

**FEDERAL REGISTER: 44 FR 4632 (January 22, 1979)**

DEPARTMENT OF ENERGY

AGENCY: Office of Energy Research

10 CFR Part 320

University Coal Research Laboratories Program; Proposed Rulemaking and Public Hearing Regarding Policies and Procedures for the University Coal Research Laboratories Program

ACTION: Notice of proposed rulemaking and public hearing.

**SUMMARY:** The Department of Energy proposes to establish the 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 Title VI, 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 with the capacity to establish and operate the coal laboratory. The proposed regulation includes definitions and interpretations of terms included in the authorizing legislation, discussion of proposed eligibility, selection, and evaluation criteria, funding and administrative information necessary for the preparation and submission of proposals for grants for the establishment of university coal research laboratories.

**DATES:** Comments must be received by March 19, 1979, 5:00 p.m., E.S.T.; The proposed effective date of the regulation would be 30 days after publication of the final regulation. The national hearing shall be held on February 23, 1979, 9:30 a.m., E.S.T., in Room 3000A, Federal Building, 12th and Pennsylvania Avenue, N.W. Washington, D.C.

**ADDRESSES:** Send comments and requests to speak to the University Coal Research Laboratories Program, Office of Field Operations Management, Office of Energy Research, Department of Energy, 400 First Street, N.W., Room 501, Washington, D.C. 20545.

**FOR FURTHER INFORMATION CONTACT:**

Richard E. Stephens, Director, Division of Institutional Programs, Office of Field Operations Management, Office of Energy Research, Department of Energy, 400 First Street, N.W., Room 501, Washington, D.C. 20545, 202-376-9387 or 376-9188.

**SUPPLEMENTARY INFORMATION:**

**I. INTRODUCTION**

This regulation proposes to add 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, (hereafter 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 Congress in passing Title VIII of Pub. L. 95-87 recognized that the increased utilization of coal as an alternative energy source to petroleum and natural gas was to be of critical importance in assuring adequate future energy supplies for the Nation. The increase in 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 and the related need to assure an adequate supply of highly trained professional manpower for future energy-related programs in the public and private sectors. The Congress determined that these could 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, 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 expertise and be directed at one or more specific coal research problems. Each designated laboratory is to be 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 laboratory research. Test 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.

## **II. GENERAL COMMENTS**

In implementing the provisions of this legislation, DOE has considered the potential roles of the university coal research laboratories in relation to other ongoing coal research supported by DOE with academic institutions, the DOE laboratories and private industry. DOE's extensive current coal research program is focused on numerous scientific and technical problems related to coal utilization. Recognizing that full public participation in the preliminary planning for the university coal research laboratories program will improve the ultimate quality and substance of this program, the DOE has consulted extensively with university scientists and administrators, representatives of the coal producing and user industry, and others interested in the proposed program. Five public meetings were held across the country in FY 1978 at which numerous suggestions and recommendations were made on the future development of this program. These recommendations have been carefully considered in the preparation of these proposed regulations.

In addition, DOE has received significant assistance in preparing these proposed regulations from the National Academy of Engineering. At the request of DOE, the Academy established a special committee of coal research experts from universities, industry and other Federal agencies to advise DOE on the prospective role of the university coal research laboratories and the criteria to be used by DOE in the selection and designation of these laboratories. The preliminary deliberations from this Academy Committee have been useful to DOE in the preparation of the proposed regulations and the final report of the Committee will provide further guidance to DOE in the implementation of the UCL Program.

Development of the University Coal Research Laboratories Program has involved the planning and preparation of program regulations governing the designation of the university coal research laboratories and the ultimate awarding of grants to implement these laboratory activities. Appropriations for the Program were not requested in FY 1979 since the time required for orderly development of the regulations would preclude grant awards before FY 1980. The next key milestones in the further development of the program will include the issuance of the final regulations after receiving public comments and the publication of a Program Announcement to solicit proposals from institutions of higher education interested in and capable of operating coal research laboratories. Following the review and evaluation of these proposals, DOE will designate thirteen institutions of higher education at which University coal research laboratories will be established and operated. DOE funding of the designated laboratories will be subject to the availability of appropriations to the program in the FY 1980 budget and in subsequent years.

## **III. THE PROPOSED REGULATION**

The proposed regulation describes the purpose and scope of the University Coal Research Laboratories Program, the eligibility requirements, proposed evaluation and selection criteria, the contents of and review procedures for proposals, and plans for continuing operation of the program.

