importance. Descr: This effort is designed to provide state-of-the-art technology to develop a system for rapid identification and diagnosis of agents of diseases acquired naturally or by exposure to biological weapons. The system will provide for rapid identification of agents/diseases through exam of clinical specimens such as blood, urine, spinal fluid, and throat washings. The system should be extremely sensitive using very specific reagents such as monoclonal antibodies prepared through hybridoma technology. Methods utilizing the latest in biotechnology techniques should be utilized, such as labeled molecular probes for the identification and analysis of microbes or their products. DA Topic No. A87-333 Title: Subunit vaccines for military importance diseases. Descr: Subunit vaccines are those composed of key portions of killed microorganisms. The aim of this effort is to rid the killed microorganism of undesirable components by utilizing the techniques of microbial engineering and identifying just those parts of an organism that are able to produce immunity w/o side effects and to utilize genetic engineering to produce these purified antigens in large qtys. DA Topic No. A87-334. Title: Nozzle Assy for Army Mass Delousing Outfit. Descr: a requirement exists to dispense a metered amt of pediculicide dust during mass delousing operations. A Nozzle Assy, capable of accurately dispensing 2-4 grams per application should be developed. DA Topic No. A87-335. Title: Carbon dioxide generator. Descr: a requirement exists to develop a lightweight CO2 Generator for attracting arthropods to survey traps. The generator must be useable in remote areas and not require extensive logistical support. DA Topic No. A87-336. Title: vaccine del systems. Descr: a requirement exists for Controlled-Release Systems, carriers, and/or adjuvants compatible with vaccines or subunit vaccines for high-hazard agents of specific interest to the Army. Additionally, a need also exists for new methods of immunization and/or mucosal immunity to these high-hazard agents. See Note 42. (296)

US Dept of Energy, Idaho Operations Office, Attn: Ronald A King, Contract Management Div, 785 DOE Place, Idaho Falls, ID 83402, 208/526-0790

A – STATE GEOTHERMAL RESEARCH AND DEVELOPMENT (PRDA) No. DE-PR07-86ID12662. Intent to receive and consider for support, proposals from state agencies who desire to cost-share on state-oriented research on those aspects of geothermal energy that are not being studied by private industry, but which have the potential for results that will be applicable by industry in development of geothermal resources. The Geothermal Energy Research, Development, and Demonstration Act of 1974 provides for DOE to enter into agreements with Stats to perform geothermal resource analyses and technology transfer. The Congress has mandated that certain funds would be used to assist the States with significant hydrothermal resources. The total amt of DOE funding allotted for this program is $510,000. The DOE cost-share will not exceed $75,000 per award; and the state must cost-share a min of 10% of the gross amt requested. It is anticipated that up to seven awards will be made, depending on the amt of each award. The expected contractual relationship will be grants. As a min requirement, responses shall demonstrate that: (1) the agency is designated by the state as being responsible for geothermal resources within the state; (2) the areas of research are geological, geochemical, geophysical, or hydrological aspects of hydrothermal systems; the proposed research must be on hydrothermal resources, and the states from which the proposals are received must have a significant hydrothermal resource base as defined by DOE research programs or by the US Geological Survey Circulars 790 and 892. The PRDA will be issued during Nov 86 with proposals due approx 90 days thereafter. potential proposers desiring to receive a copy of the PRDA should provide a written request to the above address. (296)

Naval Ocean Research and Development Activity (NORDA), Contrs Office, Attn: Code 102:NMC, NSTL, MS 39529-5004, 601/688-5220

A – DEVELOPMENT OF A PROTOTYPE ATLAS OF OPTICAL ATTENUATION (K-490) Intent to negotiate a contr on a basis of Other Than Full and Open Competition IAW 10 USC 2304(c)(1) with Scripps Institution of Oceanography, University of CA San Diego, La Jolla, CA, because of their capabilities and experience to complete this effort without substantial duplication and unacceptable time delays. This sole-source award is to procure a research effort to 1. develop a prototype Atlas of Optical Attenuation (K-490) in the northeastern Pacific Ocean and the Gulf of AK, 2. adapt Coastal Zone Color Scanner (CZCS) atmospheric correction algorithm for low solar elevations, 3. develop regional models extending CZCS surface K to 100 and 200 m using existing transects of in-situ K profiles, and 4. develop Tactical Environmental Support System (TESS) Regional Optical Transmission/Attenuation Model based on CZCS climatology. It is anticipated that the contr will be for 36 months. See Notes 22 and 46. (295)

Natick Procurement Div, US Army Natick Research, Development and Engineering Center, Natick, MA 01760-5011. Attn: Cheryl Kelly, Cont Specialist, 617/651-4317 or Richard Mobley, Contr Officer, 617/651-4328

A – DEVELOPMENT OF WATER RESISTANT COATINGS, FILMS OR NON-WOVENS FOR CHEMICAL PROTECTION Previous R&D efforts under Cont DAAK60-84-C-0052 with Springborn Labs proved it possible to develop improved semipermeable matls which offer a high rate of moisture vapor transmission while providing a high barrier to water and an auxiliary barrier to chemical, biological agents & water penetration. This follow-on work shall consist of 2 phases. Phase 1: Development of more hydrophilic polyurethane, period of performance, 12 months; Phase II: Pilot coatings studies, period of performance: 9 months. Del FOB destn to US Army Natick Research, Development & Engineering Center. Sol will be released approx 5 Nov 86 and will close approx 5 Dec 86. Funds are not presently avail. Document 15-00025-87K. See Note 11. The Govt will consider any proposal received from a responsible source. (296)

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ASD/PMAS, Wright-Patterson AFB, OH 45433-6503

A – WINDBLAST TESTING The windblast tests will be performed using a variety of equipment provided by the Life Support Program Office (i.e., flight helmets, chemical biological and oxygen masks, survival equipment, life preserver, etc) in a no. of different configurations. The testing facility must be able to attain a peak velocity of 600 + 30 KEAS and provide seat tilt angles of 0 - 34 with a variety of different acft seats to include the ACES II. The contractor shall provide, install, and maintain for the duration of all testing, instrumentation necessary to record the following parameters: windblast velocity vs elapsed time; left and right pitot pressure vs elapsed time (ACES II seat); static pressure vs elapsed time (ACES II seat); mode switch position vs elapsed time (ACES II seat); high speed film cameras (400 frames per second) and pre/post-test photographs must also be provided. Interested sources are requestd to submit their responses within 15 days after publication notices to Bill Zimmer, ASD/AEKXA, Wright-Patterson AFB, OH 513/255-3950. RFP F33657-87-R-0017. (295)

NASA Lewis Research Center, 21000 Brookpark Rd, Cleveland, OH 44135

A – CORRECTION: POWER MANAGEMENT CONTROL AND DISTRIBUTION FOR POWER SYSTEM TEST BED RFP3-111196Q. BOD 15 Oct 86. Contact, Linda Marie Kendrick, at 216/433-2883. Contr officer, Brocone at 216/433-2884. Copies of the sol may be obtained by calling 216/433-6616. Support the Power System Test Bed by defining the power system control strategy and requirements, developing component and system simulations and models; developing control algorithms and software, and delivering control and power system hardware. This will be a Task Order type contr and will contain an option for additional contractor effort within the basic scope of work. Multiple contr awards may be made. All responsible sources may submit a bid, proposal or quotation, as applicable, which shall be considered by the agency. The est closing date is 15 Nov 86. The est period of performance for the Basic Effort is 36 months. The est Period of Performance for the Optional Effort is 12 months. See Notes 27 and 57. (294)

Naval Underwater Systems Center, Code 09, Commercial Acquisition Dept, Bldg 11, Newport, RI 02841-5047. For further info, contact Kathy Ramotowski, Contr Negotiator. To obtain a copy of sol, address letter of request to attn of K Ramotowski, Code 094, NUSC, New London Lab, Bldg 43, New London, CT 06320-5594

