

**FEDERAL REGISTER: 44 FR 25592 (May 1, 1979)**

DEPARTMENT OF ENERGY

AGENCY: Office of Energy Research

10 CFR Part 320

University Coal Research Laboratory Program

ACTION: Final rule.

**SUMMARY:** The Department of Energy (DOE) has established policies and procedures to be followed in the selection and designation of thirteen university coal research laboratories as authorized by Title VIII of Pub. L. 95-87, the Surface Mining Control and Reclamation Act of 1977, as amended by Section 604 of Pub. L. 95-617, the Public Utilities Regulatory Policies Act of 1978.

The university coal research laboratories are established for the purpose of carrying out advanced research and training related to one or more problems of coal energy resources and conversion. At least one of the coal laboratories so designated must be located within each of the major coal provinces of the United States, including Alaska, but no more than one per State.

Ten of the thirteen laboratories authorized must be located in States with abundant coal reserves and all the laboratories must be administered by institutions of higher education with experience and expertise in coal research and currently or potentially outstanding coal research programs with the capacity to establish and operate the coal laboratory.

The final rule includes definitions and interpretations of terms included in the authorizing legislation a summary of eligibility, selection, and evaluation criteria, and funding and administrative information necessary for the preparation and submission of applications to DOE for grants for the establishment of university coal research laboratories.

EFFECTIVE DATE: May 11, 1979.

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**SUPPLEMENTARY INFORMATION:**

- I. Background
- II. Comments on the Proposed Rule
- III. Additional Information
- IV. Text of the Authorizing Legislation

**I. BACKGROUND**

This regulation adds a new Part 320 to Subchapter B, Chapter II of Title 10 of the Code of Federal Regulations.

Title VIII of the Surface Mining Control and Reclamation Act of 1977, Pub. L. 95-87, as amended by Section 604 of the Public Utilities Regulatory Policies Act of 1978, Pub. L. 95-617, (hereinafter referred to as the Act) authorizes the Administrator of the Energy Research and Development Administration (ERDA) to designate thirteen institutions of higher education at which university coal research laboratories will be established and operated. Section 301 of the Department of Energy Organization Act, Pub. L. 95-91 transferred to the Secretary of Energy all functions of the Administrator of ERDA with respect to the University Coal Research Laboratories Program.

The Administration and the Congress recognize that the increased utilization of coal as an alternative energy source to petroleum and natural gas is of critical importance in assuring adequate future energy supplies. Increased coal utilization is dependent in part on increased scientific and technical understanding of various problems associated with the mining, processing and conversion of coal for energy purposes. There is also a related need to assure that an adequate supply of

highly trained professional manpower exists for future energy-related programs in the public and private sectors. These objectives can be met in part through the increased participation and involvement of institutions of higher education in coal-related research and manpower development.

The University Coal Research Laboratories Program (UCL), as authorized in the Act, is designed to expand opportunities for coal research at institutions of higher education and through participation in such research, to develop new professional manpower for future energy-related programs.

In order to carry out these purposes, thirteen institutions of higher education are to be designated by the Department of Energy (DOE) as locations for the establishment and operation of university coal research laboratories. These laboratories are to conduct advanced research on selected problems in the extraction and utilization of coal resources. This research may involve the combined efforts of specialists from different academic disciplines and be directed at one or more specific coal problems. Each designated laboratory is responsible for developing close and productive relationships with the private sector, other academic institutions, State and local government, and public groups to insure the exchange of information on the results of their research. Research facilities for the characterization of coal are also to be established at each laboratory to work in close cooperation with private industry. In addition, each laboratory is to develop programs for the training of students engaged in advanced study in disciplines related to coal as a source of energy.

DOE published a Proposed Rule on the University Coal Research Laboratories Program in the Federal Register on January 22, 1979, (44 FR 4632-4639). The Proposed Rule described the purpose and scope of the program, eligibility requirements, evaluation and selection criteria, the contents of and review procedures for grant applications, and plans for continuing operation and administration of the program.

Nineteen written comments were received in response to the Proposed Rule and an additional thirteen presentations were made at a public hearing held on February 10 (word illegible) in Washington, D.C. Many of the comments sought clarification of various parts of the Proposed Rule; some suggested specific changes or revisions. All of the written comments and presentations, as well as other information available to DOE, were considered in arriving at the final rules adopted herein.

## **II. COMMENTS ON THE PROPOSED RULE**

Written comments and presentations were received from scientists and administrators at institutions of higher education and from representatives of state agencies and independent testing laboratories. The remainder of this section consists of summaries of substantive comments received and responses to these comments, further clarifications of DOE's rationale in developing the Proposed Rule, and changes made in the Proposed Rule as the result of public comment.

### **A. DEFINITIONS -- SECTION 320.2**

#### **1. Abundant Coal Reserves, Section 320.2(a)**

Comments: There were two comments relating to the determination of states with abundant coal resources.

Responses: The Energy Information Administration, DOE, U.S. Bureau of Mines and U.S. Geological Survey were consulted to determine the most recent and authoritative source of data on U.S. coal reserves by state; all concurred on the August 1977 USBM publication, "Demonstrated Coal Reserve Base of the United States on January 1, 1976." This publication is used by DOE in determining the coal reserves of the various states for purposes of this Act. The Proposed Rule used a 1.5 billion ton minimum limit as the definition of "abundant coal reserves." While some states may claim more abundant coal reserves or coal resources, in order to provide for uniform determination of coal reserves on a national basis, DOE will continue to use the above - referenced USBM report in determining those states with abundant coal reserves. It should be noted that in implementing the Act as amended, no eligible institution of higher education is excluded from submitting an application to the UCL Program due to the amount of coal reserves of the state in which it is situated.

#### **2. Coal Research, Section 320.2(c)**

Comments: There were eight comments relative to the definition of coal research. Two comments related to the acceptability of research on coal as an industrial raw material and byproducts of coal production, such as underclays. Two comments related to the omission of specific reference to "mine safety" and "reclamation." Several comments requested that DOE identify types of coal research or ranks and grades of coal which were considered of higher priority.

Response: The definition of Section 320.2(c) refers to research that will advance efforts to expand the use of coal as an energy source and is considered to be consistent with the purposes of the Act. While research on coal as an industrial raw material or on coal production and utilization byproducts is not specifically excluded from the definition, such research carries a lower priority in the UCL program because of the emphasis in the Act on coal as a direct energy source.

Both "mine safety" and "reclamation" are acceptable areas of research under the broad definition. In recognition of its critical role in the expanded use of coal, "mine safety" is now cited in the definition. Reclamation is considered adequately covered by the broader term "environmental effects." Research in these areas, however, should complement or focus on different aspects of, and not duplicate, research currently supported by other agencies and organizations. A broad definition of coal research permissible under the UCL Program has been developed to allow applicants the opportunity to propose responsive research programs that focus on national and/or regional problems, including research on coals of different rank and grade.

### 3. Institutions of Higher Education, Section 320.2(f)

Comments: Twelve comments were received relative to the definition of institution of higher education. Two comments related to "accredited masters and/or doctoral degree programs in disciplines related to coal research." Ten comments focused on membership, organization, management and the role of the lead institution in consortia or partnerships. One of the ten comments proposed the substitution of "agent" for lead institution on the premise that this would make the partner institutions more equal. One of the comments asked whether a state organization can act as the administrative body for a consortium rather than using a "lead institution."

Response: To clarify the definition of "accredited," the following addition has been inserted into the definition... "must be accredited by the appropriate general regional accrediting agency or, where appropriate, by a recognized professional accrediting body..." The Act is clear that only institutions of higher education may qualify as an applicant for designation as a UCL. In the Proposed Rule, DOE broadened the definition of institution of higher education to permit applications from consortia or partnerships of such institutions. Public or private organizations or agencies which are not institutions of higher education would not qualify for membership in a UCL consortium or partnership. However, this restriction does not preclude limited participation of public or private organization or agencies (which do not by themselves qualify for membership in a UCL consortium or partnership) from collaborating in research and training efforts conducted by UCL.

