficiency of residential buildings and to publish notice of such determination in the Federal Register. 42 U.S.C. 6833 (a)(5)(A). If the Secretary determines that the revision of the 1992 Model Energy Code, or any successor thereof, improves the energy efficiency in residential buildings, then not later than two years after the date of the publication of such determination, each State is required to certify that it has reviewed the provisions of its residential building code regarding energy efficiency with respect to the revised or successor code, and has made a determination as to whether it is appropriate for the State to revise its residential building code to meet or exceed the provisions of the revised or successor code. 42 U.S.C. 6833(a)(5)(B). A previous Federal Register notice (59 FR 36173, July 15,1994) provided notice of the Secretary's determination that the 1993 Model Energy Code was an improvement over the 1992 version.

ECPA authorizes the Secretary to permit extensions of the deadlines for filing the certification described above if the State can demonstrate that it has made a good faith effort to comply with the requirements and that it has made significant progress in doing so. 42 U.S.C. 6833(c).

II. Discussion.

A. Improvements in Energy Efficiency for Low-Rise Residential Buildings as Reflected in the 1995 CABO Model Energy Code

DOE Determination of Improved Energy Efficiency From a Revised Model Energy Code

DOE believes, the significant differences between the 1995 version and the 1993 version are as follows: (1) the 1995 MEC incorporates revised U_o[1] values for metal-framed walls; (2) the 1995 MEC includes revised air infiltration control requirements; (3) the 1995 MEC provides additional instructions for performing whole building energy analyses in accordance with Chapter 4 of the MEC; and (4) the 1995 MEC provides improved guidance for dealing with thermal performance of

[1] U_o=the area-weighted average thermal transmittance of the gross area of the building envelope; i.e., the exterior wall assembly including fenestration and doors, the roof and ceiling assembly, and the floor assembly, British thermal unit/(hour×square feet×degrees Fahrenheit).

fenestration products, air distribution ducts, and crawl space foundations. The 1995 MEC also includes several minor technical changes that improve energy efficiency in low-rise residential buildings. These differences, and their impacts on energy efficiency, are discussed in further detail below. Based on a review of the differences between the 1993 and 1995 versions of the MEC, as discussed below, the Department has determined that the 1995 MEC would improve the energy efficiency of low-rise residential building codes.

B. Specific Changes in the 1995 Model Energy Code

Inputs for Energy Simulation Analyses

Chapter 4 of both the 1993 and 1995 MEC allows the code user to perform an energy simulation analysis of the proposed building and the ''standard design'' building (a hypothetical building which meets the MEC requirements). If the energy consumption of the proposed building is less than or equal to that of the standard design building, then the proposed building complies with the MEC. Since this analysis is complex and often requires the use of computerized energy simulation tools, Chapter 4 is not widely used in practice.

Chapter 4 in the 1995 MEC specifies assumptions for design parameters such as air infiltration, distribution system efficiency, window shading and orientation, internal heat gains, and domestic hot water consumption that did not appear in the 1993 MEC. Previously, the selection of input values for these parameters, which are usually required when performing an energy analysis, was left to the discretion of the user. Depending on the user's assumptions, the energy consumption of the proposed and standard design buildings could be significantly affected.

The 1995 MEC changes in Chapter 4 limit the users' ability to manipulate many of the required input values, thereby preventing artificial reductions in the stringency of the code. As an example, window area and orientation are now specifically addressed. The 1995 MEC stipulates that the window area of the standard design building must equal the area of the proposed building, with the area equally distributed on the north, south, east, and west exposures. Since the 1993 MEC had no such stipulations, a Chapter 4 user could assume that the windows in the standard design could be oriented primarily on the north side, a high energy use orientation. A large energy ''credit'' towards compliance could then be obtained simply by placing the windows in the proposed orientation; placing most windows on the south side results in a low energy use configuration. Thus the Chapter 4 changes serve to improve the energy efficiency of the 1995 version by ensuring that reasonable assumptions for the standard design building and proposed building are made before performing the energy analyses, and an artificially high ''target'' for energy consumption in the standard design does not appear.