Section 320.2 provides definitions for key terms in the University Coal Research Laboratories Program. Particular attention should be paid to the definitions of abundant coal reserves, major coal provinces, and institutions of higher education. For further reference and guidance, it is also suggested that interested parties consult the following technical references:

Demonstrate Coal Reserve Base of the United States on January 1, 1976. Table 2, U.S. Bureau of Mines, Division of Coal, August 1977.

*PACER* -- Data Entry, Retrieval and Update for the National Coal Resource Data System, Phase I, Figure 2, Coal Provinces of the Coterminous United States, U.S. Geological Survey Professional Paper 978, 1978.

The eligibility requirements for the program are included in Section 320.7. The definition of the term "institution of higher education" is significant to this section as is the requirement to certify sources, availability and commitment of cost-sharing funds to meet requirements stipulated in Sections 802(b) and 804(b) of the Act. Information is also presented on the acceptability of consortium proposals.

Sections 320.8 and 320.9 provide requirements for proposal content and application procedures for the submission of proposals by eligible institutions of higher education following the issuance of a Program Announcement by DOE. The Act specifies that 90 days shall be available for the preparation and submission of these proposals. Information is presented on the evaluation and selection procedures to be followed by the Department upon receipt of proposals. All eligible proposals will be reviewed, evaluated, and ranked by a technical review panel in accordance with the evaluation criteria of Section 320.11. Following the completion of the review and evaluation process and the consideration of programmatic factors (Section 320.12), DOE will designate the thirteen institutions at which university coal research laboratories will be established and operated (Section 320.10). These designations will be made within 90 days from the submission of proposals.

Section 320.11 lists the evaluation criteria against which the proposals will be reviewed and ranked. These criteria shall include but not necessarily be limited to: (a) Understanding of the Objectives of the UCL Program and Functions of the Functions of the UCL; (b) Qualifications of the Eligible Institution; (c) Scientific and Technical Merit of the Proposed Program; (d) Program Management Plans; and (e) Fiscal Management.

Following the designation of the thirteen laboratories and subject to the availability of funds, DOE will initiate the grant award process. As described in Section 320.13, specific funding to be provided each laboratory will depend on such factors as the availability of appropriated funds, the nature and proposed costs of each designated laboratory's program and DOE administrative judgment. Awards will be made as grants following the procedures developed in the DOE *Federal Assistance Regulation*. The proposed DOE *Federal Assistance Regulation* was published in 43 FR 36962 on August 4, 1978.

Proposed Section 320.14 lists the limitations on the funding any coal research laboratory may receive as specified by the Act. Depending on the level of appropriated funds, DOE allocation of funds to the UCL's will be in accordance with the following priorities: (a) research operating expenses; (b) movable research equipment; and (c) construction of facilities and related acquisition of fixed equipment and startup costs.

Procedures for continuation awards are included in proposed Section 320.15. Tentative budget levels for subsequent year operations of the designated laboratories will be agreed to for planning purposes by DOE and the individual laboratories at the outset of the program. Specific funding levels for each coal laboratory in subsequent years will depend on program performance, proposed research and program plans for the next program year and the availability of appropriated funds. DOE's interpretation of the Act's cost sharing requirements is included in proposed Section 320.16. Specifically, 50 percent cost sharing is required for the operating expenses portion of each laboratory's program. Such costsharing must be in cash, in property, or in service of equivalent value. Proposers must certify as to the source, availability, and commitment of cost sharing funds.

Subsequent sections of the proposed regulation provide for the allocation of invention and patent rights under the program. The preparation of reports and dissemination of information and the termination of the overall program if the present authorization is not extended beyond FY 1984.

#### **IV. OPPORTUNITY FOR PUBLIC COMMENT**

Interested individuals and groups are invited to submit written comments with respect to the proposed regulation to the University Coal Research Laboratories Program. Office of Field Operations Management, Office of Energy Research, Department of Energy, 400 First Street, Rm. 501, Washington, D.C. 20545. All comments and related information should be received by March 19, 1979, in order to ensure consideration.

A public hearing on the proposed regulation will be held at 9:30 a.m. on February 23, 1979, in Room 3000A, Federal Building, 12th and Pennsylvania Avenue, N.W., Washington, D.C., to receive oral presentations from interested persons. Any person who has an interest in the proposed regulation may make a written request for an opportunity to make an oral presentation or to ask specific questions about this proposed regulation. Such a request must be received not later than three days prior to the public hearing.