A – DESIGN FEATURES AND SPECIFIC DESIGN PARAMETERS FOR AN ADVANCED, PRESTRESSED, SPIRALLY WOUND, EXTENDABLE MAST. The extended member is to exhibit no "buckling" to failure in axial compression. No initial force is to be required to extend the tube from its housing. Destn: Receiving Officer, NUSC, NLON Lab, New London, CT 06320-5594. Sol N66604-87-Q-A337. Contr period: 90 days ARO. Sole source to Ametek, Hunters Spring Div, One Spring Ave, Hatfield, PA 19440. See Note 22. (296)

NASA Johnson Space Center, BC2, Houston, TX 77058

A – DEVELOPMENT OF SHUTTLE AVIONICS EVALUATION REQUIREMENTS (SAVER) RFP 9-BC2-37-7-1P. Closes 12/29/86. Request Sol from BF35/Betty Hall, 713/483-4512 for additional information, obtain from the Contracting Officer, Robert A. Law, 713/483-2141. Continued development of the saver application on the Advanced Information Management (AIM) System. This effort involves maintenance and modification of the AIM System, maintenance and problem solving. A 12-month performance period plus three 12-months options are contemplated. Sol opening and closing dates are targeted for Nov 26, 1986, and December 29, 1986, respectively. Pursuant to the authority contained in 10 U.S.C. 2304 (c) (1), as delineated in Federal Aquisition Regulation 6.302-1 (b) (1), The NASA Lyndon B. Johnson Space Center proposes to enter into negotiations with TRW, Inc. Houston, TX, for this effort. Reference numbered note 22. (295)

Naval Underwater Systems Center, Code 09, Commercial Acquisition Dept, Bldg 11, Newport, RI 02841-5047. For further info contact Sherrie Barca, Contr Negotiator. To obtain copy of sol address letter of request to attn of Sherrie Barca, Code 094, NUSC, New London Lab, Bldg 43, New London, CT 06320-5594

A – DEVELOPMENT OF A SUBMARINE COMMUNICATIONS BUOY WITH ICE-PENETRATING CAPABILITY Buoy requirements definition plus final and complete conceptual design will be required. Qty: 1 job. Destn: Receiving Officer, Naval Underwater Systems Center, New London Lab, New London, CT 06320. Del: 60 days ARO. Sol No. N66604-87-Q-A309. Sole source to TRW Electronic & Defense Sector, One Space Park, Redondo Beach, CA. See Note 22. (Exception: change to read 30 days after publication in lieu of 45 days). (296)

Naval Avionics Center, 6000 E 21st St, Indianapolis, IN 46219-2189

A – PERFORMANCE AND SAFETY ANALYSIS OF TRANSPORTER VEHICLE Sol N00163-87-R-0021. BOD 12/16/86. POC E H Wilson, 317/353-3600. Contr officer: WL Jackson, 317/353-7635. The successful offeror must have past experience and existing dynamic performance/safety analysis capabilities for the transportation of large, critical, and sophisticated Navy equipment; must have tech evaluation expertise in areas of engineering analysis techniques and testing programs for heavy duty Navy transportation equipment; must have familiarity of working with Weapons Spec (WS) 20972. All responsible sources may respond to this synopsis and all such responses shall be considered. See Note 75. (295)

Natick Procurement Division, US Army Natick Research, ment and Engineering Center, Natick, MA 01760-50 Cheryl Kelly, Contr Spec, 617/651-4317

A – DEVELOPMENT OF AN OPTIMAL HUMAN WASTE MANAGE GIENE SYSTEM FOR USE WITH CHEMICAL PROTECTIVE ORGARMI requirement shall consist of two phases: Phase I - Research, Development an Fabrication, and Phase II - Multi-Unit Fabrication and Del. Period of Petorma Del FOB Destn to US Army Natick Research, Development and Engineering tick, MA. Sol will be released approx 5 Nov 86 and will close approx 5 Dec 86 not presently available. Document No. 14-00001-87K. See Note 11. The Govt w any proposal received from a responsible source. (296)

Commander, Naval Ocean Sys Ctr, San Diego, CA 921 Attn: Code 216

A – DEVELOPMENT AND TEST OF HLF-X TRANSDUCER MOD N66001-87-R-0049. CD 15 Nov 87. POC: Joyce Currie, 619/225-6758/6462 of sol(s) Notice: Only written requests will be honored. Anita Dale, Negotiator. J Contr Officer. Development and test of one under Phase I. Fabrication to two Phase II. Mathematical modeling techniques will be used to predict module and formance and to guide the modifications to the prototype design. Sole source coustics, Inc. 999 Lehigh Station Rd. PO Box 23447, Rochester, NY 14692. S sued o/a 5 Dec 86. See Note 22. (296)

Space and Naval Warfare Systems Command, Wash DC 5100

A – ENHANCED HF PROPOGATION PREDICTION Sol N00039-87- POC J Rinaldi. Development of an enhanced HF propogation prediction to prov very fast execution of the min 3.1 HF propogation algorithm within a personal Spawar plans to award a sole source contract to advanced Digital Systems, I Torreyana Rd, Ste 200, San Diego CA 92121. See Note 22. When calling be p state name, address and sol no. Responsible sources may submit an offer wh considered, (294)

Contr Officer, Naval Research Lab, Washington, DC 2037 Code 1233.AC

A – RESEARCH CONTINUATION OF EXISTING CONTRACT ON BE AL OF SHOCK WAVES IN HETEROGENEOUS MATERIALS. Contact Clark, 202/767-4585; Contr Officer, Mary Ann Carpenter, 202/767-4585. Co of existing contr to perform Research studies on the behavior of shock waves in nous matls. Anticipate negotiations with Sachs/Freeman, Inc Landover, MD. Se 68. (295)

National Cancer Institute, Research Contrs Branch, Blair Rm 2A07, NIH, Bethesda, MD 20892

★ **A – SURVEILLANCE, EPIDEMIOLOGY AND END RESULTS** Sol 55422. BOD 11/1/86. POC Dorothy Coleman, Contr Officer. Negotiations will b ed with the CT Dept of Health Services, 150 Washington Street, Hartford, CT continuation of the above mentioned service. This organization has the prerequi edge, experience and facilities for performance of the proposed procurement b its preliminary and current work on this project. (294)

Natick Procurement Div, US Army Natick Research, Deve and Engineering Center, Natick, MA 01760-5011; Attn Kelly, Contract Specialist, 617/651-4317

A – FABRICATE 10 ADDITIONAL BURNER AND FUEL VALVE ASSE Negotiations will be conducted with International Thermal Research, Richmond, modify contract number DAAK60-86-C-0040. Document No. 16-00117-86K. See (296)

DOT, Fed Hwy Admin, Contracts & Procurement, 400 SW, Rm 4410, Washington, DC 20590

➊ **A – CORRECTION: WORK ZONE TRAFFIC CONTROL DELI FOR CHANNELIZATION,** RFP No. DTFH61-87-R-00025. BOD 1 Dec 86. Co Bonnie Tereshenko, HCP-31, 202/366-4233. Approx issue date extended to 3 Closing date has been extended to 1 Dec 86. (295)

US Army Strategic Defense Command, Contracting and tion Management Office, DASD-H-CRS, Attn: Tom 205/895-3000, POB 1500, Huntsville, AL 35807-3801

A – CORRECTION: "STRATEGIC DEFENSE INITIATIVE PROJECT LIED DEFENSE SYSTEMS SURVIVABILITY ANAYLSIS". RFP DASG60 8 which appeared in Issue No. 9198, dtd 20 Oct 86, is amended to Delete Note 44.