Recessed Lighting Fixtures

The 1995 MEC limits heat loss and air infiltration through recessed lighting fixtures located in the building envelope. For buildings using recessed lighting fixtures, this requirement will improve energy efficiency. Recessed lighting fixtures were not explicitly addressed in the 1993 MEC.

Thermal Performance Ratings of Windows and Doors

Windows and doors are a large source of heat loss in today's insulated residences. Even a small change in window or door U-values (their proclivity for transmitting heat energy) can have a significant effect on the energy use in the house. According to a study in 1993 by the Department's Lawrence Berkeley Laboratory, heating and cooling energy lost through residential windows alone accounts for 3 percent of the nation's energy use.

The 1995 MEC incorporates a consistent test procedure that can be used to determine the thermal performance of fenestration products. Accurate thermal performance ratings are necessary to ensure that when these products are claimed to be energy efficient, there is a standardized, widely recognized test procedure that can substantiate the claim. Just as there are standardized methods for rating the R-value of insulation products, the fenestration product U-value test helps to ensure that the new home does in fact comply with the MEC.

The 1995 MEC includes a testing and rating procedure developed by the National Fenestration Rating Council (NFRC) pursuant to Section 121 of EPACT. 42 U.S.C. 6292. EPACT assigned the NFRC the responsibility for developing a window rating system. Specifically the 1995 MEC requires that:

- Fenestration products, if tested for thermal performance, shall use the NFRC testing and simulation procedure;
- If tested for thermal performance, fenestration products shall have their U-value determined by ''an accredited, independent laboratory'';
- If tested, fenestration products shall be ''labeled and certified by the manufacturer'' with their U-value rating; and
- If the NFRC procedure is not used to test certain fenestration products, a limited default table appearing in the 1995 MEC shall be used to determine the U-value of those products.

The 1995 MEC will therefore help eliminate intentional and unintentional discrepancies in tested U-values by referencing only one test procedure, NFRC 100–91, *Procedure for Determining Fenestration Product Thermal Properties*. Previously, the use of different thermal performance tests by the various fenestration product manufacturers often resulted in different U-values for the same tested fenestration products. When fenestration products were ''rated'' based on various procedures, tests, and assumptions, the meaning of the U-value obtained using those previous methods was not always clear. For example, some windows were rated given a ''center-of-glass'' U-value while others were given ''whole unit'' U-values. Since the former only addressed heat transmission through the glass at the center of the window, while the latter evaluated overall performance of the glass, frame, and sash components, the two values obtained did not represent the same type of thermal performance and are thus were not comparable. Since the whole window assembly is clearly the available ''path'' for heat transfer in the building envelope, the whole window U-values are more appropriate.

The NFRC test procedure is based on a whole unit U-value test procedure. By referencing this procedure, the 1995 MEC encourages the use of the whole unit U-value as a measure of window and door performance, instead of just the center-of-glass U-value.

When specific fenestration product U-values were not available in the past, the products were often given ''rule-of-thumb'' or arbitrary ratings. For example, in California, the energy code required a maximum U-value for windows of 0.65. Until NFRC ratings were required in California, an operable aluminum framed, dual glazed window was deemed to satisfy this requirement. After the NFRC rating procedures were established, these windows were found to have U-values of approximately 0.90.

Because not all windows and doors are NFRC-rated at this time, and because the 1995 MEC does not require that they be tested using the NFRC procedure, a default fenestration U-value table is provided for products which are not NFRC rated. The default table appearing in the 1995 MEC is based on whole-

product U-values taken from the 1993 ASHRAE Handbook of Fundamentals. This table accounts for field verifiable fenestration options only, such as frame construction material, number of panes of glass, or presence of storm doors when determining the appropriate default U-value. In this manner, the table ensures that the efficiency of the windows is not overstated if a default value is used.