DOE does not specify the organizational form or structure of a consortium or partnership. However, it is required that a party designated by the consortium or partnership be capable of receiving the award and have both significant capabilities and experience in the management of interdisciplinary or inter-institutional programs and administrative experience in Federal grant and contract management. This "party" is expected to be legally responsible on behalf of the consortium or partnership for proposal submissions, award negotiations, technical reports, financial reports and fiscal accountability. The party selected to provide these services on behalf of a consortium or partnership will, therefore, be presumed to have a leadership role. The party may be one of the institutions of the consortium or a nonprofit organization authorized to represent the consortium. In the case of multistate consortia or partnerships, a "lead" institution must be designated and the location of the "lead" institution shall be considered the "home state" for the purpose of meeting the limitation of the Act in stipulating that no more than one UCL shall be located in any single state. In these situations, a significant portion of the UCL program must be conducted in the lead institution's "home state." Changes have been made in the final regulations to incorporate these clarifications.

### 4. Major Coal Provinces, Section 320.2(g)

Comment: Three comments were received relative to the definition and interpretation of major coal provinces. All comments related to those states which fall in more than one coal province and the method of designating a UCL within each province.

Response: The Act stipulates that at least one UCL shall be established within each major coal province, but that no more than one laboratory shall be located in a single state. Coal provinces have been defined by the U.S. Geological Survey (note the U.S. Bureau of Mines as cited in the Act). The definitive reference is USGS Prof. Paper 978, PACER, Data Entry, Retrieval and Update for the National Coal Resource Data System, 1978. Some states fall in two or more coal provinces, although their major coal reserves may lie primarily in one coal province. DOE will evaluate UCL proposals on the basis of quality and merit of UCL programs proposed and will select thirteen of the best qualified applicants for designation as UCL's while meeting the Act's requirements that ten UCL's be in states with abundant coal reserves and at least one be located in

each of the seven coal provinces. The UCL's selected through this process are expected to provide a balance of research between problems of a general (National) nature and problems relevant to the various regions and coal provinces. This definition will, therefore, remain as proposed except for the following changes in the designation of provinces: Eastern Province, add "Delaware"; and Gulf Province, add "Alabama." These were inadvertently omitted in the proposed rule.

#### 5. Operating Expenses, 320.2(h)

Comment: Three comments were directed at the limitation of \$500 on research equipment purchases contained in the definition of "operating expenses." Comments were also made at the public hearing on whether operating expenses included "start up" costs.

Response: DOE concurs with these comments and is substituting a \$1000 limitation in the Final Rule.

This section has been further revised to exclude "new program startup expenses" as a cost category under the definition of "operating expenses." The program Solicitation (see Section 320.8, Content of Proposals, et seq.) will provide further information on the definition and allowability of new program startup expense.

### **B. ESTABLISHMENT OF PROGRAM, SECTION 320.3**

Comment: Four comments were received relating to this Section. One comment requested clarification of "education" and "training" as used in the Act and the proposed rule. One comment questioned whether the use of the National Academy of Engineering in its advisory capacity to DOE inferred an engineering emphasis in the UCL Program. Two comments requested clarification of the relationship of research to be conducted under the UCL Program to other coal research currently supported at universities by DOE.

Response: DOE has interpreted education as referred to in the Act to be focused principally on the training of advanced students through participation in coal research with related, but limited, course development and improvement and information dissemination activities. A specific definition of education and training has been added in Section 320.2(g).

The Act directed DOE to consult with the National Academy of Engineering in the process of designating the UCL Institutions. The Academy organized a committee of scientists and engineers to provide assistance to DOE in the initial development of the UCL Program. The NAE committee favors multidisciplinary research on a broad range of coal problems which extend beyond the field of engineering.

The UCL Program is intended to complement and extend, but not to duplicate or supplant, research on coal currently being conducted in universities. It is anticipated that UCL research will be directed at broader and more fundamental questions and/or may relate to specific problems and issues of a regional or coal province nature. Underlying all UCL research will be the emphasis on training through research participation. The final regulations have been revised to reflect this position.

The last sentence in the second paragraph of Section 320.3 has been modified for consistency with the Act and subsequent Sections of the Rule by indicating that the UCL program will build upon and strengthen existing "or potential" coal-related research capabilities at the selected universities.

### **C. PROGRAM OBJECTIVES, SECTION 320.4**

Comment: Sixteen comments were directed to Section 320.4, dealing with the establishment of test laboratories for coal characterization. Six comments were concerned with the role and functions of these laboratories. Ten comments dealt with possible unfair competition with commercial testing laboratories which might result from the Federal funding of these laboratories.

Response: Comments on the role and functions of coal characterization in the UCL Program were particularly helpful. The proposed rule adopted the language of the Act in referring to the establishment of "test laboratories for coal characterization." The words "test laboratory" infer a routine coal testing function, which if permitted might result in direct competition with established independent, commercial laboratories. On the other hand, research to advance the knowledge and understanding of the fundamental characteristics of coals is considered essential to many areas of coal research. Based on comments received, a new Section 320.2(c) has been inserted defining "Coal Characterization Research." Also, references to coal characterization in Sections 320.4, 320.5, 320.8, and 320.11 have been modified to delete the words "test laboratory"

and to stress the research nature of coal characterization. These changes clarify the role of coal characterization in the UCL Program to significantly reduce the potential for unfair competition with independent testing laboratories. An applicant for participation in the UCL program is required to set forth a program for coal characterization research which complements and assists other coal research proposed in the application. This coal characterization program must clearly show that it will not duplicate or supplant the services normally provided by commercial testing laboratories. (Section 320.5, Functions of University Coal Research Laboratories, has been revised to incorporate this determination.) A proposed coal characterization research program may utilize new or existing facilities or be conducted wholly by or jointly with other private or public organizations.

#### **D. FUNCTIONS OF A UNIVERSITY COAL RESEARCH LABORATORY, SECTION 320.5**

Comment: Eight comments were directed to various aspects of the role and functions of a UCL. These dealt with the scope of UCL research, collaborative research with industry, the involvement of external advisors and the transfer of research results.

Response: DOE has defined coal research broadly and outlined the functions of a UCL with the intent of providing each applicant with the maximum flexibility in proposing a program which identifies and responds to coal research needs and opportunities as perceived by the applicant. The research may focus on general, fundamental problems of coal research, or problems of particular significance to a state, region or coal province, or a balance between the two. Applicants are encouraged to focus the major part of their research efforts in one or more programmatic areas comprised of individual (or groups of) coherent research projects. Each UCL is encouraged and expected to establish collaborative efforts over time with other organizations which might include other academic institutions, industry, private laboratories, state or Federal agencies and laboratories. Each UCL should seek external inputs in the planning and evaluation of its research and training efforts and is also expected to communicate information on its research accomplishments through various means. DOE does not seek to dictate the scope and nature of such arrangements since needs and opportunities for obtaining inputs and dissemination of results will vary. Exchange of scientific and technical ideas and information among the members of the UCL network will be particularly encouraged by DOE. Section 320.19, Reporting Dissemination of Information, provides additional guidance on the question of UCL information exchange and reporting responsibilities.

Section 320.5 has been revised (as noted in the comments on Section 320.4) to reflect the change in the definition of the test laboratory for coal characterization and in the relationship of such coal characterization research to the services provided by commercial testing laboratories.

#### **E. ELIGIBILITY REQUIREMENTS, SECTION 320.7**

Comment: There were two comments relative to this Section. One comment proposed a revision of the rule to restrict eligibility to those institutions with doctoral degree programs in disciplines related to ongoing and proposed areas of coal research. One comment proposed the addition of an eligibility requirement which would prohibit any institution which engaged in the selling of routine sampling and testing services from being considered as an applicant to the UCL Program.

