

DEPARTMENT OF EDUCATION**Office of Special Education and
Rehabilitative Services**

[CFDA No. 84.133B]

**National Institute on Disability and
Rehabilitation Research; Notice
Inviting Applications for New Awards
Under Certain Programs for Fiscal
Year (FY) 1993**

AGENCY: Department of Education.

ACTION: Correction notice.

SUMMARY: On January 21, 1993 a notice
inviting applications for new awards

under certain programs for fiscal year
1993 was published in the **Federal
Register** at 58 FR 5535. This notice
corrects the deadline for transmittal of
applications, available funds, and
estimated average size of awards.

On page 5537, second column, lines
five through nine are corrected to read
as follows:

Deadline for Transmittal of

Applications: March 24, 1993.

Available Funds: \$7,450,000.

Estimated Average Size of Awards:

\$600,000-\$650,000.

FOR FURTHER INFORMATION CONTACT:Yvonne Fleming, U.S. Department of
Education, 400 Maryland Avenue SW.,

room 3418, Switzer Building,
Washington, DC 20202-2572.
Telephone (202) 205-8532. Deaf and
hearing impaired individuals may call
(202) 205-5516 for TDD services.

Authority: 29 U.S.C. 760-761.

Dated: February 11, 1993.

William L. Smith,

*Acting Assistant Secretary, Office of Special
Education and Rehabilitative Services.*

[FR Doc. 93-3841 Filed 2-18-93; 8:45 am]

BILLING CODE 4000-01-M

Federal Register

**Friday
February 19, 1993**

Part V

Department of Energy

**Office of Conservation and Renewable
Energy**

10 CFR Part 455

**Grant Programs for Schools and
Hospitals and Buildings Owned by Units
of Local Governments and Public Care
Institutions; Final Rule**

DEPARTMENT OF ENERGY

Office of Conservation and Renewable Energy

10 CFR Part 455

[Docket No. CE-RM-91-130]

Grant Programs for Schools and Hospitals and Buildings Owned by Units of Local Government and Public Care Institutions

AGENCY: Office of Conservation and Renewable Energy, Department of Energy.

ACTION: Final rule.

SUMMARY: Today the Department of Energy (DOE) is publishing a final rule revising the regulations for its Grant Programs for Schools and Hospitals and for Buildings Owned by Units of Local Government and Public Care Institutions, also known as the Institutional Conservation Program (program, Institutional Conservation Program, or ICP). The program provides grants to institutions to fund detailed energy audits, called technical assistance programs (TAs), and energy conservation measures (ECMs). The purpose of the revisions is to provide States and institutional grantees more specific guidance in some areas of program operation and more flexibility in other areas. The revisions are also intended to improve the DOE ability to assist States, institutions, and other interested parties in improving energy efficiency, reducing energy costs, and leveraging available resources. In a number of cases, the revisions reflect changes to the program made by the State Energy Efficiency Programs Improvement Act of 1990 (Pub. L. 101-440).

EFFECTIVE DATE: March 22, 1993.

FOR FURTHER INFORMATION CONTACT: Thomas P. Stapp, U.S. Department of Energy, Institutional Conservation Program, Office of Conservation and Renewable Energy, CE-531, Forrestal Building, 1000 Independence Avenue, SW, Washington, D.C. 20585, (202) 586-2096.

SUPPLEMENTARY INFORMATION:

- I. Introduction and Description of the Program
- II. Revisions to the Regulations
- III. Review Under Executive Order 12291
- IV. Review Under Executive Order 12778
- V. Review Under the Regulatory Flexibility Act
- VI. Review Under the Paperwork Reduction Act
- VII. Review Under National Environmental Policy Act
- VIII. Review Under Executive Order 12612

IX. Review Under the Federal Energy Administration Act

X. Catalog of Federal Domestic Assistance

I. Introduction and Description of the Program

The Department of Energy (DOE or Department) has revised the program regulations for the Institutional Conservation Program, 10 CFR part 455, authorized by title III of the Energy Policy and Conservation Act, as amended, (the Act) 42 U.S.C. 6371 et seq. The program is subject to the general DOE Assistance Regulations at 10 CFR part 600 which are cross-referenced in 10 CFR part 455 and sometimes discussed in this preamble.

The Act established a primary goal for the program of reducing energy use and costs in institutional buildings. To accomplish this goal, it authorized DOE to establish cost-shared energy conservation grant programs to fund TAs in public and private non-profit schools, hospitals, and buildings owned by units of local government and public care institutions and to fund the purchase and installation of ECMs in schools and hospitals.

Among other things, the TAs are used to identify changes in maintenance and operating procedures and new equipment or materials that could conserve energy in eligible buildings. Implementation of the maintenance and operating procedures and installation of the new ECMs contribute to energy conservation in the building where they are used.

The purpose of today's notice is to improve the operation and flexibility of the Institutional Conservation Program. The Department has based this notice on its experience in administering the program since fiscal year 1979, questions raised and suggestions made by participants in the program, and amendments to the Act by the State Energy Efficiency Programs Improvement Act of 1990 (Pub. L. 101-440) (1990 legislation). Other areas of program administration require revision due to evolution of the program. DOE has rearranged a number of the subparts to the rule and added some new subparts and new sections to provide a more logical sequence and to make the rule easier to use. DOE has also made a number of minor technical or grammatical corrections.

Another objective of today's rule is to facilitate the leveraging of ICP funds by encouraging States and institutions to identify additional sources of non-Federal funding for energy efficiency improvements and to obtain funding from those sources where feasible. Since ICP funding is limited, it is important

that States and institutions utilize non-grant funding sources whenever possible. Finally, DOE believes that improved and more flexible regulations will have a positive influence on energy efficiency efforts.

II. Revisions to the Regulations

The principal revisions being made in this action are: Reorganizing the rule in more logical order and adding new sections and headings for clarity; redefining "building" to cover groups of structures that are centrally metered or are served by a central utility plant; changing the building eligibility date to May 1, 1989; simplifying the requirements for an energy audit; allowing demand-shifting ECMs if they do not use more energy than was used before their installation; adding definitions and other regulatory provisions for optional new grants to States for technical assistance, program assistance, and marketing; deleting the exclusion of educational agency administration buildings from eligibility; providing for various new or changed requirements that States must address in their State Plans or have the option to address; allowing States to specify the conversion factors to be used for various types of energy conservation measures involving changes in the use of electricity; incorporating into the rule the DOE deobligation/reobligation policy for various types of situations; deleting the requirement that TAs be long-term planning documents and allowing States to limit the range and types of ECMs to be considered in TAs (which are based on energy audits that meet the requirements of the rule) for particular types of buildings; encouraging States to use life-cycle costing procedures in the analysis and ranking of ECM applications, while permitting the continued use of simple payback if a State elects to do so; and adding regulatory provisions for States that want to use life-cycle costing.

Further revisions in this action are: Raising the upper limit on the cost effectiveness of eligible ECMs to 15 years if life-cycle costing is used; changing the calculation procedures for conversions to coal and renewables; revising hardship criteria to concentrate on financial need; raising the State administrative grant maximum base amount to \$50,000 and eliminating the matching requirement for these grants; providing for administrative grants from appropriated funds where States fund ECMs from non-Federal sources; requiring a State to offer regular ICP grants to eligible religious institutions if such institutions would be ineligible for the non-Federal ECM funding due to

State constitutional prohibitions on providing State aid to religious institutions; providing for allowance of liens on grant-funded equipment where the matching contribution is borrowed, and requiring that DOE be notified if a lender sues to repossess the equipment; providing States the option of allowing applications for credit toward the grantee's share of the cost of ECMs; allowing States the option of permitting new grant applications for TAs and ECMs that were included in previous cycle grants but for which funds were never expended; providing for a sample energy use report, using a representative sampling technique, to replace the current requirement that all grantees file such reports; and allowing rebates to be used for the grantees' matching contribution up to specified limits.

Proposed Changes to Each Section, Comments Received, and the DOE Final Action

The following discussion describes the DOE proposed change(s) to each section, comments received regarding those proposed changes, and the DOE final action.

List of Subparts and Sections

DOE proposed rearranging the subparts to improve the organization and comprehensibility of the program regulations. Three favorable, and no unfavorable, comments were received on this change, and DOE has finalized the changes as proposed. A comparative listing of the old and new subparts was included in the discussion of proposed changes in the Notice of Proposed Rulemaking (NPR) published in the Federal Register on January 6, 1992 (57 FR 433).

Section 455.2 Definitions

DOE proposed revising the definition of "building" to change the eligibility date to May 1, 1989, and to permit a group of structural units served by a central utility plant and centrally metered to be considered a "building." Several commenters liked the changes as proposed. Other commenters asked DOE to provide the States with additional flexibility so that, for instance, groups of structures which are connected by covered walkways, or which can be served by a single ECM, as well as structures served either by a central utility plant or by a central meter, could be considered "buildings." DOE is changing the definition to provide for structures served either by a central meter or by a central utility plant but is not going any further because DOE believes that structures not so connected cannot be considered

buildings based on the definition in the Act.

DOE proposed revising the definition of "complex" to delete the reference to a central utility plant, which was added to the definition of building. One commenter wanted the old definition restored. DOE believes the revised definition, which covers a closely situated group of buildings, is sufficiently broad to include those that are, or are not, served by central utility plants, and DOE is not changing the definition. States now have considerable latitude via their State Plans to decide when and to what extent TAs need to cover groups of structures in various configurations.

DOE proposed revising the definition of "coordinating agency" to clarify that a State, as well as a private, non-profit entity, may serve in this role consistent with State laws and regulations. Six comments supported the proposed revision, and DOE is adopting this change as proposed. Two commenters said coordinating agencies should be able to serve in that capacity for either TA applications or ECM applications, or both. DOE agrees. One commenter objected to States that serve in this role hiring TA analysts or doing the TAs with State employees. Subject to State law, that decision, with respect to public institutions, is up to each State entity which serves as a coordinating agency. With respect to private, non-profit institutions, that decision could be made by a public coordinating agency with the acquiescence of those institutions.

DOE proposed revising the definition of "energy audit" (EA) to delete the reference to former § 455.19 (which DOE proposed to drop from the rule) and to add wording which reflects the definition in the Act. Five commenters supported this change and none opposed it. The final version of the definition tracks the proposed version with one significant addition. That addition ties the definition to the energy audit content requirements of 10 CFR 450.43, if the audit is conducted with financial assistance under 10 CFR part 455. This addition is necessitated by section 400B of the Act, 42 U.S.C. 6372 a, which requires DOE guidelines (codified at 10 CFR 450.43 and former § 455.19) for the conduct of energy audits with DOE financial assistance. However, since Congress has not provided appropriations for energy audits for many years and is not expected to do so in the future, this addition is not expected to be a significant set of binding requirements for such audits.

DOE did not propose revising the definition of energy conservation maintenance and operating procedures, but a commenter pointed out that by dropping former § 455.19, the rule no longer had a list of examples of such procedures. DOE has, therefore, added the list of examples of these procedures, included in former § 455.19, to the definition in § 455.2. This list of examples is not intended to be an exhaustive one but includes many examples of what DOE considers to be energy conservation maintenance and operating procedures (as distinct from ECMs). The distinction is an important one, and DOE believes having this list of examples in the rule helps clarify the differences.

DOE proposed revising the definition of "energy conservation measure" to reflect statutory amendments. One commenter felt it would help clarify the definition to add a reference to load management systems after the word "maintain," which DOE has done. Such systems are the only types of ECMs which are allowed to simply maintain energy consumption (others must save energy or, as discussed later, provide for conversion to a renewable source of energy). A number of commenters suggested that the definition should be broadened to include types of load management systems or other measures which cause more energy to be used than before their installation but which save money. DOE believes the legislative intent was clear that, at the very least, such ECMs must maintain energy usage to qualify, and DOE has not changed that requirement. One commenter asked if the comment in the preamble to the NPR (57 FR 434, 1st column) relating to fuel switching meant that no ECMs designed to allow different fuels to be used were eligible. DOE intended this to refer to ECMs that do not achieve energy savings. Consistent with applicable U.S. House of Representatives report language, DOE does not interpret the revised definition to cover fuel switching that does not save energy. House Report No. 101-646, 101st Congress, 2nd Session 15 (1990), reprinted in 1990 U.S. Code Congressional and Administrative News 1656. However, ECMs that involve a cost-effective change in fuels (which would require the achievement of appropriate energy and cost savings, as discussed later) are eligible.

DOE also proposed revising new subsection (10) (old subsection (i)) under the definition of "energy conservation measure" to add, as an example of an eligible ECM, replacement or modification of exterior lights that are physically attached or

connected to an eligible building. Many commenters favored the proposed change, and none opposed it. However, almost all the commenters on this subject asked that the example be broadened to include additional exterior lights such as those in parking lots and stadiums if the institution paid the utility bills for those lights. DOE believes that exterior lights not attached or connected to "any structure * * * which includes a heating or cooling system or both" cannot be considered eligible ECMs because they are not part of a "building" as defined by section 391(1) of the Act, 42 U.S.C. 6371 (1).

DOE proposed deleting the definition of "energy use evaluation" (EUE) because the requirements for energy audits were being made more flexible. The feeling was that, with the States now being able to do simpler EAs, the EUE option would not be needed. One State asked that the definition of EUE be restored because the EUE requirements spelled out in former § 455.20 did not include looking at maintenance and operating procedures, while even the more flexible new EA requirements included a review of such procedures. DOE believes that it would be preferable to review such procedures prior to undertaking a TA in order to eliminate obviously unnecessary ECMs before incurring the expense of a TA. However, since 1985 DOE has interpreted and implemented the Act to allow such an undertaking without that prior review. There does not seem to be a compelling reason to alter that policy. DOE has decided therefore to restore a definition of EUE which includes the EUE elements set forth in former § 455.20.

Although DOE did not propose revising the definition of "hospital," one commenter asked that the definition be expanded to include rehabilitation hospitals that are not domiciliary or long-term care institutions. DOE believes the current definition allows for such hospitals under the conditions specified, and has not added them to the definition. As in other places in the definitions, an attempt has been made to include examples of allowable hospitals, but those examples are not intended either to cover all the possibilities or to exclude everything that is not mentioned.

DOE proposed adding a definition of "load management system" to provide for this type of equipment, newly allowable under the 1990 legislation. Comments on this change have already been discussed under "energy conservation measure," and DOE has adopted the change as proposed.

DOE proposed adding a definition for "marketing" to provide for this new

type of State grant activity made allowable, under certain circumstances, by the 1990 legislation. One commenter suggested that the definition be broadened to allow activities "managed or performed" by the State (not just managed by the State). DOE agrees, and has added this wording to the definition. The intent here is to make clear that the State is responsible for the activities under this type of grant regardless of whether the State uses outside resources or State personnel to accomplish them.

Five commenters asked that the definition of "marketing" be broadened to include activities such as site visits to schools and hospitals and preparing articles about energy conservation. The proposed definition was based on the 1990 legislation which says "marketing and other costs associated with leveraging of non-Federal funds for carrying out this part." DOE has revised the proposed definition to include marketing activities specifically mentioned in the Senate and House reports on the 1990 legislation. The revision includes some types of site visits and articles. States must keep in mind, however, that they will need to report on their marketing program grant in terms of ultimate results—which means they need to assure that non-Federal financing is identified, made available to, and used by eligible institutions as part of their marketing program.

Several commenters suggested that a new definition be added for "non-Federal funds" relating to the new types of grants provided for under the 1990 legislation. Such non-Federal funds must be identified and used for ECMs in order for States to qualify for new grants for technical assistance, program assistance, and/or marketing. DOE believes this is a good idea and has added such a definition.

A number of commenters inquired about the types of funds that might be allowable under the definition of non-Federal funds. A State receiving a grant for marketing must be able to document that the marketing grant it received from DOE was used to identify and make available these non-Federal funds (whether they are direct State funds such as loans from the State, or funds from State-issued bonds, or funding sources the State has identified and arranged for in the public or private sector, such as funds from utilities or banks). Funds obtained by the State from the petroleum violation escrow settlements which are considered as non-Federal, such as those from the Stripper Well and Diamond Shamrock settlements, would qualify as non-

Federal funds. Petroleum violation escrow funds which are required by statutes, court orders or settlement agreements to be treated as Federal funds (e.g., those under the court order in *U.S. v. Exxon Corp.*, 561 F.Supp. 816 (D.D.C. 1983) and those available due to the Warner Amendment, 96 Stat. 1830, 1919 (1982)) do not qualify as non-Federal funds for this purpose. Funds obtained by institutions without the assistance of the State program also do not qualify as non-Federal funds for the purposes of programs under § 455.20(j).

DOE proposed deleting the definition of "operations office manager" and to add a definition of "support office director" to reflect the realignment of the DOE Field Offices. There were no comments on these changes, and DOE has adopted them as proposed.

DOE proposed adding a definition of "program assistance" to provide for this new type of State grant activity made allowable, under certain circumstances, by the 1990 legislation. As discussed under the new definition of marketing, one commenter suggested adding that the activity can be managed or performed by the State. DOE agrees and has made this change. Several commenters suggested that more examples of allowable activities be provided such as in-depth reviews of TAs or maintenance and operating procedure training. As mentioned earlier, DOE does not intend definitional examples to be all-inclusive or to exclude all activities not mentioned, but DOE has added to the definition some clarifying language to cover TA reports and maintenance and operating procedure training. Beyond those clarifications, DOE believes the States have considerable flexibility to design these programs to help their institutions identify and achieve their energy efficiency goals.

DOE proposed revising the definition of "school facilities" by adding administrative facilities newly allowable due to the 1990 legislation. There were no negative comments on this change, and DOE has adopted it as proposed. DOE received several comments asking that administrative facilities be added elsewhere in the rule (such as under the definition of "school"). DOE believes that including it under school facilities is sufficient and has, therefore, not added this term elsewhere as an additional example.

One commenter suggested that the definition of "technical assistance" be broadened to provide for State-performed TAs. Subject to State law, a State can do, or arrange for, TAs either as a coordinating agency or under the new grants provided for by the 1990

legislation. DOE believes the current definition does not preclude State-performed TAs and has, therefore, not changed the definition.

Several commenters suggested that DOE add a definition for "technical assistance program update," since DOE has allowed States the option of providing credit for these. DOE agrees and has added this new definition. As the definition states, such updates are intended to be brief documents designed to provide current information on ECMs being proposed for funding. Updates should not be extensive or total revisions to existing TAs. (States will need to spell out their requirements for TA updates in their State Plans.)

Section 455.20 Contents of State Plan

DOE proposed a number of revisions to this section. The first three changes—revising the introductory wording to provide for new State grants for technical assistance, program assistance and marketing; adding a new paragraph (c) requiring States to set forth their procedures for notifying eligible institutions of funding availability each cycle; and deleting the former paragraph which required States to include results from PEAs—generated no comments (in the case of the first two) or only positive comments (in the case of the third), and DOE has adopted them as proposed.

One commenter asked that DOE waive the requirement that States solicit the views of eligible institutions if the State is required to amend the plan (such as due to a rule change). DOE believes that it is important for eligible institutions to be aware of such pending State Plan changes and that the State seek input from them when amending the State Plan. Therefore, DOE has not changed this requirement.

A number of commenters raised questions about paragraph (e) relating to ranking grant applications, pointing out that, if the States use a continuous cycle (provided for by the 1990 legislation for States that receive a grant from DOE for TAs), they would not be able to rank applications. In fact, DOE states in § 455.92(c) that ranking is not required for these grants.

DOE proposed adding a new paragraph (j) requiring a State to describe its programs for technical assistance, program assistance, marketing and non-Federally funded ECMs if the State elects to apply for these new grants provided for by the 1990 legislation. Several questions were raised about the requirements set forth in this paragraph, such as how States can assure that institutions that receive TAs or participate in program assistance and marketing activities under these

grants later benefit from the State's program to fund ECMs from non-Federal sources, and how States can assure equitable availability/distribution of funds.

DOE believes that States need to design realistic programs for TAs, marketing and program assistance so that participants have a reasonable expectation of going on to the next logical step. For institutions that participate in the TA and/or marketing programs, the next step ought to be getting ECMs implemented with non-Federal funds. This may not happen in all cases, but States should work toward achieving that goal. DOE does not believe there is a single way to accomplish this and is not mandating one. But States need to avoid setting up programs that neglect or entirely miss segments of the eligible institutions (such as using all their appropriated funds for programs that assist only schools or only hospitals or targeting the non-Federal funds that way). States may receive useful feedback on this from their eligible institutions when they seek it pursuant to paragraph (a) of this section.

DOE proposed revising paragraph (k) to require States to describe their requirements for an EA that is to be used as a basis for a TA grant application. Four commenters viewed this change favorably (although one, as previously described, wanted the EUE option restored), and none opposed it. Consistent with the discussion above, the final version of paragraph (k) refers to the EUE option. Accordingly, the wording of this paragraph has been revised to delete the suggestion that the EA is an indispensable basis for a TA grant application.

One commenter suggested that States be able to decide what, of the information formerly required in the EAs, should be included in the new EAs. If DOE does not provide financial assistance for an EA, States have some discretion to specify EA elements. However, that discretion is subject to the minimum requirements in the statutory definition of an EA which is repeated in § 455.2. DOE has also added to paragraph (k) a requirement that States describe in their State Plans the qualifications needed for auditors who perform EAs and persons performing EUEs in the State. EAs or EUEs should be considered important first steps for institutions considering energy conservation improvements, and DOE wants to encourage development of State policies to ensure adequate quality.

DOE proposed revising paragraph (l) to simplify the maintenance and

operating procedure provisions in the State Plan. One comment was received regarding this change, and it was positive. DOE has, therefore, adopted this change as proposed.

DOE proposed revising paragraph (m) to provide more specific examples of actions States might take to assure that financial assistance under this part supplements, but does not supplant, other available sources of funding. Several commenters objected to these revisions, suggesting that it would be too difficult to implement or it was too restrictive. DOE believes it is very important for States—and institutions—to investigate other possible funding sources before considering ICP grants, and DOE has consequently retained the revised wording. Several commenters suggested that States be allowed, pursuant to this paragraph, to exclude from eligibility certain ECMs that are being funded by other sources in the State (for instance, lighting improvements being funded by utilities), or to require that ICP grant applicants first seek other available sources of funding. DOE agrees and has added a third subparagraph to paragraph (m) to provide for any limitations States might elect to place on applicants because of other sources of funding that are available in the State. However, States should have a program to help eligible institutions identify and obtain such funding.

DOE proposed revising paragraph (o) to allow States the flexibility to establish requirements for TAs done in the State, including the option of varying the requirements depending upon the type, size, location, etc., of particular buildings. A few commenters objected to this revision because they felt the former requirement that all TAs be long-term planning documents based on extensive reviews of all buildings was still valid. Far more commenters felt the change would be helpful. DOE understands the concerns of those who want the TAs to continue to be complete reviews of buildings, and has allowed a State to continue requiring such a review if the State elects to do so. But DOE believes it is also valid to offer States the option of designing TAs for different building types, omitting detailed long-term plans, if appropriate.

In response to several comments, DOE has added to paragraph (o) a provision for States to specify situations where particular ECMs may, or may not, be considered appropriate for particular types of buildings or groups of structures that qualify as a building. A number of commenters pointed out that no matter how "building" is defined, some groups of structures might not

logically fit into a single TA even if they met the definition, and some ECMs might require special treatment in TAs under certain circumstances. DOE believes it is a good idea to allow States considerable flexibility in this regard.

In commenting on proposed paragraph (o), several commenters felt States should be able to dispense with TAs altogether if a single ECM is wanted or to limit TAs to a single targeted ECM. It is inappropriate to dispense with TAs because EUEs do not examine operation and maintenance changes and neither EUEs nor EAs require a cost effectiveness test. Furthermore, if a TA or the EA or EUE on which a TA is based do not examine a reasonable selection of ECM possibilities in light of the size and type of building, the TA may be inadequate to be eligible under § 455.71 which sets forth the eligibility requirements for an ECM grant application.

DOE proposed revising paragraph (q) to provide for a specification by a State of when an updated TA will be required. The comments were all favorable on this change, but several commenters suggested that the States also need to specify the required scope and contents of such TA updates. DOE agrees and has added this language to the paragraph which is being adopted as proposed with this revision added. As covered in the new definition of a TA update, these are intended to be brief revisions of particular data in existing TAs, not extensive or total revisions of entire documents.

DOE did not propose revising paragraph (r), but a number of commenters objected to this paragraph, with its prohibition on TA analysts "having financial conflicts of interest (such as an interest in the ECMs which are installed after the TA is done). Some firms that install ECMs want to do their own TAs because they do not feel they should be held to estimates in TAs done by others, particularly if a guarantee of the savings is involved. DOE considered this issue, but decided that it was in the best interests of the program to retain the prohibition on conflict of interest. This decision was based both on the DOE conviction that independent TAs are the foundation of an effective ICP and on the provisions under 10 CFR 600.436(b)(3)(iv) and Office of Management and Budget Circular A-110 Attachment (O), section (b)(3), which stress the importance of avoiding real, apparent, or potential conflicts of interest where Federal grants are providing funding for projects (such as those undertaken by ICP grantees).

DOE proposed adding a new paragraph (s) to allow a State to specify

whether it would accept applications for ECMs which had been included in previous grant awards but for which funds were never expended. Five commenters approved of this change and no one opposed it, but two commenters asked that TAs be added if they had been similarly included in a previous grant award but not done. DOE agrees that this would be reasonable and has, therefore, adopted this revision with that change.

DOE proposed revising paragraph (u)(1) to require that States use only 3,413 as the factor in conversion of kilowatt hours to Btus to ensure consistency. Many comments were received on this proposed change, 23 of 24 of which were opposed to the change. The primary objection was that it would have the effect of precluding consideration of some cogeneration projects and some conversions from electricity to other energy sources because such projects and conversions would not show energy savings if 3,413 were used. Some commenters asked DOE to retain the current option of using either 3,413 or 11,600, while others suggested that States be allowed to select whatever factors they felt appropriate for the particular measure and utility involved.

With regard to the conversion of kilowatt hours, DOE has decided to allow States the option of using either 3,413 or 11,600 for all of the ECMs reviewed in the State, or to use 3,413 for certain types of ECMs, and 11,600 for other types of ECMs. Where two factors are used, the State must specify the particular factor to be used for each type of ECM and must cite the source for the decision. There should be a valid basis for assigning a particular factor to a particular type of ECM, and States must apply each factor consistently once it has been assigned. DOE did not intend to preclude the funding of particular ECMs when it proposed the change and hopes the revision to the change discussed here will allow States the flexibility to evaluate all ECMs in an equitable manner.

DOE proposed adding a new subparagraph (u)(2) to allow States to select either simple payback or life-cycle costing as their cost-effectiveness testing approach for TAs. Several commenters felt the life-cycle costing approach was inappropriate to ICP (too complicated, too costly to do, too difficult to project costs, etc.), but the majority of the commenters felt it was worthwhile to offer the option. A few commenters suggested that DOE allow States to use simple payback for some ECMs and life-cycle costing for others. DOE does not believe there is any

practical way to have two different cost-effectiveness tests used in a State at the same time and has not made that change.

Other commenters asked if States could use their own discount and fuel price escalation rates and other variables. DOE had always intended that States have some discretion to use their own factors for such data as discount and fuel cost escalation rates, and DOE has added language providing for that limited discretion in subparagraph (u)(2), subject to the limits specified in § 455.64(g)—namely, that the discount rate must equal or exceed that calculated under 10 CFR part 436, and the energy cost escalation rates may not exceed those calculated under 10 CFR part 436. DOE also requires a State to describe the procedures it intends to require for life-cycle cost analyses in the State including any limits a State elects to place on the degree to which non-energy cost savings can be used in life-cycle cost calculations. (Corresponding changes are being made to § 455.64, which will be discussed later.) DOE will make available annually tables, by DOE region, which set forth present worth factors which reflect the DOE discount and energy cost escalation rates.

DOE believes that life-cycle costing (LCC) is a more thorough method of determining the relative cost-effectiveness of ECMs than simple payback and, consequently, has provided this option in the final rule and encourages its use by States. The most important elements of life-cycle costing are the explicit consideration of cost savings over the full life of the ECM and the discounting of these savings to present value. The most appropriate way to display the results of such an analysis in the ranking of ECM applications is in the form of savings-to-investment ratios. States that wish to use life-cycle costing in the ranking of ECM applications will have to establish procedures for institutions to follow, but DOE will permit States considerable latitude in the establishment of such procedures as long as they follow the basic methodology provided in new § 455.64 including the calculation of savings-to-investment ratios. DOE has also eliminated the 10-year simple payback limit on ECMs for those States that adopt LCC procedures.

In order to provide consistency in the calculations for simple payback and life cycle costing, DOE has added a new subparagraph (u)(3) to provide for a State to specify if more than 50 percent of the savings used in calculating cost effectiveness shall be from the estimated value of the energy to be saved by the ECM. (As more fully discussed under

§§ 455.63 and 455.64, at least 50 percent of the savings used in such calculations shall always be from the value of the energy saved with the remainder coming from related non-energy cost savings.

DOE proposed adding a new paragraph (v) to require a State to describe its role as a coordinating agency. No one objected to this change, but commenters raised questions about how coordinating agencies would operate. DOE has revised paragraph (v) to require description of the role of any "coordinating agency" because the definition of that term allows for entities other than the State to perform that role. States could serve as coordinating agencies for TA applications or ECM applications or both. States could offer to select approved TA analysts or ECM contractors but could not require institutions legally independent of the State such as religiously affiliated institutions to restrict themselves to such selections. If there are State law prohibitions on State assistance to religiously affiliated institutions, then a State would have to restrict its coordinating role accordingly and make provision for DOE to issue direct grants to those institutions.

DOE is also providing guidance to its Support Offices on the coordinating agency function. It is important that the State work with its DOE Support Office to assure efficient operation of the coordinating agency process. A number of commenters said that States serving as coordinating agencies should be responsible for doing technical and other reviews of TAs, applications, and grantee reports. DOE agrees that any coordinating agency should be so responsible. On the other hand, DOE remains responsible for the program and intends to maintain necessary oversight.

DOE proposed adding new paragraph (w) to provide for a State to specify when it would consider applications for credit which would allow an applicant to apply costs incurred for TAs, ECMs, or TA updates against their non-Federal shares. Most commenters thought this was a good idea to offer as an option, but many objected to the 3-year limit placed on projects proposed for credit, which DOE proposed in § 455.102(b). DOE has consequently decided to drop that limit from § 455.102(b) (as will be discussed under that section) and the reference to it in this paragraph, and to add to paragraph (w) a provision that States can specify in their State Plans any time limits they propose to place on work proposed for credit. States can also limit credit to TAs, TA updates, ECMs, or a combination of some or all of these.

Otherwise, DOE has adopted this revision as proposed.

A number of commenters asked whether a State could design its ICP program so that it required a non-Federal share of more than 50 percent (and consequently offered a Federal share of less than 50 percent) allowing the State to reach more institutions with assistance. Traditionally, ICP has offered 50/50 grants to most applicants (except those qualifying for severe hardship which could get up to 90 percent Federal share). However, the actual wording (for instance, in § 455.142(a) and (b), covering TA and ECM grants) is "DOE may make grants to schools, hospitals, and coordinating agencies for up to 50 percent of the costs * * * (emphasis added). This language is consistent with section 396(b) of the Act, 42 U.S.C. 6371e(b). Since DOE is not legally required to make a 50 percent grant, DOE has no objection to allowing a State to offer applicants less than 50 percent Federal share grants. Therefore, DOE has added a new paragraph (x) to this section to provide for specification by a State of the level of Federal share funding it will offer applicants (i.e., what percent of the total cost will be provided by the Federal share and what percent must be provided by the grantee as the non-Federal share) if the State elects to offer less than 50 percent Federal share grants. Whatever percent the State elects to offer must apply to all grant applicants in the State except those qualifying for severe hardship.

Section 455.21 Submission and Approval of State Plans and State Plan Amendments

DOE proposed amending this section to provide a new paragraph (d) covering submission of State Plan amendments not required by DOE but wanted by the State and to provide in paragraph (e) for a 60-day review period for State Plan amendments by DOE. No one objected to those changes, and DOE has adopted them with some minor clarification to indicate when DOE acts through its Support Office Director. However, two commenters said they felt 90 days was not enough time to give States to submit revised Plans due to changes in regulations as provided in paragraph (a). Each of these commenters asked for 180 days to submit such revisions. DOE allows a State to seek an extension of time to submit such revisions in this section and consequently does not feel it is necessary to change the 90-day deadline. Another commenter asked why paragraph (e) said, "With the consent of DOE, the State may submit a new or amended plan at any time." That

language comes from section 394(b) of the Act, 42 U.S.C. 6371c(b), but seems unnecessary in the rule in light of the extensive provisions for submittals of State Plans and amendments. Because the submission of an amendment may be considered a request for DOE consent, DOE has deleted the separate requirement for consent from the rule.

Section 455.30 Allocation of Funds

DOE proposed revising this section to provide for the State grants allowed by the 1990 legislation. There were no commenters opposed to this revision, and DOE has adopted it as proposed. However, there were a number of comments asking that coordinating agencies be specifically addressed, and DOE has, therefore, added a new § 455.30(b)(5) to cover such allocations which can be directed to TAs (up to the limit specified for TAs) and/or ECMs depending upon how the coordinating agency elects to operate.

Section 455.31 Allocation formulas

One commenter suggested that DOE should change the population figures annually in the allocation formulas. In fact, DOE does this using the most recent estimated census data which is revised annually by the Department of Commerce Bureau of the Census in years between each decennial census.

The sum of heating and cooling degree days is based on the National Oceanic and Atmospheric Administration most recent editions of "State, Regional, and National Monthly and Seasonal Heating Degree Days, Weighted by Population" and "State, Regional, and National Monthly and Seasonal Cooling Degree Days, Weighted by Population." The proposed rule referenced the source for census data and heating and cooling degree days. For technical, non-substantive reasons, DOE has deleted these references although the sources of data will continue to be the same. Copies of the source documents are available from DOE upon request.

Section 455.32 Reallocation of funds

DOE proposed a number of revisions to this section, partly to incorporate the new grants provided for by the 1990 legislation and partly to incorporate DOE policy on deobligation and reobligation of grant funds. There were many comments in response to these revisions most of which asked that States be allowed to retain and reobligate funds beyond the December 31 deadline provided for in the proposed revisions. Some commenters felt that States serving as coordinating agencies should be allowed more

flexibility in retaining and reobligating funds.

DOE believes that all grants should be treated in a consistent manner, and so has not established different deadlines for regular grants made to schools and hospitals and grants to coordinating agencies. A new paragraph (e) has been added covering grants provided through a coordinating agency. DOE has decided not to change the December 31 deadline for reobligation of funds which become available due to declined grants. DOE encourages States to evaluate all grant applications carefully to minimize the chances that grantees later decline their grant awards. Reobligation is a requirement under the Act, and DOE believes that there must be a limited amount of time for such funds to be reobligated within a State. After that time, such funds must be reallocated among all the States.

Subpart D—Preliminary Energy Audit and Energy Audit Grants

DOE invited public comment on the desirability of removing and reserving this entire subpart, because it was no longer being funded by DOE. Most comments on this possible deletion were favorable, and DOE has removed and reserved subpart D. Should funding ever become available for these activities in the future, DOE will restore those sections to the rule.

Section 455.61 Eligibility

DOE proposed a number of revisions to this section to provide for changes made by the 1990 legislation and by the proposed change to the EA requirements. There were no comments on these changes. DOE has revised this section in conformity with the discussion above explaining the DOE acceptance of a comment advocating continued use of EUEs as a prerequisite for TA grants.

One commenter asked that TAs be allowed for leased buildings. The Act generally precludes coverage of most leased buildings, 42 U.S.C. 6371(5). As mentioned in the definition for "owned or owns" at 10 CFR 455.2, the only type of lease that would be allowable is "a leasehold interest, which is, or shall become, a fee simple title in a building or complex."

Section 455.62 Contents of a Technical Assistance Program

DOE proposed a number of revisions to this section to provide the States the option of devising more flexible TA requirements, to require on-site analysis of buildings, to delete the separate calculations for coal and renewable conversions, and to require that demand

charge data be provided where demand charge costs are included in energy costs. As already discussed under § 455.20, a number of commenters disagreed with allowing States to design TA requirements less complete than those in the old rule, while a few commenters thought TAs should be allowed to review a single ECM, or even be dispensed with altogether, if a clear-cut need for a single ECM is felt to exist. DOE continues to believe that even reduced TAs must appropriately examine a building's overall systems and a reasonable selection of possible ECMs, at least to the extent of verifying the findings in the EA or EUE; DOE has restored wording from the former rule relating to the reasonableness of the recommendations in the TA and the accuracy and completeness of the EA. DOE has not reduced the TA requirements for financially assisted TAs beyond what was proposed and has adopted that wording as proposed, with the revisions mentioned. DOE wants to emphasize the importance of a valid EA or EUE which should make a responsive TA much easier to do.

Three commenters felt the requirement for an on-site analysis was a good idea, and no one opposed that change; DOE has adopted it as proposed. One commenter suggested that States be allowed to specify when TAs might cover groups of structures or ECMs serving groups of structures or buildings, and DOE has so provided under the revisions already discussed in § 455.20.

A few commenters addressed the proposed change relating to deletion of the separate calculations for coal and renewable conversions. Because the calculations are now in § 455.63, this issue is discussed under that section. No commenters objected to the requirement to include demand charge data, and that change has been adopted as proposed.

A number of commenters asked why DOE performs technical reviews of TAs and other grantee documents since States already perform such reviews. DOE is responsible for oversight of the State reviews of the reasonableness and validity of TAs and grant applications before making a final funding decision. The DOE Support Offices work in close cooperation with the States in this regard but must use their own judgement as to the extent of DOE review. The better the State review, the less extensive should be the need for subsequent DOE review.

Section 455.63 Cost-Effectiveness Testing

As already discussed under § 455.20, DOE proposed allowing States the

option of using either simple payback or life-cycle costing as their cost-effectiveness test for ECMs. This section was added to provide for the basic requirements for each approach. Most commenters were in favor of this option, but some felt States should be able to use both approaches, depending upon the ECM(s) involved. As discussed under § 455.20, DOE does not believe this would be workable and has not made this change.

DOE has, however, provided in the calculations for both simple payback and life-cycle costing that estimated non-energy cost savings may be taken into consideration in determining cost effectiveness as long as those non-energy savings do not exceed 50 percent of the savings used in the calculations. The estimated value of the energy to be saved by the ECM shall represent in all cases at least 50 percent of the savings used in cost-effectiveness calculations. Pursuant to § 455.20(u)(3), States may specify in their State Plans a greater than 50 percent requirement for the value of the energy saved (and a corresponding lower than 50 percent limit for non-energy savings). Non-energy savings could include net savings from maintenance and operating procedure changes related to the ECM and/or savings from changes in type of fuel used.

On the issue of the separate coal and renewable calculations, most of the commenters who addressed this proposed change disagreed with at least part of it. Some felt the coal calculation should be restored; others wanted the renewables calculation to continue. DOE has decided to add a new § 455.63(a)(2) to provide a new calculation approach for renewables which requires that the costs of the renewable fuel and any backup non-renewable fuel needed for the operation of the renewable ECM must be subtracted from the cost of the fuels displaced to determine the estimated savings from the ECM. This change would then permit renewables to be evaluated on the basis of net cost savings rather than on the value of the energy saved. As indicated in the definition of renewable resource energy conservation measure in § 455.2, to qualify for this calculation at least 50 percent of Btus produced after the conversion must be from the renewable energy source.

DOE believes this separate calculation approach for renewables is justified by the legislative definition of "energy conservation measure" as "an installation or modification of an installation in a building which is primarily intended to maintain or

reduce energy consumption and reduce energy costs or *allow the use of alternative energy source* * * * (section 391(2) of the Act, 42 U.S.C. 6371, emphasis added). While the Act does not explicitly define "alternative energy source," section 301 of Public Law 95-619 (42 U.S.C. 6371 note) refers to the rapid depletion of "the Nation's non-renewable energy sources." Accordingly, DOE has decided not to restore the former calculation for coal conversions (i.e., allowing them to be based on the net cost savings without demonstrating energy savings).

However, DOE has added a new subparagraph (a)(3) to this section to provide a simple payback calculation for ECMs designed to shift demand to periods of lower demand and cost. As previously discussed, because of the 1990 legislation, such ECMs need only maintain previous energy usage and can be evaluated based on cost savings. The net result of these changes is to leave renewable conversions and ECMs that shift demand to periods of lower demand and cost as the only two types of ECMs funded by ICP whose calculations to determine simple payback need not consider the value of the energy saved. As previously discussed under the definition of "energy conservation measure," ECMs whose purpose is simply to switch from one non-renewable energy source to another non-renewable energy source, but which result in no energy savings, are not eligible under ICP.

Section 455.64 Life-Cycle Cost Methodology.

DOE proposed, in § 455.63, to use 10 CFR part 436 (the regulations for the Federal Energy Management Program) for life-cycle cost methodology. A number of commenters asked if DOE was going to provide further guidance on this subject. Upon further review of 10 CFR part 436, DOE has decided that, rather than a cross reference to that part, it would be preferable to include in the ICP regulations an adaptation of 10 CFR part 436 for use in doing life-cycle costing under ICP with States then permitted to develop their own procedures consistent with those basic requirements. DOE has, therefore, added new § 455.64 to cover the life-cycle cost methodology for ICP. There is a manual under 10 CFR part 436 which provides guidance and is available from DOE on request.

Several commenters asked if States could use their own discount rates and fuel cost escalation rates instead of those in 10 CFR part 436. Within the limitations set forth in § 455.64, States may use a higher discount rate and a

lower energy cost escalation rate. States may also elect to use the figures provided annually by DOE pursuant to 10 CFR part 436.

In the preamble discussion to the Notice of Proposed Rulemaking, DOE indicated that it was considering limiting the savings to be used in life-cycle cost calculations under ICP to energy cost savings, and DOE asked for comments on this idea. One commenter suggested that DOE let each State decide. The statutory definition of "energy conservation measure" makes clear that, except for demand-shifters and renewables, such measures are primarily intended to conserve energy rather than just save money. Therefore, except for demand shifters and renewables, DOE has decided to require, in the life-cycle cost calculations under § 455.64, that the estimated value of the energy that will be saved by installing the ECM constitute at least 50 percent of the savings used to evaluate an energy conservation measure under the life-cycle costing approach. DOE has further allowed States to specify a higher percent for the value of the energy to be saved if they elect to do so in their State Plans. These provisions are consistent with the new provisions for calculating simple payback, already discussed under § 455.63.

DOE believes that the 50 percent minimum for the value of energy to be saved is a reasonable floor to place on this calculation in the context of a program intended primarily to foster energy conservation. Other estimated cost savings, such as from ECM-related maintenance and operating procedure changes or from changes in type of fuel used, can be included in these calculations up to the limit set by the State, but they may not exceed 50 percent of the estimated savings used in the calculations. Here again, this is consistent with the change already discussed under § 455.63 relating to calculations for simple payback.

Section 455.71 Eligibility

DOE proposed revising this section in a number of areas, including: Deleting the exclusion of administrative buildings used by local education agencies, as provided by the 1990 legislation; providing for TA updates where the States require them; and providing for the State option of using simple payback or life-cycle costing in cost-effectiveness testing of ECMs. These changes have already been discussed under other sections, and no commenters disagreed with them, so DOE has adopted them as proposed.

DOE also proposed extending the allowable payback range to 15 years

(from 10 years) for States using the life-cycle costing approach. A number of commenters asked that other changes be made to the allowable payback range, including suggestions to make the range 2 to 12, 1 to 15, or 1 to 10 years for all applicants. Commenters urging a reduction in the minimum payback generally said that, even though it would appear reasonable that institutions should fund ECMs with less than 2-year paybacks (with a 50 percent match, that means the institution's payback would be 1 year), nevertheless, many institutions are not able to fund these lower-payback ECMs internally.

DOE continues to believe that institutions should make every effort to fund lower-payback ECMs on their own, and use grant funds only for the somewhat higher-payback ECMs which would be more difficult to fund internally. DOE has, therefore, not changed the 2-year minimum allowable payback. DOE has left the higher end of the allowable range at 10 years for simple payback and has limited the study period for life-cycle costing to 15 years. DOE has made this distinction because for study periods beyond 10 years the failure to discount to present value is a significant distortion in testing for cost effectiveness.

DOE proposed revising this section by adding the prohibition on leased equipment which was formerly in the definition of ECM. All the comments on this change were favorable, but several thought it should be made clearer that ECMs purchased through long-term purchase agreements were eligible as was explained in the preamble. DOE has added wording to § 455.71(c) to provide this clarification.

Although not proposed for change, one commenter said that DOE should drop the requirement that maintenance and operating procedure changes be implemented before an ECM application can be accepted because the requirement was unworkable. DOE continues to believe that ICP grantees should implement maintenance and operating procedure changes (and that States should constantly encourage this), because maintenance and operating procedure changes are low-cost, high-return items which can make ECMs unnecessary. DOE has, therefore, not changed the requirement in § 455.71(a)(5) that maintenance and operating procedure changes be implemented before ECMs can be eligible for funding. (To further help with this effort, DOE has also continued to require in § 455.62 that TA analysts assume that the maintenance and operating procedure changes have been implemented in doing calculations for

ECM applications; so it continues to behoove applicants to implement them.)

DOE has also added a new § 455.71(a)(6) that requires applicants to comply with any State requirements to avoid supplanting other funds, as specified in the State Plan pursuant to § 455.20 which was also discussed under that section.

Section 455.72 Scope of the Grant

DOE proposed revising this section by making a distinction between the design costs incurred as part of the TA and those incurred as part of the ECM installation. One commenter felt a further clarification was needed, and DOE has, therefore, revised the wording to state that allowable ECM design costs would exclude design costs funded under the TA.

Subpart G—State Administrative Expenses

DOE proposed adding this subpart with § 455.80, § 455.81 and § 455.82. There were no negative comments on this change, and DOE has adopted this revision as proposed. One commenter suggested that activities allowable under the new grants provided for by the 1990 legislation (such as marketing and program assistance) be added as examples of allowable activities under the State administrative grant in § 455.82. Although the State can use administrative funds to oversee such activities, as stated in the introductory paragraph to § 455.82, DOE does not believe it would be appropriate for States to perform the activities themselves using the administrative grant. States should apply for separate grants to carry out these activities, pursuant to § 455.121.