The 1995 MEC provision for an accredited, independent laboratory to perform the U-value tests reduces the potential for inaccurate testing and ensures unbiased results. Labeling and certification by the manufacturers will help builders, code officials, and home buyers recognize the energy efficiency of the fenestration products. Window labels and certified product directories also simplify compliance and code enforcement, thereby ensuring that the energy efficiency claimed for proposed designs will actually be built into the new house.

Overall, the new fenestration product rating, certification, and labeling procedures in the 1995 MEC will increase energy efficiency of low-rise residences by ensuring that the thermal performance of the fenestration products, reflected in their U-value ratings, are based on a common accurate rating procedure or a field-verifiable default table, so that the claimed thermal performance is achieved, and by increasing MEC compliance, awareness, and enforcement through product labeling.

Metal Framed Walls

The 1995 MEC includes criteria that specifically correct for metal stud framing when calculating the thermal performance of walls using the ''Design by Component Performance Approach'' of Chapter 5. Because metal conducts heat more rapidly than wood, metal stud framing results in a less thermally efficient wall compared to wood framing. Metal framed walls must increase the wall cavity insulation levels or utilize insulated sheathing to meet the equivalent efficiency of a wood framed wall. For example, when R–19 insulation is placed in a wood framed wall with non-insulated sheathing, the resulting wall U-value is approximately 0.05. For the same insulation in a metal framed wall the U-value is approximately 0.10. (A higher U- value means poorer thermal performance.) Since the wall assembly must still achieve a required U-value, the metal framed wall will require more installed insulation than the wood framed wall.

The 1995 MEC will result in improved energy efficiency in buildings with metal framing by ensuring that the thermal performance of metal framed walls are calculated accurately when evaluating component performance under Chapter 5.

Ventilated Crawlspaces

The 1995 MEC requires insulation in the floor above a ventilated crawl space. When the crawl space wall is insulated and the crawl space is ventilated, the effectiveness of the crawl space wall insulation is very limited because outdoor air is allowed into the space through the vents, thereby bypassing the insulation. Requiring floor insulation for ventilated crawlspace will improve the energy efficiency of residential buildings by ensuring that conditioned space is truly thermally isolated from outside air or unconditioned spaces.

Air Infiltration

The 1995 MEC enhances the air infiltration control provisions related to caulking and sealing of openings and joints in the building shell. Provisions are added requiring sealing around tubs and showers, at attic and crawl space access panels, and around plumbing and electrical penetrations through the exterior envelope of the building. The new code clarifies acceptable sealing methods.

Infiltration significantly affects the energy efficiency of any residential building by allowing unconditioned air into the conditioned space. This additional outside air must be either heated or cooled, requiring additional energy consumption. Application of the additional 1995 MEC provisions will increase energy efficiency by decreasing unwanted air infiltration.

Duct Sealing

The 1995 MEC strengthens the duct sealing provisions of the earlier code by applying them to all supply and return ducts, allowing the use of mastic with backing tape only for sealing of non-fiberglass ducts, and excluding the use of ''duct tape.''

Studies have shown that improper duct sealing significantly increases energy consumption in houses with forced-air distribution systems. Conditioned air on the supply side can leak into unconditioned spaces and dissipate to the outdoors. Leaks on the return duct systems will draw unconditioned air into the intake of the heating or air-conditioning equipment, requiring additional energy to heat or cool the air to the desired delivery temperature. For example, the Appliance Doctor Project in California (Home Energy, March/April 1991 and May/June 1991) found that duct leaks increased heating and cooling loads by 16 and 25 percent, respectively, as compared to well-sealed distribution systems.

Because the majority of residential buildings have air transport ducts for their heating and cooling distribution system, the new duct sealing provisions will help to reduce energy consumption attributable to duct leaks and thereby increase the energy efficiency of new residential buildings being built to comply with the 1995 MEC.

Miscellaneous Additional Technical Changes

Insulation marking

This new provision requires that all insulation placed in walls, ceilings, and floors must be installed so that the manufacturer's R-value marking can be inspected. Additionally, loose-fill insulation blown into attics must be accompanied by depth markers affixed to the roof/ceiling structure. These markers will help to ensure that the certified depth of loose- fill insulation, which is critical for providing the claimed R-value, has actually been installed by the builder or subcontractor.