H Expert and Consultant Services

Ministry of Education and Culture (MEC), Technical and Vo al Pgm (PROMEET/AMER), Edificio Banco de los Andes, 1001, Avenida Amazonas 747, Casilla 6655 CCI, Quito, Ec Tel 55-17-54, Ing. Carlos Colamarco, director, Arq. Luis assistant director

H – ECUADOR: TECHNICAL EDUCATION EC/RB-1514-PRO The tion, improvement and diversification of tech and vocational education in Ecua pgm will consist of 3 subprograms, as follows: (1) The strengthening of Dept of T cation (DET), a dept of the MEC. This will involve the construction of the Nationa cal Education Workshop with a total of approx 4,800 sq meters, the acquisition of equipment, the training of some 56 staff members of both the DET and provinc

importance. Descr: This effort is designed to provide state-of-the-art technology to develop a system for rapid identification and diagnosis of agents of diseases acquired naturally or by exposure to biological weapons. The system will provide for rapid identification of agents/diseases through exam of clinical specimens such as blood, urine, spinal fluid, and throat washings. The system should be extremely sensitive using very specific reagents such as monoclonal antibodies prepared through hybridoma technology. Methods utilizing the latest in biotechnology techniques should be utilized, such as labeled-molecular probes for the identification and analysis of microbes or their products. DA Topic No. A87-333. Title: Subunit vaccines for military importance diseases. Descr: Subunit vaccines are those composed of key portions of killed microorganisms. The aim of this effort is to rid the killed microorganism of undesirable components by utilizing the techniques of microbial engineering and identifying just those parts of an organism that are able to produce immunity w/o side effects and to utilize genetic engineering to produce these purified antigens in large qtys. DA Topic No. A87-334. Title: Nozzle Assy for Army Mass Delousing Outfit. Descr: a requirement exists to dispense a metered amt of pediculicide dust during mass delousing operations. A Nozzle Assy, capable of accurately dispensing 2-4 grams per application should be developed. DA Topic No. A87-335. Title: Carbon dioxide generator. Descr: a requirement exists to develop a lightweight CO2 Generator for attracting arthropods to survey traps. The generator must be useable in remote areas and not require extensive logistical support. DA Topic No. A87-336. Title: vaccine del systems. Descr: a requirement exists for Controlled-Release Systems, carriers, and/or adjuvants compatible with vaccines or subunit vaccines for high-hazard agents of specific interest to the Army. Additionally, a need also exists for new methods of immunization and/or mucosal immunity to these high-hazard agents. See Note 42. (296)

US Dept of Energy, Idaho Operations Office, Attn: Ronald A King, Contract Management Div, 785 DOE Place, Idaho Falls, ID 83402, 208/526-0790

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ASD/PMAS, Wright-Patterson AFB, OH 45433-6503

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NASA Lewis Research Center, 21000 Brookpark Rd, Cleveland, OH 44135

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Naval Underwater Systems Center, Code 09, Commercial Acquisition Dept, Bldg 11, Newport, RI 02841-5047. For further info, contact Kathy Ramotowski, Contr Negotiator. To obtain a copy of sol, address letter of request to attn of K Ramotowski, Code 094, NUSC, New London Lab, Bldg 43, New London, CT 06320-5594

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NASA Johnson Space Center, BC2, Houston, TX 77058

A – DEVELOPMENT OF SHUTTLE AVIONICS EVALUATION REQUIREMENTS (SAVER) RFP 9-BC2-37-7-1P. Closes 12/29/86. Request Sol from BF35/Betty Hall, 713/483-4512 for additional information, obtain from the Contracting Officer, Robert A. Law, 713/483-2141. Continued development of the saver application on the Advanced Information Management (AIM) System. This effort involves maintenance and modification of the AIM System, maintenance and problem solving. A 12-month performance period plus three 12-months options are contemplated. Sol opening and closing dates are targeted for Nov 26, 1986, and December 29, 1986, respectively. Pursuant to the authority contained in 10 U.S.C. 2304 (c) (1), as delineated in Federal Adusition Regulation 6.302-1 (b) (1), The NASA Lyndon B. Johnson Space Center proposes to enter into negotiations with TRW, Inc. Houston, TX, for this effort. Reference numbered note 22. (295)

Naval Underwater Systems Center, Code 09, Commercial Acquisition Dept, Bldg 11, Newport, RI 02841-5047. For further info contact Sherrie Barca, Contr Negotiator. To obtain copy of sol address letter of request to attn of Sherrie Barca, Code 094, NUSC, New London Lab, Bldg 43, New London, CT 06320-5594

A – DEVELOPMENT OF A SUBMARINE COMMUNICATIONS BUOY WITH ICE-PENETRATING CAPABILITY Buoy requirements definition plus final and complete conceptual design will be required. Qty: 1 job. Destn: Receiving Officer, Naval Underwater Systems Center, New London Lab, New London, CT 06320. Del: 60 days ARO. Sol No. N66604-87-Q-A309. Sole source to TRW Electronic & Defense Sector, One Space Park, Redondo Beach, CA. See Note 22. (Exception: change to read 30 days after publication in lieu of 45 days). (296)

Naval Avionics Center, 6000 E 21st St, Indianapolis, IN 46219-2189

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Commander, Naval Ocean Sys Ctr, San Diego, CA 92152-5000; Attn: Code 216

A – DEVELOPMENT AND TEST OF HLF-X TRANSDUCER MODULES Sol: N66001-87-R-0049. CD 15 Nov 87. POC: Joyce Currie, 619/225-6758/6462 (for copies of sols) Notice: Only written requests will be honored. Anita Dale, Negotiator. Julie Brooke, Contr Officer. Development and test of one under Phase I. Fabrication to two under opt Phase II. Mathematical modeling techniques will be used to predict module and array performance and to guide the modifications to the prototype design. Sole source to Hydroacoustics, Inc. 999 Lehigh Station Rd. PO Box 23447, Rochester, NY 14692. Sol to be issued o/a 5 Dec 86. See Note 22. (296)

Space and Naval Warfare Systems Command, Wash DC 20363-5100

A – ENHANCED HF PROPOGATION PREDICTION Sol N00039-87-R-0115(S). POC J Rinaldi. Development of an enhanced HF propogation prediction to provide for the very fast execution of the min 3.1 HF propogation algorithm within a personal computer. Spawar plans to award a sole source contract to advanced Digital Systems, Inc. 10975 Torreyana Rd, Ste 200, San Diego CA 92121. See Note 22. When calling be prepared to state name, address and sol no. Responsible sources may submit an offer which will be considered. (294)

Contr Officer, Naval Research Lab, Washington, DC 20375-5000, Code 1233.AC

A – RESEARCH CONTINUATION OF EXISTING CONTRACT ON BEHAVIORAL OF SHOCK WAVES IN HETEROGENEOUS MATERIALS. Contact, Annetta Clark, 202/767-4585; Contr Officer, Mary Ann Carpenter, 202/767-4585. Continuation of existing contr to perform Research studies on the behavior of shock waves in heterogenous matls. Anticipate negotiations with Sachs/Freeman, Inc Landover, MD. See Note 22, 68. (295)

National Cancer Institute, Research Contrs Branch, Blair Building, Rm 2A07, NIH, Bethesda, MD 20892

★ **A – *SURVEILLANCE, EPIDEMIOLOGY AND END RESULTS*** Sol N01-CN-55422. BOD 11/1/86. POC Dorothy Coleman, Contr Officer. Negotiations will be conducted with the CT Dept of Health Services, 150 Washington Street, Hartford, CT 06106 for continuation of the above mentioned service. This organization has the prerequisite knowledge, experience and facilities for performance of the proposed procurement by virtue of its preliminary and current work on this project. (294)

Natick Procurement Div, US Army Natick Research, Development and Engineering Center, Natick, MA 01760-5011; Attn: Cheryl Kelly, Contract Specialist, 617/651-4317

A – FABRICATE 10 ADDITIONAL BURNER AND FUEL VALVE ASSEMBLIES. Negotiations will be conducted with International Thermal Research, Richmond, BC, CN to modify contract number DAAK60-86-C-0040. Document No. 16-00117-86K. See Note 22. (296)