Subpart H—State Grants for Technical Assistance, Program Assistance and Marketing

DOE proposed adding this subpart (with § 455.90, § 455.91, and § 455.92) to provide for these new grants made allowable by the 1990 legislation. No comments were opposed to this change, but a number of commenters raised questions about the new grants. One commenter wondered if States could run both an appropriated grant program and a new grant program with non-Federally funded ECMs. That would be possible if a State elected to do this and met the respective requirements. DOE even alludes to such a situation by requiring that any State with a constitutional prohibition on direct State assistance to eligible religiously affiliated institutions continue to make appropriated fund grants available to such institutions if the State's non-

Federal funding source(s) for ECMs would not be available to such institutions.

Another commenter asked whether only programs directly funded by the State would be counted as part of the aggregate program funds, for purposes of § 455.121(a)(3). DOE believes it is not realistic to expect that only State-provided funds qualify, but DOE believes it is essential that a State directly relate the non-Federal funds to the State program to obtain those funds. It would not be acceptable, for instance, to include in the aggregate figure ECMs done by institutions that received no financial assistance either directly from the State or through the State program to identify and get committed the non-Federal funding sources.

DOE takes very seriously a State obligation to obtain the non-Federal funds for ECMs and then relate such efforts to the ECMs done with the funding. If necessary, States can use part of their marketing grant to do this. The funds need not be direct State funds, but the State must be able to document that its program(s) identified them and made them available to the eligible institutions in the State for ECMs. Another commenter asked if TAs could be provided throughout the year under the new State-run TA grants. This is possible under these new grants and is covered in § 455.92(b). DOE has adopted this subsection as proposed.

A much more extensive discussion of the grants funded under Subpart H will be found in the preamble to the NOPR, 57 FR 438-439.

Subpart I—Cost Sharing

Section 455.100 Limits to Federal Share

DOE proposed adding this section as part of new Subpart I—Cost Sharing. None of the commenters opposed this change, and DOE has adopted it as proposed. However, a number of commenters asked if States could run cycles where they offer less than a 50 percent Federal share for ICP grants (thereby requiring a more than 50 percent non-Federal share). DOE has not changed the wording of this section which says "may not be used to pay more than 50 percent of the costs * * *". As discussed under § 455.20, a State may decide if it wants to offer less than 50 percent Federal share grants, and if so, to specify this in its State Plan. Two commenters also asked if TA grants could exceed a 50 percent Federal share for other than applicants qualifying for severe hardship. DOE has not made that change because DOE believes that TAs (whether funded directly by DOE or

through a State grant for TAs as provided for by the 1990 legislation) need to be treated consistently, with no more than a 50 percent Federal or State share, unless a severe hardship grant is involved; the funding source for TAs in both cases is appropriated funds which must be administered pursuant to the Act which includes the 50 percent limitation for other than severe hardship grants.

Section 455.101 Borrowing the Non-Federal Share/Title to Equipment

DOE proposed adding this section as a result of the 1990 legislation. There were no negative comments on this revision, and DOE has adopted it as proposed. An extensive discussion of this section appears in the preamble to the NOPR published in the *Federal Register* on January 6, 1992, 57 FR 439-440. When applicants borrow their matching shares and have liens placed on grant-funded equipment, they should keep in mind that all applicable regulations and requirements apply to their grants. Grant applicants are cautioned to assure that any financing agreement or related equipment acquisition agreement is in compliance with all applicable rules and regulations.

Section 455.102 Energy Conservation Measure Cost-Share Credit

DOE proposed adding this section to provide for the new State option to allow credit for previously non-Federally-funded projects. All of the commenters on this section liked the idea of offering the States the option, but seven of the eight commenters objected to the 3-year time limit for projects to qualify for credit. They thought DOE should allow each State to decide on whatever time limits it feels is appropriate. DOE has decided to drop the 3-year time limit as a result of these comments and has adopted the change with that revision. As already discussed under § 455.20, States electing to accept applications for credit will have to specify in their State Plans the conditions for doing so and any time limits. One commenter asked that DOE allow credits for upgrades to ECMs formerly funded by an ICP grant. DOE has not made this change because many eligible institutions have not yet received ECM assistance and States should be concentrating on attracting those institutions to the program. (However, under § 455.140(e) DOE has provided for the funding of replacement ECMs in cases where a State has allocated funds left over after ranking all of its applications for new ECMs.)

Section 455.103 Requirements for Applications for Credit

DOE proposed adding this section to clarify the requirements and to provide for the new State option to allow credit as discussed under § 455.102. There were no comments on this section, and DOE has adopted it as proposed.

Section 455.104 Rebates from Utilities and Other Entities

DOE proposed adding this section to set forth the requirements for handling rebates received by ICP grantees. As proposed, the section allowed grantees to use such rebates for their non-Federal shares and did not require the rebates to be deducted from project costs. Most of the 12 commenters who addressed this section liked the idea of allowing rebates to be used for the non-Federal share, but about half of the commenters pointed out that, where rebates were especially generous, they could exceed the non-Federal share. If such a situation occurred, the combination of the rebate and the Federal share of the grant would exceed the cost of the ECM(s) being funded. DOE did not intend the Federal share to end up being greater than a grantee's net cost after application of any rebate(s). Therefore, DOE has revised § 455.104(b) and added a new § 455.104(c) to specify that, if rebates exceed the non-Federal share, they can be used to fund additional approved ECMs; if excess rebates cannot be used in this way, the ECM cost (and grant) must be reduced. Otherwise DOE has adopted this change as proposed.

Other commenters felt that States should be able to exclude from ICP eligibility certain ECMs that are also being funded by rebates or other sources of funding in the State. DOE agrees that this is a valid idea and has added that option for the States to include in their State Plans as previously discussed under § 455.20.

Subpart J—Applicant Responsibilities—Grants to Institutions and Coordinating Agencies

Section 455.110 Grant Application Submittals for Technical Assistance and Energy Conservation Measures

DOE proposed a number of changes to this section relating to TA grant applications, life-cycle costing, and TA updates. No one commenting on this section objected to the proposed changes, but, because of several questions about how coordinating agencies operate, DOE has added several clarifications on how such entities would apply for grants. Otherwise DOE has adopted the changes as proposed. There were, however, two questions

raised about parts of the section not proposed for change. One commenter asked if ICP grant applications would be required for the non-Federally funded ECMs provided for under the 1990 legislation. The requirements in § 455.110 apply to ICP grants only, not to whatever programs States establish to non-Federally fund ECMs pursuant to the new programs. Applicants for those programs would have to submit whatever information is required by the State or other funding source. They would not submit ICP grant applications. By the close of each cycle, the State would need to submit to DOE the same data on buildings, ECMs, estimated costs, and energy cost savings for ECMs supported by non-Federal funds as are now submitted on all other appropriated and PVE fund grants as specified in § 455.123.

Two commenters asked about the wording of § 455.110(c)(6) which began "Unless waived by DOE, the report of the technical assistance analyst * * *". They thought this wording suggested that DOE could waive the need for a TA altogether. The intent of this sentence is to allow DOE to say it does not need another copy of the TA in cases where it has already received one (for instance, as a result of an earlier TA grant). Because this language caused confusion, DOE has revised it to make the intent clear.

Section 455.111 Applicant Certifications for Technical Assistance and Energy Conservation Measure Grants to Institutions and Coordinating Agencies

DOE proposed revising this section to provide for the new State EA requirements and for new certifications from grantees that have liens placed on grant-funded equipment; grantees would be required to assure that contracts provide for DOE notification should the grantee later be sued by a lender having a lien due to problems with repayment of the loan. One comment was received on this section asking what interest DOE had in ECMs funded under the ICP grants. Because ECM grants are made for very specific purposes which would be negated by a loss of the equipment, DOE needs to be advised if property funded with an ICP grant should subsequently be lost to a grantee such as through repossession. DOE has revised this section to require that the DOE interest in the equipment (i.e., the percent of the total cost provided by the ICP grant) be stated in the financing contract to make this interest clear. DOE has also revised this section slightly to conform to earlier changes made regarding the

requirements for an EA and is adding coordinating agencies to the heading to make it clear that the certifications are required from such entities. DOE has otherwise adopted this section as proposed.

Section 455.112 Davis-Bacon Wage Rate Requirement

DOE proposed revising this section to clarify the language. No commenters opposed the revisions, and DOE has adopted them as proposed. However, three commenters were concerned about various aspects of the requirement (dollar threshold is too low; some contractors will not participate because of the requirement especially on small projects, etc.). DOE has not changed the requirement because it is in the Act. DOE indicated that this provision would not apply to non-Federally funded ECMs, and this was favorably received by commenters.

Section 455.113 Grantee Records and Reports for Technical Assistance and Energy Conservation Measure Grants to Institutions and Coordinating Agencies

DOE proposed a number of changes to this section. One of the changes involved having grantees send one copy of each report to the State and one copy to DOE (rather than having both copies go to the State with DOE getting its copy later from the State). All of the eight commenters who addressed this revision thought it was a bad idea: It would confuse grantees; both the State and DOE would be making corrections at once; grantees are used to hearing from their States about problems with reports, etc. On the other hand, DOE also heard that there were delays sometimes in getting reports from the States. DOE has decided to change this section to provide that each DOE Support Office will agree with its States on how reports are to be submitted. Some Support Offices may ask for copies of reports directly from grantees, while others may ask the State to get both copies from the grantees and later send DOE its copies on an agreed-upon schedule.

DOE also proposed revising this section by requiring final ECM costs in reports. One commenter thought this was a good idea, but two commenters felt it might be unduly burdensome in the case of final life-cycle costs. DOE believes it is important to have final cost information and has not changed this requirement. For States electing to use life-cycle costing, grantees should be able to include a requirement that the TA analyst provide the final life-cycle cost as part of the original TA contract.

Another commenter felt it would be unreasonable to require the same reports from institutions receiving non-Federal ECM funding. In fact, such institutions are not required to file these reports, although they may be required to file other reports needed by the entity providing the non-Federal funding. (States that have non-Federally funded ECM programs must file their own reports with DOE pursuant to § 455.123.)

One commenter suggested that DOE require, in final reports on ECMs, that grantees include descriptions of changes in scope. DOE believes that this is already required in both the semi-annual progress reports and in the final report, both of which require grantees to report on what has and what has not been accomplished. Scope changes would be an important development to describe in those reports.

DOE also proposed revising this section to replace the old energy use reports required of all ECM grantees, with a new sample report. DOE proposed a "statistically valid" sample. A number of commenters on this section objected to this idea either because they liked the old requirement or they thought the new one was unreasonable or unclear as to what was required. Other commenters thought the sample idea was a good one, although it was pointed out that statistical validity might be too difficult to achieve in this context. DOE has decided to retain the sample requirement in subparagraph 455.113(b)(2)(iii) but is changing "statistically valid" to "representative." DOE will work with States to develop a good report format, and DOE wants to emphasize the importance of gathering this sample data. A number of commenters also mentioned the need for obtaining valid data on program results.

DOE has added coordinating agencies to the title of this section to make it clear that they are included in these requirements. They have always been in the text of this section (paragraph (a)) but were not in the title. For clarity, DOE has inserted in paragraph (b)(2)(i) a sentence to reinforce the requirement on coordinating agencies to report semi-annually with regard to financial assistance unused as a result of scope changes as well as financial assistance declined.

Section 455.120 Grant Applications for State Administrative Expenses

DOE proposed revising this section to raise the minimum base administrative grant to \$50,000 (from \$30,000) and drop the matching requirement. There were 18 comments on this revision,

many of which agreed with the change, while perhaps an equal number wanted the minimum base amount raised to \$60,000 (some also wanted the 5 percent maximum amount, not proposed for change in the NOPR, raised to 10 percent of the schools and hospitals grants awarded in the cycle). DOE has not changed the amounts proposed in this section, but DOE will review these amounts 3 fiscal years after the effective date of this rule and annually thereafter. If warranted by inflation and other considerations, the amounts may be adjusted by DOE at that time.

A few commenters expressed concern that removal of the matching requirement might cause some State programs to get less funding than before, because some States would feel no obligation to contribute State funds to program administration without the matching requirement. DOE hopes this does not occur and may have to review this aspect of the rule at a later date if it appears this is, in fact, taking place. DOE also proposed revising this section by adding a provision for States to apply for administrative grants if they have programs to provide non-Federal funds for ECMs as allowed by the 1990 legislation. No commenter objected to this provision, and DOE has adopted it as proposed. One commenter suggested that States should be able to charge grantees a fee (up to 5 percent of the grant) in addition to receiving an administrative grant from DOE. DOE believes that States should not "tax" grantees in addition to receiving an administrative grant from DOE.

Several commenters felt that this section was confusing, as presented, and DOE has revised the section to clarify the process. As discussed more fully under § 455.134, applications for State administrative grants should be coordinated with applications for new grants for technical assistance, program assistance, and marketing.

Section 455.121 Grant Applications for State Technical Assistance, Program Assistance, and Marketing Programs

DOE proposed adding this new section to cover grants newly allowable under the 1990 legislation. A number of commenters objected to the requirement that funds have to be obligated or committed to ECMs in the same fiscal year in order to be counted toward the aggregate program funds for the purposes of paragraph (a)(3). Several commenters asked for more time, especially to get the non-Federally funded ECM programs established (3 to 5 years were suggested by many). DOE believes 3 to 5 years is an unacceptably long time, and also believes that the

1990 legislation clearly does not provide for such a delay in getting the non-Federal funds for the ECMs committed to eligible institutions. DOE has, therefore, not changed this section and has adopted it as proposed in this regard. States that intend to use their appropriated allocations for new grants for TAs, marketing, and/or program assistance need to assure that their non-Federally funded ECM programs are coordinated with their ICP grant programs in such a way that the non-Federal ECM funds get obligated or committed to eligible institutions during the same fiscal year as the appropriated funds are granted to, and used by, the State.

DOE also proposed in this section that non-Federally funded ECMs be completed in accordance with "all applicable Federal, State and local laws and regulations." Many commenters felt it was inappropriate to require such projects to comply with Federal requirements. DOE has retained the requirement because section 396(d)(2)(A) of the Act indicates that States must use non-Federal funds, as well as Federal funds, " * * * to implement energy conservation measures and otherwise carry out a program pursuant to this part * * *" (emphasis added).

A number of other areas of this section have been discussed earlier, such as the need to relate the non-Federally funded ECMs to the ICP-funded program(s) in order for them to be counted as aggregate program funds. DOE has not changed that requirement. One commenter asked how funds for marketing and program assistance could be "obligated" to recipients. DOE inadvertently left out of some sections of the proposed rule the complete phrase "legally committed or obligated," and has made this correction throughout to make clear that the State must be able to document that it has utilized these grant funds as intended (and that non-Federal ECM funds have likewise been appropriately obligated or committed through some legal means) during the fiscal year for which the funds were allocated and granted.

One commenter asked if the 30 percent schools/30 percent hospitals minimums applied to the non-Federally funded ECMs. DOE feels States need to design their non-Federally funded ECM programs to equitably serve all eligible institutions, and States must address this in their State Plans. While a strict 30/30 split may not always work out, a non-Federally funded ECM program that targeted only schools or only hospitals would clearly not be desirable.

Another commenter asked if DOE would review the non-Federally funded ECMs. DOE certainly reserves the right to do selective monitoring of these projects because they relate to appropriated funds, but DOE would not plan to review the projects at the proposal stage. States need to set up procedures for doing this, however, to ensure that the projects qualify.

As discussed more fully under § 455.134, a State application for a grant for technical assistance, program assistance and marketing should be coordinated with an application for a grant for State administrative expenses.

Section 455.122 Applicant Certifications for State Grants for Technical Assistance, Program Assistance, and Marketing

DOE proposed creating this new section to cover the certifications States must submit if they elect to apply for the new types of grants provided for by the 1990 legislation. There were many comments about the requirements for these grants relating to other sections, but only one commenter addressed the certifications and that commenter supported the idea of relating the new grants to non-Federally funded ECMs done in the same fiscal year. DOE has adopted this section as proposed and reiterates that it is crucial that States undertaking these new grant activities establish viable non-Federal financing programs as part of this effort.

Section 455.123 Grantee Records and Reports for State Grants for Administrative Expenses, Technical Assistance, Program Assistance and Marketing

DOE proposed creation of this new section to cover the reporting requirements for all types of grants to States. One commenter agreed with the requirement that DOE be provided with adequate documentation of institutions receiving assistance under the new grants or through the non-Federal funding for ECMs; no one opposed this section. DOE has added some clarifying language to require that DOE be provided with the same data on buildings, TAs, ECMs, costs and energy cost savings as is currently provided for both appropriated and PVE funded ICP grants. Otherwise DOE has adopted this section as proposed.

DOE is particularly concerned that the results of these new grant activities and their related non-Federally funded ECM programs be reported to DOE as required in this section, so that DOE can demonstrate the relationship between the use of its appropriated funds for the new activities and the installation of

ECMs using non-Federal funds. DOE is also interested in assuring that its data base on all ICP-related TA and ECM projects is maintained in a consistent manner. Since a State sponsoring a non-Federally funded ECM program would need to gather this data anyway, to support the certification required under § 455.122 and to otherwise track the progress of its program, this requirement should not involve any additional data gathering burden for the State.

Subpart L—State Responsibilities

Section 455.130 State Evaluation of Grant Applications

DOE proposed revision of this section by providing for a State to specify whether it has requirements for review and certification of hospital applications. No one commented on this section, and it has been adopted as proposed.

Section 455.131 State Ranking of Grant Applications

DOE proposed a number of revisions to this section, including providing an exception from the ranking requirement for State-funded TAs, allowing for new EA requirements, and making several changes to the weighting of criteria for ranking.

There were a number of comments about various aspects of this section. Two commenters questioned what was meant by "on a percentage basis" in paragraph (b), covering TAs. What DOE means is that the conservation potential should be viewed as the percent of the total energy consumed or the total energy costs (or other relevant percentage savings parameter) that can be saved by making conservation improvements proposed in the EA. The intent is to assure that smaller buildings be given an equal opportunity to receive TA funding even if their potential dollar savings might be less when compared with larger buildings. DOE has adopted this revision with added wording to make that intent clear.

One commenter felt that DOE should drop the requirement for EA data used as a basis for the TA grant application. DOE believes the information included in the EA is the minimum necessary to evaluate TA applications and has not changed this requirement. States can now design simpler EAs, as discussed under § 455.2, and § 455.20, so that EAs need not be burdensome documents.

Another commenter wanted DOE to restore "directly involves," instead of the phrase "is physically connected to" proposed for the paragraph relating to ECMs in several buildings. DOE believes "is physically connected to" is the

better description, as it is the minimum requirement for such ECMs to be considered a single measure serving several buildings; DOE has not changed this requirement.

DOE proposed revising the weighting requirements for ECMs to require that at least 50 percent of a measure's ranking be based on cost effectiveness. Many commenters objected to this change, indicating that States should be given the option of deciding the weighting factors. DOE continues to believe that the 50 percent weight for cost effectiveness is a valid one and is not changing that requirement. States should have sufficient flexibility with the remaining 50 percent of the weighting to target particular types of ECMs, etc., without unduly skewing the program away from its primary goal of providing institutions with cost-effective ECMs. It is important to note, however, that States may not adopt ranking procedures that have the effect of giving greater weight to non-energy related savings than to energy related savings.

DOE also proposed revising this section to drop the former priority ranking for coal and renewable conversions. Several commenters objected to this revision. DOE has not restored that priority in the rule, but States can design their weights to give such conversions some priority in the State ranking process.

One commenter said that ECMs that are non-Federally funded should not have to be ranked. In fact, they do not have to be ranked. As previously discussed, institutions doing such ECMs would have to meet whatever reporting and application requirements are established by the State or other source of financing. Such applications would not be submitted with appropriated fund grant applications. Another commenter suggested that the 30 percent for schools/30 percent for hospitals minimums be dropped so States could set their own minimums. Those percentages are in section 396(d)(1) of the Act (42 U.S.C. 6371e), and DOE has not changed this requirement.

DOE has added clarifying language to paragraph (e) to explain that if a State elects to allow applications for credit, the Federal share shall not exceed the cost of the work remaining to be done. This is not a new requirement; it has been a longstanding DOE policy. DOE believes it helps explain the process for credit to add this wording to the rule.

Section 455.132 State Evaluation of Requests for Severe Hardship Assistance
DOE proposed adding this section which was adapted from another section

in the old rule. DOE also proposed to revise the wording to provide that financial need be the primary criterion for severe hardship. A number of commenters felt it was unrealistic or too difficult to try to determine financial need and preferred the old criteria which included other considerations like local unemployment rates and median family income. DOE believes that any institution that applies for severe hardship (which can provide a Federal share of up to 90 percent of the cost of the TA or ECM) should be willing and able to document its financial need for such assistance to the State; DOE has not changed this requirement.

One commenter asked if States had to provide for hardship assistance under the non-Federally funded ECM program or if States could set aside more than 10 percent of the non-Federal funds for hardship. As has been previously discussed under other sections, DOE believes it is up to each State to design its non-Federally funded ECM program(s) to best meet the needs and resources of that State. Therefore, States would not have to provide for hardship or could provide more than 10 percent set aside for hardship. So that potential participants understand the State program(s), such aspects of the program(s) must be set forth in the State Plan. However, because the non-Federal funds for ECMs might not be in the form of grants, the mechanisms to direct the funds to hardship candidates might have to differ from the process in this rule. There is a more detailed discussion of the revisions to this section in the preamble to the NOPR published in the *Federal Register* on January 6, 1992 (57 FR 442-443).

Section 455.133 Forwarding of Institutional Applications for Technical Assistance and Energy Conservation Measure Grants

DOE proposed revising this section to distinguish it from the next section, which covers applications for grants to States, and then to require States to certify that the applications meet program requirements. One commenter felt it was unrealistic to require States to certify this, but DOE believes this is a reasonable requirement to make of States, and DOE has not changed this requirement.

Several commenters asked why applications had to be submitted once a cycle. That is a requirement in section 395(a) of the Act, 42 U.S.C. 6371d(a), and DOE has not revised this requirement.

Another commenter said that States serving as coordinating agencies should

be responsible for reviewing applications submitted to them in that role. DOE agrees that is the ideal situation but points out that each State needs to specify its role as coordinating agency in its State Plan and work out the details of implementation with its DOE Support Office. Because the funds granted to coordinating agencies under ICP are appropriated funds, DOE is responsible for their oversight. A State should assume the primary management role when it is a coordinating agency, but, if a State cannot adequately carry out that responsibility, DOE will be obliged to require more DOE participation in the process. This is clearly a situation where a case-by-case, perhaps cycle-by-cycle, review of each situation will be necessary.

Section 455.134 Forwarding of Applications for State Grants for Technical Assistance, Program Assistance, and Marketing

DOE proposed adding this section to cover new grants provided for by the 1990 legislation. Several commenters asked if separate applications needed to be submitted for the new grants under the 1990 legislation and for the administrative expenses grant. In fact, a single application should cover all these grants, and the language of this section has been revised to clarify this. As provided for in §§ 455.143 and 455.144, separate grants will be issued for each activity or program included in such applications (such as administrative expenses, program assistance, marketing, or technical assistance). DOE has, therefore, specified that sufficient information (including a separate, specific budget, narrative description, and appropriate milestone dates for each activity or program) should be submitted for DOE to reasonably evaluate the application.

Section 455.140 Approval of Applications From Institutions and Coordinating Agencies for Technical Assistance and Energy Conservation Measures

DOE proposed revising this section in a number of areas. No commenters objected to the revision to clarify intent regarding cost overruns, and DOE has adopted it as proposed. Several commenters asked why DOE did not allow ECMs to be funded to replace earlier funded ECMs. DOE believes there are still many institutions that have never received ECM funding and should be served first. However, DOE has added a new sentence to paragraph (e) to allow States to fund ECMs that replace ECMs funded by ICP in earlier cycles only in cases where a State has

funds remaining after providing for all grants for new ECMs which are not replacements. DOE believes this will avoid allowing an institution that has already had an ECM funded from taking precedence, in a replacement ECM application, over institutions that are applying for new ECMs.

A number of commenters also suggested that DOE allow second TAs to be funded. DOE has not made this change. With the limited amount of ICP funding available, and the large number of institutions that remain to be served, DOE does not believe second TAs are an appropriate use of program funds. DOE has made provisions for States to allow credit for TA updates, however, as previously discussed. DOE proposed revising this section to provide for the State option to allow applicants to resubmit applications for ECMs that were previously included in grants but for which no funds were expended. There were no negative comments on this revision, but several commenters asked that TAs be added if they were previously provided for in a grant but not done. DOE agrees that is reasonable, and has adopted this revision with that change.

DOE further proposed revising this section by providing for grantees to use funds from cost underruns for additional approved ECMs. Everyone commented favorably on this change, but several said that requiring DOE approval for the use of such funds would delay implementation of the additional ECMs. Since appropriated funds are involved, DOE has a responsibility to review and approve changes from original grant applications that involve spending the funds differently from what was first proposed and approved by DOE. Therefore, DOE has not changed the requirement that it approve scope changes or other changes in the use of ICP grant funds.

Section 455.141 Grant Awards for Units of Local Government and Public Care Institutions, and Coordinating Agencies

DOE proposed revising this section to delete the \$500 limit for equipment purchases under this type of grant. One commenter liked this change, and no one opposed it; DOE has adopted it as proposed.

Section 455.142 Grant Awards for Schools, Hospitals, and Coordinating Agencies

DOE proposed making the same change to this section as was made for § 455.141 just discussed. With this change, meters could be purchased and installed using TA grant funds. There

were no negative comments, and DOE has adopted the section as proposed. As previously discussed under § 455.20, States are being provided the option of offering less than 50 percent Federal share grants. Several commenters raised this issue in commenting on § 455.142, but DOE does not believe any change is needed to this section because it now provides for "up to 50 percent of the costs" * * *

Section 455.142 deals with grant awards for TAs and ECMs. It may be useful for coordinating agencies to be aware that if they have applied for both TAs and ECMs, DOE intends to issue separate grants for TAs and ECMs because TAs typically closeout earlier. This management practice should not materially affect any significant interest of coordinating agencies.

Section 455.143 Grant Awards for State Administrative Expenses

DOE proposed revising this section to allow for the increased grants for State administrative expenses discussed previously and to delete the requirement for a matching contribution from the State. Most of the comments about these grants have already been covered in earlier sections. One commenter pointed out that DOE referred, in § 455.143(a)(3), to an incorrect citation. The correct citation is § 455.123(b)(2), and DOE has made that change. Otherwise DOE has adopted this section as proposed.

Section 455.144 Grant Awards for State Programs To Provide Technical Assistance, Program Assistance and Marketing

DOE proposed adding this section to cover the new types of grants provided for by the 1990 legislation. The comments on these new grants have already been covered earlier, and DOE has adopted this section as proposed.

Response to Additional Suggestions

DOE asked in the NOPR whether program participants preferred to have this rule made effective during the cycle in which it is published in the Federal Register or in the next cycle after publication. There were many responses to that question, most of which asked that DOE effectiveness not be delayed until the next cycle after publication in the Federal Register. DOE has, therefore, made this rule effective 30 days after publication in the Federal Register. States that are not yet sure how they want to address some or all of the new State options offered in this rule can wait to make those changes. Nondiscretionary changes must be made in accordance with the time limits in

this rule. However, States that have already announced their next cycle before the rule is published may wait until the following cycle to incorporate changes into their State Plans if they do not want to implement such changes in the earlier cycle.

III. Review Under Executive Order 12291

Today's issuance was reviewed under Executive Order 12291. DOE has concluded that the rule is not a "major rule" because it will not result in: (1) An annual effect on the economy of \$100 million or more; (2) a major increase in costs or prices for consumers, individual industries, Federal, State, or local government agencies or geographic regions; or (3) significant adverse effects on competition, employment, investment, productivity, innovation, or on the ability of U.S.-based enterprises to compete in domestic or export markets. In accordance with the requirements of the Executive Order, this notice has been reviewed by the Office of Management and Budget.

IV. Review Under Executive Order 12778

Section 2 of E.O. 12778 instructs each agency subject to E.O. 12291 to adhere to certain requirements in promulgating new regulations and reviewing existing regulations. These requirements, set forth in sections 2(a) and (b)(2), include eliminating drafting errors and needless ambiguity, drafting the regulation to minimize litigation, providing clear and certain legal standards for affected conduct, and promoting simplification and burden reduction. Agencies are also instructed to make every reasonable effort to ensure that the regulation: Specifies clearly any preemptive effect, effect on existing Federal law or regulation, and retroactive effect; describes any administrative proceedings to be available prior to judicial review and any provisions for the exhaustion of such administrative proceedings; and defines key terms. DOE certifies that today's final rule meets the requirements of sections 2(a) and (b) of E.O. 12778.

V. Review Under the Regulatory Flexibility Act

These regulations were reviewed under the Regulatory Flexibility Act, Public Law 96-354, which requires preparation of a regulatory flexibility analysis for any regulation that will have a significant economic impact on a substantial number of small entities, i.e., small businesses and small government jurisdictions. The changes proposed in this action primarily clarify

the regulations or add flexibility to the existing program. Thus, these changes have a minimal effect on small entities. DOE, therefore, certifies that there will not be a significant economic impact on a substantial number of small entities and that preparation of a regulatory flexibility analysis is not warranted.

VI. Review Under the Paperwork Reduction Act

The information collection requirements proposed in this Notice have been submitted to OMB in accordance with section 3504(b) of the Paperwork Reduction Act, Public Law 96-511, 94 Stat. 2812 (44 U.S.C. 3501 et seq.), and procedures implementing that Act (5 CFR 1320.1 et seq.).

VII. Review Under National Environmental Policy Act

Pursuant to the requirements of the National Environmental Policy Act of 1969, Public Law 91-190, 83 Stat. 852 (42 U.S.C. 4321 et seq.), DOE published a Notice of Availability of an Environmental Assessment (EA) of the entire Title III program on March 12, 1979, in the Federal Register, 44 FR 13554. Based on this assessment, DOE determined that the EPCA title III program did not constitute a major Federal action significantly affecting the quality of the human environment, and that, therefore, no Environmental Impact Statement (EIS) was required.

DOE has reviewed the environmental impacts for the program amendment issued today. It is the DOE judgment that the program amendment will result in no environmental impacts in addition to those previously analyzed for this program. It is, accordingly, the DOE determination that the environmental impacts of the program as modified by today's amendment have been adequately analyzed in the March 1979 EA and that these impacts are not significant. Hence, the previous negative determination is still applicable, and no additional EA or EIS is required.

VIII. Review Under Executive Order 12612

Executive Order 12612 requires that regulations be reviewed for any substantial direct effects on States, on the relationship between the National Government and the States, or in the distribution of power among various levels of Government. If there are sufficient substantial direct effects, the Executive Order requires preparation of a Federalism assessment to be used in decisions by senior policymakers in promulgating or implementing the regulation.

Today's regulatory amendments are intended to simplify the management of the program by providing the States with clearer, more specific guidance in a number of areas and greater flexibility in other areas. They will not, therefore, have a substantial direct effect on the traditional rights and prerogatives of States in relationship to the Federal Government.

IX. Review Under the Federal Energy Administration Act

The NOPR was submitted for comment to the Administrator of the Environmental Protection Agency under section 7(c)(2) of the Federal Energy Administration Act, as amended, 15 U.S.C. 766(c)(2). The Administrator did not submit any comments.

X. Catalog of Federal Domestic Assistance

The Catalog of Federal Domestic Assistance number for the Grant Program for Schools and Hospitals is 81.052.

List of Subjects in 10 CFR Part 455

Buildings, energy conservation, grant programs-energy, health facilities, hospitals, reporting and recordkeeping requirements, schools, and technical assistance.

In consideration of the foregoing, DOE hereby amends Chapter II, title 10, Code of Federal Regulations, as set forth below:

Issued in Washington, DC on February 5, 1993.

Robert L. San Martin,

Acting Assistant Secretary, Conservation and Renewable Energy.

Part 455 of chapter II, title 10, Code of Federal Regulations is revised to read as set forth below:

PART 455—GRANT PROGRAMS FOR SCHOOLS AND HOSPITALS AND BUILDINGS OWNED BY UNITS OF LOCAL GOVERNMENT AND PUBLIC CARE INSTITUTIONS

Subpart A—General Provisions

Sec.

- 455.1 Purpose and scope.
- 455.2 Definitions.
- 455.3 Administration of grants.
- 455.4 Recordkeeping.
- 455.5 Suspension and termination of grants.

Subpart B—State Plan Development and Approval

- 455.20 Contents of State Plan.
- 455.21 Submission and approval of State Plans and State Plan amendments.

Subpart C—Allocation of Appropriations Among the States

- 455.30 Allocation of funds.
- 455.31 Allocation formulas.
- 455.32 Reallocation of funds.

Subpart D—Preliminary Energy Audit and Energy Audit Grants (Reserved)

Subpart E—Technical Assistance Programs for Schools, Hospitals, Units of Local Government, and Public Care Institutions

- 455.60 Purpose.
- 455.61 Eligibility.
- 455.62 Contents of a technical assistance program.
- 455.63 Cost-effectiveness testing.
- 455.64 Life-cycle cost methodology.

Subpart F—Energy Conservation Measures for Schools and Hospitals

- 455.70 Purpose.
- 455.71 Eligibility.
- 455.72 Scope of the grant.

Subpart G—State Administrative Expenses

- 455.80 Purpose.
- 455.81 Eligibility.
- 455.82 Scope of the grant.

Subpart H—State Grants for Technical Assistance, Program Assistance, and Marketing

- 455.90 Purpose.
- 455.91 Eligibility.
- 455.92 State technical assistance awards.

Subpart I—Cost Sharing

- 455.100 Limits to Federal share.
- 455.101 Borrowing the non-Federal share/title to equipment.
- 455.102 Energy conservation measure cost-share credit.
- 455.103 Requirements for applications for credit.
- 455.104 Rebates from utilities and other entities.

Subpart J—Applicant Responsibilities—Grants to Institutions and Coordinating Agencies

- 455.110 Grant application submittals for technical assistance and energy conservation measures.
- 455.111 Applicant certifications for technical assistance and energy conservation measure grants to institutions and coordinating agencies.
- 455.112 Davis-Bacon wage rate requirement.
- 455.113 Grantee records and reports for technical assistance and energy conservation measure grants to institutions and coordinating agencies.

Subpart K—Applicant Responsibilities—Grants to States

- 455.120 Grant applications for State administrative expenses.
- 455.121 Grant applications for State technical assistance, program assistance, and marketing programs.
- 455.122 Applicant certifications for State grants for technical assistance, program assistance, and marketing.

- 455.123 Grantee records and reports for State grants for administrative expenses, technical assistance, program assistance, and marketing.

Subpart L—State Responsibilities

- 455.130 State evaluation of grant applications.
- 455.131 State ranking of grant applications.
- 455.132 State evaluation of requests for severe hardship assistance.
- 455.133 Forwarding of applications from institutions and coordinating agencies for technical assistance and energy conservation measure grants.
- 455.134 Forwarding of applications for State grants for technical assistance, program assistance, and marketing.
- 455.135 State liaison, monitoring, and reporting.

Subpart M—Grant Awards

- 455.140 Approval of applications from institutions and coordinating agencies for technical assistance and energy conservation measures.
- 455.141 Grant awards for units of local government, public care institutions, and coordinating agencies.
- 455.142 Grant awards for schools, hospitals, and coordinating agencies.
- 455.143 Grant awards for State administrative expenses.
- 455.144 Grant awards for State programs to provide technical assistance, program assistance, and marketing.

Subpart N—Administrative Review

- 455.150 Right to administrative review.
- 455.151 Notice requesting administrative review.
- 455.152 Transmittal of record on review.
- 455.153 Review by the Deputy Assistant Secretary.
- 455.154 Discretionary review by the Assistant Secretary.
- 455.155 Finality of decision.

Authority: 42 U.S.C. 6371 *et seq.*, and 42 U.S.C. 7101 *et seq.*

Subpart A—General Provisions

§ 455.1 Purpose and scope.

(a) This part establishes programs of financial assistance pursuant to Title III of the Energy Policy and Conservation Act, as amended, 42 U.S.C. 6371 *et seq.*

(b) This part authorizes grants to States or to public or non-profit schools and hospitals to assist them in conducting preliminary energy audits and energy audits, in identifying and implementing energy conservation maintenance and operating procedures, and in evaluating, acquiring, and installing energy conservation measures, including renewable resource measures, to reduce the energy use and anticipated energy costs of buildings owned by schools and hospitals.

(c) This part also authorizes grants to States or units of local government and public care institutions to assist them in conducting preliminary energy audits

and energy audits, in identifying and implementing energy conservation maintenance and operating procedures, and in evaluating energy conservation measures, including renewable resource measures, to reduce the energy use and anticipated energy costs of buildings owned by units of local government and public care institutions.

§ 455.2 Definitions.

Act, as used in this part, means the Energy Policy and Conservation Act, Public Law 94-163, 89 Stat. 871 (42 U.S.C. 6201, *et seq.*), as amended by title III of the National Energy Conservation Policy Act, Public Law 95-619, 92 Stat. 3238 (42 U.S.C. 6371), and the State Energy Efficiency Programs Improvement Act of 1990, Public Law 101-440, 104 Stat. 1011.

Assistant Secretary means the Assistant Secretary for Conservation and Renewable Energy or any official to whom the Assistant Secretary's functions may be redelegated by the Secretary.

Auditor means any person who is qualified in accordance with 10 CFR 450.44 and with State requirements pursuant to § 455.20(k), to conduct an energy audit.

Building means any structure, including a group of closely situated structural units that are centrally metered or served by a central utility plant, or an eligible portion thereof, the construction of which was completed on or before May 1, 1989, which includes a heating or cooling system, or both.

Civil rights requirements means civil rights responsibilities of applicants and grantees pursuant to the Nondiscrimination in Federally Assisted Programs regulation of the Department of Energy (10 CFR part 1040).

Complex means a closely situated group of buildings on a contiguous site such as a school or college campus or multibuilding hospital.

Construction completion means the date of issuance of an occupancy permit for a building or the date the building is ready for occupancy as determined by DOE.

Cooling degree days means the annual sum of the number of Fahrenheit degrees of each day's mean temperature above 65° for a given locality.

Coordinating agency means a State or any public or nonprofit organization legally constituted within a State which provides either administrative control or services for a group of institutions within a State and which acts on behalf of such institutions with respect to their participation in the program.

Deputy Assistant Secretary means the Deputy Assistant Secretary for Technical and Financial Assistance or any official to whom the Deputy Assistant Secretary's functions may be redelegated by the Assistant Secretary.

DOE means the Department of Energy.

Energy audit means a determination of the energy consumption characteristics of a building which:

- (1) Identifies the type, size, and rate of energy consumption of such building and the major energy-using systems of such building;
- (2) Determines appropriate energy conservation maintenance and operating procedures;
- (3) Indicates the need, if any, for the acquisition and installation of energy conservation measures; and
- (4) If paid for with financial assistance under this part, complies with 10 CFR 450.43.

Energy conservation maintenance and operating procedures means modifications in the maintenance and operations of a building and any installation therein which are designed to reduce the energy consumption in such building and which require no significant expenditure of funds, including, but not limited to:

- (1) Effective operation and maintenance of ventilation systems and control of infiltration conditions, including:
 - (i) Repair of caulking or weatherstripping around windows and doors;
 - (ii) Reduction of outside air intake, shutting down ventilation systems in unoccupied areas, and shutting down ventilation systems when the building is not occupied; and
 - (iii) Assuring central or unitary ventilation controls, or both, are operating properly;
- (2) Changes in the operation and maintenance of heating or cooling systems through:
 - (i) Lowering or raising indoor temperatures;
 - (ii) Locking thermostats;
 - (iii) Adjusting supply or heat transfer medium temperatures; and
 - (iv) Reducing or eliminating heating or cooling at night or at times when a building or complex is unoccupied;
- (3) Changes in the operation and maintenance of lighting systems through:
 - (i) Reducing illumination levels;
 - (ii) Maximizing use of daylight;
 - (iii) Using higher efficiency lamps; and
 - (iv) Reducing or eliminating evening cleaning of buildings;
- (4) Changes in the operation and maintenance of water systems through:

- (i) Repairing leaks;
 - (ii) Reducing the quantity of water used, e.g., using flow restrictors;
 - (iii) Lowering settings for hot water temperatures; and
 - (iv) Raising settings for chilled water temperatures;
 - (5) Changes in the maintenance and operating procedures of the building's mechanical systems through:
 - (i) Cleaning equipment;
 - (ii) Adjusting air/fuel ratio;
 - (iii) Monitoring combustion;
 - (iv) Adjusting fan, motor, or belt drive systems;
 - (v) Maintaining steam traps; and
 - (vi) Repairing distribution pipe insulation; and
 - (6) Such other actions relating to operations and maintenance procedures as the State may determine useful or necessary. In general, energy conservation maintenance and operating procedures involve cleaning, repairing or adjusting existing equipment rather than acquiring new equipment.
- Energy conservation measure* means an installation or modification of an installation in a building which is primarily intended to maintain (in the case of load management systems) or reduce energy consumption and reduce energy costs, or allow the use of an alternative energy source, including, but not limited to:
- (1) Insulation of the building structure and systems within the building;
 - (2) Storm windows and doors, multiglazed windows and doors, heat-absorbing or heat-reflective glazed and coated windows and door systems, additional glazing, reductions in glass area, and other window and door systems modifications;
 - (3) Automatic energy control systems which would reduce energy consumption;
 - (4) Load management systems which would shift demand for energy from peak hours to hours of low demand and lower cost;
 - (5) Equipment required to operate variable steam, hydraulic, and ventilating systems adjusted by automatic energy control systems;
 - (6) Active or passive solar space heating or cooling systems, solar electric generating systems, or any combination thereof;
 - (7) Active or passive solar water heating systems;
 - (8) Furnace or utility plant and distribution system modifications including:
 - (i) Replacement burners, furnaces, boilers, or any combination thereof which substantially increase the energy efficiency of the heating system;

(ii) Devices for modifying flue openings which will increase the energy efficiency of the heating system;

(iii) Electrical or mechanical furnace ignition systems which replace standing gas pilot lights; and

(iv) Utility plant system conversion measures including conversion of existing oil- and gas-fired boiler installations to alternative energy sources;

(9) Addition of caulking and weatherstripping;

(10) Replacement or modification of lighting fixtures (including exterior light fixtures which are physically attached to, or connected to, the building) to increase the energy efficiency of the lighting system without increasing the overall illumination of a facility, unless such increase in illumination is necessary to conform to any applicable State or local building code or, if no such code applies, the increase is considered appropriate by DOE;

(11) Energy recovery systems;

(12) Cogeneration systems which produce steam or forms of energy such as heat as well as electricity for use primarily within a building or a complex of buildings owned by an eligible institution and which meet such fuel efficiency requirements as DOE may by rule prescribe;

(13) Such other measures as DOE identifies by rule for purposes of this part as set forth in subpart D of 10 CFR part 450; and

(14) Such other measures as a grant applicant shows will save a substantial amount of energy and as are identified in an energy audit or energy use evaluation in accordance with § 455.20(k) or a technical assistance report in accordance with § 455.62.

Energy use evaluation means a determination of:

(1) Whether the building is a school facility, hospital facility, or a building owned and primarily occupied and used throughout the year by a unit of local government or by a public care institution.

(2) The name and address of the owner of record, indicating whether owned by a public institution, private nonprofit institution, or an Indian tribe;

(3) The building's potential suitability for renewable resource applications;

(4) Major changes in functional use or mode of operation planned in the next 15 years, such as demolition, disposal, rehabilitation, or conversion from office to warehouse;

(5) Appropriate energy conservation maintenance and operating procedures which have been implemented for the building;

(6) The need, if any, for the acquisition and installation of energy conservation measures including an assessment of the estimated costs and energy and cost savings likely to result from the purchase and installation of one or more energy conservation measures and an evaluation of the need and potential for retrofit based on consideration of one or more of the following:

(i) An energy use index or indices, for example, Btu's per gross square foot per year;

(ii) An energy cost index or indices, for example, annual energy costs per gross square foot; or

(iii) The physical characteristics of the building envelope and major energy-using systems; and

(7) Such other information as the State has determined useful or necessary, in accordance with § 455.20(k).

Fuel means any commercial source of energy used within the building or complex being surveyed such as natural gas, fuel oil, electricity, or coal.

Governor means the chief executive officer of a State including the Mayor of the District of Columbia or a person duly designated in writing by the Governor to act on her or his behalf.

Grant program cycle means the period of time specified by DOE which relates to the fiscal year or years for which monies are appropriated for grants under this part, during which one complete cycle of DOE grant activity occurs including fund allocations to the States; applications receipt, review, approval, or disapproval; and award of grants by DOE but which does not include the grantee's performance period.

Grantee means the entity or organization named in the Notice of Financial Assistance Award as the recipient of the grant.

Gross square feet means the sum of all heated or cooled floor areas enclosed in a building, calculated from the outside dimensions or from the centerline of common walls.

Heating or cooling system means any mechanical system for heating, cooling, or ventilating areas of a building including a system of through-the-wall air conditioning units.

Heating degree days means the annual sum of the number of Fahrenheit degrees for each day's mean temperature below 65° for a given locality.

Hospital means a public or nonprofit institution which is a general hospital, tuberculosis hospital, or any other type of hospital other than a hospital furnishing primarily domiciliary care and which is duly authorized to provide

hospital services under the laws of the State in which it is situated.

Hospital facilities means buildings housing a hospital and related facilities including laboratories, laundries, outpatient departments, nurses' residence and training facilities, and central service facilities operated in connection with a hospital; it also includes buildings containing education or training facilities for health profession personnel operated as an integral part of a hospital.

Indian tribe means any tribe, band, nation, or other organized group or community of Indians including any Alaska native village or regional or village corporation, as defined in or established pursuant to, the Alaska Native Claims Settlement Act, Public Law 92-203; 85 Stat. 688, which (a) is recognized as eligible for the special programs and services provided by the United States to Indians because of their status as Indians; or (b) is located on, or in proximity to, a Federal or State reservation or rancheria.

Load management system means a device or devices which are designed to shift energy use to hours of low demand in order to reduce energy costs and which do not cause more energy to be used than was used before their installation.

Local educational agency means a public board of education or other public authority or a nonprofit institution legally constituted within, or otherwise recognized by, a State either for administrative control or direction of, or to perform administrative services for, a group of schools within a State.

Maintenance means activities undertaken in a building to assure that equipment and energy-using systems operate effectively and efficiently.