Definition of basement wall

Under the 1993 and 1995 MEC editions, the required thermal performance of basement walls differs from that of exterior walls which are totally above grade. The 1993 and all earlier MEC editions state that ''* * * basement walls with an average below-grade area less than 50% of the total wall area * * *'' must be considered part of the gross (exterior) wall area. MEC users have often asked if this refers to the total area of all basement walls lumped together, or each individual wall section. The 1995 MEC clarifies that each individual wall enclosing the basement, i.e., each colinear wall section, must be addressed separately for purposes of evaluating which wall sections must be treated as exterior walls. This approach avoids the possibility of aggregating all basement wall sections together before determining if they are ''exterior walls.'' Basement walls mistakenly evaluated as exterior walls negatively impact energy efficiency because the thermal performance of exterior walls is less stringent than that for basement walls in all climates.

Heating degree day data

The thermal performance requirements of ceilings or roofs, walls, floors, and foundations are solely a function of ''Heating Degree Days''

(HDD), a measure of the severity of the heating load at a particular geographic location, under all MEC editions. MEC Chapter 3, ''Design Conditions,'' does not state where the HDD value for the building location shall be obtained. The 1995 MEC corrects this oversight by referring to reliable sources of HDD data. These sources include the National Oceanic and Atmospheric Administration, ASHRAE, nearby military installations with long-term weather data, or any other data source acceptable to the Building Official. In view of the criticality of the HDD parameter for determining the ultimate energy efficiency performance of the residential building, the 1995 MEC can improve energy savings by ensuring that thermal performance requirements are not understated by using inappropriate HDD data.

Foundations Supporting Masonry Veneers

In low-rise residential buildings, masonry veneer construction generally occurs in two situations: A basement foundation wall or a monolithic slab foundation is often built with a horizontal ''ledge'' on the exterior edge that will be used to support a brick veneer on the outside face of the building. If the builder or designer chooses to insulate either foundation on the exterior perimeter, then, under the 1993 MEC requirements, insulation (usually rigid plastic foam) should be placed on the ledge to provide a continuous thermal barrier around the foundation. (Ledge insulation is not at issue if the basement wall is insulated on the interior side or if a non-monolithic slab foundation is insulated on the interior side.) However, the weight of 1 to 3 stories of brick veneer bearing on a small thickness of foam insulation will normally cause the foam to compress and deform, resulting in unacceptable settlement of the veneer. To address this problem, the 1995 MEC specifically exempts that portion of the foundation wall that supports the veneer from insulation requirements.

Of all substantive differences between the 1993 and 1995 MEC, this change is the only one, in the Department's opinion, which has the potential for marginally increasing energy consumption in a residential building using a masonry veneer in combination with particular foundation types. Nonetheless, the possible increase in energy consumption does not alter DOE's determination that the 1995 MEC, taken as a whole, improves energy efficiency in low-rise residential buildings.

C. Filing Certification Statements with DOE

1. Determination

On the basis of today's DOE determination, each State is required to make its own determination as to the appropriateness of revising its residential building code to meet or exceed the provisions of the CABO Model Energy Code, 1995 edition. Section 304(a)(5)(B). This determination must be made not later than two years from the date of today's notice, unless an extenstion is provided. The State determination shall be: (1) Made after public notice and hearing; (2) in writing; (3) based upon findings and upon the evidence presented at the hearing; and (4) made available to the public. The States have considerable discretion with regard to the hearing procedures they use, subject to providing an adequate opportunity for members of the public to be heard and to present relevant information. The Department recommends publication of any notice of public hearing in newspapers of general circulation.