DOT, Fed Hwy Admin, Contracts & Procurement, 400 7th St, SW, Rm 4410, Washington, DC 20590

A – CORRECTION: WORK ZONE TRAFFIC CONTROL DELINEATION FOR CHANNELIZATION, RFP No. DTFH61-87-R-00025. BOD 1 Dec 86. Contact, Ms Bonnie Tereshenko, HCP-31, 202/366-4233. Approx issue date extended to 30 Oct 86. Closing date has been extended to 1 Dec 86. (295)

US Army Strategic Defense Command, Contracting and Acquisition Management Office, DASD-H-CRS, Attn: Tom Elkins, 205/895-3000, POB 1500, Huntsville, AL 35807-3801

A – CORRECTION: "STRATEGIC DEFENSE INITIATIVE PROJECT FOR ALLIED DEFENSE SYSTEMS SURVIVABILITY ANAYLSIS". RFP DASG60-87-R-0014 which appeared in Issue No. 9198, dtd 20 Oct 86, is amended to Delete Note 44. (295)

H Expert and Consultant Services

Ministry of Education and Culture (MEC), Technical and Vocational Pgm (PROMEET/AMER), Edificio Banco de los Andes, Oficina 1001, Avenida Amazonas 747, Casilla 6665 CCI, Quito, Ecuador; Tel 55-17-54, Ing. Carlos Colarrea, director, [illegible] Luis Rueda, assistant director

H – ECUADOR: TECHNICAL EDUCATION, EC/RB-1514-PRO. The organization, improvement and diversification of tech and vocational education in Ecuador. The pgm will consist of 3 subprograms, as follows: (1) The strengthening of Dept of Tech Education (DET), a dept of the MEC. This will involve the construction of the National Technical Education Workshop with a total of approx 4,800 sq meters, the acquisition of training equipment, the training of some 56 staff members of both the DET and provincial direc-

CRITERIA EVALUATION

Evaluator_____ Proposal No._____

Proposer_____

(a) Criterion A - Statement of Work

(1) Usefulness of the proposed research on resource assessment, resource development, or technical assistance and related activities to industry and others in the development of geothermal resources.

Strengths:

Weaknesses:

Clarification of Information Desired:

(a)(1) Score_____

CRITERIA EVALUATION

Evaluator_____ Proposal No._____

Proposer_____

(a) Criterion A - Statement of Work

(2) Technical quality of the proposed work, including consideration of the merit of the proposed approach and probability of achieving positive results.

Strengths:

Weaknesses:

Clarification of Information Desired:

(a)(2) Score_____

CRITERIA EVALUATION

Evaluator_____ Proposal No._____

Proposer_____

(a) Criterion A - Statement of Work

(3) The significance of the hydrothermal resource base.

Strengths:

Weaknesses:

Clarification of Information Desired:

(a)(3) Score_____

CRITERIA EVALUATION

Evaluator_____ Proposal No._____

Proposer_____

(b) Criterion B - Qualification and Capabilities

(1) Key personnel will be evaluated as to their capability, knowledge and understanding of the technology involved in the proposed work, as demonstrated by education, publication, and work experience.

Strengths:

Weaknesses:

Clarification of Information Desired:

(b)(1) Score_____

CRITERIA EVALUATION

Evaluator_____ Proposal No._____

Proposer_____

(b) Criterion B - Qualification and Capabilities

(2) Proposing organization's and subcontractor's capabilities with regard to availability of the necessary facilities and support. Also, past technical performance.

Strengths:

Weaknesses:

Clarification of Information Desired:

(b)(2) Score_____

CRITERIA EVALUATION

Evaluator_____ Proposal No._____

Proposer_____

(c) Criterion C - Cost-Sharing

The degree of cost-sharing and the ability of the offeror to provide its cost-share commitment.

Strengths:

Weaknesses:

Clarification of Information Desired:

(c) Score_____

CRITERIA EVALUATION

Evaluator_____ Proposal No._____

Proposer_____

(d) Criterion D - Project Financial Plan

Determine the realism and reasonableness of the proposed costs, manhours, duration of the total project and adequacy of cost breakdown by cost element and tasks (Federal Assistance Budget Information Form).

Strengths:

Weaknesses:

Clarification of Information Desired:

(d) Score_____

CRITERIA EVALUATION

Evaluator_____ Proposal No._____

Proposer_____

Proposed Cost - Reasonableness of cost and probable cost to the Government will be considered. The proposed costs will be considered as an indicator of the offeror's understanding of the work. The question to be determined by the Source Selection Official is whether an otherwise better proposal is with the apparent cost difference.

Comments:

Clarification of Information Desired:

T2e-1097K

DOE F 1325.8
(12-80)

United States Government

Department of Energy

rec SLC Sept. 2, '86

memorandum

Received by
D. Idaho Operations Office

DATE: AUG 20 1986

REPLY TO ATTN OF: CE-34

SUBJECT: Fiscal Year 1986 Funding for the DOE Geothermal State Cooperative Reservoir Analysis Program of the Geothermal Technology Division

CERTIFYING OFFICIAL
Name: Fred Glatstein
Signature:
Date: 8/12

TO: Troy E. Wade II, Manager
Idaho Operations Office

This memorandum authorizes Fiscal Year 1986 funding of $550,000 (BA/BO) in operating funds under Budget and Reporting (B&R) Number AM 15-10 for the Idaho Operations Office for procurements described in the attached guidance.

Attached to this authorization for your reference is a copy of the FTP dated 6/19/86 provided to Headquarters by your office for the State Cooperative Reservoir Analysis Program. The Idaho Operations Office will develop detailed FY 1986 statements of work for the State Cooperative Reservoir Analysis Program solicitation and conduct the evaluation of proposals.

Any significant change in program direction requires the prior concurrence of the Headquarters Program Manager and the approval of the Director, Geothermal Technology Division and the Director, Office of Renewable Technologies.

The Idaho Operations Office Approved Funding Program should be revised to reflect this authorization. The Headquarters contact for this authorization is Marshall Reed, telephone 252-8076.

Robert L. San Martin
Deputy Assistant Secretary
for Renewable Energy
Conservation and Renewable Energy

Attachments

CPU
86-315

AUG 18 1986
08/18/86

Howard Ross
UURI
from Peggy Brookshire

ATTACHMENT

FY 1986 GUIDANCE

State Cooperative Reservoir Analysis Program

Funding of $550,000 is authorized for the State Cooperative Reservoir Analysis Program for a solicitation for State Government Agencies (usually the office of the State Geologist or State Water Resources Director) designated as responsible for geothermal resources within their states to cost share geothermal research projects with the Department of Energy. Only those states with identified or potential geothermal resources (as determined by the USGS assessments in Circulars 790 and 892) are eligible to participate.

The Idaho Operations Office has the prime field responsibility for the entire State Cooperative Reservoir Analysis Program. Project coordination by the Idaho Operations Office includes contracting for any required technical assistance needed to monitor the research projects.

Research on the selection, testing, and interpretation of new technologies designed to locate and characterize hidden geothermal reservoirs should be encouraged. The data gathered by this research (cost-shared with the states) should be incorporated in existing geothermal libraries and be made available to the public.

The contractors will provide weekly reports of significant events, quarterly technical progress reports, and final technical reports on each completed task.

COMPARISON OF FY 1986
HOUSE-SENATE APPROPRIATION MARKS

Technology

HOUSE

GEOTHERMAL

Fiscal year 1985 appropriation	$31,844,000
Fiscal year 1986 estimate	25,200,000
Fiscal year 1986 recommendation	26,200,000
Change from estimate	+1,000,000

Geothermal resources include steam, hot water, geopressured methane, hot dry rock, and magma. The geothermal energy research and development program is aimed at resolving the technical problems which include uncertainties in determining size and life of reservoirs, unusually high drilling costs and lack of well stimulation techniques, the need for injection technology for economic disposal of spent brines, major corrosion and materials problems, environmental problems, and lack of efficient components.