Response: A change in the eligibility requirement to restrict applicants to those institutions which have doctoral programs in disciplines relating to coal research is considered by DOE to be unduly restrictive. In some institutions, doctoral programs may not be offered in certain disciplines which otherwise have the potential for making significant contributions to UCL research. Therefore, this suggested change is not accepted. While DOE intends to prohibit the use of UCL Program funds for the development and offering of testing services in competition with commercial laboratories, an eligibility requirement which would disqualify any institution from applying because that institution currently provides such test services to the public is considered inappropriate. Some state institutions are required by state statute to provide certain types of testing services. No modification of the proposed rule is being made in response to the comment suggesting this change.

Section 320.7(c) relative to cost-sharing is deleted from this Section and a modification of cost-sharing is discussed under Section 320.8(b)(7).

#### **F. CONTENT OF PROPOSALS (APPLICATION), SECTION 320.8**

Comments: Four comments were received relative to this Section, all of which dealt specifically with Section 320.8(b)(7) on the certification of cost-sharing. One comment raised the question as to whether it was reasonable to require that an applicant certify a long-term commitment as to the source and availability of cost-sharing funds. Three comments addressed

the problems of timing and long-term commitments which applicants might experience in seeking cost-sharing assistance through state legislative action.

Response: Section 320.8(a) has been modified to indicate that the Program Solicitation shall specify the number of copies of the proposal required and the DOE installation to which they should be sent.

The comments on certification of cost-sharing have been accepted and have resulted in the modification of Section 320.8(b)(7) to read as follows:

"A cost-sharing plan which describes in general terms how the applicant plans to meet the cost-sharing requirements of the UCL Program (see Section 320.16, Cost Sharing) proposed for the authorized duration of the UCL Program (see Section 320.21, UCL Program Termination) and a certification of the source, availability, and commitment of non-Federal funds to meet cost sharing requirements on UCL Program activities proposed for the first year."

Section 320.9, Application Procedures, has been combined with Section 320.8.

## **G. EVALUATION AND SELECTION PROCEDURES, SECTION 320.10**

Comments: There were five comments that dealt with evaluation and selection procedures. One referred to the desirability of site visits in the review and evaluation of UCL proposals. Four dealt with the designation of UCL's with respect to states with abundant coal reserves and to coal provinces. The following questions were raised. Could all thirteen UCL's be designated in states with abundant coal reserves? Will the three UCL's provided for in the Amendment to the Act be designated in states not having abundant coal resources? What criteria will be used to determine in which coal province a given state may be placed? One comment stated that DOE should assure that each regional coal laboratory truly represents the coal province for which it is designated.

Response: DOE is giving consideration to the use of site visits and other forms of interpersonal communication in the proposal review and evaluation process, but does not propose to formalize a specific procedure in the Final Rule. In the UCL selection process, where one state may include and have reserves in two or more coal provinces, DOE does not intend to assign this state to a single coal province for selection purposes. The UCL proposals will be principally evaluated on scientific and technical merit and institutional capability and potential. A DOE Selection Panel, applying the selection criteria set forth in Section 320.12, then will make a final ranking of proposals, taking into consideration the distribution of UCL's as stipulated in the Act as amended. Ten UCL's will be designated in states with abundant coal reserves. Of these ten at least one will be located in each of the seven major coal provinces.

Since abundance of coal reserves is not a limiting factor in the selection of the three UCL's authorized under the Amendment to the Act, these UCL's may be located in any state. There is no express prohibition against these three UCL's being located in states with abundant coal reserves. DOE, however, will take into consideration the congressional intent implicit in the Amendment to the Act authorizing the additional three laboratories.

Section 320.10(a)(3) has been revised to indicate that technical reviewers will be appointed by the DOE Selection Official.

Section 320.10(a)(6) of the Proposed Rule has been deleted as DOE now plans to designate all the thirteen authorized UCL's at the same time.

## **H. EVALUATION CRITERIA, SECTION 320.11**

Comments: There were four comments directed to evaluation criteria. Two raised questions concerning relationships between the UCL's and the Mining and Mineral Resources Research Institutes referred to in Section 320.11(4)(v). One comment proposed a selection criterion that would require a review of an applicant institution's history with respect to sale of routine testing services in competition with commercial laboratories and the rejection of proposals from applicants which have provided such services. One comment proposed specific reference to the desirability of interaction of UCL's with commercial laboratories so as to complement their programs with the capabilities of these laboratories rather than to establish duplicate capabilities.

Response: Recognizing that some applicants may be participating in the Mining and Mineral Resources Research Institute Program authorized under Title III of the same Act (Pub. L. 95-87) as the UCL Program (Title VIII), DOE will require that these applicants describe provisions for coordination of MMRRI and UCL program activities, particularly with respect to the

avoidance of duplication. Participation in the MMRRI Program does not preclude designation of an applicant for participation in the UCL Program. DOE does not propose to dictate the manner in which the two programs at any UCL institution must complement each other.

DOE recognizes that some applicant institutions may be required by state statute to provide certain coal-testing services. For this reason, it is not reasonable to specifically exclude applicant institutions from consideration in the UCL Program. On the other hand, the use of UCL funds to develop capabilities and services to be offered in competition with commercial laboratories is prohibited ( Section 320.5). The desirability of collaborative efforts with other organizations (which could include commercial laboratories) is cited in Section 320.5, dealing with UCL functions. DOE intends to give the applicant maximum flexibility in determining the level, scope and nature of collaborative research efforts proposed for a UCL.

Section 320.11(a)(4), Program Management Plans, has been revised to add a new subpart (i) to indicate the importance accorded demonstrated capability and experience in the administration of complete interdisciplinary and/or inter-institutional research programs comparable to a UCL.

Section 320.11(a)(5)(iii) on cost sharing as an element of fiscal management evaluation has been revised to reflect the changes made by DOE in Section 320.8(b)(7), Content of Proposals. The proposal must certify that the required cost sharing will be available for the first program year.

#### **I. SELECTION CRITERIA, SECTION 320.12**

Comment: There were two comments on this section. One requested clarification of the basis for determining the relative need for research on coals of different types and qualities distributed within the various coal provinces, Section 320.12(b). One asked clarification as to the source of data and indices of measurement of coal utilization as a programmatic factor, Section 320.12(c).

Response: The title of Section 320.12 is changed from "Programmatic Factors" to "Selection Criteria." There are no precise indices for determining the relative need for research on various coals in different coal provinces. It is anticipated that such determinations will be derived from justifications contained in the UCL proposals, reviewer comments and the collective judgment of the DOE Selection Panel. Importance of coal utilization as a programmatic selection factor will vary substantially from one state to another and from one coal province to another. Published data on coal utilization, by state and by coal province, along with forecasts of potential coal utilization over the current duration of the UCL program will be referred to by the Selection Panel as additional background information of relevance to the UCL selections.

#### **J. UCL PROGRAM IMPLEMENTATION, SECTION 320.13**

Comments: There were five comments relating to this selection. Four raised questions about DOE plans for awards in FY 1980 and beyond, assuming a \$5M appropriation in FY 1980. One comment urged emphasis on support of "currently outstanding" research capabilities in universities.

Response: DOE has not completed specific plans for UCL program funding in FY 1980. It is probable that all thirteen designated UCL's will receive some level of award. A substantial range in capabilities for research and merit of proposed research may be expected in the proposals of the thirteen designated UCL's. It is probable that several of the more advanced proposals (presently contemplated to be up to five of the 13 designated laboratories) will be selected for funding at a substantial level (at an average of \$500,000 in the initial year). The remaining designated UCL's would receive lesser amounts in the initial year (ranging from \$150,000 to \$300,000) for promising programmatic research efforts and for planning purposes. The contemplated level of funds will, of course, be contingent on the quality of the proposals received. In future years, each UCL may receive greater support commensurate with program development and performance and the availability of UCL program appropriations.