The Department recognizes that some States do not have a State residential code or have a code that does not apply to all newly constructed residential buildings. If local building codes regulate residential building design and construction rather than a State code, the State must provide for review of those local codes and determine whether it is appropriate for each of its units of general purpose local government to revise the provisions of its residential building code regarding energy efficiency to meet or exceed the 1995 MEC. States may base their determinations and certifications on reasonable preliminary determinations by units of general purpose local government. Each such State must still hold an adequate public hearing to review the information obtained from the local governments and to gather any additional data and testimony for its own determination.

States should be aware that the Department considers high-rise (greater than three stories) multi-family residential buildings and hotel, motel, and other transient residential building types of any height as commercial buildings for energy code purposes. Consequently, residential buildings, for the purposes of certification, would include one- and two-family detached and attached buildings, duplexes, townhouses, row houses, and low-rise multi-family buildings (not greater than three stories) such as condominiums and garden apartments.

2. Certification

Section 304(a) of ECPA requires each State to certify to the Secretary of Energy that it has reviewed the provisions of its residential building code regarding energy efficiency and made a determination as to whether it is appropriate for such State to revise the provisions of such residential building code to meet or exceed the 1995 MEC. The certification must be in writing and submitted within two years from the date of publication of this notice. If a State intends to certify that a residential building code already meets or exceeds the requirements of the 1995 MEC, it would be appropriate for the State to provide an explanation of the basis for this certification, e.g., the 1995 MEC is incorporated by reference in the State's building code regulations. The Department believes that it would be appropriate for the chief executive of the State (e.g., the Governor) to designate a State official, such as the Director of the State energy office, State code commission, utility commission, or equivalent State agency having primary responsibility for residential building codes, to provide the certification to the Secretary. Such a designated State official could also provide the certifications regarding the codes of units of general purpose local government based on information provided by responsible local officials.

3. Statement of Reasons

ECPA Section 304(a)(4) requires that if a State makes a determination that it is not appropriate to revise the energy efficiency provisions of its residential building code to meet or exceed the 1995 MEC, the State must submit to the Secretary, in writing, the reasons for this determination. The statement of reasons should define and summarize the pertinent issues regarding the determination and provide an explanation for the State's conclusion. If local building codes are applicable in the absence of a State code, the State may rely on reasons provided by the units of general purpose local government. Upon receipt, the Department will publish in the Federal Register a notice of availability, stating that a copy has been placed in its Freedom of Information Reading Room in the Forrestal Building in Washington, DC, so that members of the public may inspect it.

4. Submission of Certification Statements

A previous DOE determination (59 FR 36173, July 15, 1994) requires States to file a certification statement regarding

the 1993 MEC by July 15, 1996. States that have not yet made substantial progress in reviewing the energy efficiency provisions of their residential building codes with respect to the 1993 MEC may wish to proceed directly with review and certification of their codes with respect to the 1995 MEC. States that have made substantial progress in reviewing the energy efficiency provisions of their residential building codes in light of the 1993 Model Energy Code may wish to complete their review and submit an appropriate certification before considering the 1995 MEC.

5. Request for Extensions

Section 304(c) of ECPA requires that the Secretary permit an extension of the deadline for complying with the certification requirements described above if a State can demonstrate that it has made a good faith effort to comply with such requirements and that it has made significant progress toward meeting its certification obligations. Such demonstrations could include one or more of the following: (1) A plan for response to the requirements stated in section 304; (2) a statement that the State has appropriated or requested funds (within State funding procedures) to implement a plan that would respond to the requirements of section 304; or (3) a notice of public hearing.

In the event that a State has not met the July 15, 1996 deadline for certifying to the 1993 MEC, and has not filed a request for extension, it must do so. Alternatively, some States may desire to promptly certify to the 1995 MEC in response to this notice, in lieu of certifying to the 1993 MEC. In this latter instance, if a State can demonstrate that it is making significant progress towards early certification with respect to the MEC 1995, the Department will consider such a demonstration as a basis to grant a State's request for certification to the 1995 MEC in lieu of certification to the 1993 MEC.

States should submit separate requests for extension of deadline for certification to the 1995 MEC.

6. Submittals

When submitting any certification documents in response to this notice, the Department requests that the original documents be accompanied by one copy of the same.