Conduct of Hearings. DOE reserves the right to arrange the schedule of presentations to be heard at the public hearing and to establish the procedures governing the conduct of the hearing. The length of each presentation may be limited, based on the number of persons requesting to be heard.

A DOE official will be designated as presiding officer to chair the hearing. This will not be a judicial or evidentiary-type hearing. Any participant who wishes to ask a question at the hearing may submit the question, in writing, to the presiding officer. The presiding officer will determine whether the question is relevant and material, and whether the time limitations permit it to be presented for answer. Any further procedural rules needed for the proper conduct of the hearing will be announced by the presiding officer.

A transcript of the hearing will be made and the entire record of the hearing, including the transcript, will be retained by DOE and made available for inspection at the DOE Freedom of Information Office, Room GA-152, Forrestal Building, 1000 Independence Avenue, NW., Washington, D.C. 20585, between the hours of 8:00 a.m. and 4:30 p.m., Monday through Friday. Any person may purchase a copy of the transcript from the reporter.

In accordance with DOE's obligations under the National Environmental Policy Act of 1969 (NEPA), 42 U.S.C. 4321 et seq., an evaluation of the potential environmental impacts of the proposed regulation has been prepared by DOE. Based on an environmental assessment of the proposed regulation, DOE has determined that this regulation will not constitute a major Federal action having a significant effect on the quality of the human environment. Accordingly, an environmental impact statement will not be prepared. 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 proposed 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 proposed 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.

## **V. 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 Develop 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.

## **FINANCIAL ASSISTANCE**

**Section 802(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.

## **LIMITATION OF PAYMENTS**

**Section 803(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.

## **PAYMENTS**

**Section 804(a)** From 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 in 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.

## **ADVISORY COUNCIL ON COAL RESEARCH**

**Section 805(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.

## **AUTHORIZATION OF APPROPRIATIONS**

**Section 806.** 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 801(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, it is proposed to amend Chapter II of Title 10 of the Code of Federal Regulations by establishing Part 320 as set forth below.

Issued in Washington, D.C., January 17, 1979.

JOHN M. DEUTCH, *Director of Energy Research* .

Subchapter B. Chapter II of Title 10 is amended by establishing Part 320 as follows:

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### **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 a university coal research laboratory.
320.6	Management.

### **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 the Surface Mining Control and Reclamation Act of 1977, as amended by the Public Utility Regulatory Policies Act of 1978, Pub. L. 95-617, Title VI, Section 604, Coal Research Laboratories.

(c) "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, environmental and health effects, transportation, and institutional impacts. The research may relate to coal of any rank and grade.

(d) "DOE" means the Department of Energy.

(e) "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.

(f) "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 accredited master's and/or doctoral degree programs 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 lead institution for fiscal and reporting purposes. The location of the lead institution shall be considered the "home state" for purposes of meeting limitations of the Act.

(g) "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: (1) Alaska, (2) Eastern, (3) Gulf, (4) Interior, (5) Northern Great Plains, (6) Pacific, and (7) 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, 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, 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

(h) "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 \$500 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 or the acquisition and installation of major equipment.

(i) "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 coal provinces but not more than one in any state. The University Coal Research Laboratories Program will build upon and strengthen existing coal-related research capabilities at the selected 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 test laboratories 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 A UNIVERSITY COAL RESEARCH LABORATORY.**

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 shall engage in collaborative research where appropriate through cooperative arrangements with other academic institutions, laboratories, industry or other organizations. Each UCL shall propose a program for a test laboratory for coal characterization to perform in support of its research activities. This test laboratory may be used as a site for the exchange of coal research activities by 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. Each UCL shall establish and maintain regular communication 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.

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

- (a) To be eligible to 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) As a condition of eligibility, an applicant must submit a certification of the source, availability and commitment of non-Federal funds to meet cost-sharing requirements.

(d) 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 as the lead institution in a consortium or partnership proposal.

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

(a) Institutions of higher education meeting the eligibility requirements as set forth in Section 320.7, may submit an application prepared in compliance with this regulation and the UCL Program Announcement to compete for designation and Federal assistance as a university coal research laboratory. Ten copies of the application proposal must be submitted to the Program Director, University Coal Research Laboratories Program, Office of Energy Research, DOE.

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

(1) A summary statement of institutional eligibility for application to 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 a test laboratory for coal characterization, facility and equipment needs, levels and man-years of effort and projected budget requirements.

(6) Detailed project proposals for each individual program activity proposed in the summary general plan to permit separate peer review and evaluation of these projects.

(7) Institutional certification of the source, availability and commitment of proposed non-Federal funds to meet cost participation requirements.