Additional guidance on UCL funding may be included in the UCL Program Solicitation.

#### **K. LIMITATIONS ON THE USE OF FUNDS, SECTION 320.14**

Comment: Four comments were received relative to this section. One was directed at the apparent reordering of Congressional priorities in the allocation of funds. One urged flexibility in requirements to permit adaptation to state requirements. One proposed a prohibition on the UCL funds for research and training projects conducted by non-

educational institutions. One asked for information on the projected time table for UCL's in requesting funds under the limits established by the Act and set forth in Section 320.14(a).

Response: DOE decided to request a modest initial budget for the UCL Program with the expectation of expanding support based on demonstrated performance. This decision required deferment of substantial support for facilities and equipment. This decision does not represent a reordering of Congressional intent regarding facilities and equipment, nor should it be interpreted as a lack of sensitivity by DOE to the importance of facilities and equipment to the success of the UCL Program. Proposers will be required to submit a plan for FY 1980, and subsequent years, which will include estimates of resources required for research operations, facilities and equipment. The Program Solicitation will include additional details on the requirements for plans regarding facilities and equipment.

While the intent of the UCL Program is to support research in institutions of higher education, limited collaborative research with other public and private sector organizations is encouraged and a prohibition against the use of UCL funds in such efforts is not appropriate.

No changes have been made to this section.

#### **L. PROGRAM CONTINUATION, SECTION 320.15**

Comments: Two comments were received that relate to this section. One asked for clarification of the intent of DOE with respect to continuing support for facilities and equipment. One comment raised the issue of the ownership of facilities and equipment in the event support for a UCL is terminated.

Response: Assuming availability of adequate UCL Program funds, DOE would expect to provide limited support for facilities and equipment on a selected basis to the designated laboratories during the initial years of the program. Disposition of facilities and equipment purchased with DOE support will be handled in accordance with provisions in the DOE Assistance Regulations 10 CFR 616 (44 FR 12920, March 8, 1979, Section 600.116).

#### **M. COST-SHARING, SECTION 320.16**

Comment: Nine comments were received relating to this Section. One comment questioned whether an applicant proposing cost-sharing on operating expenses in excess of 50 percent would receive preferential consideration in the selection process. Two comments asked for clarification of cost-sharing requirements on facilities, equipment and start-up costs. Four comments raised questions as to the kinds of costs that could be credited to cost participation on annual UCL operating costs.

Response: While the plan for meeting cost-sharing requirements is an element of the management plan which must be submitted by each applicant, DOE does not intend to make the level of cost-sharing in excess of the requirements of the Act a criterion in the selection process. The intent of the Act is further interpreted by DOE to require in addition to the 50 percent cost share for operating expenses some cost-sharing of facilities, equipment and startup costs. As stated in the Proposed Rule, cost-sharing will be permitted at the aggregate level of the UCL program rather than on a project-by-project basis. With reference to questions regarding the allowability of education-related expenses as a cost-share, in accordance with the definition by DOE of education and training, as related to the UCL Program, ( Section 320.2(g)), only those costs associated with education activities proposed as one of the direct functions of the UCL Program would be considered allowable as a proposed cost-share applicable to UCL program operating expenses. This might include costs associated with the conduct of seminars on UCL research or research conducted through the UCL by advanced students. Specific items proposed as cost-shares by UCL's shall be discussed during negotiations prior to award.

#### **N. REPORTING AND DISSEMINATION OF INFORMATION, SECTION 320.19**

Comment: Three comments were received relating to this section. One comment questioned the need for semiannual performance reports. One comment suggested the need for a mechanism for interaction among coal researchers in the network of UCL's to exchange information and reduce overlapping research. One comment requested clarification as to the scope and level of information dissemination efforts stipulated under Section 320.19(b).

Response: DOE expects to require a brief technical progress report midway in each annual grant period and an annual (or final) report at the end of the grant period which reports in more detail on program activities, technical progress and accomplishments. Section 320.19(a) has been modified to clarify this requirement. This level of reporting is considered

essential to monitor performance of the UCL Program and to provide for its continuity. Although not specifically described in the proposed rule, DOE envisions regular meeting of the directors of the thirteen UCL's and periodic technical meetings of UCL and other researchers for purposes of information exchange. The manner in which research results are disseminated may vary with the nature of the research and its potential users. For example, research on regional problems may require different methods of information dissemination than would a program in fundamental coal science. Therefore, beyond encouraging prompt dissemination of research results, DOE does not specify requirements for information dissemination. Based on these comments and the requirements of the Assistance Regulations, a new Subsection (b) has been added to cover financial and budget reporting requirements.

### **III. ADDITIONAL INFORMATION**

In addition to the changes made in the Proposed Rule as cited above, other changes and improvements have been made for administrative clarification and editorial improvement. Subsequent to the publication of the proposed rule on the University Coal Research Laboratories Program, DOE issued the Final Rule on the Department's Assistance Regulations 10 CFR Part 600 (44 FR 12920-12934, March 8, 1979). These regulations contain regulatory and nonregulatory material concerning administrative and other Federal requirements applicable to recipients of grants and cooperative agreements. The effect of these regulations will be to simplify the application for and the award and administration of DOE assistance funds. It is contemplated that grants will be used as the award instruments to support the designated laboratories. The award and subsequent administration of UCL grants will be conducted in accordance with the provisions of the DOE Assistance Regulations.

In accordance with DOE's obligations under the National Environmental Policy Act of 1969 (NEPA), 42 U.S.C. 4321 et seq., it has been determined that this action does not constitute on a programmatic level a major Federal action significantly affecting the quality of the human environment within the meaning of Section 102(2)(c) of NEPA. Consequently, no environmental impact statement is required. However, DOE has an obligation to review specific programs proposed for funding under this regulation and determine whether a site-specific environmental review is required.

In accordance with its plans for implementing Executive Order 12044, Improving Government Regulations (43 FR 18634, May 1, 1978) DOE has determined that this final regulation is significant because Congress and the DOE regard expanded utilization of coal to be of widespread concern and that the proposed University Coal Research Laboratories can make important contributions to this national objective. DOE has also determined that this regulation will have no major economic impacts, as defined in DOE Order 2030.1, December 12, 1978, and that a regulatory analysis of this program is not required.

This regulation is effective on May 11, 1979. As noted, extensive public comments were received on the Proposed Rule. In addition, five public meetings were held at locations across the country in FY 1978 and suggestions and recommendations made at these and other occasions have been of significant assistance to DOE in preparing and publishing this regulation.

### **IV. TEXT OF THE AUTHORIZING LEGISLATION**

For convenience, the texts of the provisions of Title VIII of the Surface Mining Control and Reclamation Act and the amending legislation authorizing the University Coal Research Laboratories Program are reprinted below.

#### **SURFACE MINING ACT -- TITLE VIII -- UNIVERSITY COAL RESEARCH LABORATORIES -- Establishment of University Coal Research Laboratories**

##### **SECTION 801**

(a). The Administrator, Energy Research and Development Administration (hereafter referred to as "Administrator" in this title), after consultation with the National Academy of Engineering, is authorized and directed to designate ten institutions of higher education at which university coal research laboratories will be established and operated.

(b) In making designations under this section, the Administrator shall consider the following criteria:

- (1) The institution of higher education shall be located in a State with abundant coal reserves.
- (2) The institution of higher education shall have experience in coal research, expertise in several areas of coal research, and potential or currently active, outstanding programs in coal research.
- (3) The institution of higher education has the capacity to establish and operate the coal laboratories to be assisted under this title.

(c) Not more than one coal laboratory established pursuant to this title shall be located in a single State and at least one coal laboratory shall be established within each of the major coal provinces recognized by the Bureau of Mines, including Alaska.