Marketing means a program or activity managed or performed by the State including but not limited to:

(1) Obtaining non-Federal funds to finance energy conservation measures consistent with this part;

(2) Making site visits to school and hospital officials to review program opportunities;

(3) Giving presentations to groups such as school or hospital board officials and personnel; and

(4) Preparing and disseminating articles in publications directed to school and hospital personnel.

Native American means a person who is a member of an Indian tribe.

Non-Federal funds means financing sources obtained or arranged for by a State as a result of the State program(s) pursuant to § 455.20(j), to be used to pay for energy conservation measures for institutions eligible under this part, and

includes petroleum violation escrow funds except for those funds required to be treated as if they were Federal funds by statute, court order, or settlement agreement.

Operating means the operation of equipment and energy-using systems in a building to achieve or maintain specified levels of environmental conditions of service.

Owned or owns means property interest including without limitation a leasehold interest which is or shall become a fee simple title in a building or complex.

Preliminary energy audit means a determination of the energy consumption characteristics of a building including the size, type, rate of energy consumption, and major energy-using systems of such building which if paid for with financial assistance under this part, complies with 10 CFR 450.42.

Primarily occupied means that in excess of 50 percent of a building's square footage or time of occupancy is occupied by a public care institution or an office or agency of a unit of local government.

Program assistance means a program or activity managed or performed by the State and designed to provide support to eligible institutions to help ensure the effectiveness of energy conservation programs carried out consistent with this part including such relevant activities as:

(1) Evaluating the services and reports of consulting engineers;

(2) Training school or hospital personnel to perform energy accounting and to identify and implement energy conservation maintenance and operating procedures;

(3) Monitoring the implementation and operation of energy conservation measures; and

(4) Aiding in the procurement of energy-efficient equipment.

Public care institution means a public or nonprofit institution which owns:

(1) A facility for long-term care, rehabilitation facility, or public health center, as described in section 1624 of the Public Health Service Act (42 U.S.C. 300s-3; 88 Stat. 2270); or

(2) A residential child care center which is an institution, other than a foster home, operated by a public or nonprofit institution. It is primarily intended to provide full-time residential care, with an average length of stay of at least 30 days, for at least 10 minor persons who are in the care of such institution as a result of a finding of abandonment or neglect or of being persons in need of treatment or supervision.

Public or nonprofit institution means an institution owned and operated by:

(1) A State, a political subdivision of a State, or an agency or instrumentality of either; or

(2) A school or hospital which is, or would be in the case of such entities situated in American Samoa, Guam, the Commonwealth of Puerto Rico, the Commonwealth of the Northern Mariana Islands, and the U.S. Virgin Islands, exempt from income tax under section 501(c)(3) of the Internal Revenue Code of 1954; or

(3) A unit of local government or public care institution which is, or would be in the case of such entities situated in American Samoa, Guam, the Commonwealth of Puerto Rico, the Commonwealth of the Northern Mariana Islands, and the U.S. Virgin Islands, exempt from income tax under section 501(c)(3) or 501(c)(4) of the Internal Revenue Code of 1954.

Renewable resource energy conservation measure means an energy conservation measure which produces at least 50 percent of its Btu's from a non-depletable energy source.

School means a public or nonprofit institution which:

(1) Provides, and is legally authorized to provide, elementary education or secondary education, or both, on a day or residential basis;

(2) Provides, and is legally authorized to provide, a program of education beyond secondary education, on a day or residential basis and:

(i) Admits as students only persons having a certificate of graduation from a school providing secondary education, or the recognized equivalent of such certificate;

(ii) Is accredited by a nationally recognized accrediting agency or association; and

(iii) Provides an educational program for which it awards a bachelor's degree or higher degree or provides not less than a 2-year program which is acceptable for full credit toward such a degree at any institution which meets the preceding requirements and which provides such a program;

(3) Provides not less than a 1-year program of training to prepare students for gainful employment in a recognized occupation and which meets the provisions cited in paragraph (2), and subparagraphs (2)(i), and (2)(ii) of this definition; or

(4) Is a local educational agency.

School facilities means buildings housing classrooms, laboratories, dormitories, administrative facilities, athletic facilities, or related facilities operated in connection with a school.

Secretary means the Secretary of the Department of Energy or his/her designee.

State means, in addition to the several States of the Union, the District of Columbia, the Commonwealth of Puerto Rico, Guam, American Samoa, the Commonwealth of the Northern Mariana Islands, and the U.S. Virgin Islands.

State energy agency means the State agency responsible for developing State energy conservation plans pursuant to section 362 of the Energy Policy and Conservation Act (42 U.S.C. 6322) or, if no such agency exists, a State agency designated by the Governor of such State to prepare and submit the State Plan required under section 394 of the Energy Policy and Conservation Act.

State hospital facilities agency means an existing agency which is broadly representative of the public hospitals and the nonprofit hospitals or, if no such agency exists, an agency designated by the Governor of such State which conforms to the requirements of this definition.

State school facilities agency means an existing agency which is broadly representative of public institutions of higher education, nonprofit institutions of higher education, public elementary and secondary schools, nonprofit elementary and secondary schools, public vocational education institutions, nonprofit vocational education institutions, and the interests of handicapped persons in a State or, if no such agency exists, an agency which is designated by the Governor of such State which conforms to the requirements of this definition.

Support office director means the Director of the DOE field support office with the responsibility for grant administration or any official to whom that function may be redelegated.

Technical assistance means: (1) The conduct of specialized studies to identify and specify energy savings or energy cost savings that are likely to be realized as a result of the modification of maintenance and operating procedures in a building, the acquisition and installation of one or more specified energy conservation measures in a building, or both; and

(2) the planning or administration of such specialized studies. For schools and hospitals which are eligible to receive grants to carry out energy conservation measures, the term also means the planning or administration of specific remodeling, renovation, repair, replacement, or insulation projects related to the installation of energy conservation or renewable resource measures in a building.

Technical assistance program update means a brief revision to an existing technical assistance program report designed to provide current information such as that relating to energy use, equipment costs, and other data needed to substantiate an application for an energy conservation measure grant. Such an update shall be limited to the particular measures included in the related grant application together with any relevant data regarding interactions or relationships to previously installed energy conservation measures.

Unit of local government means the government of a county, municipality, parish, borough, or township which is a unit of general purpose government below the State (determined on the basis of the same principles as are used by the Bureau of the Census for general statistical purposes) and the District of Columbia. Such term also means the recognized governing body of an Indian tribe which governing body performs substantial governmental functions and includes libraries which serve all residents of a political subdivision below the State level (such as a community, district, or region) free of charge and which derive at least 40 percent of their operating funds from tax revenues of a taxing authority below the State level.

§ 455.3 Administration of grants.

Grants provided under this part shall comply with applicable law, regulation, or procedure including, without limitation, the requirements of:

(a) The DOE Financial Assistance Rules (10 CFR part 600 as amended) except as otherwise provided in this rule;

(b) Executive Order 12372 entitled "Intergovernmental Review of Federal Programs" (48 FR 3130, January 24, 1983; 3 CFR, 1982 Comp., p. 197) and the DOE regulation implementing this Executive Order entitled

"Intergovernmental Review of Department of Energy Programs and Activities" (10 CFR part 1005);

(c) Office of Management and Budget Circular A-97 entitled "Rules and Regulations Permitting Federal Agencies to Provide Specified or Technical Services to State and Local Units of Government under title III of the Intergovernmental Coordination Act of 1968" available from the Office of Management and Budget, Office of Publication Services, 725 17th Street, NW., Washington, DC 20503;

(d) DOE regulation entitled "Nondiscrimination in Federally Assisted Programs" (10 CFR part 1040) which implements the following public laws: Title VI of the Civil Rights Act of

1964; section 16 of the Federal Energy Administration Act of 1974; section 401 of the Energy Reorganization Act of 1974; title IX of the Education Amendments of 1972; The Age Discrimination Act of 1975; and section 504 of the Rehabilitation Act of 1973; and

(e) Such other procedures applicable to this part as DOE may from time to time prescribe for the administration of financial assistance.

§ 455.4 Recordkeeping.

Each State or other entity within a State receiving financial assistance under this part shall make and retain records required and specified by the DOE Financial Assistance Rules, 10 CFR part 600, and this part.

§ 455.5 Suspension and termination of grants.

Suspension and termination procedures shall be as set forth in the DOE Financial Assistance Rules, 10 CFR part 600.

Subpart B—State Plan Development and Approval

§ 455.20 Contents of State Plan.

Each State shall develop and submit to DOE a State Plan for technical assistance programs and energy conservation measures, including renewable resource measures and, to the extent appropriate, program assistance, and/or marketing. The State Plan shall include:

(a) A statement setting forth the procedures by which the views of eligible institutions or coordinating agencies representing such institutions, or both, were solicited and considered during development of the State Plan and any amendment to a State Plan;

(b) The procedures the State will follow to notify eligible institutions and coordinating agencies of the content of the approved State Plan or any approved amendment to a State Plan;

(c) The procedures the State will follow to notify eligible institutions and coordinating agencies of the availability (each funding cycle) of funding under this program and related funding available from non-Federal sources to fund technical assistance programs and energy conservation measures consistent with this part;

(d) The procedures for submittal of grant applications to the State;

(e) The procedures to be used by the State for evaluating and ranking technical assistance and energy conservation measure grant applications pursuant to § 455.130 and § 455.131, including the weights assigned to each criterion set forth in §§ 455.131 (c)(1),

(c)(2), (c)(3), (c)(4) and (c)(5). In addition, the State shall determine the order of priority given to fuel types that include oil, natural gas, and electricity, under § 455.131(c)(2);

(f) The procedures that the State will follow to insure that funds will be allocated equitably among eligible applicants within the State including procedures to insure that funds will not be allocated on the basis of size or type of institution, but rather on the basis of relative need, taking into account such factors as cost, energy consumption, and energy savings, in accordance with § 455.131;

(g) The procedures that the States will follow for identifying schools and hospitals experiencing severe hardship and for apportioning the funds that are available for schools and hospitals in a case of severe hardship. Such policies and procedures shall be in accordance with § 455.132;

(h) A statement setting forth the extent to which, and by which methods, the State will encourage utilization of solar space heating, cooling and electric systems, and solar water heating systems;

(i) The procedures to assure that all financial assistance under this part will be expended in compliance with the requirements of the State Plan, in compliance with the requirements of this part, and in coordination with other State and Federal energy conservation programs;

(j) If a State is eligible and elects to use up to 100 percent of the funds provided by DOE under this part for any fiscal year for program and technical assistance and/or up to 50 percent of such funds for marketing:

(1) A description of each activity the State proposes, including the procedures for program operation, monitoring, and evaluation;

(2) The level of funding to be used for each program and the source of those funds;

(3) The amount of the State's allocated funds that the State proposes to use for each;

(4) A description of the non-Federal financing mechanisms to be used to fund energy conservation measures in the State during the fiscal year;

(5) A description of the evaluation/selection criteria to be used by the State in determining which institutions receive funding for energy conservation measures;

(6) The procedures for assuring that all segments of the State's eligible institutions, including religiously affiliated institutions receive an equitable share of the assistance provided both for program and technical

assistance, marketing, and energy conservation measures;

(7) A description of how the State will track: the amount of total available funds by source; the amount of funds obligated against those funds; and any limits on types of institutions eligible for particular funding sources; and

(8) The procedures for assisting institutions which initially receive program, technical, or marketing assistance (as part of the State's special program(s)) in later participating in the State's program(s) to provide energy conservation measure funding;

(k) The requirements for an energy audit or an energy use evaluation, and the requirements for qualifications for auditors or persons who will conduct energy use evaluations in the State;

(l) With regard to energy conservation maintenance and operating procedures:

(1) The procedures to insure implementation of energy conservation maintenance and operating procedures in those buildings for which financial assistance is requested under this part;

(2) A provision that all maintenance and operating procedure changes recommended in an energy audit pursuant to § 455.20(k), or in a technical assistance report under § 455.62, or a combination of these are implemented as provided under this part; or

(3) An assurance that the maintenance and operating procedures will be implemented in the future, or a reasonable justification for not implementing such procedures, as appropriate;

(m) The procedures to assure that financial assistance under this part will be used to supplement, and not to supplant, State, local or other funds, including at least:

(1) The screening of applicants for eligibility for available State funds;

(2) The identification of applicants which are seeking or have obtained private sector funds; and,

(3) Limiting or excluding (at the option of the State) the availability of financial assistance under this part for funding particular measures for which funding is being provided by other sources in the State (such as utility rebates) together with any requirements for potential applicants to first seek other sources of funding and document the results of that attempt before seeking financial assistance under this part and a description of the State's plan to assist potential applicants in identifying and obtaining other sources of funding;

(n) The procedures for determining that technical assistance programs performed without the use of Federal funds and used as the basis for energy conservation measure grant applications

have been performed in compliance with the requirements of § 455.62, for the purposes of satisfying the eligibility requirements contained in § 455.71(a)(3);

(o) The State's policy regarding reasonable selection of energy conservation measures for study in a technical assistance program including any restrictions based on category of building or on groups of structures where measures may, or may not, be appropriate for all the structures and any additional State requirements for the conduct of such a program;

(p) The procedures for State management, monitoring, and evaluation of technical assistance programs and energy conservation measures receiving financial assistance under this part. This includes any State requirements for hospital certifications from a State agency with descriptions of the review procedures and coordination process applicable in such cases. If there is no school facilities agency in the State, or if the existing agency does not certify all types of schools, it also includes any State requirements for an alternative review and certification process for schools;

(q) The circumstances under which the State requires an updated technical assistance program report to accompany an application for an energy conservation measure grant and the scope and contents of such an update;

(r) A description of the State's policies for establishing and insuring compliance with qualifications for technical assistance analysts. Such policies shall require that technical assistance analysts be free from financial interests which may conflict with the proper performance of their duties and have experience in energy conservation and:

(1) Be a registered professional engineer licensed under the regulatory authority of the State;

(2) Be an architect-engineer team, the principal members of which are licensed under the regulatory authority of the State; or

(3) Be otherwise qualified in accordance with such criteria as the State may prescribe in its State Plan to insure that individuals conducting technical assistance programs possess the appropriate training and experience in building energy systems;

(s) The circumstances under which the State will or will not consider accepting applications for technical assistance programs or energy conservation measures which were included in earlier approved grant awards but which were not implemented and for which no funds

were expended after the original grant award;

(t) A statement setting forth:

(1) An estimate of energy savings which may result from the modification of maintenance and operating procedures and installation of energy conservation measures;

(2) A recommendation as to the types of energy conservation measures considered appropriate within the State; and

(3) An estimate of the costs of carrying out technical assistance and energy conservation measure programs;

(u) For purposes of the technical assistance program pursuant to § 455.62:

(1) A statement setting forth uniform conversion factors to be used by all grant applicants in the technical assistance analysis for conversion of fuels to Btu equivalents. For the conversion of kilowatt hours to Btus, the State may use 3,413, representing consumption at the consumer's end, or 11,600, representing consumption at the producer's end, or may assign 3,413 to some types of energy conservation measures and 11,600 to other types of measures in which case the State shall specify the conversion factor to be used for each type of measure, providing a rationale and citing the sources used in making this decision, and the State shall always apply the specified factor consistently to all ECMs of a particular type;

(2) A statement setting forth the cost-effectiveness testing approach to be used to evaluate energy conservation measures pursuant to § 455.63. States may select either the simple payback approach or the life-cycle costing approach. Only one approach may be used for all technical assistance programs in the State. If the State elects to use the life-cycle costing approach, it must specify, consistent with § 455.64(g), whether it will use DOE-provided or its own energy cost escalation rate or annual discount rate, together with any other procedures required to be used (in addition to those specified in § 455.64); and

(3) A statement setting forth that 50 percent (or a higher percent) of total cost savings (used in calculating cost effectiveness pursuant to § 455.63(a)(1) for simple payback, or § 455.64(c) for life-cycle costing) must be from the cost of the energy to be saved.

(v) For any coordinating agency, a description of how it will operate including but not limited to:

(1) Name and address;

(2) Type of institutions covered;

(3) Application processing procedures;

(4) Whether TA applications, ECM applications, or both are covered;

(5) Intended schedule for soliciting and processing applications;

(6) Any special provisions for religiously affiliated institutions;

(7) Nature of subagreement to be used with institutions;

(8) Whether TA or ECM contractors selected by the coordinating agency will be offered incident to, or as a condition in, subagreements; and

(9) Other significant policies and procedures;

(w) If a State elects to allow credit toward the cost share for an energy conservation measure for the costs of technical assistance programs, technical assistance program updates, or energy conservation measures previously incurred and wholly paid for with non-Federal funds, the policies regarding such credit, including any time limits for the age of the earlier-funded work being proposed for credit; and

(x) The limit to the Federal share to be provided to applicants in the State if a State elects to provide less than a 50 percent Federal share to its applicants that do not qualify for severe hardship.

§ 455.21 Submission and approval of State Plans and State Plan amendments.

(a) Proposed State Plans or Plan amendments necessitated by a change in regulations shall be submitted to DOE within 90 days of the effective date of this subpart or any amended regulations. Upon request by a State, and for good cause shown, DOE may grant an extension of time.

(b) The Support Office Director shall, within 60 days of receipt of a proposed State Plan, review each plan and, if it is reasonable and found to conform to the requirements of this part, approve the State Plan. If the Support Office Director does not disapprove a State Plan within the 60-day period, the State Plan will be deemed to have been approved.

(c) If the Support Office Director determines that a proposed State Plan fails to comply with the requirements of this part or is not reasonable, DOE shall return the plan to the State with a statement setting forth the reasons for disapproval.

(d) Except for State Plan amendments covered by paragraph (a) of this section, if a State wishes to deviate from its approved State Plan, the State must submit and obtain DOE approval of the State Plan amendment.

(e) The Support Office Director shall, within 60 days or less of receipt of a proposed State Plan amendment review each amendment and, if it is found to conform to the requirements of this part, approve the amendment. If the Support

Office Director determines that a proposed State Plan amendment fails to comply with the requirements of this part, or is not reasonable, DOE shall return the amendment to the State with a statement setting forth the reasons for disapproval.

Subpart C—Allocation of Appropriations Among the States

§ 455.30 Allocation of funds.

(a) DOE will allocate available funds among the States for two purposes: to award grants to schools, hospitals, units of local government, and public care institutions and coordinating agencies representing them to implement technical assistance and energy conservation measures grant programs and to award grants to eligible States for administrative expenses, technical assistance programs, program assistance, and marketing expenses in accordance with this part.

(b) DOE shall notify each Governor of the total amount allocated for grants within the State for any grant program cycle:

(1) For schools and hospitals, the allocation amount shall be for technical assistance programs, subject to any limitation placed on technical assistance, and energy conservation measures;

(2) For States that are eligible pursuant to § 455.91, up to 100 percent of the funds allocated to the State by DOE may be used for technical assistance programs and/or for program assistance and up to 50 percent of the funds allocated to the State by DOE may be used for marketing as defined in § 455.2;

(3) For States eligible under § 455.81, a portion of the allocation may be used for a grant to the State for administrative expenses as described in § 455.120;

(4) For unit of local government and public care institutions, the allocation amount shall be solely for technical assistance programs; and

(5) For coordinating agencies, the allocation amount shall be for either technical assistance programs subject to any limitation placed on technical assistance, or energy conservation measures, or both depending on how the coordinating agency elects to operate.

(c) DOE shall notify each Governor of the period for which funds allocated for a grant program cycle will be made available for grants within the State.

(d) Each State shall make available up to 10 percent of its allocation for schools and hospitals in each grant program cycle to provide financial assistance, not to exceed a 90 percent Federal share, for

technical assistance programs and energy conservation measures for schools and hospitals determined to be in a class of severe hardship. Such determinations shall be made in accordance with § 455.132.

§ 455.31 Allocation formulas.

(a) Financial assistance for conducting technical assistance programs for units of local government and public care institutions shall be allocated among the States by multiplying the sum available by the allocation factor set forth in paragraph (c) of this section.

(b) Financial assistance for conducting technical assistance programs and acquiring and installing energy conservation measures, including renewable resource measures, for schools and hospitals, shall be allocated among the States by multiplying the sum available by the allocation factor set forth in paragraph (c) of this section.

(c) The allocation factor (K) shall be determined by the formula:

$$K = \frac{0.07}{N} + 0.1 \frac{(Sfc)}{(Nfc)} + 0.83 \frac{(SP)(SC)}{(NPC)}$$

where, as determined by DOE:

(1) Sfc is the projected average retail cost per million Btu's of energy consumed within the region in which the State is located as contained in current regional energy cost projections obtained from DOE.

(2) Nfc is the summation of the Sfc numerators for all States;

(3) N is the total number of eligible States;

(4) SP is the population of the State;

(5) SC is the sum of the State's heating and cooling degree days; and

(6) NPC is the summation of the (SP)(SC) numerators for all States.

(d) Except for the District of Columbia, Puerto Rico, Guam, American Samoa, the Commonwealth of the Northern Mariana Islands, and the U.S. Virgin Islands, no allocation available to any State may be less than 0.5 percent of all amounts allocated in any grant program cycle. No State will be allocated more than 10 percent of the funds allocated in any grant program cycle.

§ 455.32 Reallocation of funds.

(a) If a State Plan has not been approved and implemented by a State by the close of the period for which allocated funds are available as set forth in the notice issued by DOE pursuant to § 455.30(c), funds allocated to that State for technical assistance and energy conservation measures will be

reallocated among all States for the next grant program cycle, if available.

(b) Funds which have been allocated to States in a grant program cycle but which have not been obligated to eligible State, school, or hospital grant applicants by the end of that cycle shall be reallocated by DOE among all States in the next grant program cycle.

(c) Funds which become available due to deobligations resulting from funds returned by grantees due to cost underruns or scope-of-work reductions on completed projects shall be reallocated by DOE among all States in the next grant program cycle.

(d) Funds which become available because of declined grants to schools and hospitals within a State may be reobligated to other eligible applicants in the State until the December 31 following the close of the cycle for which the funds were allocated to the State. Such funds which have not been reobligated by that deadline shall be reallocated by DOE among all States in the next grant program cycle.

(e) Funds which become available because of declined or deobligated financial assistance provided through coordinating agencies to schools and hospitals within a State may be reobligated to other eligible applicants in the State until the December 31 following the close of the cycle for which the funds were allocated to the coordinating agency. Such funds which have not been reobligated by that deadline shall be reallocated by DOE among all States in the next grant program cycle.

(f) Funds granted to States for technical assistance, program assistance, and marketing pursuant to § 455.144 are subject to reallocation by DOE among all the States in the next program cycle if such funds are not committed by the State to their intended purposes by means of grants, contracts, or other legally binding obligations, or redirected to schools and hospitals grant applications pursuant to § 455.144(d), by the December 31 following the close of the cycle for which the funds were allocated to the State.

Subpart D—Preliminary Energy Audit and Energy Audit Grants [Reserved]

Subpart E—Technical Assistance Programs for Schools, Hospitals, Units of Local Government, and Public Care Institutions

§ 455.60 Purpose.

This subpart specifies what constitutes a technical assistance program eligible for financial assistance under this part and sets forth the

eligibility criteria for schools, hospitals, units of local government, and public care institutions to receive grants for technical assistance to be performed in buildings owned by such institutions.

§ 455.61 Eligibility.

To be eligible to receive financial assistance for a technical assistance program, an applicant must:

(a) Be a school, hospital, unit of local government, public care institution, or coordinating agency representing them except that financial assistance for units of local government and public care institutions will be provided only for buildings which are owned and primarily occupied by offices or agencies of a unit of local government or public care institution and which are not intended for seasonal use and not utilized primarily as a school or hospital eligible for assistance under this program;

(b) Be located in a State which has an approved State Plan as described in subpart B of this part;

(c) Have conducted an energy audit or an energy use evaluation required pursuant to § 455.20(k) and adequate to estimate energy conservation potential for the building for which financial assistance is to be requested, subsequent to the most recent construction, reconfiguration, or utilization change which significantly modified energy use within the building;

(d) If an energy audit has been performed, give assurance that it has implemented all energy conservation maintenance and operating procedures required pursuant to § 455.20(k) or provide a written justification for not implementing them pursuant to § 455.20(l)(3); and

(e) Submit an application in accordance with the provisions of this part and the approved State Plan.

§ 455.62 Contents of a technical assistance program.

(a) The purpose of a technical assistance program is to provide a report based on an on-site analysis of the building which meets the requirements of this section and the State's procedures for implementing this section.

(b) A technical assistance program shall be designed to identify and document energy conservation maintenance and operating procedure changes and energy conservation measures in sufficient detail to support possible application for an energy conservation measure grant and to provide reviewers and decision makers handling such applications sufficient information upon which to base a

judgment as to their reasonableness and a decision whether to pursue any or all of the recommended improvements.

(c) A technical assistance program shall be conducted by a technical assistance analyst who has the qualifications established in the State Plan in accordance with § 455.20(r).

(d) At the conclusion of a technical assistance program, the technical assistance analyst shall prepare a report which shall include:

(1) A description of building characteristics and energy data including:

(i) The results of the energy audit or energy use evaluation of the building together with a statement as to the accuracy and completeness of the energy audit or energy use evaluation data and recommendations;

(ii) The operation characteristics of energy-using systems; and

(iii) The estimated remaining useful life of the building;

(2) An analysis of the estimated energy consumption of the building, by fuel type in total Btus and Btu/sq.ft./yr., using conversion factors prescribed by the State in the State Plan, at optimum efficiency (assuming implementation of all energy conservation maintenance and operating procedures);

(3) A description and analysis of all identified energy conservation maintenance and operating procedure changes, if any, and energy conservation measures selected in accordance with the State Plan, including renewable resource measures, setting forth:

(i) A description of each energy conservation maintenance and operating procedure change and an estimate of the costs of adopting such energy conservation maintenance and operating procedure changes;

(ii) An estimate of the cost of design, acquisition and installation of each energy conservation measure, discussing pertinent assumptions as necessary;

(iii) Estimated useful life of each energy conservation measure;

(iv) An estimate of any increases or decreases in maintenance and operating costs that would result from each conservation measure, if relevant to the cost effectiveness test applicable under this part;

(v) An estimate of any significant salvage value or disposal cost of each energy conservation measure at the end of its useful life if relevant to the cost effectiveness test applicable under this part;

(vi) An estimate, supported by all data and assumptions used in arriving at the estimate, of the annual energy savings, the annual cost of energy to be saved,

and total annual cost savings using current energy prices including demand charges expected from each energy conservation maintenance and operating procedure change and the acquisition and installation of each energy conservation measure. In calculating the potential annual energy savings, annual cost of energy to be saved, or total annual cost savings of each energy conservation measure, including renewable resource measures, the technical assistance analyst shall:

(A) Assume that all energy savings obtained from energy conservation maintenance and operating procedures have been realized;

(B) Calculate the total annual energy savings, annual cost of energy to be saved, and total annual cost savings, by fuel type, expected to result from the acquisition and installation of the energy conservation measures, taking into account the interaction among the various measures;

(C) Calculate that portion of the total annual energy savings, annual cost of energy to be saved, and total annual cost savings, as determined in paragraph (d)(3)(vi)(B) of this section, attributable to each individual energy conservation measure; and

(D) Consider climate and other variables;

(vii) An analysis of the cost effectiveness of each energy conservation measure consistent with § 455.63 and, if applicable, § 455.64 of this part;

(viii) The estimated cost of the measure, which shall be the total cost for design and other professional service (excluding the cost of a technical assistance program), if any, and acquisition and installation costs. If required by the State in its State Plan, or if requested by the applicant, the technical assistance report shall provide a life-cycle cost analysis which is consistent with § 455.64 and states the discount and energy cost escalation rates that were used;

(ix) The simple payback period of each energy conservation measure, calculated pursuant to § 455.63(a);

(4) Energy use and cost data, actual or estimated, for each fuel type used for the prior 12-month period, by month, if possible;

(5) Documentation of demand charges paid by the institution for the prior 12-month period, by month if possible, when demand charges are included in current energy prices or when the technical assistance report recommends an energy conservation measure that shifts energy usage to periods of lower demand and cost; and

(6) A signed and dated certification that the technical assistance program has been conducted in accordance with the requirements of this section and that the data presented is accurate to the best of the technical assistance analyst's knowledge.

§ 455.63 Cost-effectiveness testing.

(a) This paragraph applies to calculation of the simple payback period of energy conservation measures.

(1) The simple payback period of each energy conservation measure (except measures to shift demand, or renewable resource measures) shall be calculated, taking into account the interactions among the various measures, by dividing the estimated total cost of the measure, as determined pursuant to § 455.62(d)(3)(ii), by the estimated annual cost savings accruing from the measure (adjusted for demand charges), as determined pursuant to § 455.62(d)(3)(vi), provided that:

(i) At least 50 percent of the annual cost savings used in this calculation shall be from the cost of the energy to be saved or a higher percent if required by a State in its State Plan pursuant to § 455.20(u)(3); and

(ii) No more than 50 percent of the annual cost savings used in this calculation shall be from other cost savings, such as those resulting from energy conservation maintenance and operating procedures related to particular energy conservation measures, or from changes in type of fuel used, or a lower percent if required by a State in its State Plan pursuant to § 455.20(u)(3).

(2) The simple payback period of each renewable resource energy conservation measure shall be calculated, taking into account the interactions among the various measures, by dividing the estimated total cost of the measure, as determined pursuant to § 455.62(d)(3)(ii), by the estimated annual cost savings accruing from the measure taking into account at least the annual cost of the non-renewable fuels displaced less the annual cost of the renewable fuel, if any, and the annual cost of any backup non-renewable fuel needed to operate the system, adjusted for demand charges, as determined pursuant to § 455.62(d)(3)(vi).

(3) The simple payback period of each energy conservation measure designed to shift demand to a period of lower demand and lower cost shall be calculated, taking into account the interactions among the various measures, by dividing the estimated total cost of the measure, as determined pursuant to § 455.62(d)(3)(ii), by the estimated annual cost savings accruing

from the measure taking into account at least the annual cost of the energy used before the measure is installed less the estimated annual cost of the energy to be used after the measure is installed, adjusted for demand charges, as determined pursuant to § 455.62(d)(3)(vi).

(b) This paragraph applies, in addition to paragraph (a) of this section, if the State plan requires the cost effectiveness of an energy conservation measure to be determined by life-cycle cost analysis or if the applicant requests such an analysis.

(1) A life-cycle cost analysis, showing a savings-to-investment ratio greater than or equal to one over the useful life of the energy conservation measure or 15 years, whichever is less, shall be conducted in accordance with the requirements set forth in the State Plan pursuant to §§ 455.20(u)(2), 455.20(u)(3) and § 455.64.

(2) The resulting savings-to-investment ratio shall be used for the purpose of ranking applications.

§ 455.64 Life-cycle cost methodology.

(a) The life-cycle cost methodology under § 455.63(b) of this part is a systematic comparison of the relevant significant cost savings and costs associated with an energy conservation measure over its expected useful life, or other appropriate study period with future cost savings and costs discounted to present value. The format for displaying life-cycle costs shall be a savings-to-investment ratio.

(b) An energy conservation measure must be cost effective, and its savings-to-investment ratio must be greater than or equal to one no earlier than the end of the second year of the study period.

(c) A savings-to-investment ratio is the ratio of the present value of net cost savings attributable to an energy conservation measure to the present value of the net increase in investment, maintenance and operating, and replacement costs less salvage value or disposal cost attributable to that measure over a study period.

(d) Except for energy conservation measures to shift demand or to use renewable energy resources, the numerator of the savings-to-investment ratio shall include net cost savings, appropriately discounted and adjusted for energy cost escalation consistent with paragraph (g) of this section, subject to the limitation that the cost of the energy to be saved shall constitute at least 50 percent of the net cost savings unless the State specifies a higher percent in its State plan pursuant to § 455.20(u)(3).

(e) With respect to energy conservation measures to shift demand or to use renewable energy resources, the numerator of the savings-to-investment ratio shall be net cost savings appropriately discounted and adjusted for energy cost escalation consistent with paragraph (g) of this section.

(f) The study period for a life-cycle cost analysis, which may not exceed 15 years, shall be the useful life of the energy conservation measure or of the energy conservation measure with the longest life (for purposes of ranking buildings with multiple energy conservation measures).

(g) The discount rate must equal or exceed the discount rate annually provided by DOE under 10 CFR part 436. The energy cost escalation rates must not exceed those annually provided by DOE under 10 CFR part 436.

(h) Investment costs may be assumed to be a lump sum occurring at the beginning of the base year, or to the extent that there are future investment costs, discounted to present value.

(i) The cost of energy and maintenance and operating costs may be assumed to begin to accrue at the beginning of the base year or when they are actually projected to occur.

(j) It may be assumed that costs occur in a lump sum at any time within the year in which they are incurred.

Subpart F—Energy Conservation Measures for Schools and Hospitals

§ 455.70 Purpose.

This subpart sets forth the eligibility criteria for schools and hospitals to receive grants for energy conservation measures, including renewable resource measures, and the elements of an energy conservation measure program.

§ 455.71 Eligibility.

(a) To be eligible to receive financial assistance for an energy conservation measure, including renewable resource measures, an applicant must:

(1) Be a school, hospital, or coordinating agency representing them as defined in § 455.2;

(2) Be located in a State which has an approved State Plan as described in subpart B of this part;

(3) Have completed a technical assistance program consistent with § 455.62, as determined by the State in accordance with the State Plan, for the building for which financial assistance is to be requested subsequent to the most recent construction, reconfiguration, or utilization change to the building which significantly

modified energy use within the building;

(4) Have completed an updated technical assistance program if required in the State Plan as specified in § 455.20(q);

(5) Have implemented all energy conservation maintenance and operating procedures which are identified as the result of a technical assistance program or have provided pursuant to the State plan a satisfactory written justification for not implementing any specific maintenance and operating procedures so identified;

(6) Have met any requirements set forth in the State Plan pursuant to § 455.20(m) regarding the avoidance of supplanting other funds in the financing of energy conservation measures under this part;

(7) Have no plan or intention at the time of application to close or otherwise dispose of the building for which financial assistance is to be requested within the simple payback period or useful life (depending on the State's requirement for determining cost effectiveness) of any energy conservation measure recommended for that building; and

(8) Submit an application in accordance with the provisions of this part and the approved State Plan;

(b) To be eligible for financial assistance:

(1) In States where simple payback has been selected as the cost-effectiveness test pursuant to § 455.20(u)(2), the simple payback period of each energy conservation measure for which financial assistance is requested shall not be less than 2 years nor greater than 10 years, and the estimated useful life of the measure shall be greater than its simple payback period; or

(2) In States where life-cycle costing has been selected as the cost-effectiveness test pursuant to § 455.20(u)(2), the savings-to-investment ratio of each energy conservation measure must be greater than or equal to one under § 455.63(b)(1), over a period for analysis which does not exceed 15 years, and the useful life of the energy conservation measure must be at least 2 years.

(c) Leased equipment is not eligible for financial assistance under this part. Equipment which becomes the property of the grantee at the conclusion of a long-term purchase agreement without any additional payment is eligible.

§ 455.72 Scope of the grant.

Financial assistance awarded under this subpart may be expended for the design (excluding design costs funded

under the technical assistance program), acquisition, and installation of energy conservation measures to reduce energy consumption or measures to allow the use of renewable resources in schools and hospitals or to shift energy usage to periods of low demand and cost. Such measures include, but are not necessarily limited to, those included in the definition of "energy conservation measure" in § 455.2.

Subpart G—State Administrative Expenses

§ 455.80 Purpose.

This subpart describes what constitutes a State administrative expense that may receive financial assistance under this part and sets forth the eligibility criteria for States to receive grants for administrative expenses.

§ 455.81 Eligibility.

To be eligible to receive financial assistance for administrative expenses, a State must:

(a) Have in place a State Plan approved by DOE pursuant to § 455.21 and

(b) Be operating a program to provide technical assistance and energy conservation measure grants, or technical assistance, program assistance, and marketing (where energy conservation measures are funded non-Federally) to eligible institutions pursuant to this part.

§ 455.82 Scope of the grant.

A State's administrative expenses shall be limited to those directly related to administration of technical assistance programs, program assistance and marketing programs, and energy conservation measures including costs associated with:

(a) Personnel whose time is expended directly in support of such administration;

(b) Supplies and services expended directly in support of such administration;

(c) Equipment purchased or acquired solely for and utilized directly in support of such administration, subject to 10 CFR 600.436;

(d) Printing, directly in support of such administration; and

(e) Travel, directly related to such administration.

Subpart H—State Grants for Technical Assistance, Program Assistance, and Marketing

§ 455.90 Purpose.

This subpart describes what constitutes a State program for technical

assistance, program assistance, and marketing that may receive financial assistance under this part and sets forth the eligibility criteria for States to receive grants for technical assistance, program assistance, and marketing.

§ 455.91 Eligibility.

To be eligible to receive financial assistance for technical assistance, program assistance, and marketing, a State must:

(a) Have in place a State Plan approved by DOE which includes a description of the State's program or programs to provide technical assistance, program assistance, and marketing, pursuant to § 455.20(j)(1);

(b) Have established a program consistent with this part to fund, from non-Federal sources, energy conservation measures for eligible institutions; and

(c) Provide to DOE a certification pursuant to § 455.122.

§ 455.92 State technical assistance awards.

Technical assistance awards by States under this subpart are subject to all requirements of this part which apply to DOE-awarded technical assistance program grants except that States:

(a) Are not required to award the funds in grant instruments;

(b) May award the funds throughout the fiscal year subject to § 455.144(a)(3); and

(c) Are not required to rank applications under § 455.131(b) of this part.

Subpart I—Cost Sharing

§ 455.100 Limits to Federal share.

Amounts made available under this part, together with any other amounts made available from other Federal sources, may not be used to pay more than 50 percent of the costs of technical assistance programs and energy conservation measures unless the grantee qualifies for the exceptions specified in §§ 455.141(a), 455.142(a), 455.142(b), or for severe hardship assistance specified in § 455.142(c). In cases of severe hardship, the Federal share of the cost cannot exceed 90 percent.

§ 455.101 Borrowing the non-Federal share/ title to equipment.

The non-Federal share of the costs of acquiring and installing energy conservation measures may be provided by using financing or other forms of borrowed funds, such as those provided by loans and performance contracts, even if such financing does not provide for the grantee to receive clear title to

the equipment being financed until after the grant is closed out. However, grantees in such cases must otherwise meet all the requirements of this part, and financing and loan agreements and performance contracts under this section are subject to the requirements of 10 CFR Part 600 and the certification requirements under § 455.111(e). Grantees must receive clear title to the equipment when the loan is paid off.

§ 455.102 Energy conservation measure cost-share credit.

To the extent a State provides in its State Plan, DOE may wholly or partially credit the costs of the following, with respect to a building, toward the required cost-share for an energy conservation measure grant in that building:

(a) A non-Federally funded technical assistance program;

(b) A non-Federally funded technical assistance program update to comply with § 455.20(q); and

(c) The non-Federally funded implementation of one or more energy conservation measures, which complies with the eligibility criteria set forth in § 455.71.

§ 455.103 Requirements for applications for credit.

(a) If a State has provided for credit in its State Plan pursuant to § 455.20(w), applications for credit will be considered only when the technical assistance programs or updates and the energy conservation measure projects for which credit is sought meet the applicable program requirements, such as those specified in § 455.61, § 455.62, § 455.71, and the relevant sections of 10 CFR part 600, except that the project need not comply with the Davis-Bacon Act regarding labor standards or wage rates.

(b) Credit for energy conservation measures will be considered only when supported by a technical assistance analysis that meets the requirements of § 455.62 and that was performed prior to the installation of the energy conservation measures.

§ 455.104 Rebates from utilities and other entities.

(a) Grantees which receive rebates or other monetary considerations from utilities or other entities for installing the energy conservation measures funded by a grant under this part may use such funds to meet their cost-sharing obligations pursuant to § 455.100.

(b) Where the rebate or monetary consideration does not exceed the non-Federal share of the cost of the measures applied for in a grant application,

grantees are not required to deduct the amount of the rebate or monetary consideration from the cost of the measures, and DOE does not consider such rebates or monetary considerations to be program income which would have to be remitted to DOE upon receipt by the grantee.

(c) Where the rebate or monetary consideration does exceed the non-Federal share of the cost of the measures applied for in a grant application, grantees may use the excess to fund additional measures if such measures have been recommended in the technical assistance report. If it is not possible to use the excess funding in this way, the grantee must reduce the cost—and DOE will reduce the Federal share—by the amount of the excess above the non-Federal share.

Subpart J—Applicant Responsibilities—Grants to Institutions and Coordinating Agencies

§ 455.110 Grant application submittals for technical assistance and energy conservation measures.

(a) Each eligible applicant desiring to receive financial assistance (either from DOE directly, through a State serving as a coordinating agency, or through another organization serving as a coordinating agency) shall file an application in accordance with the provisions of this subpart and the approved State Plan of the State in which such building is located. The application, which may be amended in accordance with applicable State procedures at any time prior to the State's final determination thereon, shall be filed with the State energy agency designated in the State Plan. Coordinating agencies shall file a single application with DOE which includes all of the information required below for each building for which assistance has been requested and to which is attached a copy of each application from each building owner.

(b) Applications from schools, hospitals, units of local government, public care institutions, and coordinating agencies for financial assistance for technical assistance programs shall include the certifications contained in § 455.111 and:

(1) The applicant's name and mailing address;

(2) The energy audit or energy use evaluation required by the State pursuant to § 455.20(k) for each building for which financial assistance is requested;

(3) A project budget, by building, which stipulates the intended use of all Federal and non-Federal funds,

including in-kind contributions (valued in accordance with the guidelines in 10 CFR part 600), to be used to meet the cost-sharing requirements described in subpart I of this part;

(4) A brief description, by building, of the proposed technical assistance program, including a schedule, with appropriate milestone dates, for completing the technical assistance program;

(5) Additional information required by the applicable State Plan and any other information which the applicant desires to have considered, such as information to support an application from a school or hospital for financial assistance in excess of the 50 percent Federal share on the basis of severe hardship or an application which proposes the use of Federal funds, paid under and authorized by another Federal agreement to meet cost sharing requirements.

(c) Applications from schools and hospitals and coordinating agencies for financial assistance for energy conservation measures, including renewable resource measures, shall include the certifications contained in § 455.111 and:

(1) The applicant's name and mailing address;

(2) A description of each building for which financial assistance is requested sufficient to determine the building's eligibility, ownership, use, and size in gross square feet;

(3) A project budget, by measure or building, as provided in the State Plan which stipulates the intended use of all Federal and non-Federal funds and identifies the sources and amounts of non-Federal funds, including in-kind contributions (valued in accordance with the guidelines in 10 CFR part 600) to be used to meet the cost-sharing requirements described in subpart I of this part;

(4) A schedule, including appropriate milestone dates, for the completion of the design, acquisition, and installation of the proposed energy conservation measures for each building;

(5) For each energy conservation measure proposed for funding, the projected cost, the projected simple payback period, and if appropriate, the life-cycle cost savings-to-investment ratio calculated under § 455.64. Applications with more than one energy conservation measure per building shall include projected costs and paybacks, and if appropriate, the savings-to-investment ratios for each measure and the average simple payback period or overall savings-to-investment ratio for all measures proposed for the building;

(6) The report of the technical assistance analyst (unless waived by DOE because the report is already in its possession). This report must have been completed since the most recent construction, reconfiguration, or utilization change to the building which significantly modified energy use, for each building;

(7) An update of the technical assistance program report if required by the State in its State Plan and as specified in § 455.20(q);

(8) If the applicant is aware of any adverse environmental impact which may arise from adoption of any energy conservation measure, an analysis of that impact and the applicant's plan to minimize or avoid such impact; and

(9) Additional information required by the applicable State Plan, and any additional information which the applicant desires to have considered, such as information to support an application for financial assistance in excess of the non-Federal share set forth in the State plan on the basis of severe hardship, or an application which proposes the use of Federal funds paid under and authorized by another Federal agreement to meet cost sharing requirements.

§ 455.111 Applicant certifications for technical assistance and energy conservation measure grants to institutions and coordinating agencies.

Applications for financial assistance for technical assistance programs and energy conservation measures, including renewable resource measures, shall include certification that the applicant:

(a) Is eligible under § 455.61 for technical assistance or § 455.71 for energy conservation measures;

(b) Has satisfied the requirements set forth in § 455.110;

(c) For applications for technical assistance, has implemented all energy conservation maintenance and operating procedures recommended in the energy audit pursuant to § 455.20(k), if done, and for applications for energy conservation measures, those recommended in the report obtained under a technical assistance program pursuant to § 455.62. If any such procedure has not been implemented, the application shall contain a satisfactory written justification consistent with the State plan for not implementing that procedure;

(d) Will obtain from the technical assistance analyst, before the analyst performs any work in connection with a technical assistance program or energy conservation measure, a signed statement certifying that the technical

assistance analyst has no conflicting financial interest and is otherwise qualified to perform the duties of technical assistance analyst in accordance with the standards and criteria established in the approved State Plan;

(e) When using borrowed funds for the non-Federal share of an energy conservation project where a lien is placed by the lender on equipment funded under the grant, will obtain clauses in the financing contract:

(1) Stating the percent of DOE interest in the equipment (i.e., the percent of the total cost provided by the grant); and

(2) Requiring lender notification, with certified return receipt requested, to the applicable Support Office Director of the filing of a lawsuit seeking a remedy for a default; and

(f) Will comply with all reporting requirements contained in § 455.113.

§ 455.112 Davis-Bacon wage rate requirement.

When an energy conservation measure or group of measures in a building, funded under this part, has a total estimated cost for acquisition and installation of more than \$5,000, any construction contract or subcontract in excess of \$2,000, using any grant funds awarded under this part must include:

(a) Those contract labor standards provisions set forth in 29 CFR 5.5 and

(b) A provision for payment of laborers and mechanics at the minimum wage rates determined by the Secretary of Labor in accordance with the Davis-Bacon Act (40 U.S.C. 276a) as set forth in 29 CFR part 1.

§ 455.113 Grantee records and reports for technical assistance and energy conservation measure grants to institutions and coordinating agencies.

(a) Each unit of local government or public care institution which receives a grant for a technical assistance program and each school, hospital, and coordinating agency which receives a grant for a technical assistance program or an energy conservation measure, including renewable resource measures, shall keep all the records required by § 455.4 in accordance with this part and the DOE Financial Assistance Rules.