Issued in Washington, DC, on November 29, 1996.

Christine A. Ervin,

Assistant Secretary, Energy Efficiency and Renewable Energy.

[FR Doc. 96–31065 Filed 12–5–96; 8:45 am]

BILLING CODE 6450–01–P

Office of Energy Research and Office of Environmental Management; Energy Research Financial Assistance Program Notice 97–03; Environmental Management Science Program

AGENCY: U.S. Department of Energy (DOE).

ACTION: Notice inviting grant applications.

SUMMARY: The Offices of Energy Research (ER) and Environmental Management (EM), U.S. Department of Energy, hereby announce their interest in receiving grant applications for performance of innovative, fundamental research to support the management and disposal of DOE radioactive, hazardous chemical, and mixed wastes; the stabilization of nuclear materials and spent nuclear fuel; remediation of contaminated sites; and the decontamination and decommissioning of facilities.

The DOE Environmental Management program currently has ongoing applied research and engineering efforts under its Technology Development program. These efforts must be supplemented with basic research to address long-term technical issues crucial to the EM mission. Basic research can also provide EM with near-term fundamental data that may be critical to the advancement of technologies that are under development but not yet at full scale nor implemented. Proposed basic research under this notice should contribute to environmental management activities that would decrease risk for the public and workers, provide opportunities for major cost reductions, reduce time required to achieve EM's mission goals, and, in general, should address problems that are considered intractable without new knowledge. This program is designed to inspire ''breakthroughs'' in areas critical to the EM mission through basic research and will be managed in partnership with ER. ER's well-established procedures, as set forth in the Energy Research Merit Review System, as published in the Federal Register, March 11, 1991, (56 FR 10244), will be used for merit review of applications submitted in response to this notice. This information is also available on the World Wide Web at http://www.er.doe.gov/production/grants/merit.html.

Subsequent to the formal scientific merit review, applications that are judged to be scientifically meritorious will be evaluated by DOE for relevance to the objectives of the Environmental Management Science Program. Additional information can be obtained at http://www.em.doe.gov/science.

DATES: Potential applicants are strongly encouraged to submit a brief preapplication. All preapplications, referencing Program Notice 97–03, should be received by DOE by 4:30 P.M. E.S.T., January 15,1997. A response encouraging or discouraging a formal application generally will be communicated to the applicant within three weeks of receipt. The deadline for receipt of formal applications is 4:30 P.M., E.D.T., April 16,1997, in order to be accepted for merit review and to permit timely consideration for award in Fiscal Year 1997.

ADDRESSES: All preapplications, referencing Program Notice 97–03, should be sent to Dr. Roland F. Hirsch, ER–73, Mail Stop F–240, Office of Health and Environmental Research, U.S. Department of Energy, 19901 Germantown Road, Germantown, Maryland 20874–1290, telephone: (301) 903–5349. Preapplications will be accepted if submitted by United States Postal Service, including Express Mail, commercial mail delivery service, or hand delivery, but will not be accepted by fax, electronic mail, or other means.

After receiving notification from DOE concerning successful preapplications, applicants may prepare formal applications using the instructions in the Office of Energy Research Application Guide and in the Supplementary Information in this notice. Applications must be sent to: U.S. Department of Energy, Office of Energy Research, Grants and Contracts Division, ER–64, 19901 Germantown Road, Germantown, Maryland 20874–1290, Attn: Program Notice 97–03. The above address for formal applications must also be used when submitting formal applications by U.S. Postal Service Express Mail, any commercial mail delivery service, or when hand carried by the applicant. Please note that notification of a successful preapplication is not an indication that an award will be made in response to the formal application.

Awards

Multiple-year funding of grant awards is anticipated, contingent upon the availability of funds. Award sizes are expected to be on the order of $100,000–$300,000 per year for total project costs for a typical three year grant. Applications for collaborative projects involving several research groups or more than one institution may receive larger awards if merited. Investigators considering submitting collaborative projects are encouraged to prepare a single application incorporating the entire research program and a combined