(d) The Administrator shall establish a period, not in excess of ninety days after the date of enactment of this Act, for the submission of applications for designation under this section. Any institution of higher education desiring to be designated under this title shall submit an application to the Administrator in such form, at such time, and containing or accompanied by such information as the Administrator may reasonably require. Each application shall --

(1) describe the facilities to be established for coal energy resources and conversion research and research on related environmental problems including facilities for interdisciplinary academic research projects by the combined efforts of specialists such as mining engineers, mineral engineers, geochemists, mineralogists, mineral economists, fuel scientists, combustion engineers, mineral preparation engineers, coal petrographers, geologists, chemical engineers, civil engineers, mechanical engineers, and ecologists;

(2) set forth a program for the establishment of a test laboratory for coal characterization which, in addition, may be used as a site for the exchange of coal research activities by representatives of private industry engaged in coal research and characterization:

(3) set forth a program for providing research and development activities for students engaged in advanced study in any discipline which is related to the development of adequate energy supplies in the United States. The research laboratory shall be associated with an ongoing educational and research program on extraction and utilization of coal.

(e) The administrator shall designate the ten institutions of higher education under this section not later than ninety days after the date on which such applications are to be submitted.

## **SECTION 802 - FINANCIAL ASSISTANCE**

(a) The Administrator is authorized to make grants to any institution of higher education designated under section 801 to pay the Federal share of the cost of establishing (including the construction of such facilities as may be necessary) and maintaining a coal laboratory.

(b) Each institution of higher education designated pursuant to section 801 shall submit an application to the Administrator. Each such applicant shall --

(1) Set forth the program to be conducted at the coal laboratory which includes the purposes set forth in section 801(d);

(2) Provide assurances that the university will pay from non-Federal sources the remaining costs of carrying out the program set forth;

(3) Provide such fiscal control and funds accounting procedures as may be necessary to assure the proper disbursement of an accounting for Federal funds received under this title;

(4) Provide for making an annual report which shall include a description of the activities conducted at the coal laboratory and an evaluation of the success of such activities, and such other necessary reports in such form and containing such information as the Administrator may require, and for keeping such records and affording such access thereto as may be necessary to assure the correctness and verification of such reports; and

(5) Set forth such policies and procedures as will insure that Federal funds made available under this section for any fiscal year will be so used as to supplement and, to the extent practical, increase the level of funds that would, in the absence of such Federal funds, be made available for the purposes of the activities described in subsections 801(d)(1), (2), and (3), and in no case supplant such funds.

## **SECTION 803 - LIMITATION OF PAYMENTS**

(a) No institutions of higher education may receive more than \$4,000,000 for the construction of its coal research laboratory, including initially installed fixed equipment, nor may it receive more than \$1,500,000 for initially installed movable equipment, nor may it receive more than \$500,000 for new program startup expenses.

(b) No institution of higher education may receive more than \$1,500,000 per year from the Federal Government for operating expenses.

## **SECTION 804 - PAYMENTS**

(a) From the amounts appropriated pursuant to section 806, the Administrators shall pay to each institution of higher education having an application approved under this title an amount equal to the Federal share of the cost of carrying out that application. Such payments may be installments, by way of reimbursement, or by way of advance with necessary adjustments on account of underpayments or overpayments.

(b) The Federal share of operating expenses for any fiscal year shall not exceed 50 per centum of the cost of the operation of a coal research laboratory.

## **SECTION 805 - ADVISORY COUNCIL ON COAL RESEARCH**

(a) There is established an Advisory Council on Coal Research which shall be composed of

(1) The Administrator, ERDA who shall be Chairman;

(2) The Director of the Bureau of Mines of the Department of the Interior;

(3) The President of the National Academy of Sciences

(4) The President of the National Academy of Engineering;

(5) The Director of the United States Geological Survey; and

(6) Six members appointed by the Administrator from among individuals who, by virtue of experience or training, are knowledgeable in the field of coal research and mining, and who are representatives of institutions of higher education, industrial users of coal and coal-derived fuels, the coal industry, mine workers, non-industrial consumer groups, and institutions concerned with the preservation of the environment.

(b) The Advisory Council shall advise the Administrator with respect to the general administration of this title, and furnish such additional advice as he may request.

(c) The Advisory Council shall make an annual report of its findings and recommendations (including recommendations for changes in the provisions of this title) to the President not later than December 31 of each calendar year. The President shall transmit each such report to the Congress.

(d)(1) Members of the Council who are not regular officers or employees of the United States Government shall, while serving on business of the Council, be entitled to receive compensation at rates fixed by the Administrator but not exceeding the daily rate prescribed for GS-18 of the General Schedule under section 5332 of title 5, United States Code, and while so serving away from their homes or regular places of business, they may be allowed travel expenses, including per diem in lieu of subsistence, as authorized by section 5703 of title 5, United States Code, for persons in the Government service employed intermittently.

(2) Members of the Council who are officers or employees of the Government shall be reimbursed for travel, subsistence, and other necessary expenses incurred by them in carrying out their duties on the Council.

(e) Whenever a member of the Council appointed under clauses (1) through (5) is unable to attend a meeting, that member shall appoint an appropriate alternate to represent him for that meeting.

## **SECTION 806 - AUTHORIZATION OF APPROPRIATIONS**

There are authorized to be appropriated not to exceed \$30,000,000 for the fiscal year ending September 30, 1979 (including the cost of construction, equipment, and startup expenses), and \$7,500,000 beginning with the fiscal year 1980 each fiscal year thereafter through the fiscal year ending June 30, 1983, to carry out the provisions of this title.

## **PUBLIC UTILITY REGULATORY POLICIES ACT**

### **SECTION 604 - COAL RESEARCH LABORATORIES.**

(a) Designation -- So much of section 801 of the Surface Mining Control and Reclamation Act of 1977 as precedes subsection (b) of paragraph (2) thereof is amended to read as follows: "Establishment of University Coal Research Laboratories."

"Section 801(a) The Secretary of Energy, after consultation with the National Academy of Engineering, shall designate thirteen institutions of higher education at which university coal research laboratories will be established and operated. Ten such designations shall be made as provided in subsection (e) and the remaining three shall be made in fiscal year 1980.

"(b) In making designations under this section, the Administrator shall consider the following criteria:

"(1) Those ten institutions of higher education designated as provided in subsection (e) shall be located in a State with abundant coal reserves."

(b) Authorization of Appropriations -- Section 806 of such Act is amended to read as follows:  
Authorization of Appropriations

Section 806(a) For the ten institutions referred to in the last sentence of section 801(a), there are authorized to be appropriated not to exceed \$30,000,000 for the fiscal year ending September 30, 1979 (including the cost of construction, equipment, and startup expenses), and not to exceed \$7,500,000 for the fiscal year 1980 and for each fiscal year thereafter through the fiscal year ending before October 1, 1984, to carry out the provisions of this title.

(b) For the three remaining institutions referred to in the last sentence of section 807(a), there are authorized to be appropriated not to exceed \$6,500,000 for the fiscal year 1980 (including the cost of construction, equipment, and startup expenses), and not to exceed \$2,000,000 for each fiscal year after fiscal year 1980 ending before October 1, 1984, to carry out the provisions of this title.

(c) Conforming Amendment -- Title VIII of such Act is amended by striking out the terms "Administrator" and "Administrator, ERDA" in each place they appear and substituting "Secretary of Energy" in each such place.

In consideration of the foregoing. Chapter II of Title 10 of the Code of Federal Regulations is amended by establishing Part 320 as set forth below.

Issued in Washington, D.C., April 23, 1979.