(b) Each grantee shall submit reports as follows:

(1) For technical assistance programs, two copies of a final report of the analysis completed on each building for which financial assistance was provided shall be submitted, either both to the State energy agency, or one to the State energy agency, and one to DOE as agreed upon between the State and the DOE Support Office no later than 90

days following completion of the analysis. These reports shall contain:

(i) The report submitted to the institution by the technical assistance analyst, and

(ii) The institution's plan to implement energy conservation maintenance and operating procedures;

(2) For energy conservation measure projects:

(i) Semi-annual progress reports. Two copies shall be submitted, either both to the State energy agency or one to the State energy agency and one to DOE, as agreed upon between the State and the DOE Support Office, no later than the end of July (for the period January 1 through June 30), and January (for the period July 1 through December 31) and shall detail and discuss milestones accomplished, those not accomplished, status of in-progress activities, and remedial actions if needed to achieve project objectives. Reports of coordinating agency grantees shall include financial assistance which an institution declines or does not use as a result of a change in scope. A final report may be submitted in lieu of the last semi-annual report if it satisfies the semi-annual progress report and final report designated time frames;

(ii) A final report. Two copies shall be submitted, either both to the State energy agency or one to the State energy agency and one to DOE, as agreed upon between the State and the DOE Support Office, within 90 days of the completion of the project and shall list and describe the energy conservation measures acquired and installed, contain a final actual cost and a final estimated simple payback period for each measure and the project as a whole, or a final savings-to-investment ratio for each measure and the project as a whole (depending on the State requirement), and include a statement that the completed energy conservation measures conform to the approved grant application;

(iii) Annual energy use reports from a representative sample to be selected by the State which will reflect the grantee's actual post-retrofit energy use experiences for 3 years after project completion. Two copies of these reports shall be submitted, either both to the State energy agency or one to the State energy agency and one to DOE, as agreed upon between the State and the DOE Support Office within 60 days after the end of each 12-month period covered in the reports and shall identify each building and provide data on energy use for that building for the relevant 12-month period. To the extent feasible, energy consumption data in each annual report should be the monthly usage data by fuel or energy

type, and the reports should include brief descriptions of any changes in building usage, equipment, or structure occurring during the reporting period.

(3) Each copy of any technical assistance or energy conservation measure report shall be accompanied by a financial status report completed in accordance with the documents listed in § 455.3;

(4) In cases where both copies of the grantee technical assistance, energy conservation measure, and financial status reports are submitted to the State, as agreed upon between the State and the DOE Support Office, the State shall in turn submit copies to DOE on a mutually agreed-upon schedule; and

(5) Such other information as DOE may from time to time request.

Subpart K—Applicant Responsibilities—Grants to States

§ 455.120 Grant applications for State administrative expenses.

Each State desiring to receive grants to help defray State administrative expenses shall file an application in accordance with the provisions of this section.

(a) Where a State is operating a program solely to provide grants to schools and hospitals, the maximum amount of administrative expenses the State may apply for is \$50,000 or 5 percent of the Federal share of its schools and hospitals grant awards, whichever is greater.

(1) At any time after notice by DOE of the amounts allocated to each State for a grant program cycle, each State may apply to DOE for an amount for administrative expenses not exceeding \$50,000.

(2) After making a submittal to DOE as required under § 455.133, each State may apply for a further grant not exceeding 5 percent of the total Federal share of all grant awards for technical assistance and energy conservation measures within the State, less the \$50,000 provided for in paragraph (a)(1) of this section if that was previously awarded to the State for administrative expenses in the same grant program cycle.

(b) Where a State is eligible and elects to apply to use its appropriated allocation for grants for technical assistance, program assistance, and/or marketing pursuant to § 455.121, the maximum amount of administrative expenses the State may apply for is \$50,000 or 5 percent of the total amount obligated or legally committed to eligible recipients in the State pursuant to the State's program under this part, whichever is greater.

(1) At any time after notice by DOE of amounts allocated to each State for a grant program cycle, each State may apply to DOE for an amount for administrative expenses not exceeding \$50,000.

(2) Once the total amount obligated or legally committed to the program in the cycle is known, a State may subsequently apply for a further grant, not exceeding 5 percent of the total amount (less the \$50,000 provided for in paragraph (b)(1) of this section if that was previously awarded to the State for administrative expenses in the same fiscal year) obligated or legally committed to eligible recipients in the State during the fiscal year for technical assistance, program assistance, and marketing, and for energy conservation measures which are funded with non-Federal funds but which meet the certification and other requirements of this part for such energy conservation measures.

(3) The aggregate amount applied for to cover State administrative expenses, technical assistance, program assistance, and marketing cannot exceed the State's allocation for the fiscal year.

(c) In the event that a State cannot, or decides not to use the amount available to it for an administrative grant under this section for administrative purposes, these funds may, at the discretion of the State, be used for technical assistance and energy conservation measure grants to eligible institutions within that State in accordance with this part.

(d) Applications for financial assistance to defray State administrative expenses shall include:

(1) The name and address of the person designated by the State to be responsible for the State's functions under this part;

(2) An identification of intended use of all Federal and non-Federal funds to be used for the State administrative expenses listed in § 455.82; and

(3) Any other information required by DOE.

§ 455.121 Grant applications for State technical assistance, program assistance, and marketing programs.

(a) A State may apply for up to 100 percent of the amount allocated to it for a grant program cycle to fund administrative expenses under § 455.120 and technical assistance and program assistance programs, or for up to 50 percent of the amount allocated to it for a grant program cycle to fund marketing programs provided that:

(1) The State has established a program to fund technical assistance, program assistance, or marketing programs, and has described its program

or programs in its State Plan, as specified in § 455.20(j);

(2) The State has a program or programs established consistent with this part of that fund, from non-Federal sources, energy conservation measures eligible under this part;

(3) Not more than 15 percent of the aggregate amount of Federal and non-Federal funds legally committed or obligated to eligible recipients in the State to provide program assistance, marketing and technical assistance programs, implement energy conservation measures consistent with this part, and otherwise carry out a program pursuant to this part for the fiscal year concerned are expended for program assistance, technical assistance and marketing costs for such program;

(4) The energy conservation measures funded from non-Federal sources under this section would be eligible for funding under § 455.71; and

(5) The institutions undertaking the non-Federally funded energy conservation measures do so in accordance with all applicable Federal, State, and local laws and regulations with particular attention paid to applicable Federal and State non-discrimination laws and regulations.

(b) Applications for financial assistance to defray State technical assistance, program assistance, or marketing expenses shall include:

(1) The name and address of the person designated by the State to be responsible for the State's functions under this part;

(2) An identification of intended use of all Federal and non-Federal funds for the State administrative expenses listed in § 455.82, or the technical assistance, program assistance, or marketing programs pursuant to this section;

(3) Descriptions of the activities to be implemented together with a description of the State's program to provide non-Federal sources of funding to carry out the State's program(s) for energy conservation measures consistent with this part;

(4) A certification that the 15 percent limit specified in subparagraph (a)(3) of this section will not be exceeded; and

(5) Any other information required by DOE.

§ 455.122 Applicant certifications for State grants for technical assistance, program assistance, and marketing.

Applications from States for financial assistance for technical assistance programs, program assistance, and marketing shall include certifications that the State:

(a) Has established a program or programs to fund, from non-Federal

sources, energy conservation measures for eligible buildings consistent with this part;

(b) Will not expend, for technical assistance, program assistance, and marketing, more than 15 percent of the aggregate amount of Federal and non-Federal funds legally obligated or committed to eligible recipients in the State to provide technical assistance, program assistance, marketing programs, implement energy conservation measures consistent with this part, and otherwise carry out a program pursuant to this part for the fiscal year concerned; and

(c) Has provided for regular DOE-funded grants to eligible religiously affiliated institutions if the State has a State constitutional or other legal prohibition on providing State assistance to such institutions and if such institutions would be ineligible to apply for the non-Federally funded energy conservation measures or State-funded technical assistance.

§ 455.123 Grantee records and reports for State grants for administrative expenses, technical assistance, program assistance, and marketing.

(a) Each State which receives a grant for administrative expenses, or a grant for technical assistance programs, program assistance, or marketing shall keep all the records required by § 455.4 in accordance with this part and the DOE Financial Assistance Rules.

(b) Each State shall submit a semi-annual program performance report to DOE by the close of each February and August, including, but not limited to:

(1) A discussion of administrative activities pursuant to § 455.82, if a State has received a grant to fund such activities, and a discussion of milestones accomplished, those not accomplished, status of in-progress activities, problems encountered, and remedial actions, if any, planned pursuant to § 455.135(f);

(2) A discussion of technical assistance, program assistance, and/or marketing programs pursuant to § 455.121, if the State has received grants to fund such activities, including a discussion of the results of the State's program to non-Federally fund energy conservation measures consistent with this part pursuant to § 455.121, with a list of buildings receiving assistance for technical assistance programs and a list of buildings which obtained energy conservation measures using non-Federal funds, including the name and address of each building, the amount and type of funding provided to each, and for energy conservation measures, the types of measures funded in each

building together with each measure's total estimated cost and estimated annual cost savings, annual energy savings, and the annual cost of the energy to be saved (determined pursuant to § 455.62(d)) consistent with the data currently provided to DOE on all ICP grants;

(3) A summary of grantee reports received by the State during the report period pursuant to §§ 455.113(b)(1) and (b)(2);

(4) For the report due to be submitted to DOE by the close of each August, an estimate of annual energy use reductions in the State, by energy source, attributable to implementation of energy conservation maintenance and operating procedures and installation of energy conservation measures under this part. Such estimates shall be based upon a sampling of institutions participating in the technical assistance phase of this program and upon the energy use reports submitted to the State pursuant to § 455.113(b)(2)(iii); and

(5) Such other information as DOE may from time to time request.

(c) Each copy of any report covering grants for State administrative, technical assistance, program assistance, or marketing expenses shall be accompanied by a financial status report completed in accordance with the documents listed in § 455.3. In addition, States shall file quarterly financial status reports for the quarters which occur between the semi-annual report periods covered in their program performance reports. These quarterly reports are due within 30 days following the end of the applicable quarters.

Subpart L—State Responsibilities

§ 455.130 State evaluation of grant applications.

(a) If an application received by a State is reviewed and evaluated by that State and determined to be in compliance with subparts E, F, and J of this part, § 455.130(b), any additional requirements of the approved State Plan, State environmental laws, and other applicable laws and regulations, then such application will be eligible for financial assistance.

(b) Concurrent with its evaluation and ranking of grant applications pursuant to § 455.131, the State will forward applications for technical assistance or for energy conservation measures for schools to the State school facilities agency for review and certification that each school application is consistent with related State programs for educational facilities. For hospitals the certification requirement applies only if

there is a State requirement for it in which case the procedure should be described in the State Plan.

§ 455.131 State ranking of grant applications.

(a) Except as provided by § 455.92 of this part, all eligible applications received by the State will be ranked by the State in accordance with its approved State Plan.

(b) For technical assistance programs, buildings shall be ranked in descending priority based upon the energy conservation potential, on a savings percentage basis, of the building as determined in the energy audit or energy use evaluation pursuant to § 455.20(k). Each State shall develop separate rankings for all buildings covered by eligible applications for:

(1) Technical assistance programs for units of local government and public care institutions and

(2) Technical assistance programs for schools and hospitals.

(c) All eligible applications for energy conservation measures received will be ranked by the State on building-by-building or a measure-by-measure basis. If a State ranks on a building-by-building basis, several buildings may be ranked as a single building if the application proposes a single energy conservation measure which is physically connected to all of the buildings. If a State ranks on a measure-by-measure basis, a measure that is physically connected to a number of buildings may be ranked as a single measure. Buildings or measures shall be ranked in accordance with the procedures established by the State Plan on the basis of the information developed during a technical assistance program (or its equivalent) for the building and the criteria for ranking applications. The criterion set forth in paragraph (1) of this subsection shall receive at least 50 percent of the weight given to the criteria used to rank applications. Each State may assign weights to the other criteria as set forth in the State Plan pursuant to § 455.20(e). The criteria for ranking applications are:

(1) Simple payback or a life-cycle cost analysis, calculated in accordance with § 455.63 and § 455.64, as applicable;

(2) The types and quantities of energy to be saved, including oil, natural gas, or electricity, in a priority as established in the approved State Plan;

(3) The types of energy sources to which conversion is proposed, including renewable energy;

(4) The quality of the technical assistance program report; and

(5) Other factors as determined by the State.

(d) A State is exempt from the ranking requirements of this section when:

(1) The total amount requested by all applications for schools and hospitals for technical assistance and energy conservation measures in a given grant program cycle for grants up to 50 percent is less than or equal to the funds available to the State for such grants and the total amount recommended for hardship funding is less than or equal to the amounts available to the State for such grants and

(2) The total amount requested by all applications for buildings owned by units of local government and public care institutions in a given grant program cycle is less than or equal to the total amount allocated to the State for technical assistance program grants in the State;

(e) If a State elects to permit applications for credit pursuant to § 455.102, such applications for completed or partially completed energy conservation measures shall reflect both the work done and the work to be done and will be reviewed and ranked on the basis of the cost of all of the measures in the project. The credit shall not exceed the non-Federal share of the proposed additional energy conservation measures (and the Federal share shall not exceed the cost of the work remaining to be done).

(f) Within the rankings of school and hospital buildings for technical assistance and energy conservation measures including renewable resource measures to the extent that approvable applications are submitted, a State shall initially assure that:

(1) Schools receive at least 30 percent of the total funds allocated for schools and hospitals to the State in any grant program cycle and

(2) Hospitals receive at least 30 percent of the total funds allocated for schools and hospitals to the State in any grant program cycle.

(g) If there are insufficient applications from schools or hospitals to cover the respective 30 percent requirements specified in paragraph (f) of this section, then the State may recommend use of the remaining funds in those allocations for other qualified applicants.

§ 455.132 State evaluation of requests for severe hardship assistance.

(a) To the extent provided in § 455.30(d), financial assistance will be initially available for schools and hospitals experiencing severe hardship based upon an applicant's inability to provide the non-Federal share as specified in the State plan pursuant to § 455.20(g). This financial assistance

will be available only to the extent necessary to enable such institutions to participate in the program.

(b) The State shall recommend funds for severe hardship applications wholly or partially from the funds reserved in accordance with § 455.30(d) and as stated in an approved State Plan.

(c) Applications for Federal funding in excess of the non-Federal share in the State plan pursuant to § 455.20(x) based on claims of severe hardship shall be given an additional evaluation by the State to assess on a quantifiable basis to the maximum extent practicable the relative need among eligible institutions. The minimum amount of additional Federal funding necessary for the applicant to participate in the program will be determined by the State in accordance with the procedures established in the State Plan. The primary consideration shall be the institution's inability to provide the non-Federal share of the project cost as specified in the State plan pursuant to § 455.20(x). Secondary criteria such as climate, fuel cost and fuel availability, borrowing capacity, median family income in the area, and other relevant factors as determined by the State may be addressed in the State Plan as specified in § 455.20(g).

(d) A State shall indicate, for those schools and hospitals with the highest rankings, determined pursuant to § 455.131(b) and (c):

(1) The amount of additional hardship funding requested by each eligible applicant for each building determined to be in a class of severe hardship and

(2) The amount of hardship funding recommended by the State based upon relative need, as determined in accordance with the State Plan, to the limit of the hardship funds available. The State must decide on a case-by-case basis whether, and to what extent, it will recommend hardship funding.

(e) If there are insufficient applications from hardship applicants to cover the 10 percent allocation provided for in § 455.30(d), then the State may recommend use of the remaining funds for other qualified applicants. The total amount recommended for hardship grants cannot exceed the 10 percent limit.

§ 455.133 Forwarding of applications from institutions and coordinating agencies for technical assistance and energy conservation measure grants.

(a) Except as provided by § 455.92 of this part, each State shall forward all applications recommended for funding within its allocation to DOE once each program cycle along with a listing of buildings or measures covered by

eligible applications for schools, hospitals, units of local government, and public care institutions ranked by the State if necessary pursuant to the provisions of § 455.131. If ranking has been employed, the list shall include the standings of buildings or measures.

(1) Measure-by-measure rankings will be recombined for the respective buildings with more than one recommended measure and

(2) Buildings will be consolidated under one grantee application.

(b) The State shall indicate the amount of financial assistance requested by the applicant for each eligible building and, for those buildings recommended for funding within the limits of the State's allocation, the amount recommended for funding. If the amount recommended is less than the amount requested by the applicant, the list shall also indicate the reason for that recommendation.

(c) The State shall indicate that it has reviewed and evaluated all of the submitted applications and that those applications meet the relevant requirements of the program, and shall certify that applications submitted are eligible pursuant to § 455.130(a).

§ 455.134 Forwarding of applications for State grants for technical assistance, program assistance, and marketing.

A State eligible to apply for grants for technical assistance, program assistance, or marketing, as described in § 455.121, may submit such an application to DOE any time after the allocations have been announced as part of, or in lieu of, an application for a grant for State administrative expenses. Such applications shall provide separate narrative descriptions, budgets and appropriate milestone dates, covering each activity or program, that are sufficiently detailed to enable DOE to reasonably evaluate the application.

§ 455.135 State liaison, monitoring, and reporting.

Each State shall be responsible for:

(a) Consulting with eligible institutions and coordinating agencies representing such institutions in the development of its State Plan;

(b) Notifying eligible institutions and coordinating agencies of the content of the approved State Plan and any amendment to a State Plan;

(c) Notifying each applicant how the applicant's building or measure ranked among other applications, and whether and to what extent its application will be recommended for funding or if not to be recommended for funding, the specific reasons(s) therefor;

(d) Certifying that each institution has given its assurance that it is willing and

able to participate on the basis of any changes in amounts recommended for that institution in the State ranking pursuant to § 455.131;

(e) Reporting requirements pursuant to § 455.113; and

(f) Direct program oversight and monitoring of the activities for which grants are awarded as defined in the State Plan. States shall immediately notify DOE of any noncompliance or indication thereof.

Subpart M—Grant Awards

§ 455.140 Approval of applications from institutions and coordinating agencies for technical assistance and energy conservation measures.

(a) DOE shall review and approve applications submitted by a State in accordance with § 455.133 if DOE determines that the applications meet the objectives of the Act, and comply with the applicable State Plan and the requirements of this part. DOE may disapprove all or any portion of an application to the extent funds are not available to carry out a program or measure (or portion thereof) contained in the application, or for such other reason as DOE may deem appropriate.

(b) DOE shall notify a State and the applicant of the final approval or disapproval of an application at the earliest practicable date after the DOE receipt of the application, and, in the event of disapproval, shall include a statement of the reasons therefor.

(c) An application which has been disapproved for reasons other than lack of funds may be amended to correct the cause of its disapproval and resubmitted in the same manner as the original application at any time within the same grant program cycle. Such an application will be considered to the extent funds have not already been designated for applicants by the ranking process at the time of resubmittal. However, nothing in this provision shall obligate either the State or DOE to take final action regarding a resubmitted application within the grant program cycle. An application not acted upon may be resubmitted in a subsequent grant program cycle.

(d) DOE shall not provide supplemental funds to cover cost overruns or other additional costs beyond those provided for in the original grant award for technical assistance projects and shall fund only one technical assistance project per building.

(e) DOE shall not provide supplemental funds to cover cost overruns or other additional costs beyond those provided for in the

original grant award for energy conservation measures funded under a grant in a given grant program cycle. DOE shall not provide funds to cover energy conservation measures intended to replace energy conservation measures funded in an earlier grant cycle unless the State has funds remaining after all applications for new energy conservation measures have been evaluated and submitted to DOE for funding.

(f) If provided for in the State Plan, an applicant may reapply for a technical assistance program or an energy conservation measure grant which was included in a prior grant application but which was not implemented and for which no funds were expended.

(g) An applicant may apply for, and DOE may make, grant awards in another grant program cycle for additional energy conservation measures which relate to a building which previously received grants for other energy conservation measures.

(h) Funds which become available to a grantee after the installation of all approved measures, due to cost underruns in the installed measures, may be used by the grantee for additional measures if such measures are approved in writing by the State and DOE.

(i) DOE may fund costs incurred by an applicant for technical assistance and energy conservation measure projects after the date of the grant application, so long as that date is no earlier than the close of the preceding grant program cycle. Such costs may be funded when, in the judgment of DOE, the applicant has complied with program requirements and the costs incurred are allowable under applicable cost principles and the approved project budget. The applicant bears the responsibility for the entire project cost unless the application is approved by DOE in accordance with this part.

(j) In addition to the prior approval requirements for project changes as specified in the DOE Financial Assistance Rules (10 CFR part 600), a grantee shall request prior written approval from DOE before:

(1) Transferring DOE or matching amounts between buildings included in an approved application when the State ranks applications on a building-by-building basis or

(2) Transferring DOE or matching amounts between energy conservation measures included in an approved application when the State ranks on a measure-by-measure basis.

§ 455.141 Grant awards for units of local government, public care institutions, and coordinating agencies.

(a) DOE may make grants to units of local government, public care institutions, and coordinating agencies representing them for up to 50 percent of the costs of performing technical assistance programs for buildings covered by an application approved in accordance with § 455.140 except that in the case of units of local government and public care institutions a majority of whose operating and capital funds are provided by the Government of the U.S. Virgin Islands, Guam, American Samoa, or the Commonwealth of the Northern Mariana Islands, a grant may be made for up to 100 percent of such costs.

(b) Total grant awards within any State to units of local government and public care institutions are limited to funds allocated to each State in accordance with § 455.30.

(c) Units of local government and public care institutions are not eligible for financial assistance for severe hardship.

§ 455.142 Grant awards for schools, hospitals, and coordinating agencies.

(a) DOE may make grants to schools, hospitals, and coordinating agencies for up to 50 percent of the costs of performing technical assistance programs for buildings covered by an application approved in accordance with § 455.140; except that in the case of schools and hospitals a majority of whose operating and capital funds are provided by the Government of the U.S. Virgin Islands, Guam, American Samoa, or the Commonwealth of the Northern Mariana Islands a grant may be made for up to 100 percent of such costs. Grant awards for technical assistance programs in any State within any grant program cycle shall be limited to a portion of the total allocation as specified in § 455.30(b)(1).

(b) DOE may make grants to schools, hospitals and coordinating agencies for up to 50 percent of the costs of acquiring and installing energy conservation measures, including renewable resource measures, for buildings covered by an application approved in accordance with § 455.140, except that in the case of schools and hospitals a majority of whose operating and capital funds are provided by the Government of the U.S. Virgin Islands, Guam, American Samoa, or the Commonwealth of the Northern Mariana Islands, a grant may be made for up to 100 percent of such costs.

(c) DOE may award up to 10 percent of the total amount allocated to a State for schools and hospitals in cases of

severe hardship, ascertained by the State in accordance with the State Plan, for buildings recommended and in amounts determined by the State pursuant to § 455.132(d)(2).

§ 455.143 Grant awards for State administrative expenses.

(a) For the purpose of defraying State expenses in the administration of technical assistance programs in accordance with subpart E and energy conservation measures in accordance with subpart F or energy conservation measures non-Federally funded pursuant to § 455.121, DOE may make grant awards to a State:

(1) Immediately following public notice of the amounts allocated to a State for the grant program cycle, and upon approval of the application for administrative costs, in an amount not exceeding \$50,000;

(2) Concurrent with grant awards for approved applications for technical assistance or energy conservation measures for institutions in that State and upon approval of an application for administrative costs, in an amount not exceeding the difference between the amount granted pursuant to paragraph (a)(1) of this section and 5 percent of the Federal share of the total amount of grants awarded within the State for technical assistance programs and energy conservation measures in the applicable grant program cycle; or

(3) Upon receipt by DOE of documentation from the State demonstrating that sufficient non-Federal funding has been obligated or legally committed to schools and hospitals for energy conservation measures pursuant to § 455.121(a) and § 455.123(b)(2), and upon approval of an application for administrative costs, in an amount not exceeding the difference between the amount granted pursuant to paragraph (a)(1) of this section and 5 percent of the aggregate Federal and non-Federal funds obligated or legally committed to eligible recipients in the State to provide technical assistance, program assistance, and marketing programs and implement energy conservation measures consistent with this part, for the fiscal year concerned.

(b) Grants for such purposes may be made for up to 100 percent of the projected administrative expenses, not to exceed the State's allocation or the \$50,000 or 5 percent limit, as approved by DOE.

(c) The total of all grants for State administrative costs, technical assistance programs, and energy conservation measures (or for State administrative costs, technical assistance, program assistance, and

marketing, if the State elects and is eligible to apply for such grants) in that State shall not exceed the total amount allocated for that State for any grant program cycle.

(d) In the event that a State cannot or decides not to use the amount available to it for an administrative grant under this section for administrative purposes, these funds may, at the discretion of the State, be used for technical assistance and energy conservation grants to eligible institutions within that State in accordance with this part.

§ 455.144 Grant awards for State programs to provide technical assistance, program assistance, and marketing.

(a) For the purpose of defraying State expenses in the administration of special programs to provide technical assistance and program assistance pursuant to § 455.121, DOE may make a grant award to a State for up to 100 percent of the funds allocated to the State for the grant program cycle, provided that the State meets the requirements described in § 455.121(b). In addition:

(1) Funds for individual technical assistance programs provided by the State pursuant to this section shall not exceed 50 percent of the cost of the technical assistance program;

(2) Grants for program assistance may be made for up to 100 percent of a State's projected program assistance expenses; and

(3) Grants for State technical assistance, and program assistance programs may be awarded by DOE upon approval of an application from the State.

(b) For the purpose of defraying State expenses in the administration of a marketing program pursuant to § 455.121, DOE may make a grant award to a State for up to 50 percent of the funds allocated to the State for the grant program cycle, provided that the State meets the requirements described in § 455.121(b). In addition:

(1) Grants for marketing may be made for up to 100 percent of a State's projected marketing expenses; and

(2) Such grants may be awarded by DOE upon approval of an application from the State.

(c) If a State provides a certification under section 455.121(b) and is unable to document that the required non-Federal funding levels for energy conservation measures were achieved substantially for the previous fiscal year for which a similar certification was submitted, DOE may deny the application, accept it after the percentage of allocated funds is reduced

in light of past performance, or take other appropriate action.

(d) In the event that a State, after receiving a grant under this section, cannot or decides not to use all or part of the amount available to it for technical assistance, program assistance, and marketing, these funds may, at the discretion of the State and after appropriate application to and approval of DOE, be used for technical assistance and energy conservation grants to eligible institutions within that State in accordance with this part.

Subpart N—Administrative Review

§ 455.150 Right to administrative review.

(a) A State shall have a right to file a notice requesting administrative review of a decision under § 455.143 by a Support Office Director to disapprove an application for a grant award for State administrative expenses subject to special conditions or a decision under § 455.21 of this part by a Support Office Director to disapprove a State Plan or an amendment to a State Plan.

(b) A State shall have a right to file a notice requesting administrative review of a decision under § 455.144 by a Support Office Director to disapprove an application for a grant award for State technical assistance, program assistance, or marketing programs.

(c) A school, hospital, coordinating agency, or State acting as an institution's duly authorized agent shall have a right to file a notice requesting administrative review of a decision under § 455.140 by a Support Office Director to disapprove an application for a grant award to perform technical assistance programs or to acquire and install an energy conservation measure if the disapproval is based on a determination that:

(1) The applicant is ineligible, under § 455.61 or § 455.71 or for any other reason; or

(2) An energy use evaluation submitted in lieu of an energy audit is unacceptable under the State Plan; or

(3) A technical assistance program equivalent performed without the use of Federal funds does not comply with the

requirements of § 455.62 for purposes of satisfying the eligibility requirements of § 455.71(a)(3).

§ 455.151 Notice requesting administrative review.

(a) Any applicant shall have 20 days from the date of receipt of a decision subject to administrative review under § 455.150 to disapprove its application for a grant award to file a notice requesting administrative review. If an applicant does not timely file such a notice, the decision to disapprove shall become final for DOE.

(b) A notice requesting administrative review shall be filed with the Support Office Director and shall be accompanied by a written statement containing supporting arguments.

(c) If the applicant is a State appealing pursuant to paragraph (a) of § 455.150, the State shall have the right to a public hearing. To exercise that right, the State must request such a hearing in the notice filed under paragraph (b) of this section. A public hearing under this section shall be informal and legislative in nature.

(d) A notice or any other document shall be deemed filed under this subpart upon receipt.

§ 455.152 Transmittal of record on review.

On or before 15 days from receipt of a notice requesting administrative review which is timely filed, the Support Office Director shall forward to the Deputy Assistant Secretary the notice requesting administrative review, the decision to disapprove as to which administrative review is sought, a draft recommended final decision for concurrence, and any other relevant material.

§ 455.153 Review by the Deputy Assistant Secretary.

(a) If a State requests a public hearing pursuant to paragraph (a) of § 455.150, the Deputy Assistant Secretary, within 15 days, shall give actual notice to the State and Federal Register notice of the date, place, time, and procedures which shall apply to the public hearing. Any public hearing under this section shall be informal and legislative in nature.

(b) The Deputy Assistant Secretary shall concur in, concur in as modified, or issue a substitute for the recommended decision of the Support Office Director:

(1) With respect to a notice filed pursuant to paragraph (a) of § 455.150, on or before 60 days from receipt of documents under § 455.152 or the conclusion of a public hearing, whichever is later; or

(2) With respect to a notice filed pursuant to paragraph (b) of § 455.150, on or before 30 days from receipt of documents under § 455.152.

§ 455.154 Discretionary review by the Assistant Secretary.

On or before 15 days from the date of the determination under § 455.153(b), the applicant for a grant award may file an application, with a supporting statement of reasons, for discretionary review by the Assistant Secretary. If administrative review is sought pursuant to paragraph (a) of § 455.150, the Assistant Secretary shall send a notice granting or denying discretionary review within 15 days and upon granting such review, shall issue a decision no later than 60 days from the date discretionary review is granted. If administrative review is sought pursuant to paragraph (b) of § 455.150, the Assistant Secretary shall send a notice granting or denying discretionary review within 15 days and upon granting such review shall issue a decision no later than 30 days from the date discretionary review is granted. The Assistant Secretary may not issue a notice or decision under this paragraph without the concurrence of the DOE Office of General Counsel.

§ 455.155 Finality of decision.

A decision under § 455.153 shall be final for DOE if there is no review sought under § 455.154. If there is review under § 455.154, the decision thereunder shall be final for DOE, and no appeal shall lie elsewhere in DOE.

[FR Doc. 93-3696 Filed 2-18-93; 8:45 am]

BILLING CODE 9450-01-P

Federal Register

Friday
February 19, 1993

Part VI

Department of Education

34 CFR Part 361

The State Vocational Rehabilitation
Services Program; Proposed Rule

DEPARTMENT OF EDUCATION

34 CFR Part 361

The State Vocational Rehabilitation Services Program

AGENCY: Department of Education.
ACTION: Notice of intent to regulate.

SUMMARY: The Secretary provides notice that the Department intends to amend the regulations implementing The State Vocational Rehabilitation Services Program authorized under title I of the Rehabilitation Act of 1973, as amended (the Act), to establish evaluation standards and performance indicators, required under the Rehabilitation Act Amendments of 1992. The standards and indicators would be used to measure the performance of each State's program and to provide information for the development of a program improvement plan for each State that does not meet the standards. The Secretary is publishing this notice of intent to regulate to solicit public comment on what the content of the standards and indicators should be prior to the development of specific proposed standards and indicators.

DATES: Comments, suggestions, or recommendations in response to this notice must be received on or before April 20, 1993.

ADDRESSES: All comments concerning this notice should be addressed to Commissioner, Rehabilitation Services Administration, U.S. Department of Education, 400 Maryland Avenue, SW., room 3028, Mary E. Switzer Building, Washington, DC 20202-2899.

FOR FURTHER INFORMATION CONTACT: Hubert Davis, U.S. Department of Education, 400 Maryland Avenue, SW., room 3018, Mary E. Switzer Building, Washington, DC 20202-2899. Telephone: (202) 205-8299. Individuals who are hearing impaired may call (202) 205-5896 for TDD services.

SUPPLEMENTARY INFORMATION:

Background

The Rehabilitation Act Amendments of 1992 (Pub. L. 102-569, enacted October 29, 1992) added a new section 106, which requires the Secretary, through the Commissioner of the Rehabilitation Services Administration (RSA), to establish evaluation standards and performance indicators for the title I vocational rehabilitation services program by September 30, 1994. The standards and indicators must be developed with input from State vocational rehabilitation agencies, related professional and consumer organizations, service recipients, and

other interested parties. Each State is required to report annually the extent to which it is in compliance with the evaluation standards and to develop a program improvement plan if its performance falls below established standards. The Secretary is required to withhold funds if a State agency that does not comply substantially with the evaluation standards fails to enter into a program improvement plan or to comply substantially with a program improvement plan.

The concept of using standards to evaluate the performance of rehabilitation programs is not new to the Act. Section 401(b) of the Rehabilitation Act of 1973 required the Secretary to develop and publish general standards for evaluating whether programs were achieving the objectives of the Act and to consider whether programs had met the standards in making decisions regarding continued or increased funding. The 1978 amendments to the Act struck the language in section 401(b) and added a new section 14 that required the Secretary to evaluate the impact and effectiveness of all programs under the Act, but did not require the Secretary to establish standards for evaluation or to consider the results of program evaluations in making funding decisions under the Act. The concept of standards subsequently was added to section 14 in the 1984 amendments to the Act, but no provision was made for using the standards or evaluations in making funding decisions. Since 1984, the provisions in section 14(a) relating to evaluation standards have remained substantially the same.

Standards were developed in the 1970s and 1980s in response to these evolving legislative requirements. RSA collaborated with the Council of State Administrators of Vocational Rehabilitation (CSAVR) to develop and field test the first set of standards. RSA later awarded an evaluation contract to the Berkeley Planning Associates (BPA) to develop a revised set of standards. The BPA standards assessed program procedures as well as outcomes. CSAVR reviewed and modified the standards developed by BPA and in 1984 recommended that State agencies adopt the modified standards. Although additional efforts have been made since 1984 to revise the BPA standards and to develop new standards, no other standards have been used to date.

Compliance with the BPA evaluation standards was voluntary. The standards were never used as a basis for sanctions or funding decisions because there was no such authority in the statute.

Statutory Provisions and Legislative History of Section 106

Section 106 provides that the evaluation standards and performance indicators must include outcome and related measures of program performance that facilitate, and in no way impede, the purpose and policy of title I. The purpose of title I, as stated in section 100 of the Act, as amended, is to assist States in operating a comprehensive, coordinated, effective, efficient, and accountable program of vocational rehabilitation that is designed to assess, plan, develop, and provide vocational rehabilitation services for individuals with disabilities, consistent with their strengths, resources, priorities, concerns, abilities, and capabilities, so that those individuals may prepare for and engage in gainful employment. The policy of title I, as stated in the amended section 100, is that each State's vocational rehabilitation program be carried out in a manner that is consistent with the following principles:

(A) Individuals with disabilities, including individuals with the most severe disabilities, are generally presumed to be capable of engaging in gainful employment, and the provision of individualized vocational rehabilitation services can improve their ability to become gainfully employed.

(B) Individuals with disabilities must be provided opportunities to pursue meaningful careers by securing gainful employment commensurate with their abilities and capabilities and in integrated settings.

(C) Individuals with disabilities must be active participants in their own rehabilitation programs, including making meaningful and informed choices about the selection of their vocational goals and objectives and the vocational services they receive.

(D) Families and natural supports can play an important role in the success of a vocational rehabilitation program if an individual with a disability requests or needs these supports.

(E) Qualified vocational rehabilitation counselors and other qualified rehabilitation personnel facilitate the accomplishment of an individual's employment goals and objectives.

(F) Individuals with disabilities and their advocates are full partners in the vocational rehabilitation program and must be involved on a regular basis and in a meaningful manner with respect to policy development and implementation.

(G) Accountability measures must facilitate and not impede the accomplishment of the goals and

objectives of the program, including providing vocational rehabilitation services to, among others, individuals with the most severe disabilities.

The only additional guidance provided in the legislative history for section 106 is the suggestion in the Committee Report of the Senate Committee on Labor and Human Resources that the standards and indicators should include factors relating to consumer satisfaction and should emphasize gainful employment outcomes.

Examples of Possible Standards and Indicators

On the basis of the statutory language and legislative history of section 106 and the stated purposes and policies of title I, the Secretary is giving preliminary consideration to proposing standards and indicators that would assess each State's vocational rehabilitation services program. The Secretary intends to develop standards and indicators that focus on assessing the quality of outcomes, rather than procedural requirements, because the legislation emphasizes performance outcomes and because the Secretary does not intend to duplicate procedural requirements for which there are existing compliance monitoring mechanisms. The Secretary is interested in receiving comment on this decision.

Examples of some possible evaluation standards are listed below, along with examples of possible performance indicators for each standard. The examples of standards and indicators provided in this notice are derived in part from the previous standards developed by RSA, CSAVR, and BPA, to the extent those standards continue to be relevant in light of amendments to title I. These examples are meant to stimulate public comment regarding what the proposed standards and indicators should be. They are not the Secretary's proposed standards and indicators.

(1) Coverage and Accessibility

Compliance with a coverage and accessibility standard, for example, might be measured by the following types of indicators:

- The number of individuals accepted for services, including those with severe disabilities, in relation to the number who apply for services.
- The number of individuals served, including those with severe disabilities, in relation to the number accepted for services.
- The number of individuals served, including those with severe disabilities, in relation to the State's population.

- The extent to which individuals who are served are provided all of the services identified in their IWRP.

- The extent to which individuals exiting special education, including those with severe disabilities, are accepted for services.

(2) Effective Use of Resources

Compliance with an effective use of resources standard might be measured by the following types of indicators:

- The extent to which successful employment outcomes are attained in relation to the resources of the State vocational rehabilitation agency.
- The extent to which eligibility determinations are made and services delivered in a timely manner.
- The average rehabilitation rate of counselors.

(3) Attainment of High Quality Employment and Employment-Related Outcomes for Clients

Compliance with an attainment of high quality employment and employment-related outcomes standard might be measured by the following types of indicators:

- The ratio of rehabilitations, including those attained by individuals with severe disabilities, to other types of case closures.
- The ratio of competitive employment outcomes to the total number of rehabilitations that are attained by clients, including individuals with severe disabilities.
- The extent to which placements provide increases in hours worked and wages earned from pre-service hours and wages.
- The extent to which placements are in career ladder positions with the potential for promotion.
- The extent to which placements provide integrated working environments.
- The extent to which placements reduce the number of rehabilitated individuals who receive public assistance and other transfer payments.
- The extent to which placements provide rehabilitated individuals with employment-related fringe benefits, such as health insurance and retirement benefits.

(4) Retention of Program Benefits by Clients

Compliance with a retention of program benefits standard might be measured by the following type of indicator:

- The extent to which the employment and related outcomes of rehabilitated individuals, such as those suggested under possible standard (3), are maintained or improved over time.
- The proportion of rehabilitated individuals who return for services.

(5) Consumer Satisfaction

Compliance with a consumer satisfaction standard might be measured by the following types of indicators:

- The extent to which clients are satisfied with their treatment by the vocational rehabilitation agency and counselors.
- The extent to which clients are satisfied with their participation in the selection of their vocational goals and objectives.
- The extent to which clients are satisfied with the services they have received.
- The extent to which clients are satisfied with the providers of needed services.
- The extent to which clients are satisfied with the employment they have obtained.

The Secretary anticipates that some of the data that is currently collected to measure compliance with program procedural requirements will also be useful in measuring performance under the standards and indicators. However, the Secretary believes that certain standards and indicators may be adopted that would require the collection of additional data. For example, the Secretary is not aware of existing data sources that could be used to measure performance under possible consumer satisfaction and retention of benefits standards. The Secretary requests that commenters identify existing data sources that may provide useful information for measuring performance under possible standards and indicators that are proposed by the commenter or provided as examples in this notice.

If additional data is required to measure performance under the standards and indicators that are adopted, the Secretary intends to begin measuring performance under those standards and indicators that can be measured based on existing data sources prior to measuring performance under the standards and indicators that require the collection of additional data.

INVITATION TO COMMENT:

The Secretary is interested in receiving public comment on (1) whether the examples of standards contained in this notice are an appropriate basis for measuring program performance and, if not, what alternative standards should be used; (2) whether the types of indicators provided as examples in this notice would be measurable, and what other indicators would better implement specific standards (both those contained in this notice and those proposed in

comments); and (3) what weights should be given to specific standards (both those contained in this notice and those proposed in comments). The Secretary encourages commenters to propose standards and indicators that are measurable and are not unduly burdensome and to consider both qualitative and quantitative factors of vocational rehabilitation program performance. In addition, because program performance may be affected by factors such as the types of clients a State vocational rehabilitation agency

serves and the economic environment within a State, the Secretary is interested in receiving comment on whether client and economic variables should be taken into account so that the measures of reported performance are standardized from State to State. Finally, the Secretary is interested in receiving comment on how acceptable levels of performance under each standard should be determined.

All comments submitted in response to this notice will be available for public inspection, during and after the

comment period, in room 3018, 330 C Street, SW., Washington DC, between the hours of 8:30 a.m. and 4 p.m., Monday through Friday of each week except Federal holidays.

(Authority: 29 U.S.C. 726)

Dated: February 12, 1993.

Richard W. Riley,

Secretary of Education.

[FR Doc. 93-3842 Filed 2-18-93; 8:45 am]

BILLING CODE 4000-01-U

Test Report Federal Register

Friday
February 19, 1993

Part VII

Department of Education

34 CFR Part 305

Regional Resources and Federal Centers;
Final Rule

DEPARTMENT OF EDUCATION

34 CFR Part 305

RIN 1820-AB00

Regional Resource and Federal Centers

AGENCY: Department of Education.

ACTION: Final regulations.

SUMMARY: The Secretary amends the regulations implementing the Regional Resource and Federal Centers program authorized by section 621 of the Individuals with Disabilities Education Act (IDEA). These final regulatory changes are needed to implement the guidelines and criteria developed by the Secretary based on recommendations from a panel convened in accordance with section 621(f)(1) of the IDEA. These regulations add requirements for the Regional Resource and Federal Centers related to the identification of and the provision of technical assistance on emerging issues and trends; clarify responsibilities related to linking and coordinating with other technical assistance providers as well as certain other entities; and assure that Regional Resource Center (RRC) evaluation measures include State capacity for improving services for students with disabilities.

EFFECTIVE DATE: These regulations take effect either 45 days after publication in the *Federal Register* or later if the Congress takes certain adjournment. If you want to know the effective date of these regulations, call or write the Department of Education contact person. A document announcing the effective date will be published in the *Federal Register*.

FOR FURTHER INFORMATION CONTACT: Ms. Marie Roane, U.S. Department of Education, 400 Maryland Avenue, SW., room 3072, Switzer Building, Washington, DC 20202-2651. Telephone: (202) 205-8451. Deaf and hearing impaired individuals may call (202) 205-6170 for TDD services.

SUPPLEMENTARY INFORMATION: The Regional Resource and Federal Centers program provides assistance for projects designed to assist State educational agencies, and through those State educational agencies, local educational agencies and other appropriate agencies providing special education, related services, and early intervention services to infants, toddlers, children, and youth with disabilities and their families. Public Law 101-476, amending the IDEA, required that the Secretary convene a panel to develop, and publish

in the *Federal Register* for review and comment, guidelines and criteria for the operation of the program.

This program supports the National Education Goals by improving services for infants, toddlers, children, and youth with disabilities and, by so doing, helping them reach the high levels of academic achievement called for by the National Education Goals.

On September 21, 1992, the Secretary published a notice of proposed rulemaking (NPRM) in the *Federal Register* (57 FR 43572). The NPRM included a discussion of the major issues.

Public Comment

In the NPRM the Secretary invited comments on the proposed regulations. Except for minor editorial revisions, there are no differences between the NPRM and these final regulations. The Secretary did not receive any substantive comments.

Executive Order 12291

These regulations have been reviewed in accordance with Executive Order 12291. They are not classified as major because they do not meet the criteria for major regulations established in the order.

Intergovernmental Review

This program is subject to the requirements of Executive Order 12372 and the regulations in 34 CFR part 79. The objective of the Executive order is to foster an intergovernmental partnership and a strengthened federalism by relying on processes developed by State and local governments for coordination and review of proposed Federal financial assistance.

In accordance with the order, this document is intended to provide early notification of the Department's specific plans and actions for this program.

Assessment of Educational Impact

In the notice of proposed rulemaking, the Secretary requested comments on whether the proposed regulations would require transmission of information that is being gathered by or is available from any other agency or authority of the United States.

Based on the response to the proposed rules and on its own review, the Department has determined that the regulations in this document do not require transmission of any information that is being gathered by or is available from any other agency or authority of the United States.

List of Subjects in 34 CFR Part 305

Grant programs—education, State, State educational agencies, Infants, toddlers, children, and youth with disabilities, Early intervention, Special education and related services, Local educational agencies.

(Catalog of Federal Domestic Assistance Number 84.028, Regional Resource and Federal Centers)

Dated: February 4, 1993.

Richard W. Riley,
Secretary of Education.

The Secretary amends part 305 of title 34 of the Code of Federal Regulations as follows:

PART 305—REGIONAL RESOURCE AND FEDERAL CENTERS

1. The authority citation for part 305 continues to read as follows:

Authority: 20 U.S.C. 1421, unless otherwise noted.

2. Section 305.10 is amended by revising the heading, and adding after the words "identifying and solving persistent problems" in paragraph (b) a comma and the words "and in identifying emerging issues and trends", to read as follows:

§ 305.10 What kinds of services are provided by Regional Resource Centers under this part?

* * * * *

3. Section 305.11 is redesignated as § 305.12, and a new § 305.11 is added to read as follows:

§ 305.11 What kinds of services are provided by the Federal Center under this part?

The Federal Center shall—
(a) Provide a national perspective for establishing technical assistance activities within and across regions by identifying and synthesizing emerging issues and trends and establishing a panel to interpret this information. This panel must be broadly representative of the special education constituency, including representatives of State and local educational agencies, parent organizations, consumer and advocacy organizations, professional organizations, and consumers, with particular attention being given to individuals from minority backgrounds. This information must be shared with Regional Resource Centers and State educational agencies and may serve as a basis for multi-State and multi-regional technical assistance activities;
(b) Assist in linking and coordinating the Regional Resource Centers with each other and with other technical assistance providers, including health-

related entities as well as organizations representing persons with disabilities, professional organizations, and parent projects. Information from these activities must be shared with the Regional Resource Centers as well as the States;

(c) Provide information to, and training for, agencies, institutions, and organizations regarding techniques and approaches for submitting applications for grants, contracts, and cooperative agreements under Parts C through G of the Act, and make that information available to the Regional Resource Centers on request;

(d) Give priority to providing technical assistance concerning the education of children with disabilities from minority backgrounds and exchanging information with and, if appropriate, cooperating with other centers addressing the needs of these children; and

(e) Provide assistance to State educational agencies, through Regional Resource Centers, for the training of hearing officers.