The Committee directs that the Department continue, not less than $1,000,000, within available funds, to pursue the initiative begun in FY 1984 to drill a deep research well in the Salton Sea geothermal field to aid in understanding of future geothermal resources and for other scientific purposes. An additional $1,000,000 is provided for geopressure research to continue monitoring of test wells.

SENATE

GEOTHERMAL

The Geothermal Research and Development Program is aimed at resolving technical problems that preclude the private sector from fully developing our vast geothermal resources. The Committee recommends $27,200,000 for geothermal activities, an increase of $2,000,000 over the budget request and $1,000,000 over the House allowance.

Hydrothermal industrialization.—The Committee includes $2,000,000 to continue a minimal effort in the hydrothermal area. These funds will assist States with significant hydrothermal resources to continue programs relating to resource assessment, resource development, technical assistance, and related activities. An amount of $320,000 is included for continuation of the National Geothermal Information Service and Technical Assistance Program.

The Committee recommendation includes $1,060,000 for building retrofit work and additional pipeline construction for the geothermal district heating system operated by the city of Boise, ID. The Department is directed to promptly process the pending application made by the geothermal resource owners for renegotiation of the terms of their geothermal loan guaranty.

Geopressured resources.—The recommendation includes $3,600,000 for geopressured resources, the same as the budget request. This funding will continue analysis of long-duration flow test data from the design wells.

Geothermal technology.—The Committee recommends $20,800,000 for geothermal technology activities, the same as the budget request and the House allowance. The Committee concurs with the House proposal in support of the Salton Sea scientific drilling project.

The recommendation includes an additional $2,000,000 for hot dry rock research to restore the program to the 1985 funding level.

Due to the advances in hot dry rock research, the Committee believes it appropriate to endorse a project to demonstrate the commercial viability of the technology. Accordingly, the Committee includes $425,000 for a commercialization project in the southern Rocky Mountain area and directs the Department to proceed with a request for proposals.

ID F-5700.8 (Rev. 11-85)
Ref DOE Order 5700.7

U.S. DEPARTMENT OF ENERGY

FIELD TASK PACKAGE PROPOSAL/AGREEMENT

1. Field Work Package Number	2. Field Task Package Number	3. Task Sequence Number	4. Revision Number	5. Date Prepared
				06/19/86

6. Field Task Package Title	7. Field Work Package Title
STATE COOPERATIVE RESERVOIR ANALYSIS PROG.	GEOTHERMAL TECHNOLOGY DEVELOPMENT

8. Budget and Reporting Code	9. Field Task Package Term	10. Contractor Name	11. Code
AM 15 10 00 0	Begin 0 8 0 1 8 6 End 0 9 3 0 8 7	DOE-Idaho	

12. Contractor Task Manager	13. Principal Investigators	14. Is this task package included in the current Institutional Plan?
P. A. M. Brookshier		■ Yes ☐ No

15. Work Location (if different from contractors main office):

a. Name of Facility

b. City

c. State

d. Zip Code

16. Does this task package include any management service efforts?

☐ Yes ■ No

17. Task Description (200 words or less)

The goal of the State Cooperative Reservoir Analysis Program is to cost-share research to be performed by State agencies on those aspects of geothermal systems that are not being studied by private industry, but which have the potential for results that will be applicable by industry or the public in development of geothermal resources. The State Cooperative Reservoir Analysis Program supports research only on hydrothermal systems. The areas of research are in the geological, geochemical, geophysical, and hydrological aspects of hydrothermal systems. The Geothermal Energy Research, Development, and Demonstration Act of 1974 provides for DOE to enter into agreements with States to perform geothermal resource assessments. Congress directed that FY 1986 funding be used to continue this program. This program will be executed by solicitation for proposals by State agencies or universities. The State cost share is to be a minimum of 10% and the DOE share will not exceed $75,000 per proposal. It is anticipated that there will be only one proposal awarded per state.

The cost breakdown of this program is as follows:

Monitoring and support services from UURI	$ 40,000
Funds available for the RFP	510,000

18. Contractor Task Manager/Date

Brookshier by MB (Signature) 6/19/86 (Date)

18a. Program Categorization (Fill in the appropriate square)

- [ ] BASIC & APPLIED RESEARCH
- [ ] EXPLORATORY DEVELOPMENT
- ■ TECHNOLOGY DEVELOPMENT
- [ ] ENGINEERING DEVELOPMENT
- [ ] DEMONSTRATION
- [ ] COMMERCIALIZATION

19. Detail Attachments (See instructions) a. ☐ FACILITY REQUIREMENTS b. ☐ PUBLICATIONS c. ■ PURPOSE d. ■ BACKGROUND e. ☐ APPROACH f. ■ TECHNICAL PROGRESS/JUSTIFICATION g. ■ FUTURE ACCOMPLISHMENTS h. ■ RELATIONSHIPS TO OTHER PROJECTS i. ■ ENVIRONMENTAL EVALUATION j. ■ EXPLANATION OF MILESTONES k. ☐ CAPITAL EQUIPMENT JUSTIFICATION l. ☐ INVENTORIES JUSTIFICATION m. ☐ AFL ANALYSIS n. ☐ OTHER _____

ID F-5700.C (Rev. 11-85)
Ref: DOE Order 5700.7

U.S. DEPARTMENT OF ENERGY

FIELD TASK PACKAGE PROPOSAL/AGREEMENT

TASK REQUIREMENTS FOR OPERATING/EQUIPMENT—COSTS AND OBLIGATIONS

Contractor Name	Field Work Package Number	Field Task Package Number	Task Sequence Number	Revision Number	Date Prepared
DOE-Idaho					06/19/86

Field Task Package Title: STATE COOPERATIVE RESERVOIR ANALYSIS PROGRAM

20. Staffing (in full person years)	FY-1986	FY-1987 Budget			FY-1988
		President's	Revised	Authorized	
a. Scientific	0		0		0
b. Other Direct	0		0		0
c. Total Direct	0		0		0
21. Obligations and Costs (in thousands)					
a. Total Costs (BO)	$ 550	$	$ 0	$	$ 0
1. Total Direct Costs	$	$	$	$	$
(a) Direct Salaries					
(b) Materials & Supplies					
(c) Subcontracts					
(d) Travel					
(e) Computer Services					
(f) Low Value Capital Equpment					
(g) Other _____					
2. Total Overhead Costs	$	$	$	$	$
(a) Direct Labor Burden					
(b) G&A Expenses					
(c) Common Support					
b. Total Obligations (BA)	$ 550	$	$ 0	$	$ 0
c. Uncosted Obligations @ 9/30/1985 $ _____					
22. *Equipment (in thousands)*					
a. Equipment Costs (BO)	$ 0	$	$ 0	$	$ 0
b. Equipment Obligations (BA)	$ 0	$	$ 0	$	$ 0
c. Uncosted Obligations @ 9/30/1985 $ 0					
23. Other Costs and Obligations (not in 21.)					
a. Inventory Change Costs (BO)	$ 0	$	$ 0	$	$ 0
b. Inventory Change Obligations (BA)	$ 0	$	$ 0	$	$ 0
c. Uncosted Obligations @ 9/30/1985 $ 0					
d. Other Costs (BO)	$ 0	$	$ 0	$	$ 0
e. Other Obligations (BA)	$ 0	$	$ 0	$	$ 0

U.S. DEPARTMENT OF ENERGY

FIELD TASK PACKAGE PROPOSAL/AGREEMENT

TASK REQUIREMENTS FOR OPERATING/EQUIPMENT—COSTS AND OBLIGATIONS

ID F-5700.E (Rev. 11-85)
Ref: DOE Order 5700.7

Contractor Name	Field Work Package Number	Field Task Package Number	Task Sequence Number	Revision Number	Date Prepared
DOE- Idaho					06/19/86