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

(d) Additional information on the format and content for application proposals are contained in a University Coal Research Laboratories Program Announcement, notice of which shall be published in the FEDERAL REGISTER.

#### **SECTION 320.9 - APPLICATION PROCEDURES.**

An eligible institution of higher education may submit a proposal to DOE in response to the UCL Program Announcement. This Program Announcement will specify the closing date for the submission of proposals. No more than 90 days will be provided for the preparation and submission of proposals.

#### **SECTION 320.10 - EVALUATION AND SELECTION PROCEDURES.**

(a) Proposals submitted in response to the UCL Program Announcement will be reviewed and evaluated in accordance with the following procedures:

(1) An initial review will be conducted by the UCL Program Office 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 Announcement.

(2) Applications from institutions that do not meet the eligibility requirements shall be rejected.

(3) Proposals from institutions meeting the conditions of eligibility shall be reviewed, evaluated, and ranked in accordance with the evaluation criteria ( Section 320.11) by Technical Reviewers appointed by the Director, Office of Energy Research, from among qualified technical experts in areas related to coal research.

(4) Subsequent to the review, evaluation, and ranking of all proposals by the Technical Reviewers, a further analysis of programmatic factors ( Section 320.12) will be carried out in the selection process by a DOE Selection Panel appointed by

the Director, Office of Energy Research.

(5) The DOE Selection Official, assisted by the DOE Selection Panel and based on the evaluation of selection criteria and programmatic factors, 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) At the discretion of the DOE Selection Official, ten UCL institutions in states with abundant coal reserves may be designated initially in the selection process and three additional institutions may be designated subsequently without regard to the abundance of state coal reserves.

(7) After designation of the UCL's, the UCL Program Office will enter into negotiations with such proposer to select and establish support levels for those program activities to be included in the grant award. Projects to be supported will be subject to the level of appropriated funds and UCL programmatic considerations.

(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 320.11 - EVALUATION CRITERIA.**

(a) Proposals from institutions which meet the requirements of eligibility ( Section 20.7) 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.

(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 quality 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 test laboratory for coal characterization 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) Program management plan proposed for UCL.

(ii) 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) Documentation of cost-sharing to meet the specific requirements on laboratory operating expenses and such cost-sharing as may be appropriate to facilities and equipment requests.

(b) All eligible UCL proposals will be reviewed and evaluated technically with respect to the above-Listed evaluation criteria.

#### **SECTION 320.12 - PROGRAMMATIC FACTORS.**

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

(a) The ranking of proposals with respect to the evaluation criteria.

(b) The relative need for research on coals of different types and qualities distributed within the various coal provinces.

(c) Geographic distribution of the applicants with respect to coal provinces, coal reserves, and coal utilization.

(d) 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.

#### **SECTION 320.13 - UCL 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. All awards will be subject to the availability of appropriated funds.

#### **SECTION 320.14 - LIMITATIONS ON THE USE OF FUNDS.**

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

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

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 320.15 - 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. Renewable proposals will be required of each UCL at a time and in a format 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 agree on a mutually acceptable continuation program plan; or the level of available UCL Program funds. In such instances, terminal funding at a reduced level for one (1) year may be authorized by the UCL Program Office.

#### **SECTION 320.16 - 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 regulations, 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 Organization." Cost sharing may vary in amount from project to project 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. 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 320.17 - GENERAL REQUIREMENTS.**

(a) Applicants for participation in the Program are required to comply with the provisions of the DOE Assistance Regulations applicable to grants awarded to institutions of higher education, and, as applicable, such other procedures applicable to grants under the program as DOE may from time to time prescribe, and any Federal requirements applicable to grants awarded under the UCL program.

(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 320.18 - INVENTIONS AND PATENTS.**

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, and any agreements by DOE to waive title to inventions that may be made under the program shall be pursuant to the policies and procedures of the applicable provisions of the DOE Assistance Regulations.

#### **SECTION 320.19 - REPORTING AND DISSEMINATION OF INFORMATION.**

(a) Each designated UCL shall submit semiannual 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 and such other information as may be required by DOE.

(b) 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 320.20 - PROPOSAL INFORMATION.**

Information contained in proposals submitted in response to the subsequent UCL program solicitation shall be treated, handled, and disclosed, and information shall be provided to unsuccessful proposers, in accordance with the policies and procedures set forth in applicable DOE Assistance Regulations and the UCL Program Announcement.

**SECTION 320.21 - UCL PROGRAM TERMINATION.**

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

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