(Authority: 20 U.S.C. 1421)

§ 305.30 [Amended]

4. Section 305.30 is amended by adding the words "and § 305.11" after "in § 305.10".

5. Section 305.31 is amended by revising the heading, paragraphs (a)(1) and (2), and paragraph (f)(2) and adding a parenthetical phrase at the end of the section immediately preceding the authority citation to read as follows:

§ 305.31 What are the selection criteria for evaluating applications under this program?

* * *

(a) * * *

(1) The Secretary reviews each application for a Regional Resource Center for information that shows the needs of the States in the region and support for the applicant's project by the agencies to be served by the project.

(2) The Secretary reviews each application for a Federal Center for information that identifies potential issues and trends of national concern and procedures for obtaining broad based input in validating, interpreting, synthesizing, and updating information on emerging issues and trends on a regular basis.

(f) * * *

(2) The Secretary looks for information that shows methods of evaluation that are appropriate for the project, and, to the extent possible, are objective and produce data that are quantifiable. For Regional Resource Centers, evaluation methods must

include evaluation of changes in State capacity to work with local educational agencies to improve services for students with disabilities.

* * *

(Approved by the Office of Management and Budget under control number 1820-0028)

(Authority: 20 U.S.C. 1421)

6. In § 305.40 the heading and undesignated introductory text are revised and a parenthetical phrase is added at the end of the section immediately preceding the authority citation to read as follows:

§ 305.40 What additional activities must each Center perform?

Each Regional Resource or Federal Center shall—

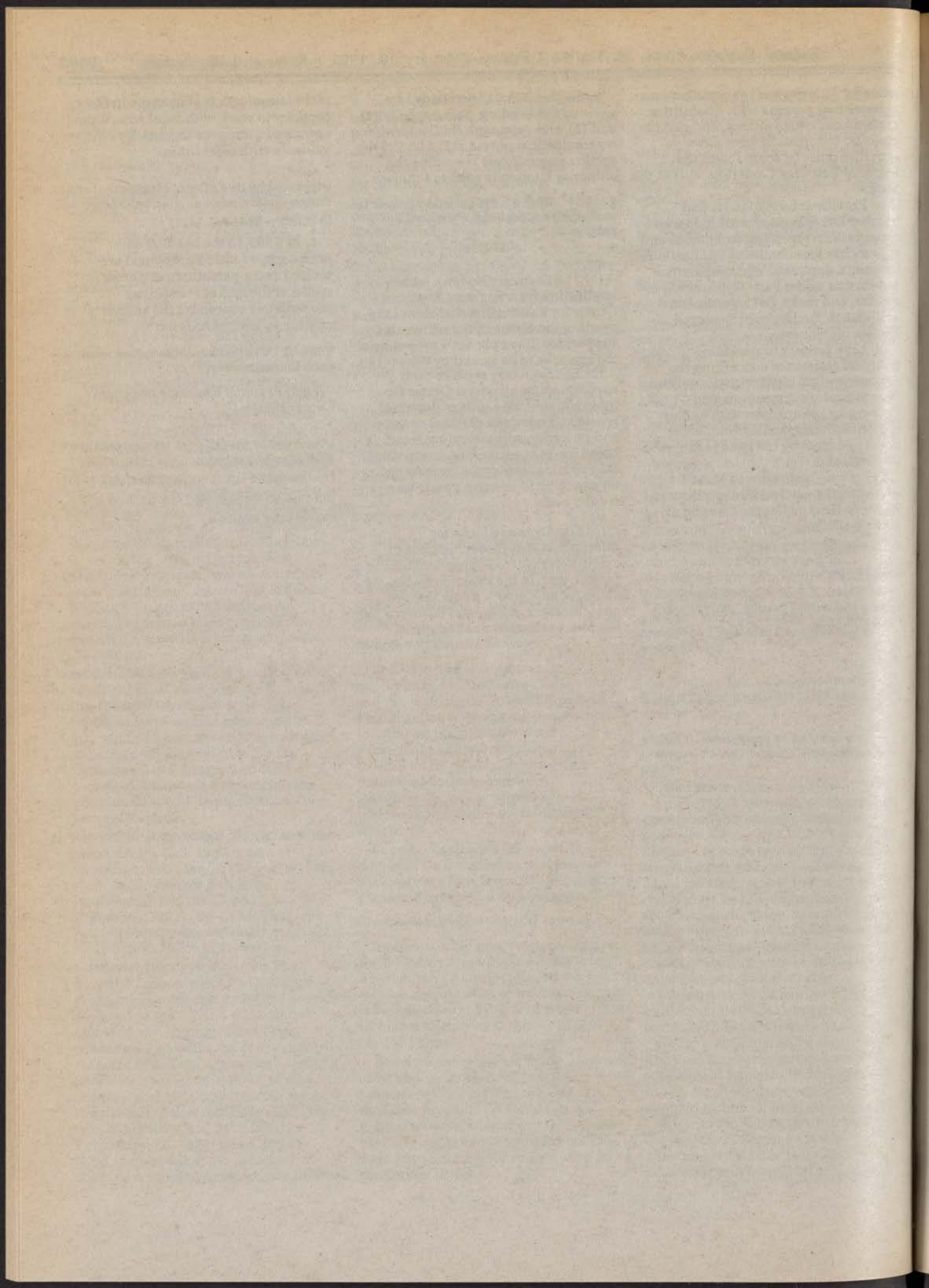
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(Approved by the Office of Management and Budget under control number 1820-0028)

(Authority: 20 U.S.C. 1409(g); 20 U.S.C. 1421)

[FR Doc. 93-3839 Filed 2-18-93; 8:45 am]

BILLING CODE 4000-01-M



FRIDAY FEBRUARY 19, 1993

Friday
February 19, 1993

Part VIII

Department of the Interior

Bureau of Indian Affairs

Indian Gaming; Notice

DEPARTMENT OF THE INTERIOR**Bureau of Indian Affairs****Indian Gaming**

AGENCY: Bureau of Indian Affairs, Interior.

ACTION: Notice of approved Tribal-State Compact.

SUMMARY: Pursuant to 25 U.S.C. 2710, of the Indian Gaming Regulatory Act of 1988 (Pub. L. 100-497), the Secretary of

the Interior shall publish, in the **Federal Register**, notice of approved Tribal-State Compacts for the purpose of engaging in Class III (casino) gambling on Indian reservations. The Assistant Secretary—Indian Affairs, Department of the Interior, through his delegated authority, has approved the Tribal-State Compact for Class III Gaming Between the Swinomish Indian Tribal Community and the State of Washington, enacted on December 21, 1992.

DATES: This action is effective February 19, 1993.

FOR FURTHER INFORMATION CONTACT:

Hilda Manuel, Interim Staff Director, Indian Gaming Management Staff, Bureau of Indian Affairs, Washington, DC 20240, (202) 219-0994.

Dated: February 11, 1993.

Stan Speaks,

Acting Assistant Secretary, Indian Affairs.

[FR Doc. 93-3868 Filed 2-18-93; 8:45 am]

BILLING CODE 4310-02-M

Test Report

Friday
February 19, 1993

Part IX

Environmental Protection Agency

40 CFR Part 86

Control of Air Pollution From New Motor
Vehicles; Final Rule

ENVIRONMENTAL PROTECTION AGENCY

40 CFR Part 86

[AMS-FRL-4595-7]

RIN 2060-AC65

Control of Air Pollution From New Motor Vehicles and New Motor Vehicle Engines; Regulations Requiring On-Board Diagnostic Systems on 1994 and Later Model Year Light-Duty Vehicles and Light-Duty Trucks

AGENCY: Environmental Protection Agency (EPA).

ACTION: Final rule.

SUMMARY: This final rule establishes requirements for on-board diagnostic (OBD) systems on light-duty vehicles and light-duty trucks beginning with the 1994 model year. Section 202(m) of the Clean Air Act (CAA) requires EPA to promulgate rules mandating OBD systems on such vehicles. This rulemaking requires manufacturers to install OBD systems which; monitor emission control components for any malfunction or deterioration causing exceedances of emission standards, and alert the vehicle operator to the need for repair. This rulemaking also requires that, when a malfunction occurs, diagnostic information must be stored in the vehicle's computer to assist the mechanic in diagnosis and repair. This rulemaking does not contain the final requirements under which information necessary to perform repair and maintenance service on on-board diagnostic systems and other emission-related vehicle components would be made available to the service and repair industry. Such requirements will be contained in a forthcoming Agency rulemaking.

DATES: This final rule is effective May 20, 1993. The incorporation by reference of certain publications listed in the regulations is approved by the Director of the Federal Register as of May 20, 1993.

The information collection requirements contained in § 86.094-21 have not been approved by the Office of Management and Budget (OMB) and are not effective until OMB has approved them. A technical amendment will be published in the *Federal Register* when OMB has approved the information collection requirements.

ADDRESSES: Materials relevant to this rulemaking are contained in Docket No. A-90-35. The docket is located at The Air Docket, 401 M Street, SW., Washington, DC 20460, and may be viewed in room M-1500-8:30 a.m.

until noon and from 1:30 p.m. until 3:30 p.m. Monday through Friday. A reasonable fee may be charged by EPA for copying docket material.

FOR FURTHER INFORMATION CONTACT: Todd Sherwood, Certification Division, U.S. Environmental Protection Agency, 2565 Plymouth Road, Ann Arbor, Michigan 48105, Telephone (313) 668-4405.

SUPPLEMENTARY INFORMATION:

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I. Introduction and Summary of Rule

Section 202(m) of the CAA, as amended by the Clean Air Act Amendments of 1990 (CAAA), directs EPA to promulgate regulations requiring 1994 and later model year light-duty vehicles (LDVs) and light-duty trucks (LDTs) to contain an OBD system which will monitor emission-related components for malfunctions or

deterioration "which could cause or result in failure of the vehicles to comply with emission standards established" for such vehicles.¹ On September 24, 1991, EPA published a notice of proposed rulemaking² outlining the Agency's proposed OBD requirements. Today's document promulgates these regulations.

Under these regulations, a vehicle's OBD system must be capable of detecting a malfunction or deterioration of emission-related components or design elements before such a malfunction or deterioration individually causes an emission increase greater than certain thresholds set by EPA as outlined below. EPA will evaluate whether the OBD system is properly monitoring and identifying such malfunctions or deterioration using the Federal Test Procedure (FTP). When such a malfunction or deterioration is detected, a malfunction indicator light (MIL) must illuminate on the dashboard and codes identifying the malfunction must be stored in the computer for access by a repair technician.

For LDVs and LDTs with Otto cycle engines, the rule requires that the OBD system monitor the performance and detect malfunctions and deterioration of the catalyst and oxygen sensor and detect engine misfire. When the OBD system makes such a detection, a trouble code must be stored in the vehicle computer identifying the likely problem, and the MIL must be illuminated. The thresholds for OBD system identification of these emission-related malfunctions or deterioration are as follows:

(1) Catalyst deterioration before it results in both exhaust emissions greater than 0.6 g/mi HC and an exhaust emission increase of greater than 0.4 g/mi HC;

(2) Engine misfire before it results in an exhaust emission increase of greater than 0.4 g/mi HC, 3.4 g/mi CO, or 1.0 g/mi NOx; and,

(3) Oxygen sensor deterioration before it results in an exhaust emission increase of greater than 0.2 g/mi HC, 1.7 g/mi CO, or 0.5 g/mi NOx.

In addition to detecting misfire as described above, the system must store a code indicating which cylinder is misfiring or that multiple cylinders are misfiring. In addition to detecting oxygen sensor deterioration as described above, the system must detect any malfunction or deterioration of the sensor that renders it incapable of

¹ These regulations apply to all 1994 and later model year LDVs and LDTs for which emission standards are currently in place or are subsequently adopted. In addition to standards already in place, EPA is developing standards which would be applicable to vehicles when operating on natural

gas and liquefied petroleum gas (57 FR 52912, November 5, 1992).

² 56 FR 48272 (September 24, 1991).

satisfactorily performing its functions as part of the OBD system.

Additionally, manufacturers are required to detect the occurrence of a malfunction or deterioration of any other emission-related powertrain system or component that results in an FTP exhaust emission increase of 0.2 g/mi HC, 1.7 g/mi CO, or 0.5 g/mi NO_x. Rather than explicitly specifying what other components must be monitored, EPA is providing the manufacturer with the flexibility to determine the need to monitor. Finally, for all vehicles certified to the revised evaporative emissions test procedure,³ the vehicle's OBD system must detect the occurrence of any leakage or other malfunction of the vapor recovery or purge systems that results in an evaporative emissions increase of 30.0 g/test where these emissions result from vapor leaks greater than or equal to a 0.04 inch (1 mm) diameter hole or equivalent sized leak. Manufacturers are required to detect these additional malfunctions only if they occur in actual use and result in the aforementioned emission levels or increases. In other words, if operational failure of components or systems other than the catalyst, the oxygen sensor, or anything causing engine misfire is avoidable or will not cause an emission increase greater than the thresholds discussed in this paragraph, such components or systems need not be monitored, nor their failures detected. However, to ensure compliance with these regulations, the Agency's in-use enforcement program will be structured to evaluate whether threshold-exceeding emission increases do, in fact, occur in-use.

For LDVs and LDTs with diesel cycle engines, this rulemaking does not require monitoring of the oxygen sensor and detection of engine misfire. However, catalyst malfunction or deterioration must be detected before emissions are greater than 0.6 g/mi HC and have increased 0.4 g/mi HC, and any other malfunction or deterioration of an emission-related powertrain component must be detected prior to an emission increase of 0.2 g/mi HC, 1.7 g/mi CO, or 0.5 g/mi NO_x. Manufacturers are required to detect these malfunctions (including malfunction of the catalyst) only if they occur in actual use and result in the aforementioned emission levels or increases. Therefore, if manufacturers are confident that any

malfunction or deterioration will not result in threshold-exceeding emission increases, they may choose to forego OBD monitoring of emission control system performance. To ensure compliance with these regulations, the Agency's in-use enforcement program will be structured to evaluate whether threshold-exceeding emission increases do, in fact, occur in-use.

For the purpose of this rulemaking, the emission increases discussed above are measured from a baseline emission level equivalent to the emission level of the vehicle under normal and properly maintained operating conditions. In other words, the emission thresholds represent emission increases above the emission level of the vehicle prior to the malfunction occurring. If, by replacing a questionable component with a known good component the emissions decrease by the threshold level for that component, the OBD system should have detected a problem and flagged the questionable component as malfunctioning.

This rulemaking also requires that, for all LDVs and LDTs (including those with diesel cycle engines), the OBD system monitor and detect electrical failure or disconnection of the evaporative purge control or any emission-related powertrain component which, either directly or indirectly, sends information to, or receives information from, the vehicle's on-board computer. If electrical disconnection occurs that prevents or limits the operation of the component, regardless of the emission effect, the MIL must be illuminated and a trouble code stored. For obvious reasons, electrical functioning of the evaporative purge control need not be monitored on vehicles not equipped with an evaporative emission control system.

This rulemaking also contains anti-tampering provisions to protect the on-board computer from any form of tampering, and to make inspection of the OBD system an effective in-use enforcement measure during Inspection and Maintenance program testing.

The proposed requirements governing the accessibility of stored codes to persons servicing OBD equipped vehicles are also being finalized in this rulemaking. However, the proposed requirements under which manufacturers must make available, in a timely fashion and at a reasonable cost, all emission-related diagnostic and repair information necessary to properly use the OBD system and make emission-related repairs are not being made final in this rulemaking. A forthcoming Agency final rulemaking shall address these proposed requirements.

In accordance with the CAAA, all requirements will be implemented beginning with the 1994 model year, with the exception of vapor leak detection within the evaporative emission control system as noted below. Manufacturers can request waivers for OBD requirements for up to two years. EPA will consider each waiver request on a case-by-case basis.

These regulations adopt a two step phase-in of evaporative control system OBD requirements. Beginning with the 1994 model year, all vehicles not having been granted a waiver from OBD requirements by EPA will be expected to detect electrical failure within the evaporative purge control. In addition, EPA will implement the OBD criteria for vapor leak detection and non-electrical purge problems within the evaporative emissions control system for vehicles certified to the Agency's revised evaporative emission test procedure, which will be phased-in between model years 1996 and 1999.

Today's rulemaking makes an allowance for manufacturers to satisfy the Federal OBD requirements through the 1998 model year by installing systems satisfying the California OBD II requirements pertaining to those model years. This allowance means that manufacturers could concentrate on designing one system to meet the California OBD requirements and installing that system nationwide during allowable model years. The Agency will accept OBD systems which demonstrate compliance with California OBD II regulations as satisfying Federal OBD requirements for this period.

Despite EPA acceptance of OBD systems that meet the OBD II requirements, all existing Federal requirements and those being made final today will continue to apply, with the exception of the following: § 86.094-17, specifying the technical requirements of OBD; § 86.094-18, specifying the tampering prevention requirements; § 86.094-25(d), specifying the durability data vehicle requirements; and §§ 86.094-30(f) and 86.095-30(f), specifying the OBD certification requirements. For example, the Agency will conduct its own certification, selective enforcement audit, and in-use enforcement programs. However, for a 1994 through 1998 model year vehicle certified to OBD II regulations, compliance will be determined against the OBD II emission thresholds and other technical requirements. EPA will conduct its own enforcement programs separately from California, but the enforcement protocols used by the Agency for vehicles certified to the OBD II

³ Control of Air Pollution from New Motor Vehicles and New Motor Vehicle Engines: Evaporative Emission Regulations for Gasoline- and Methanol-Fueled Light-Duty Vehicles, Light-Duty Trucks and Heavy-Duty Vehicles, signed by the Administrator on January 20, 1993, and soon to appear in the Federal Register.

requirements will be those specified in the OBD II rule.

Today's final rulemaking is expected to result in substantial emission reductions at reasonable costs. The cost effectiveness, or total dollars per ton of pollutant reduced, has been estimated at \$1,974 per ton of HC reduced, \$124 per ton of CO reduced, and \$1,974 per ton of NO_x reduced. The increased cost to the manufacturer is estimated at roughly \$78 per vehicle. This reduces to an estimated net cost increase to the consumer of \$36 per vehicle after accounting for fuel economy savings and other savings associated with replacement of current I/M tailpipe testing with OBD system checks.

Today's rulemaking applies to all 1994 and later model year light-duty vehicles and light-duty trucks manufactured on, or after, the effective date of these regulations, as indicated above.⁴

II. Background and Development

On November 15, 1990, the Clean Air Act Amendments of 1990 were signed into law. Section 207(a) of these amendments added paragraph (m) to section 202 of the Clean Air Act (CAA, or Act), which directs the EPA to promulgate regulations requiring manufacturers to install on all new 1994 and later model year LDVs and LDTs diagnostic systems capable of:

(a) Accurately identifying, for the vehicle's useful life, emission-related system deterioration or malfunction, including, at a minimum, the catalytic converter and oxygen (O₂) sensor, which could cause or result in failure of the vehicles to comply with emission standards;

(b) Alerting the vehicle's owner or operator to the likely need for emission-related component or system maintenance or repair;

(c) Storing and retrieving fault codes specified by the Administrator; and

(d) Providing access to stored information in a manner specified by the Administrator.

In addition, section 202(m)(5) of the amended Act requires manufacturers to make available to interested persons all necessary emission-related maintenance and repair information, including information needed to make use of the OBD system. Such information is to be provided according to regulations adopted by EPA.

As of August 1990, 96 urban areas were in violation of the National

Ambient Air Quality Standard (NAAQS) for ozone and 41 areas could not attain the NAAQS for carbon monoxide (CO). EPA estimates that currently 60% of the total tailpipe HC emissions from LDVs are caused by the 20% of vehicles with serious emission control system malfunctions or degradation.⁵ The more stringent new vehicle emission standards mandated by the Act are likely to increase further the proportion of total LDV emissions from malfunctioning vehicles.

Most OBD systems on current in-use vehicles target only those malfunctions causing driveability problems. However, many types of malfunctions may not cause driveability problems but may nonetheless lead to significant increases in emissions. Since emission-related malfunctions do not generally cause any outward indication of a problem (e.g., poor driveability or decreased fuel economy), these malfunctions would be difficult to detect and repair without OBD.

Inspection and Maintenance (I/M) programs target these malfunctions, but often cannot detect them because of the limited test conditions possible with current I/M programs. Because OBD can be operable during essentially the full operating range of the vehicle, problems with vehicle operation which may occur during only limited operating conditions but causing significant emission increases can more effectively be detected through OBD.

Both the California Air Resources Board (CARB) and EPA have studied ways to use OBD systems to detect emission problems. In 1985, CARB promulgated California state regulations which required the vehicle's on-board computer to monitor the oxygen sensor, the EGR valve, and the evaporative purge solenoid for proper operation and to provide a warning to the vehicle operator when any malfunctions occurred. That set of regulations is known as OBD I and took effect beginning with the 1988 model year.⁶

However, OBD I does not require monitoring of several critical emission-related components (e.g., catalyst, evaporative system vapor leaks) and does not require sufficient sensitivity to detect significant malfunctions of components that are monitored (e.g., electrical circuit continuity of the oxygen sensor was required, rather than a more complete check of actual oxygen sensor operating characteristics). CARB has promulgated new OBD regulations,

OBD II,⁷ which provide more stringent requirements and other improvements to the OBD system. Such requirements include catalyst monitoring, evaporative emission control system leak detection, monitoring of the operational characteristics of the oxygen sensor, and detection of engine misfire. These OBD II requirements would be implemented by manufacturers installing specific CARB mandated OBD systems in their LDVs and LDTs. OBD II is scheduled for phase-in beginning with the 1994 model year, with full compliance by the 1996 model year. EPA has worked closely with CARB in developing both the technology and the enforcement aspects of the OBD II regulations.

After passage of the CAAA, the Agency published a notice of proposed rulemaking on September 24, 1991, requiring OBD on all new vehicles beginning with the 1994 model year. This final rulemaking adopts the proposed regulations with some exceptions as discussed later in this preamble.

The regulations promulgated today differ from California's OBD II rule in some respects. The requirements being promulgated today are expressed as emission performance standards, rather than the more design-oriented approach taken in the OBD II requirements. Emission performance standards provide the manufacturer with flexibility in determining which components or systems the OBD system should monitor and how to monitor them. Manufacturers will be allowed to determine the most appropriate means of monitoring without seeking Agency regulatory approval. However, manufacturers may have the additional burden of selecting OBD system calibrations that ensure each unique design they produce complies with emission performance standards, and that their unique designs perform to the level required under these regulations.

The Agency expects that manufacturers will be able to develop identical systems to comply with both Federal and California regulations, but additional testing and calibrations development may be necessary for manufacturers to assure proper optimization of their systems. EPA has estimated these incremental costs and has included them under the category of "Application Costs" in the Regulatory Impact Analysis (RIA).

In response to concerns regarding this incremental burden, especially as it might impact implementation during the initial model years, EPA has decided to accept compliance with the California

⁴ Memorandum from Todd Sherwood to OBD Docket No. A-90-35 regarding the Ninety Day Effective Date on OBD Final Rulemaking, January 12, 1993.

⁵ Regulatory Impact Analysis: On-Board Diagnostics, Appendix I; Air Docket No. A-90-35.

⁶ Title 13 California Code § 1968 (p. 614.16.1)

⁷ Title 13 California Code § 1968.1.

OBD II requirements as an alternative means of meeting certain portions of the Federal requirements through the 1998 model year. Beyond the 1998 model year, full compliance with the Federal OBD rule will be required.⁸

III. Requirements of the OBD Final Rule

A. General System Requirements

The primary purpose of section 202(m) is to require manufacturers to install OBD systems to detect malfunctioning or deteriorated performance of a vehicle's emission-related components. The OBD system's secondary purpose is to aid in the proper diagnosis and repair of those emission-related problems.

The Act requires EPA to promulgate regulations requiring OBD systems that are able to accurately identify any emission-related deterioration or malfunction that could cause or result in exceedance of an emission standard. EPA acknowledges that a properly designed and operating vehicle could have emission levels approaching or even equaling the emission standards. In such cases, a very slight malfunction or minor deterioration, which may be infeasible to detect using OBD, could result in failure to meet an emission standard.

In other situations, a vehicle might not experience much emission performance deterioration even though an individual component's performance has reached a detectable level of malfunction or deterioration. Replacement of the component at this stage would provide little emission benefit, especially considering the cost of the repair, and could, in fact, be inappropriate if the component was incorrectly identified as having reached a detectable level of malfunction or deterioration.

Therefore, EPA is adopting a threshold approach to define the performance requirements of the Federal OBD system. Under this threshold approach, when a malfunction or deterioration of a specific emission-related component or system causes emissions to increase significantly, compared to what the emissions would be if the malfunction had not occurred, the OBD system would be expected to detect and flag the component as malfunctioning. For example, under the regulations promulgated today, if deterioration or malfunction of a vehicle's oxygen sensor

is resulting in an emission increase of 0.2 g/mi HC, 1.7 g/mi CO, or 0.5 g/mi NO_x, compared to what emissions would be if the oxygen sensor was working properly, then the vehicle's OBD system must detect this oxygen sensor malfunction and indicate that it has occurred. If the OBD system does not detect such malfunctions, it may be denied certification or be subject to recall. EPA's testing procedures for enforcing these regulations are discussed in section III.G below. EPA's reasons for using this approach are discussed further in section V.E.

The threshold approach also allows EPA to recognize both the technological feasibility of malfunction detection with OBD and the costs and emission benefits of subsequent repairs. EPA has required the OBD system to detect only those problems which can reliably be detected and whose repair would result in a significant improvement in emission performance. Thus, as discussed in detail in the NPRM, the threshold levels promulgated by EPA represent the minimum levels of significant emission impact which are technologically feasible to detect. As other information becomes available to EPA demonstrating the technological feasibility and appropriateness of setting lower threshold levels, EPA would plan to propose revisions to these thresholds.

The rulemaking places a minimum of specific monitoring requirements on the manufacturer. As required by the Act, the OBD system must monitor catalyst and oxygen sensor performance. In addition, the OBD system must monitor for and detect engine misfire and electrical disconnection of the evaporative purge control and any emission-related powertrain component or system which directly or indirectly sends information to or receives information from the vehicle's computer. The two requirements for misfire and electrical disconnection have changed slightly from the proposed requirements. For safety reasons, there will not be a requirement for fuel shut-off to misfiring cylinders, and detection of electrical disconnects and other malfunctions has been limited to powertrain components and electronic evaporative purge control as a result of EPA's conclusion, after extensive public comments, that the proposed language required broader monitoring than that contemplated under the CAA. These changes are discussed in more detail below.

These regulations also require a malfunction indicator light (MIL) on the vehicle dashboard that illuminates if component deterioration or malfunction causes emissions to increase above the

threshold levels specified in these regulations, or if loss of electrical circuit continuity of a monitored component is detected. The purpose of the MIL is to inform the vehicle operator of the need for service when the vehicle is operating under potentially high emitting conditions.

Evaluation of a vehicle's OBD system at 75°F should be adequate for ensuring proper system operation at cold ambient temperatures. EPA believes that the advent of cold temperature CO standards will result in the development of emission control strategies at cold ambient temperatures that are more consistent with emission control strategies currently designed for 75°F standards. As a result of this enhanced control, it is anticipated that any significant emission increase occurring at cold temperatures due to component malfunction or deterioration will be detectable by a vehicle's OBD system at 75°F.

EPA expects that manufacturers will install OBD systems that are feasible and accurate, which will minimize false malfunction indications and potentially needless repairs, and thus will gain consumer credibility and acceptance. Consumer acceptance is a crucial aspect of the OBD program because OBD's effectiveness relies heavily on drivers responding positively to an illuminated MIL by taking the vehicle for repair. It is a workable system that will lead to the repair of malfunctioning vehicles that contribute to air quality problems throughout the nation. EPA intends to monitor closely the development of OBD technology, consumer acceptance, and emission control strategies. As appropriate, EPA will revisit these issues and revise its OBD regulations.

B. Standardized Codes and Accessibility

Section 202(m)(4) of the Act, as amended, requires that OBD system information be unrestricted and accessible to anyone via standardized connectors without requiring access codes or any device only available from the manufacturer. Further, the OBD system information must be usable without need for any unique decoding information or device. To satisfy these mandates, EPA is requiring that OBD systems conform to uniform industry

⁸ See SAE standards #J1850, J1877, J1892, J1962, J1979, J2012, and J2186 in effect at the time of publication of this rule. Copies of these standards have been placed in the docket for this rulemaking. Note that SAE standards #J1978 and J2205, and ISO 9141, included in the proposed rulemaking, are not incorporated into this final rulemaking. These documents had not been published as final standards at the date of publication of this final rule; when these documents are published as final,

Continued

⁸ Beginning with the 1999 model year, California will also accept systems meeting Federal requirements as automatically satisfying California OBD requirements for vehicles designed to meet Tier 1 standards, see CARB Mail-Out #92-56.

standards adopted through the Society of Automotive Engineers (SAE) and be accessible with the use of a standard hand-held diagnostic tool.⁹ EPA has reviewed these SAE standards and believes they accurately and completely specify the needed requirements. In addition to "freeze-frame" information giving engine operating conditions at the time of the malfunction, the rulemaking requires that the following information be provided over the standard data link connector, if the information is available to the on-board computer or can be determined using information available to the on-board computer: calculated load value, diagnostic trouble codes, engine coolant temperature, fuel control system status, fuel trim, fuel pressure, ignition timing advance, intake air temperature, manifold air pressure, air flow rate from the mass air flow meter, engine RPM, throttle position sensor output value, secondary air status, and vehicle speed. EPA believes this information is valuable in diagnosing malfunctions and performing appropriate repairs, and it is also required by California's OBD II regulation. In addition, to increase vehicle repairability and specific to the Federal OBD rule, the regulations require that the vehicle be capable of performing bi-directional diagnostic control (i.e., the ability to not only receive information from the vehicle's computer but also control the status of various sensors by sending control signals to the vehicle's computer) based on SAE communication specifications on demand through the serial port on the standardized data link connector.

The final regulations for this requirement are identical to those in the proposed regulations, except that air flow rate and vehicle speed have been added to paragraph (f)(2) of § 86.094-17 after having been inadvertently excluded from the proposed regulations. EPA received no public comments specific to the proposed requirements for standardization and accessibility of stored computer information. Comments on the conditions for freeze-frame storage are discussed in section 3 of the Response to Comments document in the OBD docket.

C. Anti-Tampering Measures

With today's rulemaking, EPA is requiring that manufacturers protect their on-board diagnostic computers from tampering. The method employed is left to the manufacturer's choice. Such methods could include soldering

chips to their circuit boards, enclosing ("potting") the computer in a material such as polyurethane, or otherwise permanently sealing the computer housing. Write-protect features are required for flash memory systems. This OBD regulation requires adherence to SAE standard #J2186, which has been developed to meet CARB's OBD II requirement for write-protection.

Today's rule also requires manufacturers to use a single dashboard MIL to indicate all emission-related problems detected by the OBD system. The purpose being to prevent a proliferation of warning lights that could lead to driver confusion. Manufacturers may install warning lights separate from the MIL intended to alert the driver to safety problems or problems related to engine operation which could result in immediate damage, such as low oil pressure or over temperature conditions. (Separate warning lights for engine temperature, oil level, and alternator performance will continue to be allowed). EPA believes the requirement to have a single MIL for all emission-related problems is consistent with California's OBD II requirement.

To discourage tampering, the MIL must illuminate when the vehicle's ignition is in the "key-on" position each time the vehicle is started. This will facilitate in-use inspection to determine that the system is functioning. The MIL will go off after the engine is started unless a malfunction has been detected. Illumination of warning lights during key-on is already common practice in the auto industry.

The regulations also require that a readiness code be stored in the on-board computer to indicate when the diagnostic system has completed all monitoring checks and determined that all monitored systems are functioning properly. The readiness code will ensure I/M testing personnel and service technicians that malfunction codes have not been cleared since the last OBD check of the vehicle's emission-related control systems. This code will be essential if OBD checks are ever to replace tailpipe tests in I/M programs, since I/M personnel must be sure that the OBD system has had sufficient time to completely check all components and systems. The readiness code is also crucial for indicating to service personnel whether any repairs have been conducted properly; if the readiness code appears indicating a full functional check has been completed without any malfunctions being detected, the repair has been successful. As noted in the following section on Monitoring Frequency, a full evaluation

of the monitored systems may require extended vehicle operation to satisfactorily verify emission-related component or system performance.

In addition, aftermarket parts must be fully compatible with the OBD system. Installation of aftermarket parts which prevent the OBD system from performing its proper function will be considered tampering. Questions regarding potential tampering due to installation of aftermarket parts will be considered in the same manner as EPA considers devices or actions which could affect emission performance.

The anti-tampering provisions of the final regulations are identical to those proposed, except for the addition of paragraph (b) to section 86.094-18, which accepts demonstration of compliance with the OBD II tampering protection features through the 1998 model year.

D. Monitoring Frequency

EPA expects that the OBD system will evaluate component performance as often as possible. Therefore, EPA is requiring that all components monitored by the OBD system be evaluated at least once every trip, with one CVS-72¹⁰ driving cycle qualifying as a trip. Manufacturers may monitor emission-related components more frequently to avoid component damage or assure a reliable assessment of component performance.

The monitoring frequency provisions of the final regulations are identical to those proposed.

E. MIL Illumination

Upon malfunction determination by the OBD system, EPA is requiring illumination of the MIL on the vehicle dashboard. Once illuminated to indicate a malfunction, the MIL must remain illuminated during all periods of engine operation until the trouble codes stored in the on-board computer are cleared by a service technician or after repeated re-evaluation by the OBD system fails to detect a reoccurrence of the problem (see discussion following). This will eliminate confusion caused by those OBD designs which turn off the MIL when the ignition key is turned off with no re-illumination upon restart.

EPA will allow manufacturers to extinguish the MIL only if no reoccurrence of the problem is detected. As in California's OBD II regulations, EPA is allowing the manufacturer to extinguish the MIL after three subsequent sequential driving cycles of

¹⁰ The CVS-72 driving cycle is equivalent to the Urban Dynamometer Driving Schedule (UDDS) as defined in 40 CFR part 86, Appendix I, paragraph (a).

the Agency intends to incorporate them into the Federal Regulations, perhaps in the forthcoming final rule on service information availability.

similar operation (as discussed below) in which a system fault did not reoccur. EPA will also allow the computer-stored fault code to be cleared after forty (40) engine warm-up cycles if the same fault is not reregistered. These requirements will serve as the minimum number of warm-up cycles without reoccurrence of a malfunction before extinguishing the MIL or clearing the computer of fault codes. Manufacturers may determine more extensive operation is appropriate for their particular vehicle designs.

EPA is requiring the same MIL illumination and extinguishing criteria for all malfunctions California has adopted for misfire and fuel system malfunctions. Specifically, before extinguishing the MIL, the vehicle must be operated over three subsequent sequential driving cycles under which similar operating conditions have been experienced. As with the OBD II rule, similar operating conditions are defined as being within ten (10) percent of the load condition and 375 rpm with the same engine warm-up status which existed when the malfunction was first determined.

Current OBD systems incorporate a MIL displaying a phrase such as "Service Engine Soon." EPA is not specifying the exact wording for the MIL, but EPA retains the right to disapprove any wording other than "Check Engine" or "Service Engine Soon" if EPA believes that wording does not adequately alert the driver of the need for repairs or makes an unfair indication of when or where to have repairs done (e.g., "Service Soon at Dealer").

EPA is requiring the MIL to blink continuously during periods of engine misfire that could potentially damage the catalyst. This requirement is changed from the proposed requirements under which the MIL was required to blink during any misfire condition. Public comment suggested, and EPA agrees, that requiring the MIL to blink under any misfire condition may result in the MIL blinking often enough that the driver may ignore the blinking effect. However, it is necessary to have the MIL blink when misfire conditions could damage the catalyst to alert the driver to the high emitting operating condition possible during these misfire conditions and to prevent catalyst damage from actually occurring. The regulations require the manufacturer to determine the misfire conditions under which catalyst damage would potentially occur and, thus, the conditions under which the MIL must blink.

F. Repair Information Availability

This rulemaking does not contain the final requirements under which information necessary to perform repair and maintenance service on OBD systems and other emission-related vehicle components would be made available to the service and repair industry. Such requirements will be contained in a forthcoming Agency rulemaking.

G. Enforcement

Certification

Certification enforcement of the OBD requirements is composed of three aspects: (1) Manufacturers are required to submit documentation of OBD system design for Administrator approval; (2) EPA will perform audit testing of emission data vehicles, fuel economy data vehicles, and assembly line vehicles; and (3) EPA will evaluate results of in-use testing programs, such as the in-use compliance and emission factors programs, for vehicles with similar OBD systems to that under certification evaluation. The proposal discussed a fourth aspect of certification addressing compliance with information availability requirements. This fourth aspect will be addressed in the forthcoming Agency rulemaking on Repair Information Availability.

Manufacturers shall be required to provide EPA with sufficient documentation on the OBD system design to permit the Agency to perform a thorough evaluation of the effectiveness of the proposed OBD system. Although the regulations do not require that a manufacturer supply information which supports the decision not to monitor specific components or systems, the manufacturer should have such information available and EPA retains the right to access such information consistent with section 208 of the Act.

EPA is not requiring manufacturers as part of the certification program to routinely demonstrate via test data that their vehicles conform to these OBD regulations. EPA retains the right to audit manufacturers' OBD designs by selectively evaluating individual designs over a wide range of potential malfunctioning conditions as described below. If a manufacturer's design fails this audit evaluation, the manufacturer will be denied certification for vehicles equipped with that OBD design.

During certification testing of vehicles certified to Federal OBD, EPA could individually cause one or more of the following malfunctions on any emission data vehicle or other vehicle approved by the Administrator. To evaluate a

system's O₂ sensor, catalyst, or misfire monitoring, EPA could install or simulate a deteriorated O₂ sensor or catalyst or induce misfire. If the MIL illuminated and proper codes were set, the OBD system would comply with requirements to detect these malfunctions. If the MIL failed to illuminate, the OBD system would pass certification only if the increase in emissions due to the individual malfunction was less than the threshold levels being established by this rulemaking. During certification testing of vehicles certified to Federal OBD, EPA may electrically disconnect the evaporative purge control (if equipped) or any emission-related powertrain component (one at a time) that directly or indirectly receives information from or transmits information to the on-board computer, such as the auxiliary air system or engine coolant temperature sensor. The OBD system will pass certification if the MIL illuminated and proper codes were set for any electrical disconnection. Such electrical continuity audits may be done on any emission data vehicle or assembly line vehicle.

During certification of vehicles certified to California OBD II, EPA may conduct audit and confirmatory testing consistent with the provisions of the OBD II rule. Therefore, while the Agency will consider California certification in determining whether to grant a Federal certificate, EPA may also elect to conduct its own evaluation under OBD II rules for OBD systems the manufacturer is electing to voluntarily certify according to OBD II rules.

EPA also reserves the right to evaluate any other pertinent data or information in deciding whether to grant a vehicle a certificate. In determining whether an OBD system should be certified, EPA may take into consideration information on the system's previous performance in actual use should such performance exist, including emissions and MIL illumination on in-use vehicles tested under the in-use enforcement and emission factors programs or any other in-use testing program. Data from in-use vehicles would be particularly important in determining whether manufacturers would be allowed to "carryover" an OBD system from one model year to another.

The certification provisions of the final regulations are essentially the same as those proposed, except that the proposed requirements pertaining to information availability and service information plans have been deleted.

In-Use Compliance

In-use enforcement of the OBD regulations will focus on whether the OBD system detects an emission-related malfunction or deterioration that actually occurs in-use. In determining, under the provisions of section 207(c), the conformity of in-use vehicles with the performance requirements of the Federal OBD regulations, EPA will test any in-use vehicle, regardless of proper maintenance or use, as long as the vehicle's maintenance and use did not affect the proper functioning of the OBD system itself. Vehicles with detectable exhaust system leaks will first have these leaks repaired. Since the portion of the FTP used to measure exhaust emissions does not measure the emissions from such leaks, EPA's evaluation of OBD performance will not penalize a manufacturer for exhaust system leaks.

EPA will target in-use vehicles with emissions exceeding the applicable standards for further investigation of OBD system performance. For vehicles certified to OBD II, EPA will conduct in-use enforcement testing within the provisions of the OBD II rule; the following discussion is relevant for those vehicles certified to Federal OBD performance requirements.

If an in-use vehicle is tested and shown to have emissions exceeding applicable standards, an attempt will be made to diagnose and repair the problem or problems causing the high emissions. If any single and identical undetected malfunction of an emission-related powertrain component or the vapor recovery or purge control systems, regardless of whether the OBD system monitored for that malfunction, is repaired and reduces emissions by an amount greater than a threshold level on at least two vehicles of the same general OBD system design, that particular OBD system would be considered faulty.

In such a case, these vehicles will be in violation of the OBD regulations, and they may be recalled under section 207(c) of the Act for defective OBD systems, and certification carryover of that OBD system design could be denied for future model years. Also, if a malfunction found in use was not monitored by an OBD system EPA found to be faulty, future OBD systems by the same manufacturer may be required to monitor for that malfunction, unless the manufacturer could demonstrate to the Administrator's satisfaction that the malfunction will not occur in subsequent model years.

In-use evaluation of OBD system effectiveness at detecting potential

evaporative system malfunction for vehicles certified to Federal OBD will be done using the emission threshold of 30 g/test measured over the first 24 hour period of the diurnal portion of the revised evaporative emission test procedure. If a vehicle with an unilluminated MIL or illuminated MIL with no appropriate trouble code is found to fail that threshold, any discernable problems will be repaired. Upon completing these repairs, a 0.04 inch orifice will be created within the vehicle's evaporative emission control system. If the MIL then illuminates during the FTP driving cycle and a proper trouble code is stored, the vehicle's OBD system will be considered acceptable. If the MIL fails to illuminate on at least two vehicles which fail both the threshold and the 0.04 inch evaluation, and both vehicles have the same type of "as received" evaporative system malfunction(s) and the same general OBD system design, that OBD system may be subject to EPA recall. The basis and rationale for the 30 g/test emission threshold and the 0.04 inch diameter orifice are explained in section V.C. of this preamble.

In the case of an OBD system failing to identify an infrequent component failure, the OBD system, not the component, would be the subject of the recall and that recall would occur only if the determination were made that the "failure to identify" would occur on at least two vehicles of the same general OBD design within EPA's limited test sample. In the Agency's opinion, if an identical malfunction occurs on two similar vehicles within EPA's test sample of a manufacturer's fleet (usually only 10 to 40 vehicles) without being flagged by the same OBD system design, that OBD system design is inadequate and has failed to detect a malfunction with considerable likelihood of occurring during in-use operation. As proposed, EPA could effectively have required a recall after finding just one such occurrence within the in-use fleet. However, public comment suggested that such a potentially one-in-a-million occurrence should not be considered sufficient for recall. By requiring two such occurrences within such a small sample, the Agency believes that the malfunction must be occurring with sufficient probability within the in-use fleet to warrant possible recall action. This issue is discussed further in section V of this preamble.

EPA recognizes the need to assure appropriately functioning OBD systems at high mileages. CARB's OBD II regulations do so by explicitly requiring OBD monitoring of essentially the entire emission control system and assuring

proper performance at certification time. This way, CARB's OBD II regulations help guarantee the OBD system is capable of detecting problems that might not occur until very high mileage, e.g. over 100,000 miles. EPA's certification program similarly assures OBD designs which should function appropriately and detect high mileage problems with the catalyst, the oxygen sensor, misfire, and electrical disconnection. For other potential problems, EPA's program relies on manufacturer assessment of monitoring needs, backed up by EPA's in-use enforcement program.

The in-use compliance provisions of the final regulations have changed from those proposed, as discussed in detail in section V of this preamble and section 3 of the Response to Comments document in the OBD docket.

EPA's current in-use emission compliance program will continue to test properly maintained and used vehicles regardless of MIL illumination for compliance with existing regulations which require that vehicles conform to emission standards for their useful lives.

IV. Public Participation

On September 24, 1991, EPA published a Notice of Proposed Rulemaking (NPRM) which set forth proposed requirements for on-board diagnostic (OBD) systems on light-duty vehicles and light-duty trucks. The period for submission of comments on the NPRM was scheduled to close on December 9, 1991.

On November 6 and 7, 1991, a public hearing was held. The original comment period was then extended to January 10, 1992, for comments regarding the availability of service information only. In addition, on March 31, 1992, the comment period was reopened for comments relevant to the malfunction detection requirements associated with evaporative emission control system monitoring and for comments relevant to the acceptance of California OBD II requirements. The comment period concerning these two items closed on April 30, 1992.

The CAA requirements regarding the availability of service and repair industry information necessary to perform repair and maintenance service on on-board diagnostic systems and other emission-related vehicle components have elicited extensive comments. Because of the scope of the issues involved and raised by these comments, further analysis is required. As a result, the requirements for making information available to the service industry will be handled in a subsequent regulation.

Comments were received from manufacturers and their associations, mechanics and their trade associations, motor vehicle dealerships, state agencies, and private individuals. The following sections briefly summarize comments on the major issues. For the complete response to comments, see the Response to Comments on the Regulations Requiring On-Board Diagnostic Systems on 1994 and Later Model Year Light-Duty Vehicles and Light-Duty Trucks contained in the public docket for this rule.

V. Discussion of Comments and Issues

Comments on a wide range of issues concerning the proposed OBD system requirements were received. Summarized here are the comments concerning the major or controversial issues and the rationale behind EPA's final decisions. These issues are considered in more detail in the supplemental Response to Comments document prepared for this final rule and included in the docket noted earlier. Also in this Response to Comments document is consideration of other more minor issues whose resolution is reflected in this final rule.