Field Task Package Title: STATE COOPERATIVE RESERVOIR ANALYSIS PROGRAM

24. Five Year Plan (in thousands) (Based on Constant 1988 Dollars)	FY-1988	FY-1989	FY-1990	FY-1991	FY-1992
a. Total Operating Costs (BO)	$ 0	$ 0	$ 0	$ 0	$ 0
b. Total Operating Obligations (BA)	$ 0	$ 0	$ 0	$ 0	$ 0
c. Total Operating Staffing (Person Years)	0	0	0	0	0
d. Total Equipment Costs (BO)	$ 0	$ 0	$ 0	$ 0	$ 0
e. Total Equipment Obligations (BA)	$ 0	$ 0	$ 0	$ 0	$ 0
f. Inventory Change Costs (BO)	$ 0	$ 0	$ 0	$ 0	$ 0
g. Inventory Change Obligations (BA)	$ 0	$ 0	$ 0	$ 0	$ 0

25. Milestone Schedule	Proposed Schedule Begin	Proposed Schedule End	Authorized Schedule Begin	Authorized Schedule End
Program Coordination - Level of Effort	10/86	09/87		
(Detailed Milestone Schedule will be developed based on when the funds become available.)				
Procurement of monitoring and support services.				
Award of research contracts.				
Research Investigations.				
Publication of results.				

C. PURPOSE

The purpose of this program is to conduct research on the geothermal resources of several states in which a significant geothermal potential exists. The objective of the program is to conduct cost-shared research with State agencies to determine the location, size, and other parameters of suspected geothermal resources.

D. BACKGROUND

Many regions in the United States are suspected of containing significant geothermal resources, as evidenced by deep thermal water and high heat flows; but these regions contain large areas with no surface thermal manifestations to indicate the geothermal activity. Only those states with identified or potential geothermal resources (as determined by the U. S. Geological Survey geothermal resource assessments in Circulars 790 and 892) will be considered significant. Previous research conducted under the State Cooperative Reservoir Analysis Program helped delineate the areas of identified and potential geothermal resources of USGS Circular 892.

E. APPROACH

The program will consist of DOE cost-sharing research with the State agencies to gather the fundamental information needed to increase the knowledge of geothermal systems. DOE will cost-share up to 90%of the allowable cost of research projects associated with data collection and analysis. DOE may perform, at its own expense, further data gathering and analysis for resource parameters. All data and analyses will be published for use by industry, public citizens, and other researchers interested in the data.

F. TECHNICAL PROGRESS/JUSTIFICATION

FY-1978 through FY-1985

Research activities in this program began in FY 1978, and this research has added greatly to the knowledge of geothermal resources in the United States. Early research covered the entire country and showed certain states to contain identified or potential geothermal resources. More recent research has concentrated on quantifying the identified and potential geothermal resources.

FY-1986

This program will be executed by solicitation for proposals from State agencies or State universities (usually the office of the State Geologist or State Water Resources Director designated as responsible for geothermal resources within their states) to cost share geothermal research projects with the Department of Energy. The studies to be performed may include heat flow determinations and other research on the thermal gradient and thermal conductivity, water chemistry and calculations of chemical geothermometers, passive and active seismic or electrical geophysical surveys, structural geologic surveys, hydrologic studies, and compilation and reinterpretation of previous data. Participation in the research effort will be selected competitively.

FY-1987

The research started in FY 1986 will be concluded. The data collected will be integrated into topical reports, and survey results will be prepared to detail the work at each research site. The final report of each project will include a review of existing literature and the results of the completed scientific research.

G. FUTURE ACCOMPLISHMENTS

The program will be concluded at the end of 1987.

H. RELATIONSHIPS TO OTHER PROGRAMS

The Geothermal Reservoir Technology Program has a continuing interchange of scientific information and technology with the State Cooperative Reservoir Analysis Program. The research results of this program will be added to the scientific literature on geothermal reservoirs.

I. ENVIRONMENTAL EVALUATION

Operations office monitoring methods and procedures will assure the compliance with environmental concerns and requirements. The research activities funded by this program are not expected to require an Environmental Assessment (EA).

J. EXPLANATION OF MILESTONES

a. Procurement activities are those associated with the RFP, and an RFP will be issued in 90 days from the receipt of the headquarters funding letter. After the standard period for response, participants will be selected to cost-share research in the investigation of geothermal systems.

b. The cost-shared research will be completed by the end of 1987.

c. Topical reports on research progress will be published, and a final report will be prepared to cover all phases of the research project.

UNIVERSITY OF UTAH RESEARCH INSTITUTE

UURI

EARTH SCIENCE LABORATORY
391 CHIPETA WAY, SUITE C
SALT LAKE CITY, UTAH 84108—1295
TELEPHONE 801-524-3422

August 25, 1986

Peggy A. M. Brookshier
United States Department of Energy
Idaho Operations Office
785 DOE Place
Idaho Falls, Idaho 83402

Dear Ms. Brookshier:

Last week I spent several hours with Duncan Foley discussing the State Cooperative Resource Analysis Program. I will continue to review individual contracts and reports and to otherwise familiarize myself with this DOE program.

Enclosed is a revised copy of the draft SCRAP RFP. The only changes from the August 11th draft are the correction of a few minor typos and program title, and an addition to organization names in Appendix A. The RFP reads very well and I cannot recommend any changes of substance with my present information background on the program.

Also enclosed for your information is a memo notifying SCRAP Investigators of Duncan's departure from UURI and a brief introduction to my background as the new UURI contact.

I look forward to working with you on the State Cooperative Resource Analysis Program. Please call me at the indicated phone numbers anytime I can be of assistance to you.

Sincerely,

Howard Ross

Howard P. Ross
Section Head/Geophysics

Encl.

HPR:leo

UNIVERSITY OF UTAH RESEARCH INSTITUTE

UURI

EARTH SCIENCE LABORATORY
391 CHIPETA WAY, SUITE C
SALT LAKE CITY, UTAH 84108—1295
TELEPHONE 801-524-3422

MEMORANDUM

TO: State Cooperative Resource Analysis Program Investigators

FROM: Duncan Foley and Howard Ross

SUBJECT: Duncan Foley leaving ESL/UURI

DATE: August 22, 1986

Effective August 22, 1986, Duncan Foley will be leaving his present position at UURI to accept a position teaching Geology at Pacific Lutheran University in Tacoma, Washington. Duncan will continue his affiliation with UURI as a Research Associate.

Duncan's responsibilities as the UURI contact for the State Cooperative Resource Analysis Program (SCRAP), formerly the State Coupled Program (SCP) will be assumed by Howard Ross. Dr. Ross has been employed as a Senior Geophysicist/Project Manager with UURI since 1977 and was the UURI project manager for the DOE Industry Coupled Geothermal Program from 1977-1982. He has contributed to geophysical studies for several domestic and foreign geothermal resource areas since 1982.

Correspondence formerly addressed to Duncan Foley should now be directed to:

Howard P. Ross
Earth Science Laboratory/University
of Utah Research Institute
391 Chipeta Way, Suite C
Salt Lake City, Utah 84108

Howard's phone number is (801) 524-3444 or FTS 588-3444. Howard will be calling SCRAP investigators in the near future to familiarize himself with the status of the various state programs.

Duncan Foley
DUNCAN FOLEY

Howard P. Ross
HOWARD P. ROSS

M E M O R A N D U M

TO: State Cooperative Resource Analysis Program Investigators

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Duncan Foley
DUNCAN FOLEY

Howard P. Ross
HOWARD P. ROSS

STATE COOPERATIVE RESOURCE ANALYSIS PROGRAM RFP
DRAFT - AUGUST 23, 1986
D. FOLEY/H. ROSS

BACKGROUND

The Department of Energy (DOE), Geothermal Technology Division (GTD), has the charter to conduct research and develop technology required to enable the geothermal industry to satisfy better the energy needs of the United States. As a part of this overall effort, the Department is issuing this Request for Proposals (RFP) under the State Cooperative Resource Analysis Program for research in geothermal systems.