John M. Deutch. Director of Energy Research. {25599}

### **SUBCHAPTER B. CHAPTER II OF TITLE 10 is amended by establishing Part 320 as follows:**

#### **PART 320 -- UNIVERSITY COAL RESEARCH LABORATORIES PROGRAM**

##### Section

320.1	Purpose and scope.
320.2	Definitions.
320.3	Establishment of the program.
320.4	Program objectives.
320.5	Functions of university coal research laboratories.
320.6	Management.
320.7	Eligibility requirements.
320.8	Content of proposals.
320.9	Evaluation and selection procedures.
320.10	Evaluation criteria.
320.11	Selection criteria.

320.12	Program implementation.
320.13	Limitations on the use of funds.
320.14	Program continuation.
320.15	Cost sharing.
320.16	General requirements.
320.17	Patents, data, and copy rights.
320.18	Reporting and dissemination of information.
320.19	Proposal information.
320.20	UCL Program termination.

Authority: Surface Mining Control and Reclamation Act of 1977, Pub. L. 95-87, Title VHI, as amended by the Public Utilities Regulatory Policies Act of 1978, Pub. L. 95-617, Title VI, Section 604; Department of Energy Organization Act, Pub. L. 95-91, Section 644, et seq.

### **SECTION 320.1 - PURPOSE AND SCOPE.**

This part contains the requirements for the conduct of a University Coal Research Laboratories Program, the selection of thirteen institutions of higher education at which the laboratories are to be located and grant awards to establish the laboratories as authorized by Title VIII, Section 801 of the Surface Mining Control and Reclamation Act of 1977 (Pub. L. 95-87), as amended.

### **SECTION 320.2 - DEFINITIONS.**

As used in this chapter, the term --

- (a) "Abundant Coal Reserves" means a state with a demonstrated coal reserve base in excess of 1.5 billion tons.
- (b) "Act" means Title VIII of the Surface Mining Control and Reclamation Act of 1977, Pub. L. 95-87, as amended by the Public Utility Regulatory Policies Act of 1978, Pub. L. 95-617, Title VI, Section 604.
- (c) "Coal Characterization Research" means a program of research to advance knowledge and understanding of the physical and chemical characteristics of different types of coal and the correlation of these characteristics to the behavior of coal in various production, handling and utilization processes. The research program also may be concerned with the development of new techniques and procedures for the characterization of coals.
- (d) "Coal Research" means research that will advance efforts to expand the use of coal as a source of energy. The research may include, but not necessarily be restricted to, investigations relating to resource development, mining, beneficiation, direct utilization, conversion, mine safety, environmental and health effects, transportation, and institutional impacts. The research may relate to coal of any rank and grade.
- (e) "DOE" means the Department of Energy.
- (f) "DOE" Selection Official" means the Secretary of Energy, or his designee, vested with the final authority and responsibility to select and designate the University Coal Research Laboratories.
- (g) "Education and Training," for purposes of the UCL Program, includes the training of advanced students through participation in coal research and coal research seminars. Education and Training also includes limited activities relating to the dissemination of UCL research information through continuing education or related programs and the improvement or upgrading of academic courses on coal-related subjects as a direct result of UCL research activities.
- (h) "Institution of Higher Education" means a four-year university or college with established programs in several areas of coal research and related educational activities and masters and/or doctoral degree programs which must be accredited by the appropriate general regional accrediting agency or where appropriate, by recognized professional accrediting bodies in disciplines related to coal research. An institution of higher education for purposes of eligibility includes single institutions meeting the above qualifications, or a consortium or partnership of institutions which are collectively qualified. A consortium or partnership of institutions must clearly designate a "party" to serve as its agent for proposal submissions, award negotiations, technical reporting, fiscal reporting and audit requirements. In addition, multi-state consortia or

partnerships, must name a "lead" institution and the location of the "lead" institution shall be considered the "home state" for purposes of meeting limitations of the Act with the further provision that a significant part of the UCL program shall be conducted within the "home state." {25600}

(i) "Major Coal Provinces" means the division of the coal fields of the United States into coal provinces as determined by the U.S. Geological Survey (USGS). The USGS has determined the following coal provinces: Alaska, Eastern, Gulf, Interior, Northern Great Plains, Pacific, and Rocky Mountains. The following table further defines the "Major Coal Provinces" by listing all of the states which fall within each province regardless of the abundance of coal reserves. States meeting the abundant coal reserve criteria (in excess of 1.5 billion tons) are italicized:

(1) Alaska Province: Alaska.

(2) Eastern Province: Alabama, Connecticut, Delaware, Florida, Georgia, Kentucky, Maine, Maryland, Massachusetts, Mississippi, New Jersey, New Hampshire, New York, North Carolina, Ohio, Pennsylvania, Rhode Island, South Carolina, Tennessee, Vermont, Virginia, West Virginia.

(3) Gulf Province: Alabama, Arkansas, Georgia, Florida, Kentucky, Louisiana, Mississippi, Missouri, Tennessee, Texas.

(4) Interior Province: Arkansas, Illinois, Indiana, Iowa, Kansas, Kentucky, Michigan, Minnesota, Missouri, Nebraska, New Mexico, North Dakota, Ohio, Oklahoma, South Dakota, Texas, Wisconsin.

(5) Northern Great Plains Province: Colorado, Kansas, Montana, Nebraska, North Dakota, South Dakota, Wyoming.

(6) Pacific Province: Arizona, California, Idaho Nevada, Oregon, Washington.

(7) Rocky Mountains Province: Arizona, Colorado, Idaho, Montana, Nevada, New Mexico, Oregon, Texas, Utah, Washington, Wyoming.

(j) "Operating expenses" includes such costs associated with the development and operation of an ongoing research and related education program as salaries and wages, fringe benefits, travel, publication, computer supplies, research equipment up to \$1,000 in value and other direct and indirect costs associated with the operation of a coal research laboratory.

This item does not include costs associated with the construction of laboratory facilities and buildings, the acquisition and installation of major equipment or for new program startup expenses.

(k) "State" means the States of the United States.

### **SECTION 320.3 - ESTABLISHMENT OF PROGRAM.**

There is established a University Coal Research Laboratories Program under the direction of the Office of Energy Research of DOE for the purposes of expanding research on coal and the training of advanced students and others through participation in such research. This program shall consist of thirteen coal research laboratories located at institutions of higher education which have the potential for and are capable of establishing and operating such a facility. At least ten of the network of thirteen authorized coal research laboratories will be located in States with abundant coal reserves. There will be at least one University Coal Research Laboratory designated in each of the seven coal provinces but not more than one in any State. The University Coal Research Laboratories Program will build upon and strengthen existing or potential coal-related research capabilities at the selected universities and will complement, but not duplicate or supplant, research on coal currently being conducted at universities.

### **SECTION 320.4 - PROGRAM OBJECTIVES.**

The broad objectives of the University Coal Research Laboratories Program (hereafter referred to as the UCL Program) are as follows:

(a) The establishment of a network of coal research laboratories at institutions of higher education which are committed to conducting coal research;

(b) The stimulation of coal research in institutions of higher education;

(c) The training of advanced students and others through participation in coal-related research;

- (d) The establishment of research programs for the characterization of coal in support of UCL research efforts; and
- (e) The promotion of exchange of coal research information.

#### **SECTION 320.5 - FUNCTIONS OF UNIVERSITY COAL RESEARCH LABORATORIES.**

Within the scope of the UCL Program objectives, each UCL shall conduct a research program which addresses significant coal-related research problems and which provides coal research experience to advanced students and others. The coal research program shall build on existing or potential institutional capabilities and resources and focus a majority of the research effort in one or more programmatic research areas reflecting these institutional strengths. Each UCL coal research program shall represent a balance between research and training and, within institutional capabilities, shall address coal research problems of general and/or regional nature. To bring the broadest range of capabilities to bear on its research problems, each UCL is encouraged to establish collaborative research, where appropriate, through cooperative arrangements with other academic institutions, laboratories, industry or other organizations. Each UCL shall propose a program for coal characterization research to be conducted in support of its research activities. This research program may serve as a focal point for the exchange of information on coal characterization research needs and results with representatives of private industry engaged in coal research and characterization but shall not provide services in competition with commercial laboratories capable of offering these services, nor supplant or duplicate such services as are normally provided by commercial laboratories. Each UCL shall establish and maintain regular communication, as appropriate, with the public and private sectors, including State and local governments, the coal producing industry, coal users, the general public and other institutions and organizations concerned with the problems and issues of research on coal as a source of energy. Through such interactions, each UCL shall disseminate information on its research accomplishments and seek inputs concerning research needs and problems.