A. Acceptance of California OBD II Requirements

Summary of Proposal

In the NPRM, EPA proposed that OBD designs satisfying the California OBD II rules would satisfy Federal OBD requirements for some initial model years. The purpose was to allow manufacturers sufficient leadtime to evaluate their designs intended to meet California's OBD II rules to assure they also meet Federal rules or are modified as necessary. The model years considered included 1994 through 2002, with the exact interim period to be determined on the basis of additional information from the industry on the necessary changes they anticipated and the resources available to them. After the close of the initial comment period on December 9, 1991, EPA reopened the comment period from March 31, 1992, until April 30, 1992, to take further comment on the issue of accepting California OBD II systems as satisfying Federal OBD requirements. In the notice announcing the reopening of the comment period, EPA stated that its analysis suggested acceptance of OBD II at least through the 1996 model year was appropriate to provide industry sufficient leadtime for incorporating OBD II into their product lines and for making any potential calibration changes deemed beneficial in meeting federal requirements by the 1997 model

year, while satisfying the Agency's strong interest in having the more performance based aspects of the federal OBD rule in place as soon as practicable.

Comments: Overwhelmingly, vehicle manufacturers requested that EPA accept compliance with OBD II as satisfying Federal OBD requirements for some period of years. The comments from manufacturers varied as to the length of time during which OBD II should be accepted by EPA, with requests ranging from 1998 to 2002, and even indefinitely. Those requesting indefinite acceptance argued that if OBD II is acceptable at all, it should be acceptable indefinitely. Most based their recommendation on the general view that compliance with the Federal rules would require incremental investment in evaluation and potential redesign of systems satisfying California's OBD II regulations. Some vehicle manufacturers also expressed a need to conduct further in-use performance evaluation before being prepared to satisfy the Federal OBD requirements. Only the State of Colorado recommended Federal OBD implementation as soon as possible; however, its comments do not specifically object to acceptance of OBD II standards. Colorado did mention differences between the information availability requirements of the Agency's proposed rulemaking in comparison to OBD II. However, EPA's acceptance of OBD II requirements would not preclude the need to meet future Agency requirements for information availability. The State of California recommended accepting OBD II through the 1998 model year since the OBD II regulations provide for acceptance of Federally certified OBD systems beginning with the 1999 model year.¹¹

Analysis of Comments: No information supplied in the comments supported manufacturers' contention that they would need to develop alternative designs or calibrations to meet Federal rules, compared to OBD II rules. Only one commenter quantified the incremental burden of complying with the Federal rules, and that analysis did not specifically state why the incremental costs were required. EPA believes, based on at least one manufacturer's comment, that manufacturers prefer a longer period of Federal acceptance of OBD II systems to provide additional in-use performance evaluation prior to being held responsible for compliance with the Federal OBD rules.

¹¹ CARB Mail-Out #91-57.

For the reasons given in the notice of proposed rulemaking, EPA anticipates manufacturers will not need to adopt different hardware to comply with the Federal rules compared to the hardware manufacturers have indicated they will adopt to meet the California OBD II rules. The comments have not persuaded EPA that its expectations are unreasonable. Therefore, the only necessary difference in design might be a need to recalibrate the OBD system to meet the Federal emission thresholds. In EPA's judgement, no more than one additional model year should be required for a manufacturer to conduct a design evaluation, test, and perhaps develop some modifications to OBD calibrations to assure their designs satisfy Federal requirements.

From an in-use durability perspective, manufacturers might perceive the Federal rules as requiring more emphasis on in-use emission performance than the California rules. The clear responsibility of the manufacturer to develop an OBD system capable of detecting in-use problems which result in vehicles exceeding in-use emission thresholds may, in the manufacturers' view, entail greater in-use performance responsibility, necessitating additional in-use evaluation. While EPA does not believe that an additional in-use performance evaluation is necessarily required due to the differences between the California and EPA regulations, Agency understands that this regulation and the OBD II regulation are forcing the development of new OBD technology, and that an in-use performance assessment program could be useful in determining the most appropriate OBD designs for the federal regulations. Given that manufacturers must develop and install the OBD technology across its entire product line within a short timeframe, the manufacturers may not have sufficient time to adequately assess the OBD system's performance under typical in-use conditions. Even under a program designed for rapid feedback, some years could be required to evaluate in-use performance and feed this information back into the design process. The Agency believes that as many as three or four years would be required for such in-use evaluation to allow a substantial number of vehicles to accumulate sufficient mileage to make the evaluation representative of the in-use fleet.

Most manufacturers have indicated they expect to have some portion of their product lines complying with the OBD II regulations for the 1994 and 1995 model years, although each manufacturer may have some designs

which will not comply with the OBD II regulations until the 1996 model year. Thus, manufacturers should be able to begin design evaluation (including in-use evaluation) beginning with the 1994 or 1995 model year. Due to human resource limitations, potential recalibration work by some manufacturers might have to be delayed until after the 1996 model year, after completing their work in developing systems capable of meeting the California OBD II regulations for the 1996 model year. Allowing additional years for in-use evaluation and concurrent work on potential recalibration as may be necessary to evaluate compliance with the Federal certification rules and make any beneficial calibration changes, manufacturers should be able to comply with the Federal rules beginning with the 1999 model year. This is also consistent with the recommendation of the State of California.

As mentioned, some vehicle manufacturers suggested that EPA accept OBD II systems indefinitely. This alternative was neither proposed by the Agency, nor is it an attractive alternative from the Agency's perspective. The Federal regulations contain enforcement approaches consistent with past EPA policies which rely on performance evaluations, rather than specific design requirements, to encourage innovative control strategies and improvements in technology. Also, having effectively two separate regulations mandating the same type of program is unnecessarily inefficient to enforce. Finally, EPA can establish no benefit to manufacturers from having two separate sets of OBD regulations in effect for federal purposes beyond the 1998 model year.

EPA Decision: For the 1994 through 1998 model years, EPA will enforce OBD requirements against either the California OBD II requirements in place as of the publication date of this rulemaking, or the Federal OBD requirements. Beginning with the 1999 model year, full compliance with the Federal OBD requirements will be required for all vehicles covered by this rulemaking. This will assure designs fully meeting the goals of the Federal OBD program, not only for preproduction certification but also during in-use operation.

B. Catalyst Monitoring

Summary of Proposal

The proposed rule required that the MIL must be illuminated upon detection of catalyst malfunction or deterioration before it results in an exhaust emission increase greater than 0.4 g/mi HC, 3.4 g/

mi CO, or 1.0 g/mi NO_x as measured on the FTP.

Comments: Comments from several vehicle manufacturers suggested that EPA should set an emission threshold based on an absolute emission level exceedance (i.e., malfunction when emissions exceed a specified emission level, such as the OBD II threshold of 1.5 times the HC standard or roughly 0.6 g/mi) as opposed to a relative emission level increase (i.e., malfunction when emissions increase a specified level above the vehicle baseline) like the one proposed. Manufacturers argued their belief that engine-out emissions tend not to increase over the vehicle's life. Therefore, they believe that the catalyst emission threshold should be a constant, or absolute, emission level above which catalyst failure must be flagged.

Also, vehicle manufacturers argued that the dual oxygen sensor method, currently the most effective means of catalyst monitoring, which compares an oxygen sensor signal placed before the catalyst to one placed after the catalyst to determine the catalyst's operational status, is not capable of distinguishing loss of NO_x conversion capability, and does not distinguish the loss of CO conversion capability as effectively as it does the loss of HC conversion. Therefore, they believe that it would be inappropriate to require monitoring the catalyst for loss of CO or NO_x conversion capability; they believe that monitoring solely for HC conversion capability will lead to more accurate results.

Analysis of Comments: Based on analysis of the comments, the Agency agrees that, in those cases in which engine-out emissions tend to remain constant over the course of a vehicle's lifetime, it is most accurate to structure catalyst failure detection upon a constant emission level exceedance as opposed to an emission level increase. Such a constant emission level criterion also encourages manufacturers to design for low tailpipe emission levels since this would provide a greater margin for catalyst deterioration prior to requiring OBD detection. EPA views encouraging low emission designs as generally beneficial. However, there are circumstances in which engine-out emissions can increase; for example, due to the gradual loss in cylinder compression as the engine wears, especially after high mileage accumulation. In such cases, the vehicle's tailpipe emission level could approach the constant emission threshold criterion without the catalyst having experienced excessive deterioration. As the regulations are

intended to monitor a malfunction or deterioration of specific emission-related components or systems, and as the fault codes are intended to accurately indicate the component or system that has malfunctioned, the requirements for catalyst monitoring cannot rely on general emission exceedances to signal catalyst deterioration. The catalyst monitor must be designed such that a trouble code signalling catalyst deterioration can actually be traced to catalyst deterioration. The regulations, therefore, must still require that catalyst-specific deterioration be monitored and that the emission threshold specifically be tied to catalyst deterioration. See the discussion of exhaust emission threshold levels in section V.E of this preamble for more discussion of this issue.

Therefore, EPA has developed a two-tiered approach for the catalyst monitoring threshold which should satisfy both the vehicle manufacturers' and EPA's concerns. Under this approach, the Agency will target vehicles with emissions exceeding 0.6 g/mi HC for catalyst evaluation. Any such vehicle without an illuminated MIL for which replacement of the catalyst decreases tailpipe emissions by 0.4 g/mi would be considered in violation of this OBD regulation.

This differs from the proposal only by the addition of the 0.6 g/mi HC flag. This emission level was chosen on the basis of EPA's belief that it represents the lower limit of reliable detectability, and its consistency with the OBD II regulation. The 0.6 g/mi HC flag has been added to the catalyst monitoring criteria to prevent the flagging of high efficiency catalysts at low mileage. As proposed, a low mileage vehicle with tailpipe emissions of 0.1 g/mi HC would have to flag a catalyst as malfunctioning if emissions had reached 0.5 g/mi HC, even though such a catalyst may still be converting at 75 percent efficiency. The Agency does not want to flag and replace such high efficiency catalysts. The two-tiered approach of the final regulation gives leeway at low mileages to prevent replacement of still high efficiency catalysts.

This catalyst emission threshold also differs from the proposal by eliminating CO and NO_x from the evaluation criteria. EPA agrees with vehicle manufacturers that correlation between the dual oxygen sensor monitoring method and CO conversion within the catalyst is very weak, and that a correlation with NO_x conversion using this monitoring method is not possible. The efficiency of CO conversion, and loss thereof, within the catalyst is

generally affected by the same mechanisms as is HC conversion; therefore, the Agency believes that detection of a loss in HC conversion will generally be indirectly detecting a loss in CO conversion. Additionally, because the correlation between the monitoring method and HC conversion is strong and that with CO conversion is weak, the chance for false diagnosis of CO conversion losses is higher than the chance for false diagnosis of HC conversion losses. For these reasons, the Agency believes that the CO threshold should be eliminated. Also, the Agency knows of no means by which loss of NO_x conversion can be detected; therefore, the Agency believes that the NO_x threshold should also be eliminated.

EPA Decision: On the basis of the comments and further EPA analysis, matched with industry requests for a threshold level consistent with OBD II, catalyst deterioration must be detected before it results in both an exhaust emission exceedance of 0.6 g/mi HC and an emission increase of 0.4 g/mi HC.

C. Technological Feasibility of Evaporative Control System Leak Detection

Summary of Proposal

The proposed rule did not explicitly require monitoring of the evaporative emission control system. However, the proposal required that the OBD system detect any evaporative system malfunction occurring in-use and causing an evaporative emissions increase greater than 2 g/test. Therefore, the manufacturer was given the flexibility to forego monitoring by equipping vehicles with evaporative emission control systems which would not fail during in-use operation. If the manufacturer was confident that no malfunction would occur in-use, there would be no need to monitor the evaporative emission control system using OBD.

Comments: Virtually every manufacturer stated that detection of a 2 g/test emission increase, or detection of a hole so small that emissions increased by such a small amount, was infeasible if measured using the enhanced evaporative test procedure, which is scheduled for phase-in beginning with the 1996 model year through the 1999 model year.¹² Vehicle manufacturers suggested alternative

OBD requirements for evaporative monitoring such as detection of a specified orifice within the system consistent with OBD II, or detection of discrete failures such as missing gas caps or disconnected vapor lines. Many vehicle manufacturers also commented that, while preferring an orifice requirement consistent with OBD II, the OBD II requirement of 0.04 inches was both infeasible and unnecessary for improved air quality because, in their opinion, such small holes do not occur in-use.

Analysis of Comments: In developing the proposed 2 g/test evaporative emission threshold, EPA used the diurnal sequence from the current evaporative emission test procedure.¹³ The Agency agrees that detection of a problem so slight as to cause no more than a 2 g/test emission increase over the much more rigorous enhanced evaporative emission test procedure is not practicable, if even feasible, since such a small emission increase over that test procedure would correspond to such a small opening in the system that the sensors required for detection would be prohibitively expensive. Therefore, the Agency considered raising the emission increase threshold to reflect the expected (at that time) revision of the diurnal test procedure or setting an orifice detection requirement consistent with OBD II. To gain further insight into the issue, the Agency reopened the comment period from March 31 to April 30, 1992, and participated in a CARB workshop geared largely toward the technological feasibility of evaporative monitoring.

The Agency views the California OBD II orifice detection requirement as a design requirement because it mandates that the evaporative system be monitored rather than allowing the manufacturer to forego OBD monitoring by designing the evaporative system to perform such that the chance for excessive emissions is unlikely. The Agency prefers an emission threshold approach like that proposed because it encourages manufacturers to design more robust evaporative emission control systems in lieu of monitoring through OBD. An emission threshold approach also facilitates in-use enforcement by providing an objective standard (the emission threshold) against which to measure in-use performance.

Considering these factors, the Agency will stay with an emission threshold requirement, realizing that a higher emission level is required to reflect the forthcoming revision of the evaporative

emission test procedure and to balance technological feasibility and costs. The Agency believes that it is important to detect loss of system integrity within the evaporative system as soon as possible due to the large amount of fuel vapor which can escape through even very small holes.¹⁴ Industry has argued that very small holes (i.e., less than 0.08 inches) do not occur in-use. However, independent EPA and CARB analyses^{15,16} indicate that small holes are present on as many as 9 to 13 percent of in-use vehicles. This finding is consistent with EPA expectations since EPA believes that at least a portion of large leaks start as small leaks. The Agency also believes, like CARB, that detection of very small holes is feasible under proper operating conditions. In meetings held subsequent to publication of the proposed rule, several manufacturers have acknowledged that detection of small holes is feasible, and one automotive supplier has developed a monitoring system capable of detecting holes even smaller than 0.04 inches.¹⁷

Therefore, because EPA prefers a threshold approach but wants to minimize the development burden placed on manufacturers, EPA has chosen to use a two-tiered approach to the evaporative monitoring threshold, similar to that discussed for catalyst monitoring. This two-tiered approach will consist of a 30 g/test flag followed by a 0.04 inch evaluation test. The 30 g/test flag has been chosen because EPA believes that it represents the typical emission level that would escape from a 0.04 inch hole within the evaporative system according during the first 24 hours of the revised diurnal test procedure. This conclusion is based upon manufacturer-supplied data, which EPA finds to be reasonable, contained in the docket to this rulemaking. The 0.04 inch hole size has been chosen because it constitutes the minimum hole size which EPA and CARB believe can be practicably detected based on manufacturer and independently supplied data contained in the OBD docket. The Response to Comments document for this rulemaking discusses this data in detail.

¹⁴ See docket submittals from Toyota, Honda, GM and others in response to the March 31, 1992, reopening of the OBD public comment period, included in section IV-D of the docket for this rulemaking.

¹⁵ Memorandum from Linc Wehrly to Robert Larson regarding Evaporative System Leaks In-Use, September 9, 1992.

¹⁶ CARB Mail-Out #92-27, May 11, 1992.

¹⁷ Memorandum from Linc Wehrly to OBD Docket No. A-90-35, regarding a Siemens Presentation to EPA, dated June 2, 1992.

¹² Control of Air Pollution From New Motor Vehicles and New Motor Vehicle Engines: Evaporative Emission Regulations for Gasoline- and Methanol-Fueled Light-Duty Vehicles, Light-Duty Trucks and Heavy-Duty Vehicles, signed by the Administrator on January 20, 1993, and soon to appear in the Federal Register.

¹³ 40 CFR part 86.

For the purposes of in-use testing, any in-use vehicle with evaporative emissions of 30 g/test or higher measured over the revised evaporative test procedure will be flagged for OBD evaluation. This evaluation will consist of first making necessary repairs to the evaporative system, then placing a 0.04 inch orifice somewhere within the system. The vehicle will then be tested using the FTP. If the MIL then illuminates during the FTP, the OBD system will be considered in compliance. If the MIL fails to illuminate during the FTP, the OBD system will be considered in violation of this OBD regulation. EPA believes that demonstration of the OBD system's inability to detect evaporative emission malfunctions should be triggered by failure to detect a 0.04 inch orifice, rather than failure to detect evaporative emissions of 30 g/test, because the emissions of 30 g/test could have resulted from a defect other than a defect equivalent to a 0.04 inch hole, but as discussed above, EPA believes 0.04 inches is the minimum hole size that can be practically detected.

The threshold approach allows the manufacturer either to design and produce an evaporative emission control system that will not fail or that upon failure will not cause exceedance of the emission threshold, or to install a system capable of malfunction detection at the feasibility limit, i.e., detection of a 0.04 inch hole. Manufacturers could meet this using the same OBD evaporative monitoring system as installed on California OBD II certified vehicles. The manufacturer may also elect to incorporate a discrete monitoring method (i.e., one that detects hose disconnections or loose gas caps, but not small leaks such as 0.04 inch holes), thereby reducing costs, by designing an evaporative system which will either not have small leaks or will not exceed the threshold under small leak conditions. The 30 g/test flag allows the Agency to evaluate whether a vehicle not equipped with OBD leak detection within the evaporative system is in compliance because there would otherwise be no performance criteria against which to evaluate the manufacturer's choice to forego such monitoring.

EPA Decision: The Agency has chosen to stay with a threshold approach using a threshold which reasonably approximates the amount of vapors which would leak from a 0.04 inch diameter hole under low pressure conditions. This threshold will be 30 g/test measured during the first 24 hours of the 3 day diurnal which constitutes the revised evaporative emission test

procedure. Upon failure of this threshold without MIL illumination and appropriate trouble code storage, the evaporative system will be repaired and a 0.04 inch hole inserted. Failure of the MIL to illuminate during the FTP with this 0.04 inch hole would be considered a violation of OBD regulations. The 30 g/test threshold will thus be used as an evaluation flag, not a performance criterion. The 0.04 inch hole will be used as the performance criterion. Measurement for the 0.04 inch hole would be done during the dynamometer portion of the FTP, which will not be changed by the evaporative test procedure rulemaking.

It is important to note that this OBD evaluation in no way replaces current in-use enforcement procedures, rather it is an addition to those procedures. Therefore, vehicles with evaporative emissions below 30 g/test but exceeding the 2 g/test emission standard would still be considered in violation of emission standards and would potentially be targeted for a conventional emissions recall.

D. Phase-in of Leak Detection Within the Evaporative Emission Control System

Summary of Proposal

Under the proposed regulations, monitoring of the evaporative emission control system for problems would not be mandated, except for monitoring of electrical disconnect of evaporative system components which send information to or receive information from the vehicle's on-board computer. However, in-use enforcement of an evaporative leak detection emission threshold would begin with vehicles certified to the new evaporative emission test procedure being developed by EPA or by the 1996 MY, whichever occurred first.

Comments: All commenters requested that OBD requirements for evaporative emission control system problems be implemented to coincide with phase-in of the new evaporative emission test procedure. However, they did not want to implement OBD requirements beginning with the 1996 MY if the revised evaporative emission test procedures were not fully in effect by that time. Under California's OBD II rules, the phase-in of the evaporative emission monitoring requirement will coincide with the phase-in of the California revised evaporative emission test procedures. The automotive industry commented that full implementation by EPA of the evaporative emission monitoring requirement before full implementation of the new test procedure would be

inconsistent with California's requirements and would unnecessarily increase the regulatory burden on manufacturers because development of monitoring techniques would be required for evaporative systems being phased-out within a year or two.

Analysis of Comments: Comments on this issue supported EPA's position that implementation of OBD requirements for evaporative system leak detection prior to phase-in of the revised evaporative emission test procedure would result in significant extra burden on the industry with a poor cost effective environmental benefit due to the high application costs and the relatively low potential total emission reductions. EPA seeks to avoid placing such burden on the industry. However, electrical problems with the purge flow, which fall under the requirement to detect loss of electrical circuit continuity, can be detected economically beginning as early as the 1994 model year. Such an element of an OBD system would not have to be redesigned with subsequent phase-in of the revised evaporative emission test procedure. Adopting such a requirement is also consistent with the Clean Air Act mandates to have OBD monitoring systems in place beginning with the 1994 model year unless technically infeasible. Additional requirements including those necessary to detect leaks or other problems which would disrupt the normal trapping of evaporative emissions could then be phased in with the new evaporative emission test procedure.

EPA Decision: Beginning with the 1994 model year, manufacturers will be responsible for detecting problems related to the purge control operation of their vehicles' evaporative emission control system as electrically monitored by each vehicle's on-board computer. Manufacturers will be responsible for detecting additional problems with malfunction or deterioration of the evaporative emission control system for vehicle designs as they are phased in to comply with the revised evaporative emission test procedures.

E. Emission Threshold Approach and Exhaust Emission Threshold Levels

Summary of Proposal

EPA proposed an emission threshold approach for determination of emission control system deterioration or malfunction, with exhaust emission threshold levels of:

g/ml			
HC	CO	NO _x	
.4	3.4	1.0	Misfire & Catalyst.
.2	1.7	.5	All other problems.

Comments: In general, vehicle manufacturers expressed concern that the threshold levels were too low, especially those for components other than catalyst and misfire. The manufacturers argued the levels are too low because they can require MIL illumination and component replacement for vehicles meeting the standard. Also, manufacturers stated that, because of vehicle-to-vehicle variabilities, malfunction detection is required at even lower emission levels than the thresholds, which will lead to excessive MIL illuminations. Some manufacturers stated that the thresholds require unique calibrations different than the OBD II calibrations and recommended that EPA use the CARB approach of 1.5x the standards. Some manufacturers stated that EPA's thresholds penalized vehicles with low baseline emissions (the design target emission performance of the vehicle) by requiring malfunction detection and MIL illumination at absolute emission levels lower than vehicles designed to have comparatively higher baseline emissions. Some suggested the use of thresholds for primary systems and only function checks for other systems. BMW called the thresholds a good compromise between expected emission reductions and technological reliability. The American Gas Association requested that the HC threshold be set as non-methane HC.

Analysis of Comments: Regarding the issue of thresholds being too low, EPA disagrees. As discussed in the NPRM and the Technical Support Document for the OBD rulemaking, the Agency believes that malfunction detection at the threshold levels is technologically feasible, and that the thresholds strike the appropriate balance between timely flagging of malfunctions and avoidance of false malfunction indications. The Agency also believes that, with the advent of Tier I emission standards and the potential for future reductions in those standards, the chance of OBD flagging of malfunctions on vehicles emitting below the standards is very low.

As for unique calibrations, EPA has carefully reviewed both California's OBD II regulations and the planned Federal OBD regulations and can determine no cases which would require different calibrations to simultaneously meet both sets of regulations. This is not to say that OBD

calibrations which satisfy OBD II requirements will necessarily satisfy Federal requirements, or vice versa. For example, it is conceivable that one manufacturer's OBD design may be sufficiently sensitive to calibration such that one set of calibrations selected to meet OBD II rules, for example, may not be sufficient to meet Federal rules. As long as the manufacturer elects to sell the same OBD system in both California and the 49 states, the manufacturer will have to consider the compliance requirements of both sets of regulations. This is exactly the same case as has existed for some time with regard to emission compliance wherein Federal and California requirements have often differed for nominally the same vehicle design. However, the California and Federal OBD requirements are sufficiently similar to allow the manufacturer to design and calibrate an OBD system that meets both sets of requirements. Thus, one OBD design can be sold throughout the nation.

Concerning the issue of how the OBD proposal can variably impact vehicles depending on their baseline emission levels, the basis of OBD detection is on the impact of single component malfunction or deterioration. This approach differs from another possible approach, under which "emission-related system deterioration or malfunction" would be measured by determining a vehicle's total emissions and comparing those emissions to a specific total emission level. A fixed emission level OBD performance standard could be set for OBD performance evaluation; for example, a level above the exhaust emission standard equivalent to the proposed threshold could be used. Thus, for example, such a HC threshold for catalyst problems and misfire on Tier I vehicles could be 0.25+0.4 for light duty vehicles at 100,000 miles. If total emissions were greater than this absolute exhaust emission total, then the OBD system would be required to detect the emission-related system deterioration or malfunction resulting in that total emission level.

EPA believes that basing the standard on performance of individual components is preferable. One of the most important purposes of section 202(m) is to make diagnosis of emission-related problems easier for technicians. The regulations require fault codes to accurately indicate the part or system that has malfunctioned when a malfunction has occurred. In order to ensure that these codes accurately identify the system that has malfunctioned, the OBD system must

accurately trace emissions increases to specific components or systems.

In developing the proposal, EPA recognized the significantly greater technological difficulty a manufacturer would have in attempting to detect emission-related system deterioration or malfunction by relying on tailpipe emission performance rather than just the incremental impact of single component deterioration, which should be considerably less variable than tailpipe emissions. Requiring that the OBD system monitor deterioration by using a fixed emission level threshold independent of baseline emissions (the vehicle's emissions under normal, properly operating conditions) would create feasibility and enforcement problems because manufacturers are currently only technologically capable of monitoring for individual component malfunction or deterioration and cannot necessarily detect the synergistic impact of multiple component deterioration as these determine exhaust emission levels. To make the manufacturer responsible for absolute exhaust emission performance would either require stringency potentially much more severe than proposed (due to the need to detect multiple component deterioration and their synergistic impact on exhaust emissions), or much less stringency if the thresholds were raised to compensate for an assumed worse case multiple component deterioration and interaction even though in many cases only single components deteriorate or malfunction.

However, in response to comments specifically referring to how the threshold approach in the OBD proposal would affect catalyst monitoring, EPA is revising its performance requirements for OBD catalyst monitoring. Catalysts function as percent reduction devices. That is, within typical levels of engine-out emissions, a given catalyst will have the same percent emission reduction impact (e.g., if a vehicle with 2 g/mi engine-out emissions has an 80 percent efficient catalyst, the tailpipe emissions for that vehicle would be 0.4 g/mi; if another vehicle with 1 g/mi engine-out emissions has the same catalyst, the tailpipe emissions would be 0.2 g/mi). Because of this, a vehicle designed for very low tailpipe emissions resulting from high catalyst conversion efficiency would be penalized under the proposed OBD requirements in that the OBD system on such a vehicle would have to flag as unacceptable a catalyst with higher absolute conversion efficiency compared to a vehicle having higher tailpipe resulting from lower catalyst conversion efficiencies (e.g., if a vehicle with 2 g/mi engine-out emissions suffers

catalyst deterioration from 80 to 60 percent, its tailpipe emissions would increase 0.4 g/mi, from 0.4 to 0.8 g/mi, causing MIL illumination under the proposed threshold; another vehicle with the same 2 g/mi engine-out emissions and a 90 percent efficient catalyst, or 0.2 g/mi tailpipe, would undergo a 0.4 g/mi emission increase upon loss of catalyst efficiency from 90 to 70 percent, thereby requiring OBD flagging at a higher absolute conversion efficiency). This phenomenon is explained more thoroughly in the technical support document accompanying this final rule. Therefore, EPA has decided to revise the catalyst threshold to help alleviate this concern. Under the final regulations, catalyst deterioration must be detected before it results in both an exhaust exceedance of 0.6 g/mi HC, and an emission increase of 0.4 g/mi HC. For further information, see section V.B.

As for setting non-methane HC thresholds for natural gas fueled vehicles, the Agency proposed total HC thresholds. There is not a universally accepted adjustment factor for a non-methane equivalent of a total HC level. Therefore, selecting any such non-methane OBD threshold would likely benefit from further EPA analysis and public comment. Currently, there are no Federal emission requirements for natural gas fueled vehicles. However, EPA expects vehicles fueled with natural gas to be capable of meeting the same exhaust emission standards as gasoline fueled vehicles (e.g., 0.25 HC at 100,000 miles). It seems reasonable that malfunctions of emission-related components on natural gas fueled vehicles should also be detectable within the same thresholds, regardless of whether this threshold is expressed as non-methane or total HC. Perhaps greater experience with natural gas fueled vehicles will suggest why non-methane HC-based thresholds are more appropriate, at which time EPA would plan to propose adopting such thresholds. Given that there are no natural gas vehicles being certified at this time, it is not appropriate to delay the applicability of these regulations until natural gas fueled vehicles are available and the need for non-methane OBD thresholds for these vehicles can be better established. All of the OBD mechanisms EPA anticipates will be used on gasoline fueled vehicles should work equally as well on natural gas fueled vehicles. Therefore, at this time EPA sees no reason to change the HC threshold for natural gas fueled vehicles.

EPA Decision: Upon consideration of the above discussion, EPA has chosen to

change the catalyst threshold to require malfunction detection when the HC emissions have both exceeded 0.6 g/mi and increased 0.4 g/mi. The Agency sees no reason to change the other thresholds, except as discussed above regarding the evaporative monitoring threshold.

F. In-Use Enforcement

Summary of Proposal

During in-use testing, if any single emission-related repair of a malfunction or deterioration that had gone unflagged by OBD caused emission reductions equal to or greater than the thresholds, the OBD system on that vehicle would be considered faulty. The malfunction would then be induced on similar vehicles, or the malfunctioning component would be removed and placed on other vehicles. Emission increases exceeding the threshold without illuminating the MIL on a substantial number of other vehicles could lead to a recall and denial of certification carryover.

Comments: Some manufacturers stated that EPA should not have authority to recall for the redesign of OBD systems certified to Federal requirements. Ford stated that EPA must consider the manufacturer's ability to modify or redesign an OBD monitor. In addition, according to Ford, EPA must demonstrate that the manufacturer actually failed to make a reasonable engineering judgement in not monitoring certain components. Ford also suggested that since OBD, in its opinion, is designed to detect problems on properly maintained vehicles, in-use vehicles must be restored to properly maintained condition prior to evaluation.

Vehicle manufacturers also expressed concern that EPA would base a recall on a one-in-a-million malfunction which OBD had failed to identify. In the industry's opinion, the Agency's provision of flexibility regarding what must be monitored beside the catalyst, oxygen sensor, and engine misfire, is of no benefit because no system can be considered totally fail safe and the Agency's ability to base a recall on such a one-in-a-million malfunction provides too great a risk not to monitor.

Some vehicle manufacturers also expressed concern over the transfer of parts from malfunctioning vehicles to other vehicles, or inducing malfunctions in otherwise properly operating components or systems. Commenters suggested that induced malfunctions would not necessarily be identical to the original malfunction, and the transfer of parts could cause damage to the part or

the receiving vehicle, thereby eliminating the validity of any emission effects.

Analysis of Comments: EPA sees no validity in Ford's comment that the Agency does not have the authority to recall OBD systems certified as complying with Federal regulations. Section 207(c) of the Act, which provides for recall of vehicles failing to conform in-use to regulations under section 202, which includes these regulations being promulgated today, gives EPA such authority. Ford also commented that EPA must demonstrate that the manufacturer failed to make a reasonable engineering judgement in choosing not to monitor certain components when making recall determinations. The Agency has purposefully left it up to the manufacturer to determine what components, other than the catalyst, oxygen sensor, and engine misfire, need monitoring based on the belief that the manufacturer is in the best position to know. EPA has also made the manufacturer responsible for the in-use performance of the OBD system providing the manufacturer the incentive to carefully consider what components should be monitored. It would seriously undercut this incentive if EPA had to establish that the manufacturer's judgement was unreasonable prior to conducting a recall. EPA believes the flexibility and the responsibility of its OBD program go hand-in-hand. Thus, the Agency considers that in-use testing indicating component malfunction or deterioration causing emission increases beyond the specified thresholds without OBD flagging is sufficient to establish in-use liability.

In addition, restoring vehicles to their properly maintained condition prior to in-use evaluations of OBD would undermine the purpose of in-use enforcement of OBD regulations. Because the OBD system is intended in part to flag the lack of proper maintenance, the effectiveness of OBD would be greatly diminished by allowing improper maintenance to go undetected.

On the issue of one-in-a-million malfunctions causing recalls, the Agency shares the industry concern. Although OBD is intended to detect both common and rare malfunctions, the Agency does not believe it is cost effective to initiate a recall based on a one-in-a-million problem. For example, if the throttle position sensor is improperly wired or installed during production, it could cause intermittent short circuits within the electrical system of the vehicle. Such short

circuits could cause problems within the onboard computer and, hence, the OBD system itself while also causing increased emissions. Such a problem may go undetected by OBD and cannot realistically be predicted by the manufacturer during preproduction design and calibration work. Therefore, this type of malfunction should not be the basis of an OBD recall.

Considering these arguments, the Agency has revised its approach to in-use enforcement in these final regulations. If an identical type of malfunction is found to cause emission threshold exceedances on at least two similar vehicles with similar OBD systems (i.e., systems containing the same monitoring sensors and strategies) within EPA's limited test sample of a manufacturer's fleet without being properly detected by the OBD system, the Agency will consider recalling that OBD system. In the Agency's opinion, finding two identical malfunctions within a limited test sample (typically 10 to 40 vehicles) indicates that the malfunction is not a one-in-a-million problem. Also, the Agency views this approach as less stringent than the proposal because the proposal required finding the malfunction on only one vehicle and then transferring that part to, or otherwise inducing that malfunction in other vehicles. This transfer of parts or inducing of malfunctions was a serious concern for manufacturers. The Agency believes that the approach discussed here alleviates that concern since no such transfers or inducing of malfunctions would be required. The manufacturer would still have the opportunity to provide EPA with information and data on their behalf as is always allowed during recall investigations.

EPA Decision: An OBD recall would occur only if the determination is made that the failure to identify a malfunction would occur on at least two vehicles of the same general OBD design within EPA's test sample. If the identical type of malfunction occurs on two similar vehicles within EPA's test sample of the manufacturer's fleet without being flagged by the same OBD system, the system design will be considered inadequate.

G. Waiver Provisions

Summary of Proposal

Manufacturers may request waivers from OBD compliance during the 1994 and 1995 model years; EPA proposed no blanket waivers, except that manufacturers were not required to detect leaks within the evaporative system until the 1996 model year. EPA

proposed that, upon being granted a waiver from full OBD compliance, the manufacturer would have to install, at a minimum, an OBD system equivalent to a California OBD I system, and provide EPA with a justification for why more than OBD I could not be done.

Comments: Some small volume manufacturers (SVM) and a manufacturer of diesel vehicles requested they be given waivers from complying with OBD regulations until the 1996 model year based on resource constraints and supplier delays. Virtually every vehicle manufacturer requested that upon being granted a waiver from full OBD compliance, EPA simply accept OBD I systems based on the poor cost effectiveness of incorporating small improvements over OBD I and the resource constraints that manufacturers will be experiencing during the next few years in their efforts to comply with OBD II and Federal OBD requirements.

Analysis of Comments: The CAA requires that vehicles comply with EPA's OBD regulations beginning with the 1994 model year unless EPA determines that it would be infeasible for any class or category of motor vehicles to meet the regulations in the 1994 or 1995 model years. The commenters did not provide EPA with information sufficient for EPA to determine that a blanket waiver is appropriate for either SVMs or diesel vehicles in the 1994 or 1995 model years. EPA cannot, on the basis of this record, grant such a waiver. However, a manufacturer may petition individually for a waiver and therein provide evidence that compliance would be infeasible for a class or category of vehicles that it manufactures.

After further consideration, EPA believes that making small improvements to OBD I systems is neither productive nor cost effective and, therefore, agrees that an OBD I system should be adequate upon being waived from full OBD compliance. Comments concerning waivers from evaporative system monitoring were covered in Section V.D. above.

EPA Decision: Considering the above analysis, no blanket waiver will be provided to SVMs or diesel vehicles. Also, OBD I will be considered acceptable upon being waived from full OBD compliance. Moreover, as there may be some engine families with very low sales volumes that have never been equipped with an OBD I or similar OBD system, EPA may make special considerations by granting waivers for the 1994 model year to a system less than OBD I. EPA will consider such factors as manufacturer projections of

very low sales volume for an engine family (e.g., 5000 or less), scheduled phase-out of significant engine technology with the 1994 model year for that engine family, and whether or not the engine, or any similar engine within the manufacturer's product line, has ever been equipped with an OBD I or similar OBD system in making waiver decisions to a system less than OBD I.

H. Diesel-Fueled Vehicle Requirements

Summary of Proposal

Diesel-fueled vehicles were expected to comply with the same emission thresholds and enforcement criteria as were gasoline vehicles.

Comments: Mercedes-Benz commented that the proposed thresholds would either not apply to diesels (e.g., diesel vehicles have no evaporative system or oxygen sensor) or would not be reached in actual use (e.g., the catalyst threshold could never be exceeded). Therefore, they suggested that the regulatory language state that diesels need not monitor through OBD provided the manufacturer could demonstrate that there was no need.

Analysis of Comments: The Agency recognizes that certain provisions of the proposed rulemaking may not apply to some diesel vehicles. For example, light-duty diesels lack certain emission control components such as oxygen sensors and evaporative emission control systems. Also, the Agency believes that diesel-powered vehicles are capable of meeting the Federal emission standards without the use of a catalyst, making catalyst malfunction detection only a minor concern, if a catalyst is even present. EPA also believes that engine misfire within diesel engines is of very little concern since its effects on emissions are small, and its effects on catalysts and other aftertreatment devices is negligible due to the low exhaust gas temperatures inherent in diesel engines.

Therefore, EPA has revised the final regulations such that diesel vehicles have an explicit requirement to monitor only electrical disconnects within electrical systems sensed by an on-board computer (the same electrical disconnect requirement being adopted for gasoline-fueled vehicles). The only other requirements will be that in-use vehicles detect malfunctions prior to emissions exceeding the specified thresholds if such malfunctions are likely to occur or may cause such emission increases. A more thorough analysis is included in the Response to Comments document. **EPA Decision:** The Agency decision is stated in the above analysis.

I. Misfire Fuel Shut-off**Summary of Proposal**

Upon detecting engine misfire in vehicles equipped with sequential fuel injection and causing a threshold-exceedance, the fuel supply to the misfiring cylinder must be shut off.

Comments: Many vehicle manufacturers expressed safety concerns with this proposed requirement, stating that shutting off the fuel during passing maneuvers could cause an unexpected power loss and potential accidents. Some vehicle manufacturers stated that emissions would actually increase during fuel shut-off.

Analysis of Comments: The Agency agrees with industry comments concerning safety, and agrees that on some vehicles emissions may, in fact, increase during fuel shut-off.

EPA Decision: The fuel shut-off requirement has been eliminated.

J. Monitoring Limitation to Powertrain Components**Summary of Proposal**

The OBD system was expected to detect catalyst, oxygen sensor, and misfire problems, and any other emission-related malfunction or deterioration causing emissions to increase beyond specified thresholds.

Comments: Virtually every vehicle manufacturer requested that EPA be consistent with the wording of the California OBD II regulations and require detection of malfunction or deterioration of only emission-related powertrain components. This would eliminate concerns with the proposed requirements that the OBD system must detect malfunctions of components that are not considered part of the emission control system, such as a rear window defogger or seizing brakes which could cause emission threshold exceedances. Such an interpretation of the OBD requirements would go beyond the monitoring requirements anticipated by the Agency in developing these regulations.

Analysis of Comment: The Agency agrees with these comments and manufacturer requests. EPA believes it is reasonable to limit the monitoring requirements to powertrain components and the evaporative system because these systems comprise what is classically the emission control system and because current technology OBD systems cannot be expected to monitor and detect malfunctions occurring anywhere on the vehicle due to cost and computer memory constraints. Furthermore, at this time, EPA does not

believe that problems such as rear window defogger failure or seizing brakes contribute substantially to the in-use emission problem.

EPA Response: OBD monitoring requirements will be limited to emission-related powertrain components, with other explicit requirements as discussed.

K. Limitation to Vapor Leaks on Evaporative Monitoring**Summary of Proposal**

Leaks in the evaporative system must be detected prior to exceedance of a 2 g/test emission threshold.

Comments: Some vehicle manufacturers commented that the evaporative system leak detection requirement should be limited to vapor leaks, since detection of liquid leaks is not feasible with any known technologies.

Analysis of Comments: EPA agrees that liquid leaks within the evaporative system cannot be detected using currently available or foreseeable OBD methods. A manufacturer with consistent liquid leak problems would presumably suffer owner complaints (e.g., poor fuel economy, smell of gasoline fumes, etc.) and would likely fail emission testing under current in-use enforcement practices, both serving to encourage the manufacturer to improve its design and eliminate such problems.

EPA Response: The evaporative system emission threshold will be limited to vapor leaks.

L. Durability Data Vehicle (DDV) Requirements**Summary of Proposal**

For DDVs equipped with OBD, unscheduled maintenance shall only be performed if the malfunction is detected by OBD and the MIL has illuminated.

Comments: General Motors commented that the proposed requirement should be changed such that, in addition to current maintenance criteria, unscheduled maintenance could be approved by EPA and performed by the manufacturer when, but not only when, the problem is detected by OBD and the MIL has illuminated. Without such a change, manufacturers would be precluded from conducting non-OBD flagged unscheduled maintenance if they chose to include an OBD system on a DDV. This would, in effect, discourage a manufacturer from installing an OBD system on a DDV and would unnecessarily limit the manufacturer's ability to request unscheduled maintenance for other reasons.

Analysis of Comments: EPA agrees with the comment from General Motors.

EPA Response: The final regulations include a provision such that, in addition to current maintenance criteria, unscheduled maintenance upon OBD detection and MIL illumination may be approved by the Administrator.

VI. Cost Effectiveness

The following is a summary of the analyses behind the cost effectiveness estimates generated for this final rulemaking. More detailed information is contained in the final version of the Regulatory Impact Analysis in the OBD docket, #A-90-35.

A. Emission Reductions and Air Quality Impacts

The analysis of the estimated emission reductions associated with OBD assumes that OBD will identify and cause to be repaired those vehicles in all I/M areas which are capable of being identified by an enhanced I/M test, specifically the IM240 test;¹⁸ this assumption will be verified during the initial years of OBD implementation. Since OBD equipped vehicles will not constitute a significant portion of the fleet for several years, and because the existing I/M tests will be identifying malfunctioning vehicles during that time, emission reductions are not attributed to OBD until the year 2005. By that year, roughly 73 percent of the in-use fleet will be OBD equipped, and an increasingly significant number of these will be reaching higher mileages where repairs will be more typically required. Further, the existing I/M test equipment will likely be aged to the point of requiring significant maintenance and perhaps replacement. Therefore, instead of potentially investing large sums of money in updating all their I/M test equipment, this analysis presumes that I/M programs begin using a check of the OBD system to make pass/fail determinations on OBD equipped vehicles during I/M inspections. Pre-OBD vehicles would continue to be subject to the previous I/M procedures.

This cost effectiveness analysis presumes the I/M programs in the year 2005 and beyond rely on the OBD system to detect problems. The analysis presumes the current I/M program exhaust emission and evaporative control system leak detection tests are eliminated. As the year 2005 approaches, the Agency will evaluate both the I/M programs existing at that time, and the success of the OBD program to determine what program or

¹⁸ 57 FR 52950 (November 5, 1992).

combination of programs should continue. The current analysis suggests the two programs should identify much the same problems. Therefore, the Agency may reevaluate the interrelationship of the two programs at that point.

The analysis also assumes that outside I/M areas, there are no emission reductions due to OBD. This constitutes an underestimate of the potential emission reductions of OBD. This differs from the analysis supporting the proposed rulemaking which assumed emission reductions in non-I/M areas would occur, but at lower levels due to lower driver response to an illuminated MIL and lower probability of a malfunctioning vehicle receiving proper repairs in the non-I/M areas.

Therefore, in this analysis, the baseline case represents all non-attainment areas without the emission reductions of tailpipe I/M programs being realized. The OBD case represents the reductions resulting from identification and repair of any vehicle which would fail the proposed IM240 tailpipe test and any vehicle which would fail the proposed IM240 pressure/purge test.

As Table I shows, when compared to the baseline case, OBD is estimated to result in annual emission reductions of 1.0 million tons of VOC and 7.6 million tons of CO in the year 2020. OBD will also reduce NO_x emissions. Assuming OBD will identify those same vehicles identified by an enhanced I/M program with NO_x cutpoints designed to fail 10% to 20% of the vehicles, OBD would yield NO_x emission reductions of 605 thousand tons in the year 2020 relative to emission levels with no I/M program in place. Emission reductions are presented for the 2005, 2010, and 2020 calendar years and illustrate the effect of fleet turnover on the estimated emission reductions. Therefore, 2020 represents the maximum annual emission reduction expected from OBD in I/M areas.

Table I.—I/M Area Emission Reductions Attributable to OBD

(Tons of emissions reduced compared to the baseline case)

	Percent of fleet OBD equipped	Thousand tons		
		VOC	CO	NO _x
2005	73	379	3151	256
2010	90	699	5359	428
2020	99	1024	7621	605

The total emission reduction between the years 2005 and 2020 are estimated to be roughly 12.2 million tons HC, 93.3 million tons CO, and 7.5 million tons NO_x. Discounting the annual emission

reductions between the years 2005 and 2020 at a 7 percent rate and putting them in present value terms results in total discounted emission reductions attributable to OBD of roughly 4.0 million tons HC, 30.8 million tons CO, and 2.5 million tons NO_x.

B. Economic Impacts

1. Effect on Manufacturer Cost

To comply with many of the provisions made in this rulemaking, specific equipment will be required on new vehicles. In addition to these equipment requirements, the need for increased computer size and computing demand will necessitate an expansion of computing capacity, memory, and input/output (I/O) capabilities for the on-board computer. Due to the nature of this rulemaking and its basis on system performance without specific design requirements, manufacturers have considerable design flexibility. Therefore, it is difficult to develop cost estimates since a wide variety of approaches toward meeting compliance are available to the industry. The following discussion summarizes the impact on the cost of a new vehicle imposed by this rulemaking for what the Agency considers to be the most probable approach taken by industry to satisfy the Federal OBD requirements. The specific details of individual component costs are provided in the RIA which accompanies this rulemaking and has been placed in the public docket. The following describes the types of costs and the methodology employed in determining the effect on the new vehicle manufacturer cost.

a. *Component and associated hardware costs.* Based on the technical feasibility analysis, EPA identified the likely component and associated hardware (wiring, etc.) which a manufacturer would be likely to install to satisfy the Federal OBD requirements. These one-time costs for each of the components and associated hardware were then estimated. If EPA determined the necessary hardware would already be in place (i.e., not added due to these proposed OBD requirements) or that the incremental cost would be negligible, a zero dollar cost was assigned. These individual component and associated cost estimates are as follows:

Table II.—Manufacturer Component Cost Estimates¹

Crankshaft sensor	\$10.00
Camshaft sensor	10.00
Oxygen sensor	20.00
Temperature/pressure sensor (EGR monitor)	5.00
Pressure sensor (evaporative monitor)	9.00
Solenoid (evaporative monitor)	5.00
Blower motor (evaporative monitor)	8.00

Table II.—Manufacturer Component Cost Estimates¹—Continued

Computer chips	3-5
Microprocessor	3-6

¹ Costs include installation costs such as fittings and wiring.