The goal of the State Cooperative Resource Analysis Program is to cost share state-oriented research on those aspects of geothermal energy that are not being studied by private industry, but which have the potential for results that will be applicable by industry in development of geothermal resources. The State Cooperative Resource Analysis Program supports research on hydrothermal systems by state agencies or universities. The areas of research are geological, geochemical, geophysical, and hydrological aspects of hydrothermal systems. The data gathered and reports provided through research under this RFP will be incorporated into existing geothermal libraries and made readily available to the public in each state and throughout the nation.

The Geothermal Energy Research, Development, and Demonstration Act of 1974 provides for DOE to enter into agreements with States to perform geothermal resource analyses and technology transfer. This Request for Proposals is being issued under the authority of this act. Respondents must be state agencies or universities and must offer a minimum cost share of 10 percent of the total cost. Total cost to DOE is not to exceed $75,000. It is anticipated that there will be a maximum of one proposal funded per state and that 6 to 8 proposals may be funded with available monies.

QUALIFICATION CRITERIA

To qualify for consideration under this RFP, the proposer must meet the following qualification criteria. Prior to the detailed evaluation, each proposal will undergo a preliminary review to assure that these qualification criteria are satisfied. Proposals which do not meet the qualification criteria will not receive a comprehensive evaluation and will be eliminated from further consideration.

1. The proposer must be affiliated with a state agency, either a geological survey or other agency designated by the state, or with a university or college.
2. The proposed work must be in-state, or have written approval from the appropriate executive in the other state(s) where proposed work is to be done. Exceptional and unique proposals for multi-state programs may be considered.
3. The proposed research must be on hydrothermal resources, and the states from which proposals are received must have a significant hydrothermal resource base (as defined through the State Cooperative Resource Analysis Program, other DOE research programs, or by U.S. Geological Survey resource assessments such as Circular 790, Circular 892, and their supporting documents). All areas for research must meet the minimum criteria for geothermal resources defined in U.S. Geological Survey Circular 892.
4. The proposal must address one or more of the topics listed under "Potential Tasks" in this RFP.
5. The proposal must not request more than $75,000 from DOE.
6. A minimum cost-share of 10% of the gross amount requested from DOE must be clearly identified.

POTENTIAL TASKS

Proposers responding to one or more of the following tasks will be considered under this RFP. Proposals for work outside these tasks will not be responsive to the goals and current emphases of GTD and the State Cooperative Resource Analysis Program, as described in the "Background" section of this RFP, and will not be evaluated.

1. Research efforts on the selection, testing, and interpretation of new technologies designed to locate and characterize hidden geothermal reservoirs will be the primary emphasis of this program. Geological, geochemical, geophysical, and hydrological techniques are appropriate under this RFP.
2. Research efforts that will support other ongoing GTD programs in hydrothermal resources.
3. Research efforts that would enhance the knowledge base of geothermal systems or regions and would provide important information that would not otherwise be available to encourage the development of geothermal resources.
4. Efforts to transfer technical knowledge that otherwise would not be available to geothermal resource developers.

EVALUATION CRITERIA

Proposals that meet the Qualification Criteria will undergo a comprehensive evaluation according to the criteria listed below.

1. The appropriateness of the proposed research to the goal of the State Cooperative Resource Analysis Program as stated under BACKGROUND.
2. The resource potential of the area proposed for research (if applicable).
3. The technical quality of the proposed efforts, including consideration of the merit of the proposed approach and the probability of achieving positive results within the designated period.
4. The qualifications of the proposer and the proposing organization to accomplish the proposed tasks. This includes the experience and competence of the investigator(s) to perform the proposed research successfully, and the capability of the investigator's organization to provide the necessary facilities and support.
5. Appropriateness and reasonableness of the budget. This factor considers whether the proposed budget is commensurate with the level of effort needed to accomplish the project objectives, and whether the cost of the project is reasonable relative to the value of the anticipated results.

PROGRAM POLICY AND PREFERENCE FACTORS

The Source Selection Official may make selections for negotiations and subsequent awards in a manner that will further the objectives of DOE, considering the following factors:

1. One award per state may be made to encourage geographic and resource diversity in the program.
2. The variety of projects which provide the greatest potential for data to enhance the goals of the State Cooperative Resource Analysis Program and DOE.
3. Cost Considerations - The proposed cost is a function of the management approach, the technical approach, the manpower, the facilities, the organization, the uncertainties of the work, the proposer's competitive strategy and the economy. Total cost to the Government, considering total funds available and the funds requested by a particular proposal, may be used in the final selection.
4. The performance history of the proposer under previous funding received through the State Cooperative Resource Analysis Program or other federally funded projects.

PROPOSAL GUIDELINES

1. Cover Page

The cover page should provide the specific information identified in Appendix ___. Copies should be numbered, 1 through x. The number 1 copy should be the original with the signature in ink. The person signing must have the authority to commit the proposer to all the provisions of the proposal.

2. Summary

Submit a concise summary of the proposed project, which is not to exceed 750 words. Include at least the goals, methodologies and benefits of the proposed research.

3. Table of Contents

Include a Table of Contents to facilitate locating the elements outlined in these guidelines.

4. Technical Project Plan

This section should provide a thorough and concise discussion of the geothermal area or topic that will be the subject of the research. This section should not exceed 25 double-spaced pages, exclusive of tables and figures. A summary of previous investigations of the area or topic should be provided. The need for the proposed research should be identified and statements of the goals of the research, as well as identification of the investigative techniques to be used, are required. The anticipated results of the research should be discussed, as should the contribution the research will make to the goals of DOE and the State Cooperative Resource Analysis Program. The Technical Project Plan must include a suggested statement of work (the format for Statement of Work is described in Appendix ___) and a plan for dissemination of the

results of the research. If subcontractors will be used, their specific roles should be clearly identified. Individual deliverables should be specifically identified. Deliverables required by DOE are identified in Appendix C, and include weekly statements of significant events (when they occur), quarterly technical and financial progress reports, final technical reports, and other documentation.

5. Program Management

Include the time, cost and deliverable schedules for the proposed research. The expertise, responsibilities and time commitments for the proposed research of the Principal Investigator(s) and other key personnel should be specifically identified. How the proposed work will be integrated into the management structure of the proposing organization, and procedures for quality assurance need to be presented.

6. Budget

The proposed budget should be prepared in the format which follows. Unusual items should be fully explained or justified as budget notes. Prior to negotiation and award, proposers usually will be requested to provide updated cost information and additional supporting detail, including incurred cost data from any previous or ongoing projects. Where applicable, indicate items that will be cost-shared or funded entirely by the proposer. The following information must be supplied in the proposal.

a. Salaries and Wages. Identify individuals or categories of salary and wages, estimated hours or percent of time and rate of compensation proposed for each person or category. If the rate of pay shown is higher than the current rate of pay, include an explanation of amounts included for projected increases.

b. Fringe Benefits/Labor Overhead. Propose rates/amounts in conformance with proposer's normal accounting procedures. Explain what costs are covered in this category and the basis of rate computations. Indicate whether rates are used for proposal purposes only or whether they are also fixed or provisional rates for billing purposes. (This element does not need to be shown separately from item "j." if the offeror's standard practice is to include such costs in a single overhead rate.)

c. Equipment. Itemize any proposed permanent equipment acquisitions and show the estimated cost of each item. Include only items which are essential to the successful performance of the proposed research and of a type not chargeable as an indirect cost.

d. Supplies and Expendable Equipment. Indicate amounts estimated for office, laboratory, and field supplies separately. Provide detail on any specific item or other subcategory which represents a significant portion of the proposed amount.

e. Subcontracts or Consultants. Identify the specific project tasks or problems for which such service would be used. List the contemplated subcontractors (including consultants), the estimated amount of time required, and the quoted rate per day or per unit of service. If known, state whether the consultant's rate is the same as they have received for similar services commercially or under Government contracts.