#### **SECTION 320.6 - MANAGEMENT.**

- (a) The UCL Program shall be managed by a Program Director, University Coal Research Laboratories Program, located within the Office of Energy Research, DOE.
- (b) Each UCL shall be managed by a director selected by the institution. {25601}

#### **SECTION 320.7 - ELIGIBILITY REQUIREMENTS.**

- (a) To be eligible to submit an application and be designated for participation in the UCL Program, the applicant must be an institution of higher education and have accredited masters and/or doctoral degree programs in disciplines related to ongoing and proposed areas of coal research and education. The institution must have experience in coal research, and expertise in several areas of coal research and the potential for, or currently active, outstanding programs in coal research. The institution must have the demonstrated capacity to establish and operate a coal research laboratory.
- (b) To be eligible, an institution shall have or propose to establish such policies and procedures as will insure that the Federal share of funds made available under the UCL Program will be used to supplement and, to the extent practical, increase the level of funds that would, in the absence of such Federal funds, be made available for the purposes of the activities proposed for the UCL and in no case supplant such funds.
- (c) Only one proposal will be accepted from a single institution. An institution which is part of a consortium or partnership shall be subject to this restriction if that institution has been designated lead institution in a consortium or partnership proposal.

#### **SECTION 320.8 - CONTENT OF PROPOSALS.**

- (a) Institutions of higher education meeting the eligibility requirements as set forth in Section 320.7, may submit a proposal in accordance with this regulation and the UCL Program Solicitation to compete for designation as a UCL and Federal financial assistance for approved UCL Programs. The Program Solicitation will specify the number of copies of each proposal and the address of the DOE office where they should be sent.

(b) The proposal shall contain, but not necessarily be limited to the following information:

- (1) A summary statement of institutional eligibility for the UCL Program.
- (2) A summary of scope, quality and history of established coal research and education activities including ongoing coal research and education programs, faculty involvement, student participation, publications, facilities and equipment.
- (3) A statement of goals and objectives of the proposed UCL.
- (4) A description of the organizational structure and management proposed for the UCL.
- (5) A summary of the general plan for research and education activities proposed for the UCL through FY 1984, including a summary of technical projects to be undertaken, investigators and facilities to be committed, involvement of advanced students, a program for coal characterization research, facility and equipment needs, levels and man-years of effort and projected budget requirements.
- (6) Concise project proposals for each individual program activity proposed in the summary plan to permit separate scientific and technical peer review and evaluation of these projects.
- (7) A cost-sharing plan which describes in general terms how the proposal plans to meet the cost-sharing requirements of the UCL program (See Section 320.16, Cost Sharing) for the authorized duration of the UCL Program (See Section 320.21, UCL Program Termination) and a certification of the source, availability and commitment of non-Federal funds to meet cost-sharing requirements for UCL program activities proposed for the first year.

(c) The contents of the proposal described under paragraph (b) of this section, shall be sixty pages or less in length, exclusive of appendices which shall include specific project proposals (paragraph (b)(6) of this section), supportive information concerning ongoing coal-related research and education activities and other relevant information.

(d) Additional information on the format and content for proposals will be specified in a University Coal Research Laboratories Program Solicitation, notice of which shall be published in the Federal Register, and the Commerce Business Daily. The Program Solicitation will further specify the closing date for the submission of proposals. No more than 90 days will be provided for the preparation and submission of proposals.

(e) UCL proposals will be prepared in accordance with the requirements of the DOE Assistance Regulations, 10 CFR Part 600, (44 FR 12920, Mar 8, 1978).

#### **SECTION 320.9 - EVALUATION AND SELECTION PROCEDURES.**

(a) UCL Program proposals shall be subject to the following review and evaluation procedures:

- (1) An initial review shall be conducted by the DOE Selection Panel, appointed by the DOE Source Selection Official, to determine if the proposing institution meets the eligibility requirements contained in Section 320.7 and to determine if the proposal is complete as required by this regulation and the Program Solicitation.
- (2) Proposals from institutions that do not meet the eligibility requirements or the requirements of the Program Solicitation shall be rejected.
- (3) Proposals from institutions meeting the conditions of eligibility and the other application requirements shall be reviewed, evaluated, and ranked in accordance with the evaluation criteria ( Section 320.11) by Technical Reviewers appointed by the DOE Selection Official from among qualified technical experts in areas related to coal research.
- (4) Subsequent to the review and ranking of proposals, an analysis employing the selection criteria ( Section 320.12) will be performed by the DOE Selection Panel.
- (5) The DOE Selection Official, assisted by the DOE Selection Panel and based on the selection criteria, will designate thirteen institutions which individually and collectively are considered to have the greatest potentiality for meeting the objectives of a balanced national UCL Program of coal research and research-related training.
- (6) After designation of the UCL's, DOE will enter into negotiations with each UCL to select and establish the support levels for those project activities to be included in the UCL grant award.

(b) The DOE Selection Official shall announce the designated institutions at which University Coal Research Laboratories will be established and operated within 90 days of the closing date for the submission of proposals.

#### **SECTION 320.10 EVALUATION CRITERIA.**

(a) Proposals from institutions which meet the requirements of eligibility ( Section 320.7) will be evaluated and ranked by DOE using criteria which may include, but not necessarily be limited to the following:

- (1) Understanding of Objectives of UCL Program and Functions of the UCL.
    - (i) Perceptions of coal related needs, problems and issues to be met through research and training.
    - (ii) Awareness of the state-of-the-art in the principal areas of coal research proposed for the UCL.
    - (iii) The relationship of the proposed research to and the differences from current work in the same (fields).
    - (iv) Institutional rationale for participation in the UCL Program including relevance to the various programs and missions of the institution.
    - (v) Relationship of proposed plan to the functions of a UCL as set forth in Section 320.5. {25602}
  - (2) Qualifications of Eligible Institution
    - (i) Scope, quality, and history of established coal research and education programs such as ongoing research and education programs, faculty involvement, student participation, publications, facilities and equipment.
    - (ii) Potential for attracting qualified advanced students.
    - (iii) Qualifications of the investigators committed to the UCL Program.
    - (iv) Role and qualifications of UCL Director.
    - (v) Existing facilities and equipment to be committed to UCL programs.
  - (3) Scientific and Technical Merit of the Proposed Program
    - (i) The qualify of the proposed research.
    - (ii) The role of proposed research in the training of advanced students.
    - (iii) The degree to which the proposed research will advance scientific and technical understanding of the coal-related (problems) under study.
    - (iv) The role of the coal characterization research program in support of proposed UCL research and education activities.
    - (v) Provisions for communicating research results and for interaction with various segments of the public and private sectors concerning UCL activities.
  - (4) Program Management Plans
    - (i) Demonstrated capability and experience in the administration of complex interdisciplinary and/or inter-institutional research programs comparable to a UCL.
    - (ii) Program management plan proposed for UCL.
    - (iii) Plans for managing research and training activities carried on in collaboration with other organizations and institutions.
    - (iii) Reasonableness and appropriateness of the proposed cost plan specifically for UCL program administration.
    - (iv) Nature of institutional commitment to the UCL Program including provisions for institutional support, cost-sharing, program continuity and the relationship of the UCL to the overall academic mission of the institution.
    - (v) Provisions for coordination between the UCL and, if present, a Mining and Mineral Resources Research Institute established and funded under provisions of Title III, Pub. L. 95-87, including program planning, organization, management, and avoidance of program duplication.
  - (5) Fiscal Management
    - (i) The reasonableness and appropriateness of the total costs proposed for the UCL program including research, program operations, facilities, and equipment.
    - (ii) The justification presented for the major cost categories proposed (operating expenses, facilities, major equipment, etc.) with reference to Section 320.14, Limitations on the Use of Funds.
    - (iii) Certification of cost-sharing to meet the specific requirements on laboratory operating expenses and cost-sharing proposed on facilities and equipment requests in the first program year.
- (b) All eligible UCL proposals will be reviewed and evaluated with respect to the above-listed evaluation criteria.