EPA evaluated the likely vehicle designs and associated hardware which would be in place for the 1994 through 1996 model years without Federal OBD requirements. The incremental design impact of OBD on the 1994 through 1996 model year fleet was then estimated. The incremental design impact was used to predict the additional hardware and associated costs that the manufacturer would incur in building a fleet to conform to OBD requirements. These costs were averaged over the fleet to determine the following per vehicle hardware costs estimated for a typical manufacturer.

Table III.—Weighted Manufacturer Hardware Costs

Crankshaft sensor	\$4.70
Camshaft sensor	1.85
Catalyst monitor	16.20
EGR monitor	2.50
Evaporative monitor	13.00
Computer	16.50
Total	59.75

This hardware cost is based on a prediction of design trends through the 1996 model year. These design trends are used to estimate the incremental impact of these OBD requirements. Although EPA expects these design trends would continue (for example, increasing use of downstream oxygen sensors and crank angle sensors), EPA has insufficient information to predict these trends beyond the 1996 model year. Consequently, EPA assumed no increase in the installation rate would occur except due to OBD. The incremental cost in these future years due to OBD, as estimated here by EPA, is overstated to the extent such equipment would have been more frequently installed anyway.

b. *Research and development cost.* Research and development costs constitute a one-time fixed cost to develop basic techniques for OBD. EPA has determined that the basic techniques necessary to meet California's OBD II regulations should be satisfactory for meeting Federal OBD regulations. No additional OBD techniques need to be developed. Consequently, manufacturers should incur no new research and development costs because of these Federal OBD rules. However, additional testing and calibration costs may be necessary and are estimated below under "application costs."

c. *Application costs.* Efforts to apply newly developed OBD techniques to meet these Federal requirements will include additional engineering, emission and durability testing, and potential recalibration of the OBD system compared to what the manufacturer would otherwise have to do to meet California OBD II requirements. EPA has estimated application engineering costs at \$68 million per year, with the per vehicle cost dependent on annual sales. In a sales year of 15 million vehicles, application costs would be less than \$5 per vehicle.

d. *Certification costs.* The OBD rulemaking requires manufacturers to submit complete documentation and logic diagrams on their OBD systems. The Agency estimates that the production, checking, and review of the required documentation would result in weighted average costs of \$4.1 million per year, with per vehicle costs dependent on annual sales. In a sales year of 15 million vehicles, certification costs would be less than \$.30 per vehicle.

e. *Total manufacturer cost.* Summing the above costs gives a total cost to manufacturers of roughly \$65 per LDV and per LDT. Note that this per vehicle cost is dependent on vehicle sales because of the application and certification costs as discussed above. Note also that this \$65 cost does not include any manufacturer or dealer mark-up.

2. Other Consumer Costs

EPA has developed estimates for other ways in which OBD will save the consumer money. These include the following: Reduced charges for undergoing an I/M inspection since the inspection would consist solely of a quickly conducted check of the OBD system for stored trouble codes; reduced costs to repair many malfunctioning vehicles, whether flagged by a tailpipe test or an OBD system check, resulting from reduced diagnostic time spent by repair technicians and the subsequent reduction in labor costs; and the fuel economy benefits associated with these repairs.

By the year 2005, this analysis estimates that there will be roughly 65 million OBD equipped LDVs and LDTs in 49-state I/M areas. EPA's cost effectiveness model shows that, for OBD equipped vehicles, total I/M inspection costs for that year, assuming inspection consists of an OBD system check, are expected to be roughly \$98 million, with repairs totalling \$611 million assuming biennial inspections. Without the cost savings of OBD, the inspection

costs would have been \$326 million, and the repair costs \$696 million. Adding the differences in these numbers, respectively, results in consumer savings due to reduced inspection and repair costs of \$313 million in the year 2005 alone.

In the year 2005, fuel economy benefits for OBD equipped vehicles would be \$511 million, with \$406 million attributable to identification of tailpipe emission-type problems and \$101 million due to identification of evaporative emission-type problems.

EPA has not been able to adequately quantify some potential cost savings not included in these estimates. Potential cost savings can accrue due to early repairs of malfunctions which, if left undetected and unrepaired, could result in the need for even more costly repairs in the future. Also, improved repair effectiveness should reduce the potential for a part to be unnecessarily replaced in attempting to fix a problem. Repair facilities should also benefit from the availability of generic tools for accessing and using the OBD system in problem diagnosis and repair. These service facility benefits could be passed along to the consumer in the form of lower repair costs. While none of these cost savings have been quantified, all should reduce the cost of OBD implementation.

C. Cost Effectiveness

Based upon the inspection and repair costs and the fuel economy benefits described above, a biennial I/M program based on OBD inspections costs an estimated total of \$6.95 billion between the years 2005 and 2020, or roughly an average of \$464 million per year. This total cost reduces to roughly \$6.71 billion by including the repair savings for OBD equipped vehicles between the years 1996 and 2004. Adding to this the annual costs of including OBD hardware on newly produced vehicles between the years 1996 and 2020 results in a total OBD cost of roughly \$36.4 billion. Discounting these costs at a 7 percent rate and putting them in present value terms results in a total discounted cost of roughly \$16.6 billion.

Allocating the hardware costs according to the pollutant most likely to be affected by each aspect of the OBD system (i.e., the cost of evaporative monitoring would be allocated 100% to HC control, EGR monitoring to NO_x control, etc.), results in the cost effectiveness estimates of \$1974 per ton HC, \$124 per ton CO, and \$1974 per ton NO_x.

VII. Administrative Requirements

A. Administrative Designation

Under Executive Order 12291, EPA must judge whether a regulation is "major" and, therefore, subject to the requirement that a RIA be prepared. EPA has determined that this regulation is major; a RIA has been prepared and is available from the address shown at the beginning of this preamble.

This regulation was submitted to the Office of Management and Budget (OMB) for review as required by Executive Order 12291. Any written comments from OMB and any EPA response to those comments are in the public docket for this rulemaking.

B. Reporting and Recordkeeping Requirements

The information collection requirements in this rule have been submitted for approval to the Office of Management and Budget (OMB) under the Paperwork Reduction Act, 44 U.S.C. 3501 et seq. An Information Collection Request document has been prepared by EPA (ICR No. 783.25) and a copy may be obtained from Sandy Farmer, Information Policy Branch; EPA; 401 M Street, SW., (PM-223Y); Washington, DC, 20460 or by calling (202) 382-2740. These requirements are not effective until OMB approves them and a technical amendment to that effect is published in the *Federal Register*.

Public reporting burden for this collection of information is estimated to vary from 650 to 700 hours per response with an average of 675 hours per response, including time for reviewing instructions, searching existing data sources, gathering and maintaining the data needed, and completing the collection of information. These estimates are an addition to the currently approved 15,850 hours per response for this collection.

Send comments regarding the burden estimate or any other aspect of this collection of information, including suggestions for reducing this burden to Chief, Information Policy Branch; EPA; 401 M Street, SW., (PM-223Y); Washington, DC, 20460; and to the Office of Information and Regulatory Affairs, Office of Management and Budget, Washington, DC, 20503, marked "Attention: Desk Officer for EPA."

C. Impact on Small Entities

The Regulatory Flexibility Act of 1980 requires Federal agencies to identify potentially adverse impacts of Federal regulations upon small entities. In instances where significant impacts are possible on a substantial number of these entities, agencies are required to

perform a Regulatory Analysis. EPA has determined that the regulations finalized today will not have a significant impact on a substantial number of small entities. This regulation will affect manufacturers of motor vehicles and motor vehicle engines, a group which does not contain a substantial number of small entities. Further, small motor vehicle manufacturers typically purchase emission control components developed by larger organizations. Finally, waivers are available to any manufacturer, including small manufacturers, that is unable to meet these requirements in 1994 or 1995 model years. This waiver provision should assure that small manufacturers have adequate lead time to employ available technology.

This regulation will also positively affect independent repair shops and mechanics. The standardization requirements contained in these regulations will enhance the ability of independent mechanics to diagnosis and repair malfunctions.

Therefore, as required under section 605 of the Regulatory Flexibility Act, 5 U.S.C. 601 et seq. I certify that this regulation does not have a significant impact on a substantial number of small entities.

VIII. Authority

Statutory authority for the proposed emission standards is provided by sections 202(a), 202(m), 208(c) and 301(a) of the Clean Air Act, as amended, 42 U.S.C. 7521(a), 7521(m), 7542(c), and 7601(a).

List of Subjects in 40 CFR Part 86

Administrative practice and procedure, Air pollution control, Gasoline, Incorporation by reference, Motor vehicles, Motor vehicle pollution, Reporting and recordkeeping requirements.

Dated: January 29, 1993.

Carol M. Browner,
Administrator.

For the reasons set out in the preamble, part 86 of title 40 of the Code of Federal Regulations is amended as follows:

PART 86—CONTROL OF AIR POLLUTION FROM NEW AND IN-USE MOTOR VEHICLES AND NEW AND IN-USE MOTOR VEHICLE ENGINES: CERTIFICATION AND TEST PROCEDURES

1. The authority citation for part 86 continues to read as follows:

Authority: Secs. 202, 203, 205, 206, 207, 208, 215, 216, 217, and 301(a), Clean Air Act, as amended (42 U.S.C. 7521, 7522, 7524,

7525, 7541, 7542, 7549, 7550, 7552, and 7601(a)).

Subpart A—[Amended]

2. Section 86.094-2 is amended by adding a definition for "Engine warm-up cycle," in alphabetical order, to read as follows:

§ 86.094-2 Definitions.

* * * * *

Engine warm-up cycle means sufficient vehicle operation such that the coolant temperature has risen by at least 40 °F from engine starting and reaches a minimum temperature of 160 °F.

* * * * *

3. A new § 86.094-17 is added to read as follows:

§ 86.094-17 Emission control diagnostic system for 1994 and later light-duty vehicles and light-duty trucks.

(a) All light-duty vehicles and light-duty trucks shall be equipped with an emission control diagnostic system capable of identifying, for each vehicle's useful life, the following types of deterioration or malfunction which could cause emission increases greater than or exceeding the following threshold levels as measured and calculated in accordance with test procedures set forth in subpart B of this part. Paragraphs (a)(2) and (a)(3) of this section do not apply to diesel cycle light-duty vehicles or light-duty trucks.

(1) Catalyst deterioration before it results in both an exhaust emission exceedance of 0.6 g/mi HC and an exhaust emission increase of 0.4 g/mi HC.

(2) Engine misfire before it results in an exhaust emission increase of greater than 0.4 g/mi HC, 3.4 g/mi CO, or 1.0 g/mi NO_x.

(3) Oxygen sensor deterioration before it results in an exhaust emission increase of greater than 0.2 g/mi HC, 1.7 g/mi CO, or 0.5 g/mi NO_x.

(4) Any other deterioration or malfunction within the powertrain which occurs in actual use and which results in an exhaust emission increase of greater than 0.2 g/mi HC, 1.7 g/mi CO, or 0.5 g/mi NO_x, or any vapor leak which results in an evaporative emissions increase of greater than 30.0 g/test measured over the first 24 hours of the diurnal portion of the revised evaporative emissions test procedure, in accordance with test procedures set forth in subpart B of this part, for vehicles certified to that test procedure.

(b) (1) The electronic evaporative emission purge control, if equipped, and all emission-related powertrain components connected to a computer

shall, at a minimum, be monitored for circuit continuity. All components required by these regulations to be monitored shall be evaluated periodically, but no less frequently than once per Urban Dynamometer Driving Schedule as defined in 40 CFR Part 86, Appendix I, paragraph (a), or similar trip.

(2) For non-diesel cycle light-duty vehicles and light-duty trucks, the emission control diagnostic system shall at a minimum, monitor catalytic converters and oxygen sensors and shall detect misfiring cylinders.

(3) Oxygen sensor deterioration or malfunction which renders that sensor incapable of performing its function as part of the OBD system shall be identified on vehicles so equipped.

(c) The emission control diagnostic system shall incorporate a malfunction indicator light (MIL) readily visible to the vehicle operator. When illuminated, it shall display "Check Engine," "Service Engine Soon," or a similar phrase approved by the Administrator. A vehicle shall not be equipped with more than one general purpose malfunction indicator light for emission-related problems; separate specific purpose warning lights (e.g. brake system, fasten seat belt, oil pressure, etc.) are permitted. The use of red for the OBD-related malfunction indicator light is prohibited.

(d) The MIL shall illuminate and remain illuminated when any of the conditions specified in paragraphs (a) and (b) of this section are met, or whenever the engine control enters a default or secondary mode of operation. The MIL shall blink under any period of operation during which engine misfire is occurring at a level likely to cause catalyst damage as determined by the manufacturer. The MIL shall also illuminate when the vehicle's ignition is in the "key-on" position before engine starting or cranking and extinguish after engine starting if no malfunction has previously been detected. If a malfunction has previously been detected, the MIL may be extinguished if the malfunction does not reoccur during three subsequent sequential trips during which engine speed is within 375 rpm, engine load is within 10 percent, and the engine's warm-up status is the same as that under which the malfunction was first detected, and no new malfunctions have been detected.

(e) (1) The emission control diagnostic system shall record code(s) indicating the status of the emission control system. Absent the presence of any fault codes, separate status codes shall be used to identify correctly functioning

emission control systems and those emission control systems which need further vehicle operation to be fully evaluated. Fault codes shall be stored for deterioration or malfunction causing MIL illumination; the fault code shall identify the type of malfunction.

(2) For a single misfiring cylinder, the fault code(s) shall identify the cylinder; multiple misfiring cylinders need not be uniquely identified if a distinct multiple misfire fault code is stored.

(3) A fault code shall be stored when the emission control system reverts to a default or secondary mode of operation.

(4) The diagnostic system may erase a fault code if the same fault is not re-registered in at least 40 engine warm-up cycles, and the malfunction indicator light (see paragraph (d) of this section) is not illuminated for that fault code.

(f) *Available Diagnostic Signals.* (1) Upon determination of the first malfunction of any component or system, "freeze frame" engine conditions present at the time shall be stored in computer memory. Should a subsequent fuel system or misfire malfunction occur, any previously stored freeze frame conditions shall be replaced by the fuel system or misfire conditions (whichever occurs first). Stored engine conditions shall include, but are not limited to: Engine speed, open or closed loop operation, fuel system commands, coolant temperature, calculated load value, fuel pressure, vehicle speed, air flow rate, and intake manifold pressure if the information needed to determine these conditions is available to the computer. For freeze frame storage, the manufacturer shall include the most appropriate set of conditions to facilitate effective repairs. If the fault code causing the conditions to be stored is erased in accordance with paragraph (c) of this section, the stored engine conditions may also be erased.

(2) The following signals in addition to the required freeze frame information shall be made available on demand through the serial port on the standardized data link connector, if the information is available to the on-board computer or can be determined using information available to the on-board computer: Diagnostic trouble codes, engine coolant temperature, fuel control system status (closed loop, open loop, other), fuel trim, ignition timing advance, intake air temperature, manifold air pressure, air flow rate, engine RPM, throttle position sensor output value, secondary air status (upstream, downstream, or atmosphere), calculated load value, vehicle speed, and fuel pressure. The signals shall be provided in standard units based on SAE specifications incorporated by

reference in paragraph (h) of this section. Actual signals shall be clearly identified separately from default value or limp home signals. In addition, the capability to perform bi-directional diagnostic control based on SAE specifications shall be made available on demand through the serial port on the standardized data link connector per SAE specifications as referenced in paragraph (h) of this section.

(3) For all emission control systems for which specific on-board evaluation tests are conducted (catalyst, oxygen sensor, etc.), the results of the most recent test performed by the vehicle, and the limits to which the system is compared shall be available through the serial data port on the standardized data link connector per SAE specifications as referenced in paragraph (h) of this section.

(4) The OBD requirements to which the vehicle is certified (i.e., California OBD II or Federal OBD), and the major emission control systems monitored by the OBD system consistent with paragraph (h)(3) of this section, shall be available through the serial data port on the standardized data link connector per SAE specifications as referenced in paragraph (h) of this section.

(g) The emission control diagnostic system is not required to evaluate components during malfunction conditions if such evaluation would result in a risk to safety or component failure.

(h) The emission control diagnostic system shall provide for standardized access and conform with the following Society of Automotive Engineers (SAE) standards. The following SAE documents are incorporated by reference. This incorporation by reference was approved by the Director of the Federal Register in accordance with 5 U.S.C. 552(a) and 1 CFR part 51. Copies of the SAE documents may be obtained from the Society of Automotive Engineers, Inc., 400 Commonwealth Drive, Warrendale, PA 15096-0001. Copies may be inspected at Docket No. A-90-35 at EPA's Air docket (LE-131), room 1500 M, 1st Floor, Waterside Mall, 401 M Street, SW., Washington, DC, or at the Office of the Federal Register, 800 North Capitol Street, NW., suite 700, Washington, DC.

(1) SAE J1850 "Class B Data Communication Network Interface," (AUG91) shall be used as the on-board to off-board communications protocol. All emission related messages sent to the scan tool over a J1850 data link shall use the Cyclic Redundancy Check and the three byte header, and shall not use inter-byte separation or checksums.

(2) Basic diagnostic data (as specified in § 86.094-17(f)) shall be provided in the format and units in SAE J1979 "E/E Diagnostic Test Modes," (DEC91). Basic bi-directional diagnostic capability shall be available and be consistent with SAE J1979 messages.

(3) Fault codes shall be consistent with SAE J2012 "Recommended Format and Messages for Diagnostic Trouble Code Definitions," (MAR92) Part C.

(4) The connection interface between the OBD system and test equipment and diagnostic tools shall meet the functional requirements of SAE J1962 "Diagnostic Connector," (JUN92).

(5) *Limitation of Access*—Any limitation of access to the diagnostic system shall be consistent with § 86.094-18. Access to vehicle calibration data, vehicle odometer, and keyless entry codes can be limited under the provisions of § 86.094.

(i) Upon application by the manufacturer, the Administrator may waive the requirements of this section for specific components of any class or category of light-duty vehicles or light-duty trucks for model years 1994 or 1995 (or both) if compliance would be infeasible or unreasonable considering such factors as, but not limited to, technical feasibility, lead time and production cycles including phase-in or phase-out of engines or vehicle designs and programmed upgrades of computers. At a minimum, all vehicles covered by these regulations, including those receiving a waiver as described in this paragraph, shall be equipped with an OBD system meeting the California OBD I requirements, except that for the 1994 model year EPA may grant a waiver to a system less than OBD I giving consideration to such factors as manufacturer projections of very low sales volume for an engine family (e.g., 5000 or less), scheduled phase-out of significant engine technology with the 1994 model year for that engine family, and whether or not the engine, or any similar engine within the manufacturer's product line, has ever been equipped with an OBD I or similar OBD system.

(j) Demonstration of compliance with California OBD II requirements shall satisfy the requirements of this section through the 1998 model year.

4. A new § 86.094-18 is added to read as follows:

§ 86.094-18 Tampering prevention.

(a) Any vehicle with emission control computer instructions shall include features to deter modification except as authorized by the manufacturer. Any reprogrammable computer codes or operating parameters must be resistant

to tampering and the computer and any related maintenance instructions must conform to the provisions in SAE J2186 "E/E Data Link Security," (SEP91). A removable calibration memory chip shall be potted or encased in a sealed container. The SAE J2186 documents are incorporated by reference. This incorporation by reference was approved by the Director of the Federal Register in accordance with 5 U.S.C. 552(a) and 1 CFR part 51. A copy of SAE J2186 may be obtained from the Society of Automotive Engineers, Inc., 400 Commonwealth Drive, Warrendale, PA 15096-0001. A copy may be inspected at Docket No. A-90-35 at EPA's Air Docket (LE-131), room 1500 M, 1st Floor, Waterside Mall, 401 M Street, SW., Washington, DC, or at the Office of the Federal Register, 800 North Capitol Street, NW., suite 700, Washington, DC.

(b) Demonstration of compliance with the tampering protection section of the California OBD II requirements shall satisfy the requirements of this section through the 1998 model year.

5. Section 86.094-21 is amended by adding paragraphs (h) and (i) to read as follows:

§ 86.094-21 Application for certification.

(h) For each engine family incorporating an emission control diagnostic system, the manufacturer shall submit the following information:

(1) Detailed written information fully describing the functional operation characteristics of the diagnostic system.

(2) The general method of detecting malfunctions for each emission-related powertrain component.

(i) The manufacturer shall describe provisions taken to prevent tampering with emission control computer instructions.

6. Section 86.094-25 is amended by removing "; and" at the end of paragraph (d)(2)(i) and adding a period in its place and by adding paragraph (d)(2)(iii) to read as follows:

§ 86.094-25 Maintenance.

(d) * * *

(2) * * *

(iii) Has made a determination that the OBD system of a durability data vehicle representing an engine family certifying fully to the Federal OBD requirements as specified in § 86.094-17(a) through (h) has specifically detected the problem and has illuminated the malfunction indicator light.

7. Section 86.094-30 is amended by adding paragraph (f) to read as follows:

§ 86.094-30 Certification.

(f) For engine families required to have an emission control diagnostic system, certification will not be granted if, for any emission data vehicle or other test vehicle approved by the Administrator, the malfunction indicator light does not illuminate under any of the following circumstances, or if, for any assembly line vehicle, the malfunction indicator light does not illuminate under the circumstances described in paragraph (f)(4) of this section. Only paragraph (f)(4) of this section applies for diesel cycle vehicles.

(1) A catalyst is replaced with a deteriorated or defective catalyst or electronic simulation of such resulting in both an exhaust emission exceedance of 0.6 g/mi HC and an exhaust emission increase of 0.4 g/mi HC on a normal temperature (20 to 30 °C) emission certification test.

(2) A misfire condition is induced resulting in an increase in emissions of greater than 0.4 g/mi HC or 3.4 g/mi CO or 1.0 g/mi NO_x on a normal temperature (20 to 30 °C) emission certification test.

(3) Any oxygen sensor is replaced with a deteriorated or defective oxygen sensor, or the operation of such a sensor is simulated, resulting in an increase in emissions of 0.2 g/mi HC or 1.7 g/mi CO or 0.5 g/mi NO_x on a normal temperature (20 to 30 °C) emission certification test.

(4) The electronic evaporative purge control device (if equipped) or any emission-related powertrain component connected to a computer is electrically disconnected.

8. Section 86.094-35 is amended by adding paragraph (i) to read as follows:

§ 86.094-35 Labeling.

(i) All light-duty vehicles and light-duty trucks shall comply with SAE Recommended Practices J1877 "Recommended Practice for Bar-Coded Vehicle Identification Number Label," (MAY88), and J1892 "Recommended Practice for Bar-Coded Vehicle Emission Configuration Label," (MAY88) except that label characters 3 through 7 as specified in J1892 shall be consistent with the standardized engine family name as revised by EPA for the application model year. SAE J1877 and J1892 are incorporated by reference. This incorporation by reference was approved by the Director of the Federal

Register in accordance with 5 U.S.C. 552(a) and 1 CFR Part 51. Copies may be obtained from the Society of Automotive Engineers, Inc., 400 Commonwealth Drive, Warrendale, PA 15096-0001. Copies may be inspected at Docket No. A-90-35 at EPA's Air Docket (LE-131), room 1500M, 1st Floor, Waterside Mall, 401 M Street, SW., Washington, DC, or at the Office of the Federal Register, 800 North Capitol Street, NW., suite 700, Washington, DC.

9. Section 86.095-30 is amended by adding paragraph (f) to read as follows:

§ 86.095-30 Certification.

(f) For engine families required to have an emission control diagnostic system, certification will not be granted if, for any emission data vehicle or other test vehicle approved by the Administrator, the malfunction indicator light does not illuminate under any of the following circumstances, or if, for any assembly line vehicle, the malfunction indicator light does not illuminate under the circumstances described in paragraph (f)(4) of this section. Only paragraph (f)(4) of this section applies for diesel cycle vehicles.

(1) A catalyst is replaced with a deteriorated or defective catalyst or electronic simulation of such resulting in both an exhaust emission exceedance of 0.6 g/mi HC and an exhaust emission increase of 0.4 g/mi HC on a normal temperature (20 to 30 °C) emission certification test.

(2) A misfire condition is induced resulting in an increase in emissions of greater than 0.4 g/mi HC or 3.4 g/mi CO or 1.0 g/mi NO_x on a normal temperature (20 to 30 °C) emission certification test.

(3) Any oxygen sensor is replaced with a deteriorated or defective oxygen sensor, or the operation of such a sensor is simulated, resulting in an increase in emissions of 0.2 g/mi HC or 1.7 g/mi CO or 0.5 g/mi NO_x on a normal temperature (20 to 30 °C) emission certification test.

(4) The electronic evaporative purge control device (if equipped) or any emission-related powertrain component connected to a computer is electrically disconnected.

10. Section 86.095-35 is amended by adding paragraph (i) to read as follows:

§ 86.095-35 Labeling.

(i) All light-duty vehicles and light-duty trucks shall comply with SAE Recommended Practices J1877

"Recommended Practice for Bar-Coded Vehicle Identification Number Label," (MAY88), and J1892 "Recommended Practice for Bar-Coded Vehicle Emission Configuration Label," (MAY88) except that label characters 3 through 7 as specified in J1892 shall be consistent with the standardized engine family name as revised by EPA for the applicable model year. SAE J1877 and

J1892 are incorporated by reference. This incorporation by reference was approved by the Director of the Federal Register in accordance with 5 U.S.C. 552(a) and 1 CFR Part 51. Copies may be obtained from the Society of Automotive Engineers, Inc., 400 Commonwealth Drive, Warrendale, PA 15096-0001. Copies may be inspected at Docket No. A-90-35 at EPA's Air

Docket (LE-131), room 1500M, 1st Floor, Waterside Mall, 401 M Street, SW., Washington, DC, or at the Office of the Federal Register, 800 North Capitol Street, NW., suite 700, Washington, DC.

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[FR Doc. 93-3476 Filed 2-18-93; 9:45 am]

BILLING CODE 5500-55-P

Federal Register

Friday
February 19, 1993

Part X

Department of the Interior

Minerals Management Service

Outer Continental Shelf; Central Gulf of
Mexico; Oil and Gas Lease Sale and
Notice of Leasing Systems: Sale 142;
Notices

4310-MR

UNITED STATES
DEPARTMENT OF THE INTERIOR
MINERALS MANAGEMENT SERVICE

Outer Continental Shelf
Central Gulf of Mexico
Oil and Gas Lease Sale 142

1. **Authority.** This Notice is published pursuant to the Outer Continental Shelf (OCS) Lands Act (43 U.S.C. 1331-1356, (1988)), as amended, and the regulations issued thereunder (30 CFR Part 256).
2. **Filing of Bids.** Sealed bids will be received by the Regional Director (RD), Gulf of Mexico Region, Minerals Management Service (MMS), 1201 Elmwood Park Boulevard, New Orleans, Louisiana 70123-2394. Bids may be delivered in person to that address during normal business hours (8 a.m. to 4 p.m.; Central Standard Time (c.s.t.)) until the bid submission deadline at 10 a.m. Tuesday, March 23, 1993. Hereinafter, all times cited in this Notice refer to c.s.t. unless otherwise stated. Bids will not be accepted the day of bid opening, Wednesday, March 24, 1993. Bids received by the RD later than the time and date specified above will be returned unopened to the bidders. Bids may not be modified or withdrawn unless written modification or written withdrawal request is received by the RD prior to 10 a.m. Tuesday, March 23, 1993. Bid opening time will be 9 a.m., Wednesday, March 24, 1993, at the Sheraton New Orleans Hotel, at 500 Canal Street, New Orleans, Louisiana. All bids must be submitted and will be considered in accordance with applicable regulations, including 30 CFR Part 256. The list of restricted joint bidders which applies to this sale appeared in the Federal Register at 57 FR 46194, published on October 7, 1992.

3. **Method of Bidding.** A separate signed bid in a sealed envelope labeled "Sealed Bid for Oil and Gas Lease Sale 142, not to be opened until 9 a.m., c.s.t., Wednesday, March 24, 1993," must be submitted for each block or bidding unit bid upon. The sealed envelope and the bid should contain the following information: the company name, MMS qualification number, area number and/or name (abbreviations acceptable), and the block number of the block bid upon. For those blocks which must be bid upon as a bidding unit (see paragraph 12), all numbers of blocks comprising the bidding unit should appear on the sealed envelope and the bid. In addition, the total amount bid must be in whole dollar amounts.

Bidders must submit with each bid one-fifth of the cash bonus, in cash or by cashier's check, bank draft, or certified check, payable to the order of the U.S. Department of the Interior--Minerals Management Service. Also, for identification purposes, the company name and MMS qualification number, map area number and/or name (abbreviations acceptable) and the block number must appear on the check or bank draft. No bid for less than all of the unleased portions of a block or bidding unit, as referenced in paragraph 12, will be considered.

All documents must be executed in conformance with signatory authorizations on file. Partnerships also need to submit or have on file in the Gulf of Mexico regional office a list of signatories authorized to bind the partnership. Bidders submitting joint bids must state on the bid form the proportionate interest of each participating bidder, in percent to a maximum of five decimal places, e.g., 33.33333 percent. Other documents may be required of bidders under 30 CFR 256.46. Bidders are warned against violation of 18 U.S.C. 1860, prohibiting unlawful combination or intimidation of bidders.

4. **Bidding, Yearly Rental, and Royalty Systems.** The following bidding, yearly rental, and royalty systems apply to this sale:

- (a) **Bidding Systems.** All bids submitted at this sale must provide for a cash bonus in the amount of \$25 or more per acre or fraction thereof.
- (b) **Yearly Rental.** All leases awarded will provide for a yearly rental payment of \$3 per acre or fraction thereof.
- (c) **Royalty Systems.** All leases will provide for a minimum royalty of \$3 per acre or fraction thereof. The following royalty systems will be used in this sale. Note that the 12 1/2-percent royalty rate applies to blocks in water depths of 400 meters or greater.

(1) **Leases with a 12 1/2-Percent Royalty.**

This royalty rate applies to blocks in water depths of 400 meters or greater as shown on map 2 (see paragraph 12). Leases issued on the blocks and bidding units offered in this area will have a fixed royalty rate of 12 1/2 percent.

(2) **Leases with a 16 2/3-Percent Royalty.**

This royalty rate applies to blocks in water depths of less than 400 meters (see map 2). Leases issued on the blocks and bidding units offered in this area will have a fixed royalty rate of 16 2/3 percent.

10. Successful Bidders. Each person who has submitted a bid accepted by the authorized officer will be required to execute copies of the lease, pay the balance of the cash bonus bid along with the first year's annual rental for each lease issued, by electronic funds transfer in accordance with the requirements of 30 CFR 218.135, and satisfy the bonding requirements of 30 CFR 256, Subpart I.

11. Leasing Maps and Official Protraction Diagrams. Blocks or bidding units offered for lease may be located on the following Leasing Maps or Official Protraction Diagrams which may be purchased from the Gulf of Mexico regional office (see paragraph 14(a)):

(a) Outer Continental Shelf (OCS) Leasing Maps--Louisiana Nos. 1 through 12. This is a set of 29 maps which sells for \$32.

(b) Outer Continental Shelf Official Protraction Diagrams. These diagrams sell for \$2.00 each.

NH 15-12	Ewing Bank	(revised December 2, 1976).
NH 16-4	Mobile	(revised November 8, 1988).
NH 16-7	Viosca Knoll	(revised December 2, 1976).
NH 16-10	Mississippi Canyon	(revised December 2, 1976).
NG 15-3	Green Canyon	(revised December 2, 1976).
NG 15-6	Walker Ridge	(revised December 2, 1976).
NG 15-9	(No Name)	(revised April 27, 1989).
NG 16-1	Atwater Valley	(revised November 10, 1983).
NG 16-4	Lund	(revised August 22, 1986).
NG 16-7	(No Name)	(revised April 27, 1989).

(c) A complete set of all the above OCS Leasing Maps and Official Protraction Diagrams is available on microfiche for \$5.00 per set.

12. Description of the Areas Offered for Bids.

(a) Acreages of blocks are shown on Leasing Maps and Official Protraction Diagrams. Some of these blocks, however, may be partially leased, or transected by administrative lines, such as the Federal/State jurisdictional line. In these cases, the following supplemental documents to this Notice are available from the Gulf of Mexico regional office (see paragraph 14(a)).

Central Gulf of Mexico Lease Sale 142 - Final.
Unleased Split Blocks and Unleased Acreage of
Blocks with Aliquots or Irregular Acreage Under
Lease.

5. Equal Opportunity. Each bidder must qualify for the sale by submitting prior to the bid submission deadline stated in paragraph 2, the certification required by 41 CFR 60-1.5(b) and Executive Order No. 11246 of September 24, 1965, as amended by Executive Order No. 11375 of October 13, 1967, on the Compliance Report Certification Form, Form MWS-2033 (June 1985), and the Affirmative Action Representation Form, Form MWS-2032 (June 1985). See paragraph 14(e).

6. Bid Opening. Bid opening will begin at the bid opening time stated in paragraph 2. The opening of the bids is for the sole purpose of publicly announcing bids received, and no bids will be accepted or rejected at that time. If the Department is prohibited for any reason from opening any bid before midnight on the day of Bid Opening, that bid will be returned unopened to the bidder as soon thereafter as possible.

7. Deposit of Payment. Any cash, cashier's checks, certified checks, or bank drafts submitted with a bid may be deposited by the Government in an interest-bearing account in the U.S. Treasury during the period the bids are being considered. Such a deposit does not constitute and shall not be construed as acceptance of any bid on behalf of the United States.

8. Withdrawal of Blocks. The United States reserves the right to withdraw any block from this sale prior to issuance of a written acceptance of a bid for the block.

9. Acceptance, Rejection, or Return of Bids. The United States reserves the right to reject any and all bids. In any case, no bid will be accepted, and no lease for any block or bidding unit will be awarded to any bidder, unless:

(a) the bidder has complied with all requirements of this Notice and applicable regulations;

(b) the bid is the highest valid bid; and

(c) the amount of the bid has been determined to be adequate by the authorized officer.

No bonus bid will be considered for acceptance unless it provides for a cash bonus in the amount of \$25 or more per acre or fraction thereof. Any bid submitted which does not conform to the requirements of this Notice, the OCS Lands Act, as amended, and other applicable regulations may be returned to the person submitting that bid by the RD and not considered for acceptance.

(b) References to Maps 1, 2, and 3 in this Notice refer to the following maps which are available on request from the Gulf of Mexico regional office:

Map 1 entitled "Central Gulf of Mexico Lease Sale 142 - Final. Stipulations, Lease Terms, and Warning Areas."

Map 2 entitled "Central Gulf of Mexico Lease Sale 142 - Final. Bidding Systems and Bidding Units," refers largely to Royalty Rates and Bidding Units.

Map 3 entitled "Central Gulf of Mexico Lease Sale 142 - Final. Detailed Maps of Biologically Sensitive Areas," pertains to areas referenced in Stipulation No. 2.

(c) In several instances, two or more blocks have been joined together into bidding units totaling up to 5,760 acres. Any bid submitted for a bidding unit having two or more blocks must be for all of the unleased Federal acreage within all of the blocks in that bidding unit. The list of those bidding units with their total acreages appears on Map 2.

(d) The areas offered for leasing include all those blocks shown on the OCS Leasing Maps and Official Protraction Diagrams listed in paragraph 11(a), (b), and (c) except for those leased blocks described on pages 7 through 19.

January 20, 1993

Central Gulf of Mexico Leasing Update List

The following blocks have become available for leasing since publication of the preliminary notice of Sale 142 and the block update listing dated October 28, 1992. This list is being furnished for your convenience. If you have any questions regarding this please contact Ms. Pat Bryars at (504) 736-2763.

Central Planning Area

West Cameron	Vermilion South Addition	Ship Shoal, South Addition	West Delta, South Addition	Viosca Knoll
152				997
204*	274	260	125	
217		261		
219		267		
220	South Marsh Island	286		Mississippi Canyon
235		304	South Pass, South and East Addition	25
	46	305		69
		332		113
West Cameron, West Addition	Eugene Island	346	90	118
		354	92	329
		362	95	495
154	9	365		518
414	25			519
420	115		Main Pass	539
	116	South Timbalier		579
	(POR)		106	580
West Cameron, South Addition		204	(POR)	637
	Eugene Island, South Addition		111	926
521		Grand Isle	122	
544			128	Green Canyon
612	290	67		4
	390		Main Pass, South and East Addition	60
	391			61
East Cameron	397	Grand Isle, South Addition		104
			231	105
80				
84	Ship Shoal	107		
85		108		
	99	114	Breton Sound	Atwater Valley
	143	120		
East Cameron, South Addition	151		41	121
	186			165
248				
267				
294				

*District oversight caused this nonproducing lease to remain in an active status until January 1, 1993.

January 20 1993

CENTRAL GULF OF MEXICO LEASED LANDS

(1) Descriptions of blocks listed represent all Federal acreage leased unless otherwise noted.

Sabine Pass	67	146	228	293
	68	148	229	294
3	69	149	230	295
6	71	150	231	298
8	72	151	236	299
9	73	153	237	301
10	74	165	238	305
11	75	166	239	306
12	76	167	240	310
13	77	168	241	312
14	78	169	242	313
15	79	170	243	314
	82	171	244	315
West Cameron	83	172	245	318
	90	173	246	319
17	91	174	247	320
18	93	175	248	321
(SW1/4)	94	176	249	323
19	95	177	250	324
20	96	178	251	326
21	97	179	252	331
22	98	180	253	332
23	99	181	254	333
24	100	182	255	334
27	101	183	258	337
28	102	184	259	338
33	103	186	261	340
34	104	187	262	342
35	105	191	263	343
36	106	192	264	344
38	107	(S1/2)	269	351
40	108	193	272	352
41	109	194	276	359
43	110	195	277	360
44	111	196	279	363
45	112	197	280	366
46	113	198	282	368
47	114	202	283	369
48	115	203	284	370
49	116	205	285	379
53	118	206	286	380
54	129	207		382
55	130	210	West Cameron,	383
56	131	211	West Addition	385
(N1/2)	132	212		390
57	134	213	155	391
59	135	214	157	392
60	136	215	161	397
61	140	218	163	400
62	141	221	164	401
63	142	222	289	404
64	143	223	290	405
65	144	225	291	406
66	145	226	292	407

408	495	587	23	113
409	496	588	24	114
410	498	589	29	115
411	499	590	30	116
412	502	593	32	117
413	504	594	33	118
416	505	596	34	(N1/2)
419	507	600	36	120
421	509	601	37	123
422	510	604	38	124
423	512	605	39	125
424	513	606	40	126
425	515	607	41	132
426	517	609	42	134
427	518	613	43	135
430	522	615	44	136
431	523	616	45	137
432	524	618	46	140
433	526	619	47	141
434	528	620	48	142
435	529	621	49	143
436	531	622	50	144
437	532	623	51	145
438	533	624	53	148
442	534	625	56	151
444	535	628	57	152
	536	630	60	153
West Cameron	537	633	61	154
South Addition	538	634	62	155
	539	635	63	157
445	540	639	64	158
446	542	642	65	160
447	543	643	66	161
450	547	644	67	164
455	548	645	70	165
456	549	648	71	166
457	551	653	72	167
458	553	656	75	168
459	554	657	76	169
463	555	660	77	170
464	556	663	78	171
469	557		81	172
470	559	East Cameron	82	176
471	560		83	179
472	561	2	87	182
473	563	9	89	185
474	564	11	90	187
475	565	(Seaward of 8(g)	92	188
476	566	Line)	94	189
477	569	12	95	190
478	570	13	96	192
479	571	14	98	193
482	572	(E1/2 NW1/4;	99	194
483	574	NE1/4)	101	195
485	575	(Landward of 8(g)	102	(S1/2)
488	576	Line)	103	196
489	580	15	105	197
490	581	16	107	198
491	582	17	109	199
492	583	20	110	200
493	584	21	111	201
494	586	22	112	202

203.	282	369	73	162
204	283	370	75	163
(N1/2 N1/2)	284	371	76	164
207	285	376	78	165
210	286	378	80	166
211	287	379	82	167
213	289	381	83	168
214	292		84	170
215	293	Vermilion	85	171
218	297		86	175
219	298	12	87	178
220	299	16	88	179
221	300	17	89	180
222	303	18	90	182
223	304	19	92	185
226	305	20	94	186
227	306	21	95	187
229	307	22	96	188
230	308	23	99	189
231	309	24	100	190
232	310	25	101	191
233	311	26	102	193
234	313	27	103	194
235	316	29	104	195
	317	30	(SE1/4; N1/2;	196
East Cameron,	318	31	E1/2 SW1/4;	197
South Addition	320	32	E1/2 W1/2	198
	321	34	SW1/4)	199
236	322	(W1/2 NW1/4)	107	200
237	323	35	108	201
239	324	36	109	202
240	325	37	112	203
242	327	38	114	204
243	328	39	115	205
245	330	40	117	206
249	331	41	119	207
250	332	42	122	208
251	334	(E1/2)	123	213
254	335	44	124	214
255	336	45	125	215
256	337	46	126	217
257	338	47	127	218
259	339	48	129	(E1/2 NW1/4
260	341	49	130	SE1/4; NE1/4
261	346	50	131	SW1/4 SE1/4;
262	347	52	132	E1/2 SE1/4)
263	348	54	133	219
264	349	55	143	220
265	351	56	144	221
266	352	57	145	222
268	353	58	146	223
270	354	59	147	225
271	356	60	148	226
272	357	62	152	227
274	359	63	153	228
275	360	64	155	229
276	361	65	156	230
277	362	66	157	232
278	363	67	158	233
279	364	68	159	237
280	367	70	160	241
281	368	71	161	244

245	320	South Marsh	253	44
246	321	Island,	255	45
247	324	North Addition	256	47
249	325		257	48
250	327	207	258	49
251	328	208	260	50
	329	209	261	51
Vermilion,	330	210	264	53
South Addition	331	211	265	54
	332	212	266	55
252	335	213	267	57
253	338	214	268	58
255	339	215	269	59
256	340	216	270	60
257	342	217	271	61
259	344	218	273	66
261	346	219	274	68
262	348	220	275	69
263	349	(Landward of	277	70
264	351	lease 0310 stip.	278	
265	354	Line)	281	South Marsh
266	355	221	282	Island,
267	357	(Landward of	283	South Addition
268	358	lease 0310 stip.	285	
270	359	Line)	286	71
271	360	222	287	72
273	362	223	288	73
275	363	224		75
276	364	225	South Marsh	76
277	365	226	Island	77
278	367	227		78
279	368	228	2	79
280	369	229	4	80
281	370	230	5	81
282	371	(Landward of	6	82
284	373	lease 0310 stip.	8	87
286	374	Line)	10	89
287	375	231	11	90
288	376	232	12	91
289	377	233	13	94
291	378	234	14	95
293	379	235	15	96
294	380	236	16	97
295	385	237	17	98
296	386	238	18	99
297	394	239	19	102
298	395	240	22	103
300	397	241	23	106
301	398	(Landward of	25	107
302	399	lease 0310 stip	26	108
304	401	Line)	27	109
305	404	242	28	112
306	407	(Landward of	29	113
307	408	lease 0310 stip.	30	114
308	409	Line)	33	115
309	410	243	35	116
310	411	244	36	117
313	412	245	37	118
314	413	249	38	119
315		250	39	120
317		251	40	121
318		252	41	122

123	204	85	172	245
125	205	87	173	246
127		88	174	247
128	Eugene Island	89	175	(N1/2)
130		90	176	248
131	10	(SE1/4)	177	249
132	18	93	178	251
133	19	(E1/2)	179	252
134	20	94	180	253
136	22	95	181	254
137	23	97	182	(S1/2)
138	24	98	183	255
139	26	99	184	256
140	27	100	185	257
141	28	101	186	258
142	29	102	187	259
143	30	105	188	260
144	31	106	189	(SE1/4)
146	(Seaward of 8(g)	107	190	261
147	Line)	108	191	262
148	32	109	192	263
149	33	110	193	264
150	38	111	195	265
151	39	113A	196	266
153	40	113B	197	
154	41	116	198	Eugene Island,
155	42	(E1/2)	199	South Addition
156	43	117	200	
158	44	118	201	267
160	45	119	202	268
161	46	120	203	269
165	47	125	204	270
166	48	126	205	272
167	49	128	206	273
168	50	128A	207	274
169	51	129	208	275
171	52	129A	211	276
172	53	133	212	277
173	54	135	214	278
174	56	136	(W1/2 W1/2	279
175	57	138	E1/2; W1/2)	281
176	58	142	215	282
178	59	143	216	283
179	60	144	217	284
180	62	146	218	285
181	63	147	219	286
182	64	148	222	287
183	65	152	223	(S1/2; S1/2
185	70	153	224	N1/2)
186	71	154	225	288
187	72	155	227	289
188	73	156	228	292
189	74	157	229	293
190	76	158	230	294
192	77	159	231	295
193	78	160	236	296
194	79	162	237	297
195	80	163	238	298
196	81	164	240	299
197	82	165	242	300
198	83	167	243	301
199	84	170	244	302