f. Travel. Itemize estimated travel costs to show the number of trips required, destinations, the number of people traveling, per diem rates, cost of transportation, and miscellaneous expenses for each trip. Calculations of other special transportation costs (such as

charges for use of contractor-owned vehicles or vehicle rental costs) should also be shown.

g. Analytical Costs. Itemize costs of chemical analyses, age dates, x-ray determinations, and other analytic items.

h. Publication Cost. Show estimated costs of publication of the results of the proposed research.

i. Other Direct Costs. Itemize different types of costs not included elsewhere. Where appropriate, provide breakdowns showing how the cost was estimated. For example, computer time should show the type of computer, estimated time of use, and the estimated rates.

j. General and Administrative/Indirect Costs. Show proposed rate, cost base and proposed amount for allowable G & A or indirect costs based on the cost principles applicable to the proposer's organization. If the proposer has separate rates for recovery of Labor Overhead and G & A costs, each charge should be shown in the proposal in the most logical location. Explain the distinction between items included in the two cost pools. Applicants should propose rates for evaluation purposes which they are also willing to establish as fixed or ceiling rates in any resulting award. A copy of the approved rate agreement should be submitted.

k. Cost sharing. Detail the nature and amount of the contribution to be made, including contributions "in-kind". The cost share must be at least 10% of the amount requested from DOE.

l. Total Estimated Cost.

m. Fee. (if any).

n. Total Estimated Cost Plus Fixed Fee. Indicate DOE and proposer contributions.

7. Supporting Materials

The following must be included:

a. Brief curricula vitae for the Principal Investigator(s) and other key personnel, summarizing education, experience and bibliographic information related to the proposed work.

b. A description of the proposing organization, including available resources (e.g., relevant computer, library, scientific equipment, and other facilities) and relevant experience in geothermal research and DOE-funded programs.

APPENDIX ___

Format for Statement of Work

1. Content and Format of the Statement of Work. The general format must be broken into six paragraphs:

1.0 Introduction

2.0 Scope

3.0 Applicable Documents

4.0 Technical Tasks

5.0 Reports, Data, and Deliverables

6.0 Special Considerations

The content of each paragraph follows the outline below:

1.0 Introduction. The introduction is a brief overview of the technical proposal, described in fully understandable terms. Include an explanation of the benefits that this technical research program will have.

2.0 Scope. This paragraph provides an overall picture of the desired work program in concise form. The scope outlines the various phases of the effort and ties down the overall limits of the project in terms of specific technical objectives, time, and any special provisions or limitations.

3.0 Applicable Documents. This section is used to cite all applicable documents, such as previous DOE contracts, grants, or cooperative agreements, specifications, reports, and other material, which have an impact on the proposed procurement.

4.0 Technical Tasks. This paragraph should define the work to be accomplished and indicate in detail the main steps and actions which are required. These main steps constitute the work

phases (recommended approach). If the work encompasses several areas or lends itself to division into tasks, this should be indicated. Specific research and reporting tasks need to be identified.

5.0 Reports, Data, and Other Deliverables. Contract data and other reporting procedures should be indicated.

6.0 Special Considerations. A paragraph outlining any special considerations for use of Government property, for example, may be added to the Statement of Work in this paragraph.

APPENDIX A

Research efforts currently funded through the State Cooperative Resource Analysis Program.

State:	Alaska
Organization:	Division of Geological and Geophysical Surveys
Principal Investigator:	Dr. Christopher Nye
Topics:	Petrology and magmatic history of Mt. Spurr
State:	Alaska
Organization:	University of Alaska Geophysical Institute
Principal Investigators:	Dr. Donald Turner, Dr. Eugene Wescott
Topic:	Geochemical and geophysical investigation of Mt. Spurr
State:	Arizona
Organization:	University of Arizona, Department of Geosciences
Principal Investigators:	Dr. Paul Damon, Dr. Muhammad Shafiqullah
Topic:	Precision K/Ar dating of young volcanic rocks
State:	Hawaii
Organization:	University of Hawaii at Manoa - Hawaii Natural Energy Institute
Principal Investigators:	Dr. Donald Thomas
Topic:	
State:	Idaho
Organization:	Department of Water Resources
Principal Investigators:	Ms. Leah Street
Topic:	Hydrothermal systems in Twin Falls region
State:	Montana
Organization:	Montana College of Mineral Science and Technology
Principal Investigators:	Dr. William Sill, Dr. Charles Wideman
Topic:	Geophysical investigations of Ennis area
State:	Nevada
Organization	University of Nevada - Las Vegas, Division of Earth Sciences
Principal Investigators:	Dr. Dennis Trexler, Mr. Thomas Flynn
Topics:	
State:	New Mexico
Organization:	Energy Research and Development Institute
Principal Investigator:	Dr. Larry Icerman
Topic:	Industry and state cost-shared research drilling, regional data syntheses, and hydrologic analyses
State:	North Dakota
Organization:	University of North Dakota Mining and Mineral Resources Research Institute
Principal Investigator:	Dr. William Gosnold
Topic:	Thermal regime of South Dakota

State:	Oregon
Organization:	Department of Geology and Mineral Industries
Principal Investigator:	Dr. George Priest
Topic:	Geothermal systems in the Cascades
State:	Texas
Organization:	Southern Methodist University
Principal Investigator:	Dr. David Blackwell
Topic:	Heat flow of the United States
State:	Utah
Organization:	Geological and Mineral Survey
Principal Investigators:	Dr. Ray Kearns, Dr. Donald Mabey
Topics:	Geothermal resources in Cove Fort-Roosevelt area and Washington County; geothermal bibliography
State:	Washington
Organization:	Department of Natural Resources
Principal Investigators:	Mr. Michael Korosec, Mr. J. Eric Schuster
Topic:	Heat flow in Cascades
State:	Wyoming
Organization:	University of Wyoming Department of Geology and Geophysics
Principal Investigator:	Dr. Henry Heasler
Topic:	Finite-element model of hydrothermal resources

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TELEPHONE 801-524-3422

As mailed 22 Nov., w/ notes from 8 May '86

November 21, 1985

MEMORANDUM

TO: Peggy Brookshier

FROM: Duncan Foley

SUBJECT: State Coupled Program RFP

I have enclosed a draft text that may serve as a beginning for the forthcoming RFP for the State Coupled Program. I have plagiarized freely from the Cascades drilling SCAP and a USGS RFP (which was issued last year). As I mentioned over the phone, this text is certainly not sacred, so please do not hestitate to request revisions or additions for which you see a need.

Several topics need to be resolved before this RFP can go out. A major one is the arrangement that will be made between SAN and ID Operations Offices. My list of current projects is not complete for either SAN-funded efforts or projects that Ben is supervising. Of course, much boilerplate is missing, but most can come from Ron or Elizabeth.

I suggest that we limit the major portion of the text to 25-30 double-spaced pages, but advise that shorter, complete proposals would be nice. We also may wish to request staples, rather than fancy bindings.

We will need to develop a distribution list, in addition to CBD and other required notices. Present program participants should receive copies, but distribution should also be established for other state organizations and universities.

Duncan

DF/jp

PRDA Evaluation Criteria

HPR
6/22/87

Technical Proposal = 75%
Business Proposal = 25%
100%

I Technical Proposal

A. SOW			
A-1	Usefulness of proposal research	.33⅓	
A-2	Technical quality	.20	
A-3	Significance of resource base	.13.3	
B	Qualifications and Capabilities		
B-1	Key Personnel	.20	
B-2	Organization & Subcontractor	.133	
		1.000	= 100% Tech.

II Business Proposal

C.	Cost Sharing	.80	
D.	Project Financial Plan	.20	
		1.00	= 100% Bus.

10 Excellent - no major weaknesses

8 Above average - no maj. weak

5 Average - generally satisfies subcriterion

2 Below Average - weak in responding to requirements of subcriterion

0 Poor - does not meet the requirements or fails to address the subcriterion.