**SECTION 320.11 - SELECTION CRITERIA.**

(a) In making the final selection of the institutions to be designated as the site of a UCL, the following criteria will be considered by the DOE Selection Panel:

- (1) The actual ranking of the proposals with respect to the evaluation criteria.
- (2) The relative need for research on coals of different types and qualities distributed within the various coal provinces.
- (3) Geographic distribution of the applicants with respect to coal provinces, coal reserves, and the utilization of coal on a state and regional basis.

(4) The best overall mix of research specialties, educational potential, and geographic distribution as determined by DOE of coal research programs among those proposed by the designated UCL institutions.

(b) Criteria 320.12(a)(2) through (4), above, are DOE programmatic criteria which DOE will use in the selection of proposals for award and do not reflect on any individual proposal. These criteria will be used by DOE to insure the appropriate mix of awards which meet the overall UCL Program objectives.

**SECTION 320.12 - PROGRAM IMPLEMENTATION.**

Subsequent to the designation of the UCL institutions and subject to the availability of UCL Program funds, the UCL Program Office shall initiate the grant award process. Funding of designated UCL's will depend on the funding requested and the nature of the proposed program by each UCL, the best mix of research and educational activities among the UCL's and the availability of appropriated funds to the UCL Program with the amount of the grant being determined through negotiation as cited above in Section 320.10. In developing specific funding levels for the initial program year, consideration will also be given to the current capabilities and future potential of each individual UCL. All awards will be subject to the availability of appropriated funds.

**SECTION 320.13 - LIMITATIONS ON THE USE OF FUNDS.**

(a) No UCL may receive more than the following total amount of Federal funds:

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	Limit
Construction and fixed equipment	\$4.0 million.
Movable equipment	\$1.5 million.
Start-up expenses	\$0.5 million
Program operations (annual)	\$1.5 million n1

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n1 Federal share shall not exceed 50 percent of the total operating costs for any fiscal year.

(b) The Director of the UCL Program will determine the amount of funds to be advanced to each designated UCL for the initial grant year based on estimates of amounts required to conduct all or parts of the proposed program as agreed to through negotiation with the UCL. Depending on levels of appropriation, the following priorities may apply in the allocation of UCL funds: (1) Research program operating expenses; (2) acquisition of movable equipment; and (3) construction of facilities, acquisition of related fixed equipment and start-up costs.

**SECTION 320.14 - PROGRAM CONTINUATION.**

(a) The budget levels for subsequent year funding of a UCL beyond the initial year will be agreed to for planning purposes during the negotiation of the initial UCL grant. Specific funding levels for subsequent years will be contingent upon (1) technical performance, (2) proposed-continuation program plans and (3) availability of appropriations to the UCL Program. A renewal proposal will be required of each UCL at a time and in a formal mutually agreed to between DOE and the UCL.

(b) Technical performance and technical program plans of each UCL will be reviewed by qualified review panels at intervals to be specified by the UCL Program Office.

(c) The UCL Program Office will determine the scope and level of continued support to each UCL based on program reviews and the allocation of available UCL Program funds.

(d) Subsequent year support to a UCL may be refused at the discretion of the DOE UCL Program Office based, for example, on past performance; failure to continuation program plan; or the level of available USCL Program funds. In such instances, terminal funding at a reduced level for one (1) year may be authorized by the UCL Program Office. {25603}

### **SECTION 320.15 - COST SHARING.**

- (a) DOE is authorized to make grants to pay a Federal share of the costs of establishing and maintaining a UCL, including construction of such facilities as may be necessary, to those institutions of higher education designated in the UCL Program.
- (b) The Federal share of UCL operating expenses for any fiscal year shall not exceed 50 per centum of the cost of operation of a UCL.
- (c) Cost-sharing stipulated by the Act will be governed in accordance with prevailing OMB regulation, FMC 73-3, "Cost-Sharing on Federal Research" and Circular A-110 "Uniform Administrative Requirements for Grants and Other Agreements with Institutions of Higher Education, Hospitals, and Other Non-Profit Organizations." Cost participation may be accomplished by a contribution to any of the cost elements of research projects supported under specific UCL awards, either direct or indirect costs, provided that such costs would otherwise be allowable in accordance with the cost principles authorized in OMB Circular A-21 (dated February 26, 1979), and that the costs are not charged to the Federal government under any other grant or contract. Cost-sharing may vary in amount from project to project within a UCL but the aggregate of cost-sharing for the operating expenses portion of the UCL program must be of equivalent value and match or exceed expenditures of DOE funds in any given grant period. The grantee contributions to the costs of operating the UCL may be in any form, including cash or in-kind contributions (the value of which is determined by DOE), from the institution or third parties, and for any category costs, direct or indirect: Provided, They are non-Federal and are not otherwise counted as cost-sharing on other Federal projects. Education and training activities must be directly included as one of the operating expense functions of the UCL in order that such activities may be considered as part of the proposer's cost-share. Institutions or organizations participating in collaborative projects of the UCL under a subgrant may make cost-sharing contributions which meet the cost-sharing requirement. Grantees must maintain adequate cost-sharing records as well as records of all expenditures.

### **SECTION 320.16 - GENERAL REQUIREMENTS.**

- (a) Policies for and administrative requirements of the UCL research awards will be in accordance with FMC 73-7 (dated December 19, 1973); OMB Circular A-110 (dated July 30, 1976), and the DOE Assistance Regulations Subpart A and B (dated March 8, 1979).
- (b) Each grant under this part shall require that a recipient of support under the UCL program submit a final written report of activities supported in whole or in part by Federal funds made available under the program.

### **SECTION 320.17 - PATENTS, DATA, AND COPYRIGHTS.**

Each grant under the program shall be governed by the provisions of Section 9 of the Federal Nonnuclear Energy Research and Development Act of 1974, 42 U.S.C. 5908, with regard to patent and any agreements by DOE to waive title to inventions that may be made under the program shall be pursuant to 41 CFR Part 9-9. The rights-in-data provisions included in the grant shall be as required by 10 U.S.C. 600.82(c).

### **SECTION 320.18 - REPORTING AND DISSEMINATION OF INFORMATION.**

- (a) Each designated UCL shall submit semiannually brief technical progress reports and annual program performance reports to the DOE UCL Program Office. The annual report shall be submitted concurrent with the renewal proposal and shall include a description of the activities conducted at the UCL and an evaluation of the success of such activities and such other information as may be required by DOE.
- (b) UCL financial and budget reports will be prepared in accordance with OMB Circular A-110, Attachment G, Financial Reporting Requirements.
- (c) The UCL institutions and DOE shall disseminate to the public in an appropriate manner information on coal research findings resulting from program activities of the UCL program. Prompt dissemination of UCL research results to the scientific and technical community shall be encouraged.

**SECTION 320.19 - PROPOSAL INFORMATION.**

Information contained in proposals submitted in response to the subsequent UCL Program Solicitation shall be treated in accordance with ERDA-PR 9-3.150.

**SECTION 320.20 UCL - PROGRAM TERMINATION.**

The UCL Program is authorized to continue until the end of fiscal year 1984. Continuation of the program will depend on the extension of the authorizing legislation and the availability of appropriated funds.

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