303	371	69	149	233
304	372	71	150	235
305	374	(W1/2)	153	
306	375	72	154	Ship Shoal,
307	376	73	156	South Addition
308	380	75	157	
309	382	76	158	237
310	383	77	159	238
312	384	78	160	239
313	385	79	164	240
314	386	80	166	241
315	388	81	167	242
316	389	84	168	243
317	392	86	169	246
318	393	87	170	247
319	394	90	171	249
320	395	91	172	249
322	396	92	173	250
323		93	174	251
324	Ship Shoal	94	175	252
325		97	176	253
326	2	98	177	255
327	10	100	178	256
329	11	101	180	257
330	12	102	181	258
331	13	103	182	259
332	14	104	183	262
333	(S1/2 S1/2)	105	184	263
334	15	106	189	264
335	16	108	190	266
336	25	110	191	268
337	(Seaward of	111	196	269
338	Zone 2)	112	197	270
339	26	113	198	271
340	27	114	199	272
341	28	115	200	273
342	29	117	201	274
343	30	(N1/2)	202	275
344	31	118	203	276
347	32	(N1/2)	204	277
348	33	119	205	278
349	34	120	206	279
350	36	122	207	280
351	37	123	208	281
352	38	126	209	282
353	49	127	212	283
354	50	128	214	284
355	51	129	215	285
356	52	130	216	287
357	53	132	218	288
358	58	133	219	289
359	59	134	220	290
360	62	135	221	291
361	(Landward of 8(g)	136	222	292
362	Line)	137	223	293
363	63	138	224	296
364	64	140	225	299
365	(W1/2)	141	226	300
366	65	145	227	301
367	66	146	229	302
368	67	147	230	303
370	68	148	232	307

309	38	147	224	308
310	50	148	225	309
311	51	149	226	310
312	52	151	231	311
313	53	152	234	312
314	54	156	236	313
315	55	158	237	316
316	58	159	238	318
317	59	160	239	319
319	62	161	240	320
321	63	162	241	
322	66	163	242	South Pelto
323	67	164	243	
325	68	165	244	1
326	69	166	245	2
327	70	169	246	4
328	72	170	247	5
329	73	171	248	6
330	74	172	249	7
331	76	173	250	8
333	77	175	251	9
334	78	176	252	10
335	79	177	253	11
337	81	178	255	12
339	82	179	258	13
340	85	180	259	14
341	86	181	260	15
343	(N1/2)	182	261	17
348	87	184	263	19
349	88	185	264	20
351	95	186	265	22
352	97	187	266	23
353	98	188	267	25
356	99	(NW1/4)	268	
357	100	189	269	Bay Marchand
358	101	190	271	
359	102	191	272	2
360	106	192	273	3
361	107	193	275	4
364	108	194	276	5
366	109	195	277	
368	110	196	279	Grand Isle
	111	197	280	
South Timbalier	112	198	281	15
	123	200	282	16
10	124	202	283	17
21	127	203	284	18
22	128	205	285	19
23	129	206	286	20
24	130	207	287	21
25	131	208	288	22
26	132	209	289	23
27	133		290	24
(N1/2; N1/2	134	South Timbalier,	291	25
SW1/4)	135	South Addition	292	26
28	136		294	27
29	138	214	295	28
33	142	216	296	29
34	143	219	297	30
35	144	221	300	31
36	145	222	301	32
37	146	223	302	33

34	118	86	17	87
35	119	87	(Seaward of the	88
36	121	88	4th Supp. Decree	89
37		89	to 1 ft. swd. of	93
38	West Delta	90	3rd Supp.	94
39		91	Decree)	
40	17	92	27	Main Pass
41	18	93	28	
42	19	94	33	6
43	20	95	34	7
44	21	96	35	(N1/2; N1/2
(N1/2)	(S1/2 N1/2 S1/2;	97	36	S1/2, in Zone 2)
45	S1/2 S1/2)	98	37	18
46	22	99	38	(S1/2)
47	23	100	42	19
48	24	101	43	27
49	26	103	44	29
51	27	104	45	30
52	28	105	46	37
53	(N1/2; N1/2	106	47	38
55	S1/2)	107	48	39
58	29	108	49	40
59	30	109	50	41
62	31		51	42
63	32	West Delta,	52	43
66	33	South Addition	(Seaward of 8(g)	44
68	34		Line)	55
69	35	110	54	57
70	37	112	55	58
72	39	114	56	59
73	40	115	57	61
75	41	117	58	62
76	42	118	59	63
77	43	120	60	64
78	44	121	61	65
79	45	122		68
82	46	123	South Pass,	69
83	47	124	South & East	70
85	48	126	Addition	71
	49	128		72
Grand Isle, South	50	129	62	73
Addition	57	130	63	74
	58	131	64	(Landward of Line
86	59	132	65	1 ft. swd. of
88	60	133	66	3rd Supp.
89	61	135	(Seaward of	Decree)
90	62	138	1965 Decree	77
91	63	140	Line)	78
93	64	143	67	86
94	67	144	68	87
95	68	145	70	88
99	69	147	71	90
100	70	148	72	91
101	71	149	73	92
102	72	152	74	93
103	73		75	(Seaward of 8(g)
106	74	South Pass	76	Line)
109	75		77	94
111	76	6	78	95
113	79		82	97
115	80		83	98
117	85		86	99

100	Main Pass, South	237	Breton Sound	859
(N1/2; N1/2 N1/2	& East Addition	242		860
S1/2; SE1/4		243	39	861
NE1/4 SE1/4;	154	244	53	862
E1/2 SE1/4	157	248	(W1/2 Portion	863
SE1/4)	158	249	Seaward of 75	864
102	159	251	Decree Line)	865
103	160	252	54	867
105	161	253	55	868
106	163	254	56	869
(SW1/4 SE1/4	164	255		870
NE1/4; S1/2	165	256	Chandeleur	871
SW1/4 NE1/4;	166	257		872
S1/2 S1/2	167	258	9	873
NW1/4; SW1/4;	168	259	12	904
W1/2 SE1/4;	169	260	13	905
W1/2 E1/2	170	261	14	907
SE1/4)	171	262	15	908
107	172	264	17	909
108	173	265	18	910
110	175	266	(Seaward of 8(g)	911
112	178	272	Line)	912
113	179	273	19	913
(E1/2 E1/2	180	274	20	914
NE1/4; E1/2	181	276	21	915
NE1/4 SE1/4)	182	277	22	916
116	183	278	23	917
117	186	279	24	918
118	187	280	25	945
119	188	281	28	947
120	189	283	29	948
121	190	284	30	949
123	191	286	(Seaward of 8(g)	952
124	192	287	Line)	953
125	193	288	31	954
126	194	289	32	955
127	196	290	33	957
(N1/2)	198	291	34	958
129	199	292		959
131	201	293	Chandeleur, East	960
132	202	294	Addition	961
133	206	295		962
134	207	296	37	990
138	208	297	38	1002
139	209	298	40	1003
140	210	299	41	
141	217	300	43	Viosca Knoll
142	218	301		22
144	219	303	Mobile	24
145	220	304		27
146	221	305	778	29
148	222	306	779	31
149	223	308	819	32
151	224	309	820	34
152	225	310	821	65
(Seaward of	226	311	822	68
1965 Decree	227	312	823	69
Line)	229	313	824	73
153	233	315	826	74
	234		827	76
	235		828	79
	236		830	

117	817	306	944	78
118	818	347	947	79
123	821	350	949	80
124	822	438	950	81
155	823	481	952	82
156	824	482	954	84
157	825	525	955	85
158	826	526	958	108
161	827	570	959	109
170	828	658	961	114
201	829	701	962	115
202	830	702	963	116
203	861	743	964	117
204	862	744	965	123
206	863	745	966	124
209	866	746	983	125
212	867	781	985	127
213	868	782	986	128
250	869	783	987	129
251	870	784	988	147
256	871	786	989	148
294	872	787	991	149
295	899	788	993	150
296	900	789	994	151
300	903	790	995	152
301	905	824	996	153
340	906	825	1003	154
341	907	826	1004	159
343	910	828	1005	160
344	911	830	1006	161
346	912	831	1007	162
390	913	832	1008	163
427	914	833	1010	166
428	915	867	1011	167
429	916	868		168
430	942	869	Mississippi	169
474	944	871	Canyon	173
518	945	872		191
519	947	873	20	192
564	953	874	21	193
609	954	875	24	194
692	955	876	26	195
693	956	878	27	196
694	957	879	28	199
695	958	903	31	201
697	959	904	32	204
698	988	906	34	205
734	989	908	35	208
740	990	910	36	209
741	992	911	37	210
772	993	912	39	211
773	996	913	40	212
774	997	914	41	213
779	999	915	63	214
780	1000	916	64	215
781	1001	917	65	216
783	1002	918	66	217
784	1003	920	68	235
785		921	70	236
786	Ewing Bank	922	72	237
814		923	75	240
815	305	938	76	243

244	365	537	681	810
245	371	538	682	811
247	372	551	686	818
248	378	553	687	819
252	382	554	688	831
253	383	555	692	832
254	384	560	694	841
255	385	561	695	842
256	386	562	698	844
257	392	563	705	845
258	397	564	707	846
259	398	565	708	847
265	399	566	713	848
267	400	568	714	849
268	401	573	717	850
279	402	574	718	851
280	407	575	720	852
281	426	576	721	853
286	427	577	724	854
287	428	583	725	855
288	429	593	726	856
289	430	594	727	868
290	431	595	728	875
291	436	596	730	876
292	437	597	731	885
296	441	600	732	887
299	443	601	734	888
300	444	603	738	889
301	445	605	739	890
302	447	606	749	891
305	448	607	750	892
309	449	608	751	893
311	450	612	752	894
312	451	613	753	895
320	470	617	757	896
321	471	619	758	897
322	474	620	760	898
323	475	621	762	899
324	476	627	763	900
325	480	628	764	911
328	481	630	765	912
330	485	631	768	928
331	486	632	769	929
333	487	633	770	932
335	492	634	771	933
338	493	638	772	934
339	494	639	773	935
340	508	642	774	936
341	509	643	775	937
342	514	647	776	938
343	515	656	777	939
344	516	657	778	940
345	517	661	796	941
346	520	663	797	942
348	521	664	801	955
353	522	674	802	956
354	524	675	803	972
355	529	676	804	976
356	530	677	806	977
357	531	678	807	978
358	533	679	808	979
363	536	680	809	980

981	95	201	296	446
982	96	202	297	447
983	97	203	298	448
984	98	205	299	454
985	101	206	300	457
986	102	207	301	459
992	109	208	303	460
993	111	209	304	461
999	113	210	305	462
1000	114	211	309	463
1007	115	213	311	465
1008	116	214	312	466
	117	215	313	467
Green Canyon	119	216	314	468
	120	217	317	469
5	121	221	318	470
6	122	223	320	472
7	123	228	323	473
8	125	235	325	474
9	126	236	326	475
10	128	237	329	481
13	129	238	330	486
15	133	240	333	487
16	134	241	334	491
18	135	242	338	497
19	136	243	339	498
23	137	244	340	499
25	140	245	341	500
33	141	246	342	501
34	142	247	353	505
35	143	248	354	506
37	144	249	355	507
38	145	250	356	508
39	146	251	369	509
40	149	252	372	510
41	150	253	373	512
45	155	254	377	513
46	156	255	378	514
50	158	256	379	515
51	159	257	383	516
52	160	258	384	517
53	161	259	385	518
54	163	260	386	519
56	165	261	393	520
64	166	268	398	531
65	167	269	399	533
67	169	271	400	534
68	170	272	403	535
69	172	273	404	540
72	173	274	405	541
73	177	278	406	543
78	179	279	415	544
79	180	280	416	545
81	181	281	417	546
83	183	282	421	550
84	184	285	422	552
85	185	286	426	553
89	188	287	427	554
90	195	288	429	556
92	198	290	430	557
93	199	294	431	558
94	200	295	437	559

562	764	56	163	488
563	765	57	177	489
564	766	58	178	490
578	767	59	179	573
579	775	60	180	574
587	776	61	181	575
588	778	62	182	617
589	801	63	189	618
590	802	64	190	
600	808	66	209	Walker Ridge
601	810	67	210	
602	816	68	217	22
603	825	70	222	45
604	826	71	223	46
605	844	79	224	66
606	845	84	225	120
629	850	85	226	121
630	851	90	233	164
631	852	91	234	189
632	853	92	253	197
636	854	93	254	198
644	859	98	256	205
645	860	99	257	206
646	863	100	258	207
647	864	101	261	234
648	869	103	266	249
649	870	104	267	250
650	871	105	268	251
651	872	106	276	425
662	873	107	277	426
663	905	108	284	469
673	913	112	299	470
674	915	113	300	663
679	955	114	310	678
680	958	115	311	707
681	999	116	312	723
682	1001	117	313	724
689		118	321	766
690	Atwater Valley	119	327	767
691		122	334	768
692	1	123	343	811
693	7	127	344	
699	8	128	346	
700	11	133	353	
706	12	134	370	
707	13	135	371	
712	15	136	377	
713	16	137	378	
714	17	141	379	
723	18	142	397	
724	19	143	401	
725	20	145	405	
726	21	146	406	
734	22	150	408	
735	23	151	414	
736	24	152	415	
737	25	153	441	
742	26	157	444	
743	50	158	445	
756	51	160	446	
757	52	161	450	
758	55	162	457	

13. Lease Terms and Stipulations.

(a) Leases resulting from this sale will have initial terms as shown on Map 1 and will be on Form MMS-2005 (March 1986). Copies of the lease form are available from the Gulf of Mexico regional office (see paragraph 14(a)).

(b) The applicability of the stipulations which follow is as shown on Map 1 and Map 3 and as supplemented by references in this Notice.

Stipulation No. 1--Protection of Archaeological Resources.

(This stipulation will apply to all blocks offered for lease in this sale.)

(a) "Archaeological resource" means any prehistoric or historic district, site, building, structure, or object (including shipwrecks); such term includes artifacts, records, and remains which are related to such a district, site, building, structure, or object (16 U.S.C. 470w(5)). "Operations" means any drilling, mining, or construction or placement of any structure for exploration, development, or production of the lease.

(b) If the Regional Director (RD) believes an archaeological resource may exist in the lease area, the RD will notify the lessee in writing. The lessee shall then comply with subparagraphs (1) through (3).

(1) Prior to commencing any operations, the lessee shall prepare a report, as specified by the RD, to determine the potential existence of any archaeological resource that may be affected by operations. The report, prepared by an archaeologist and a geophysicist, shall be based on an assessment of data from remote-sensing surveys and of other pertinent archaeological and environmental information. The lessee shall submit this report to the RD for review.

(2) If the evidence suggests that an archaeological resource may be present, the lessee shall either:

(i) Locate the site of any operation so as not to adversely affect the area where the archaeological resource may be; or

(ii) Establish to the satisfaction of the RD that an archaeological resource does not exist or will not be adversely affected by operations. This shall be done by further archaeological investigation, conducted by an archaeologist and a

geophysicist, using survey equipment and techniques deemed necessary by the RD. A report on the investigation shall be submitted to the RD for review.

(3) If the RD determines that an archaeological resource is likely to be present in the lease area and may be adversely affected by operations, the RD will notify the lessee immediately. The lessee shall take no action that may adversely affect the archaeological resource until the RD has told the lessee how to protect it.

(c) If the lessee discovers any archaeological resource while conducting operations on the lease area, the lessee shall report the discovery immediately to the RD. The lessee shall make every reasonable effort to preserve the archaeological resource until the RD has told the lessee how to protect it.

Stipulation No. 2--Topographic Features.

(This stipulation will be included in leases located in the areas so indicated on Maps 1 and 3 described in paragraph 12.)

The banks which cause this stipulation to be applied to blocks of the Central Gulf are:

Bank Name	No Activity Zone Defined by Isobath (meters)	Bank Name	No Activity Zone Defined by Isobath (meters)
McGrail Bank	85	Jakkula Bank	85
Bouma Bank	85	Sweet Bank ¹	85
Rezak Bank	85	Bright Bank	85
Sidner Bank	85	Geyer Bank ²	85
Rankin Bank	85	MacNeil Bank ³	82
Sackett Bank ²	85	Alderice Bank	80
Ewing Bank	85	Fishnet Bank ²	76
Diaphus Bank ²	85	29 Fathom Bank	64
Parker Bank	85	Sonnier Bank	55

¹Only paragraph (a) of the stipulation applies.

²Only paragraphs (a) and (b) apply.

³Western Gulf of Mexico bank with a portion of its "3-Mile Zone" in the Central Gulf of Mexico.

(a) No activity including structures, drilling rigs, pipelines, or anchoring will be allowed within the listed isobath ("No Activity Zone" as shown on Map 3) of the banks as listed above.

(b) Operations within the area shown as "1,000-Meter Zone" on Map 3 shall be restricted by shunting all drill cuttings and drilling fluids to the bottom through a downpipe that terminates an appropriate distance, but no more than 10 meters, from the bottom.

(c) Operations within the area shown as "1-Mile Zone" on Map 3 shall be restricted by shunting all drill cuttings and drilling fluids to the bottom through a downpipe that terminates an appropriate distance, but no more than 10 meters, from the bottom. (Where there is a "1-Mile Zone" designated, the "1,000-Meter Zone" in paragraph (b) is not designated.)

(d) Operations within the area shown as "3-Mile Zone" on Map 3 shall be restricted by shunting all drill cuttings and drilling fluids from development operations to the bottom through a downpipe that terminates an appropriate distance, but no more than 10 meters, from the bottom.

Stipulation No. 3--Live Bottoms.

(To be included only on leases in the following blocks: Main Pass Area, South and East Addition, Blocks 190, 194, 198, 219-226, 244-266, 276-290; Viosca Knoll, Blocks 473-476, 521, 522, 564, 565, 566, 609, 610, 654, 692-698, 734, 778.)

For the purpose of this stipulation, "live bottom areas" are defined as seagrass communities; or those areas which contain biological assemblages consisting of such sessile invertebrates as sea fans, sea whips, hydroids, anemones, ascidians, sponges, bryozoans, or corals living upon and attached to naturally occurring hard or rocky formations with rough, broken, or smooth topography; or areas whose lithotope favors the accumulation of turtles, fishes, and other fauna.

Prior to any drilling activities or the construction or placement of any structure for exploration or development on this lease, including, but not limited to, anchoring, well drilling, and pipeline and platform placement, the lessee will submit to the Regional Director (RD) a live bottom survey report containing a bathymetry map prepared utilizing remote sensing techniques. The bathymetry map shall be prepared for the purpose of determining the presence or absence of live bottoms which could be impacted by the proposed activity. This map shall encompass such an area of the seafloor where surface disturbing activities, including anchoring, may occur.

If it is determined that the live bottoms might be adversely impacted by the proposed activity, the RD will require the lessee to undertake any measure deemed economically, environmentally,

and technically feasible to protect the pinnacle area. These measures may include, but are not limited to, the following:

- (a) the relocation of operations; and
- (b) the monitoring to assess the impact of the activity on the live bottoms.

Stipulation No. 4--Military Areas.

(This stipulation will be included in leases located within the Warning Areas and Eglin Water Test Areas 1 and 3, as shown on Map 1 described in paragraph 12.)

- (a) Hold and Save Harmless

Whether compensation for such damage or injury might be due under a theory of strict or absolute liability or otherwise, the lessee assumes all risks of damage or injury to persons or property, which occur in, on, or above the Outer Continental Shelf (OCS) to any persons or to any property of any person or persons who are agents, employees, or invitees of the lessee, its agents, independent contractors, or subcontractors doing business with the lessee in connection with any activities being performed by the lessee in, on, or above the OCS, if such injury or damage to such person or property occurs by reason of the activities of any agency of the U. S. Government, its contractors or employees, subcontractors, or any of their officers, agents or employees, being conducted as a part of, or in connection with the programs and activities of the command headquarters listed in the following table.

Notwithstanding any limitation of the lessee's liability in section 14 of the lease, the lessee assumes this risk whether such injury or damage is caused in whole or in part by any act or omission, regardless of negligence or fault, of the United States, its contractors or subcontractors, or any of its officers, agents, or employees. The lessee further agrees to indemnify and hold and save harmless the United States against all claims for loss, damage, or injury sustained by the lessee, or to indemnify and hold and save harmless the United States against all claims for loss, damage, or injury sustained by the agents, employees, or invitees of the lessee, its agents, or any independent contractors or subcontractors doing business with the lessee in connection with the programs and activities of the aforementioned military installation, whether the same be caused in whole or in part by the negligence or fault of the United States, its contractors, or subcontractors, or any of its

officers, agents, or employees and whether such claims might be sustained under a theory of strict or absolute liability or otherwise.

(b) Electromagnetic Emissions

The lessee agrees to control its own electromagnetic emissions and those of its agents, employees, invitees, independent contractors or subcontractors emanating from individual designated defense warning areas in accordance with requirements specified by the commander of the command headquarters listed in the following table to the degree necessary to prevent damage to, or unacceptable interference with, Department of Defense flight, testing, or operational activities, conducted within individual designated warning areas. Necessary monitoring control, and coordination with the lessee, its agents, employees, invitees, independent contractors or subcontractors, will be effected by the commander of the appropriate onshore military installation conducting operations in the particular warning area; provided, however, that control of such electromagnetic emissions shall in no instance prohibit all manner of electromagnetic communication during any period of time between a lessee, its agents, employees, invitees, independent contractors or subcontractors and onshore facilities.

(c) Operational

The lessee, when operating or causing to be operated on its behalf, boat or aircraft traffic in the individual designated warning areas shall enter into an agreement with the commander of the individual command headquarters listed in the following table, upon utilizing an individual designated warning area prior to commencing such traffic. Such an agreement will provide for positive control of boats and aircraft operating in the warning areas at all times.

Warning Areas' Command Headquarters

Warning Areas

W-155-A
W-155-B
(For Agreement)
Chief, Naval Air Training
Naval Air Station
ATTN: Lieutenant Commander Velez,
USN, or Lt. Joseph
Corpus Christi, Texas 78419-5100
Telephone: (512) 939-3862/3902

Command Headquarters

Chief, Naval Air Training
Naval Air Station
ATTN: Lieutenant Commander Velez,
USN, or Lt. Joseph
Corpus Christi, Texas 78419-5100
Telephone: (512) 939-3862/3902

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Warning Areas

W-155-A
W-155-B
(For Operational Control)

Command Headquarters

Fleet Area Control & Surveillance
Facility (FACSPAC)
Naval Air Station
ATTN: OSI Reser
Pensacola, Florida 32508
Telephone: (904) 452-2735/4671

W-92

Naval Air Station
Air Operations Department
Air Traffic Division/Code 52
ATTN: ACC Thrift
New Orleans, Louisiana 70146-5000
Telephone: (504) 393-3100/3101

W-453

Air National Guard - CRTG
Gulfport, Mississippi/ACMI
ATTN: Tech. Sgt. D. Crawford or
Staff Sgt. L. Wyche
Gulfport, Mississippi 39507
Telephone: (601) 867-2433

Eglin Water
Test Areas
1 and 3

Air Force Development Test Center
XRI
ATTN: Mr. Danny Pugh
Eglin AFB, Florida 32542
Telephone: (904) 882-3899/9757

14. Information to Lessees.

(a) Supplemental Documents. For copies of the various documents identified as available from the Gulf of Mexico regional office, prospective bidders should contact the Public Information Unit, Minerals Management Service, 1201 Elmwood Park Boulevard, New Orleans, Louisiana 70123-2394, either in writing or by telephone at (504) 736-2519. For additional information, contact the Regional Supervisor for Leasing and Environment at that address or by telephone at (504) 736-2759.

(b) Navigation Safety. Operations on some of the blocks offered for lease may be restricted by designation of fairways, precautionary zones, anchorages, safety zones, or traffic separation schemes established by the U.S. Coast Guard pursuant to the Ports and Waterways Safety Act (33 U.S.C. 1221 et seq.), as amended. Bidders are advised that the U.S. Coast Guard published a notice of petition for rulemaking to expand the existing safety zone around the Louisiana Offshore Oil Port (Federal Register, Vol. 57, No. 13, p. 2236, January 21, 1992).

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U.S. Army Corps of Engineers (COE) permits are required for construction of any artificial islands, installations, and other devices permanently or temporarily attached to the seabed located on the OCS in accordance with section 4(e) of the OCS Lands Act, as amended.

For additional information, prospective bidders should contact Lt. Commander Ken Parris, Assistant Marine Port Safety Officer, 8th Coast Guard District, Hale Boggs Federal Building, New Orleans, Louisiana 70130, (504) 589-6901. For COE information, prospective bidders should contact Mr. Ron Ventola CELMN-OB-S, Post Office Box 60267, New Orleans, Louisiana 70160-0267, (504) 862-2255.

(c) Offshore Pipelines. Bidders are advised that the Department of the Interior and the Department of Transportation have entered into a Memorandum of Understanding, dated May 6, 1976, concerning the design, installation, operation, and maintenance of offshore pipelines. Bidders should consult both Departments for regulations applicable to offshore pipelines.

(d) 8-Year Leases. Bidders are advised that any lease issued for a term of 8 years will be cancelled after 5 years, following notice pursuant to the OCS Lands Act, as amended, if within the initial 5-year period of the lease, the drilling of an exploratory well has not been initiated, or if initiated, the well has not been drilled in conformance with the approved exploration plan criteria, or if there is not a suspension of operations in effect. See 30 CFR 256.37.

(e) Affirmative Action. Revision of Department of Labor regulations on affirmative action requirements for Government contractors (including lessees) has been deferred, pending review of those regulations (see Federal Register of August 25, 1981, at 46 FR 42865 and 42968). Should changes become effective at any time before the issuance of leases resulting from this sale, section 18 of the lease form (Form MMS-2005, March 1986), would be deleted from leases resulting from this sale. In addition, existing stocks of the affirmative action forms described in paragraph 5 of this Notice contain language that would be superseded by the revised regulations at 41 CFR 60-1.5(a)(1) and 60-1.7(a)(1). Submission of Form MMS-2032 (June 1985) and Form MMS-2033 (June 1985) will not invalidate an otherwise acceptable bid, and the revised regulations' requirements will be deemed to be part of the existing affirmative action forms.

(f) Ordnance Disposal Areas. Bidders are cautioned as to the existence of two inactive ordnance disposal areas in the Mississippi Canyon area, shown on Map 1. These areas were used to dispose of ordnance of unknown quantity and composition.

Water depths range from approximately 750 to 1,525 meters. Bottom sediments in both areas are soft, consisting of silty clays. Exploration and development activities in these areas require precautions commensurate with the potential hazards.

The U. S. Air Force has released an indeterminable amount of unexploded ordnance throughout Eglin Water Test Areas 1 and 3. The exact location of the unexploded ordnance is unknown, and lessees are advised that all lease blocks included in this sale within these water test areas should be considered potentially hazardous to drilling and platform and pipeline placement.

(g) Communications Towers. The Department of Defense, U.S. Air Force has installed seven military communications towers in the Chandealeur/Mobile/Viosca Knoll area which support Air Combat Maneuvering Instrumentation (ACMI). This project may impose certain restrictions on oil and gas activities in that area since no activity can take place within 500 feet of a tower site, and unobstructed lines of sight must be maintained between towers. The seven towers are located within Mobile, Blocks 769, 819 and 990; Viosca Knoll, Block 116; and Chandealeur Area, Blocks 33, and 61; and Chandealeur Area, East Addition, Block 39. Information and maps of the specific locations and line of sight crossings for ACMI towers may be obtained from Mr. Wallace Williams, Minerals Management Service, (504) 736-2772.

(h) Archaeological Resources. Bidders are advised of the Notice to Lessees (NTL) affecting the historic shipwreck survey requirement published in the Federal Register on December 20, 1991, pages 66076-66082 with an effective date of February 17, 1992. This NTL details the survey methodology, including a more intensive survey with line spacing 50 meters apart, and report writing requirements. A letter to Lessees (LTL) of November 30, 1990 lists those blocks identified as having a high probability for encountering historic shipwrecks. Copies of both the NTL and LTL are available from the MMS Public Information Unit. See paragraph 14(a).

(i) Proposed Rigs to Reefs. Bidders are advised that there are OCS artificial reef sites and planning sites for the Gulf of Mexico. These are generally located in water depths of less than 200 meters. While all existing and proposed sites require a permit from the U. S. Army Corps of Engineers, this "Rigs to Reefs" program is implemented through sponsorship by the affected States as listed below with the names of the designated State Artificial Reef Coordinators:

Alabama
Mr. Walter M. Tatum
(205) 968-7578

Mississippi
Mr. Mike Buchanan
(601) 385-5860

Louisiana
Mr. Rick Kasprzak
(504) 765-2375

Texas
Ms. Jan Coulbertson
(713) 474-2811

For more information, prospective bidders should contact the above listed coordinators for their areas of interest.

Carolita Kallaur
Director, Minerals Management Service
Carolita Kallaur

Approved:

Michael Dombeck
Assistant Secretary, Land and Minerals Management

Michael Dombeck

2/16/93
Date

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[FR Doc. 93-4005 Filed 2-18-93; 8:45 am]
BILLING CODE 4310-MR-C
BILLING CODE 4310-MR-M

Billing Code: 4310-MR

DEPARTMENT OF THE INTERIOR

Minerals Management Service

Outer Continental Shelf
Central Gulf of Mexico

Notice of Leasing Systems, Sale 142

Section 8(a)(8) (43 U.S.C. 1337(a)(8)) of the Outer Continental Shelf Lands Act (OCSLA) requires that, at least 30 days before any lease sale, a Notice be submitted to the Congress and published in the Federal Register:

1. identifying the bidding systems to be used and the reasons for such use; and
2. designating the tracts to be offered under each bidding system and the reasons for such designation.

This Notice is published pursuant to these requirements.

1. Bidding systems to be used. In the Outer Continental Shelf (OCS) Sale 142, blocks will be offered under the following two bidding systems as authorized by section 8(a)(1) (43 U.S.C. 1337(a)(1)): (a) bonus bidding with a fixed 16 2/3-percent royalty on all unleased blocks in less than 400 meters of water; and (b) bonus bidding with a fixed 12 1/2-percent royalty on all remaining unleased blocks.

a. Bonus Bidding with a 16 2/3-Percent Royalty. This system is authorized by section (8)(a)(1)(A) of the OCSLA. This system has been used extensively since the passage of the OCSLA in 1953 and imposes greater risks on the lessee than systems with higher contingency payments but may yield more rewards if a commercial field is discovered. The relatively high front-end bonus payments may encourage rapid exploration.

b. Bonus Bidding with a 12 1/2-Percent Royalty. This system is authorized by section (8)(a)(1)(A) of the OCSLA. It has been chosen for certain deeper water blocks proposed for the Central Gulf of Mexico (Sale 142) because these blocks are expected to require substantially higher exploration, development, and production costs, as well as longer times before initial production, in comparison to shallow water blocks. Department of the Interior analyses indicate that the minimum economically developable discovery on a block in such high-cost areas under a 12 1/2-percent royalty system would be less than for the same blocks under a 16 2/3-percent royalty system.

As a result, more blocks may be explored and developed. In addition, the lower royalty rate system is expected to encourage more rapid production and higher economic profits. It is not anticipated, however, that the larger cash bonus bid associated with a lower royalty rate will significantly reduce competition, since the higher costs for exploration and development are the primary constraints to competition.

2. Designation of Blocks. The selection of blocks to be offered under the two systems was based on the following factors:

- a. Lease terms on adjacent, previously leased blocks were considered to enhance orderly development of each field.
- b. Blocks in deep water were selected for the 12 1/2-percent royalty system based on the favorable performance of this system in these high-cost areas as evidenced in our analyses.

The specific blocks to be offered under each system are shown on Map 2 entitled "Central Gulf of Mexico Lease Sale 142 - Final Bidding Systems and Bidding Units." This map is available from the Minerals Management Service, Gulf of Mexico Region, 1201 Elmwood Park Boulevard, New Orleans, Louisiana 70123-2394.

Approved:

Carolita Kallaur

Carolita Kallaur
 Director, Minerals Management Service

Michael Dombeck
 Assistant Secretary - Land and Minerals Management

Michael Dombeck

February 16, 1993

[FR Doc. 93-4006 Filed 2-18-93; 8:45 am]
 BILLING CODE 4310-MR-C

Federal Register

**Friday
February 19, 1993**

Part XI

Department of Transportation

Federal Aviation Administration

14 CFR Parts 61 and 142

**Aircraft Flight Simulator Use in Pilot
Training, Testing, and Checking at
Training Centers; Proposed Rule**

DEPARTMENT OF TRANSPORTATION

Federal Aviation Administration

14 CFR Parts 61 and 142

[Docket No. 26933; Notice No. 92-10A; and Special Federal Aviation Regulation No. 58]

RIN 2120-AA83

Aircraft Flight Simulator Use in Pilot Training, Testing, and Checking and at Training Centers

AGENCY: Federal Aviation Administration (FAA), DOT.

ACTION: Supplemental notice of proposed rulemaking (SNPRM); Correction.

SUMMARY: On August 11, 1992, the Department of Transportation published a Notice of Proposed Rulemaking (NPRM) (Notice 92-10; 57 FR 35888) on the use of aircraft flight simulation. This SNPRM revises the NPRM by clarifying or eliminating certain provisions found to be unclear or inappropriate for consideration at this time.

DATES: Comments on this SNPRM must be received on or before March 22, 1993.

ADDRESSES: Comments on this notice should be mailed, in triplicate, to: Federal Aviation Administration, Office of Chief Counsel, Attention: Rules Docket (AGC-10), Docket No. 26933, 800 Independence Avenue SW., Washington, DC 20591. All comments must be marked: "Docket No. 26933." Comments may be examined in room 915G on weekdays except on Federal holidays between 8:30 a.m. and 5 p.m.

FOR FURTHER INFORMATION CONTACT: Warren Robbins or Ron Myres, Regulations Branch, (AFS-350), General Aviation and Commercial Division, Flight Standards Service, Federal Aviation Administration, 800 Independence Avenue SW., Washington, DC 20591, Telephone (202) 267-8150.

SUPPLEMENTARY INFORMATION:

Comments Invited

Because the proposals in this SNPRM differ in some respects from the NPRM, Notice 92-10, the FAA encourages interested persons to file comments in response to this SNPRM even if they have already commented on the NPRM. The SNPRM supersedes four sections only of the NPRM; therefore, any comments previously received on those sections of the NPRM that are not being superseded will remain under consideration, while comments already received on the four sections being revised by this SNPRM will be considered but only if they relate to the

revised sections. The comment period on the SNPRM will close March 22, 1993.

Interested persons are invited to comment on the proposed rule by submitting such written data, views, or arguments as they may desire. Comments should identify the regulatory docket or notice number and be submitted in triplicate to the Rules Docket at the address specified above. All comments received, as well as a report summarizing each substantive public contact with FAA personnel on this rulemaking, will be filed in the docket. The docket is available for public inspection before and after the comment closing date.

All comments received on or before the closing date will be considered by the Administrator before taking action on this proposed rulemaking. Late-filed comments will be considered to the extent practicable. The proposals contained in this notice may be changed in light of comments received.

Commenters wishing the FAA to acknowledge receipt of their comments submitted in response to this notice must include with their comments a pre-addressed, stamped postcard on which the following statement is made: "Comments to Docket No. 26933." When the comment is received, the postcard will be dated, time-stamped, and mailed to the commenter.

Availability of SNPRM

Any person may obtain a copy of this SNPRM and the NPRM, Notice No. 92-10, by submitting a request to the Federal Aviation Administration, Office of Public Affairs, Attention: Public Inquiry Center, APA-200, 800 Independence Avenue, SW., Washington, DC 20591, or by calling (202) 267-3484. Communications must identify Notice No. 92-10 for the NPRM and Notice No. 92-10A for the SNPRM. Persons interested in being placed on a mailing list for future proposed rules should request from the above office a copy of Advisory Circular No. 11-2A, Notice of Proposed Rulemaking Distribution System, which describes the application procedure.

Background

On August 11, 1992, the Department of Transportation published an NPRM on the use of aircraft flight simulation. The regulatory language contained in four sections of the NPRM (Notice No. 92-10) is in need of revision. These revisions are explained more fully under the section-by-section analysis set forth below.

Section-by-Section Analysis

Section 61.187 Flight Proficiency

In the NPRM, the FAA proposed to revise paragraph (a) of § 61.187 to permit an applicant for a flight instructor certificate to receive the required instruction for the certificate in an aircraft, a flight simulator, or a flight training device. This proposed revision to paragraph (a) was inadvertent, for the FAA did not intend to revise any portion of that paragraph. Rather, it intended to add an additional provision that would permit an applicant to receive the required training in any one of the three ways described above. To accomplish this purpose, this SNPRM would restore paragraph (a) of § 61.187 without any change and would add a new paragraph (c) to § 61.187. The new paragraph would contain the proposed change that was set forth in § 61.187(a) of the NPRM, with the additional correction described below.

The NPRM incorrectly proposed that the flight instruction could be received in an aircraft, in a flight simulator, or in a flight training device used in accordance with an approved course at a training center certificated under part 142. The proposal is incorrect insofar as it fails to recognize that some or all of the training may be received in any of the following ways: (1) In an aircraft pursuant to a course given under part 61, part 121, part 135, part 141, or part 142; (2) in a flight simulator pursuant to a course approved under part 121 or part 142; or (3) in a flight training device pursuant to a course approved under part 142. This SNPRM amends the NPRM to clarify that the above options would be available to an applicant.

Section 61.197 Renewal of flight instructor certificates

The FAA inadvertently included in proposed § 61.197 certain new provisions. These provisions involve medical qualifications for the renewal of a flight instructor certificate (§ 61.197(a)(1) and (a)(2)), renewal of the certificate and its ratings without accomplishing a practical test (§ 61.197(b)(1)(i) and (ii), and (b)(2)(iv)(A) and (B)), and the use of a graduation certificate from a refresher course as a method of renewal (§ 61.197(c)). The FAA has initiated a program to review and update current part 61. The agency believes that the provisions inadvertently included in proposed § 61.197 are more appropriate for consideration in connection with its part 61 review. Accordingly, this SNPRM would withdraw the proposals described above. The FAA anticipates that these proposals, or others like them

will be part of a future rulemaking to revise part 61.

As stated in the NPRM, the purpose of proposed § 61.197 is to propose that the practical test for renewal of a flight instructor certificate be conducted, in whole or in part, in a flight simulator or flight training device. The above revisions would not affect this proposed change to § 61.197.

The other proposed changes to § 61.197 are for editorial purposes only.

Section 142.49 Training center instructor privileges and limitations

Proposed § 142.49(a) provides that a part 142 certificate holder may not allow an instructor to provide instruction "for which that instructor is qualified unless that instructor is qualified under the requirements of this subpart." On further consideration, the FAA believes that the phrase "for which that instructor is qualified" is confusing and does not add anything of substance to proposed § 142.49(a). Accordingly, this SNPRM deletes the above phrase from the proposal.

Section 142.53 Training center instructor training and testing requirements

Under proposed § 142.53(b)(2), an instructor who does not hold a medical certificate could not instruct in certain flight simulators. On reconsideration, the FAA believes that this restriction was inappropriate. The FAA has issued exemptions permitting instruction under these circumstances. It does not believe that a medical certificate is necessary provided that the instruction is conducted in a flight simulator rather than in an aircraft. Therefore, the restriction contained in the above paragraph is deleted from the proposal by this SNPRM.

Economic Evaluation

Executive Order 12291, dated February 17, 1981, directs Federal Agencies to promulgate new regulations or modify existing regulations only if potential benefits to society for each proposed change outweigh potential costs.

There are no costs associated with this SNPRM. It merely clarifies the intent of the NPRM by removing unintended restrictions, therefore, the FAA finds that further regulatory evaluation is not required. A copy of the regulatory evaluation to support the NPRM is filed in FAA Rules Docket 26933.

International Trade Impact Statement

This rule will not impose a competitive disadvantage to either U.S.

air carriers doing business abroad or foreign air carriers doing business in the United States. This assessment is based on the fact that this rule will not impose additional costs on either U.S. or foreign air carriers.

Regulatory Flexibility Determination

In accordance with the Regulatory Flexibility Act of 1980, the FAA has determined that this rule will not have a significant economic impact, positive or negative, on a substantial number of small entities. This assessment is based on the regulatory evaluation of the NPRM published on August 11, 1992, and on the fact that this SNPRM will not impose any additional costs.

Federalism Implications

The regulations adopted herein will not have any direct effects on the states, on the relationship between the national government and the states, or on the distribution of power and responsibilities among the various levels of government. Therefore, in accordance with Executive Order 12612, it is determined that this final rule will not have sufficient federalism implications to warrant the preparation of a Federalism Assessment.

Paperwork Reduction Act

The reporting and recordkeeping requirements associated with Notice 92-10 are being submitted to the Office of Management and Budget for approval in accordance with 44 U.S.C. chapter 35 under DOT NO: New; OMB NO: New; Title: Aircraft Flight Simulator Use in Pilot Training, Testing, and Checking and at Training Centers. Need for Information: To adhere to the requirements for records that would need to be generated and maintained under proposed part 142. Proposed Use of Information: To provide surveillance capability over proposed training centers to insure compliance with airman training, testing, and certification requirements. Frequency: Records would have to be kept of the training center initial application, of each student, of each instructor or evaluator, and of all air carrier certificate holder clients. These records would have to be annotated subsequent to any training, testing, or checking. Burden Estimate: 5450 hours for total annual burden. Respondents: Part 142 certificate holders and certificate holder applicants. Form(s): To be determined. Average Burden Hours per Respondent: The FAA estimates that there will be 32 certificate applicants during the first year. The average burden hours are estimated as follows:

(1) To file an application—50 hours per application.

(2) To maintain a record for each student and provide that record once per student—1 hour per record.

(3) To maintain a record for instructor and evaluator and provide that record once per instructor or evaluator, excluding the initial certificate application—1 hour per record.

(4) To provide a record to each POI for each course being instructed and the instructor's name—.25 hour per record.

For further information contact: The Information Requirements Division, M-34, Office of the Secretary of Transportation, 400 Seventh Street, SW., Washington DC 20590, (202) 366-4735. Comments may be submitted to the Office of Information and Regulatory Affairs, Office of Management and Budget, New Executive Office Building, room 3228, Washington DC 20503, (202) 395-7340, Attention: Desk Officer for FAA. A copy of comments submitted to OMB also should be sent to the FAA Rules Docket listed under ADDRESSES.

Conclusion

For the reasons discussed in the preamble, and based on the findings in the Regulatory Flexibility Determination and the International Trade Impact Analysis, the FAA has determined that, because this SNPRM makes minor technical changes that are mainly editorial in nature, it is not major under Executive Order 12291. Although this proposal is considered significant under DOT Regulatory Policies and Procedures (44 FR 11034; February 26, 1979), the technical changes that it proposes would result in an impact so minimal that the proposal does not warrant a full evaluation. Further, the proposal would not have a significant economic impact, positive or negative, on a substantial number of small entities under the criteria of the Regulatory Flexibility Act. An initial regulatory evaluation of the NPRM, which includes a Regulatory Flexibility Determination and Trade Impact Analysis, has been placed in the regulatory docket. A copy may be obtained by contacting the person identified under FOR FURTHER INFORMATION CONTACT.

List of Subjects in 14 CFR Parts 61 and 142

Administrative practice and procedure, Aircraft, Airmen, Drug testing, Educational facilities, Reporting and recordkeeping requirements.

The Proposed Amendments

In consideration of the foregoing, the Federal Aviation Administration

proposes to amend parts 61 and 142 as follows:

PART 61—[AMENDED]

1. The authority citation for part 61 continues to read as follows:

Authority: 49 U.S.C. App. 1354(a), 1355, 1421, 1422, and 1427; 49 U.S.C. 106(g) (Revised Pub. L. 97-449; January 12, 1983).

2. Section 61.187 is amended by adding a new paragraph (c) to read as follows:

§ 61.187 Flight proficiency.

* * *

(c) An applicant for a flight instructor certificate may receive flight instruction—

(1) In an aircraft, in a flight simulator, or in a flight training device used in accordance with an approved course at a training center certificated under part 142 of this chapter;

(2) In an aircraft or in a flight simulator used in accordance with a course approved under part 121 of this chapter;

(3) In an aircraft used in accordance with subpart G of part 61 of this chapter if the flight instruction—

(i) Covers the subject listed in paragraph (a) of this section; and
(ii) Is given by a person authorized by the Administrator to instruct flight instructors; or

(4) In an aircraft used in accordance with a course approved under part 135 or part 141 of this chapter.

3. Section 61.197 is revised to read as follows:

§ 61.197 Renewal of flight instructor certificates.

(a) Except as provided in paragraph (b) of this section, the holder of a flight instructor certificate may renew that certificate for an additional period of 24

calendar months if that individual satisfactorily completes a practical test for—

(1) Renewal of the flight instructor certificate and rating sought; or

(2) An additional flight instructor rating.

(b) The holder of a flight instructor certificate may renew that certificate and its ratings without accomplishing a practical test, by presenting to an FAA Flight Standards District Office evidence of one of the following:

(1) A record showing that, during the preceding 24 calendar months, the instructor has served—

(i) As a company check pilot;
(ii) As a chief flight instructor;
(iii) As a company check airman or flight instructor in a part 121 or part 135 operation; or
(iv) In a comparable position involving the regular evaluation of pilots.

(2) A graduation certificate from an approved flight instructor refresher course, provided that—

(i) The course was completed prior to the expiration date of the flight instructor certificate; and

(ii) The course consists of not less than 24 hours of—

(A) Ground training;
(B) Flight training; or
(C) A combination of ground training and flight training.

(c) If an instructor satisfactorily completes the requirements of this section within 90 days prior to the expiration date of the flight instructor certificate, the instructor is considered to have completed the requirements of this section just prior to the expiration date, and the certificate will be renewed for an additional 24 calendar months beyond the expiration date.

(d) Except as allowed by paragraph (e) of this section, the practical test

required by paragraph (a) of this section must be conducted in an aircraft.

(e) The practical test required by paragraph (a) of this section may be accomplished in an aircraft, in a flight simulator, or in a flight training device if it is accomplished in an approved course conducted by a training center certificated under part 142 of this chapter.

PART 142—[AMENDED]

Proposed part 142 is amended to read as follows:

4. Section 142.49(a) is revised to read as follows:

§ 142.49 Training center instructor privileges and limitations.

(a) A part 142 certificate holder may not allow an instructor to provide instruction in any course of training, testing, or checking unless that instructor is qualified under the requirements of this subpart.

* * *

5. Section 142.53(b)(2) is revised to read as follows:

§ 142.53 Training center instructor training and testing requirements.

* * *

(b) * * *

(2) An instructor may not instruct in a qualified and approved flight simulator that represents an airplane requiring two or more flight crewmembers unless that instructor has—

* * *

Issued in Washington, DC, on February 12, 1993.

Thomas C. Accardi,
Director, Flight Standards Service.

[FR Doc. 93-3951 Filed 2-18-93; 8:45 am]

BILLING CODE 4910-13-M