

MASTER

DEVELOPMENT OF NEW BUSINESS OPPORTUNITIES
FOR MINORITIES
IN NUCLEAR ENERGY

Final Report

December 15, 1980

Prepared for

Office of Minority Economic Impact
Department of Energy
Washington, DC 20585

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ABSTRACT

In Part I of this report the basis for the optimal development of new business opportunities for minorities in nuclear energy programs is defined within the successful completion of all contract tasks. The basis presented consists of an identification of a set of qualified minority owned small businesses, a defined reservoir of highly trained minorities with applicable expertise, a policy context for the development of opportunities, and a proposed networking structure for information transfer/professional development. In Part II of this report is presented a contractor focused analysis of the structure of the nuclear industry, a breakdown of the DOE nuclear program by region and functional area, and a directory of minority owned small businesses by region.

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1.0 INTRODUCTION

The significant expansion of nuclear power operations and capacity and nuclear waste management activities now projected for the 1980's will foster many new and expanding business opportunities. There are a number of minority owned small businesses (MOSBs) which qualify as subcontractors for part of the work under these procurements. The dominant impression, however, seems to be that minority owned firms (1) lack the expertise to perform in advanced technology areas and/or (2) are capable of performing only the small and relatively unimportant tasks. Thus, a detailed analysis of new business opportunities in the nuclear program (NE) areas must both identify and document the capability of MOSBs to contribute to the achievement of program priorities.

To take advantage of these identified opportunities, a comprehensive marketing approach involving many minority institutions and organizations is needed. The following entities are the focus of the approach:

- Minority Educational Institutions, such as the historically black universities.
- Minority Professional Associations, such as the national Technical Associations, such as the national Technical Association (NTA), and the American Association of Black in Energy (AABE).
- Minority Owned Small Business (MOSBs)

This three-pronged approach is required because historically, the development of technology in the United States has required interaction between industry, professional associations, educational institutions and government. The interchange of highly trained personnel between industry, universities, associations and government facilitated the rapid development of technology in this century. In the minority community most of the technical people with the scientific and engineering knowledge necessary to compete for contracts in the nuclear energy field are presently employed by majority sector businesses, minority and majority educational institutions, and government. This was true and to some extent is still true of the majority sector of the population as well. The flow and interchange of personnel among universities, Government laboratories and private industry contractors in the nuclear industry has been demonstrated to be beneficial in strengthening the capabilities of each and of the nuclear community as a whole. Therefore, any approach to develop the needed expertise in minority businesses must encourage and facilitate the movement of the required talent from the three areas of the majority sector mentioned above (which currently are the repositories of knowledge and expertise) to the minority economic area (which is the MOSB). In addition to the movement of personnel, interaction through joint ventures, subcontracting, and consulting involving MOSBs and educational institutions must be explored.

Towards that end the Office of Minority Economic Impact (OMEI) and the Office of the Assistant Secretary for Nuclear Energy (ASNE) has contracted AMAF Industries, Inc. to execute by December 15, 1980 the tasks specified in the following "Statement of Work":

2.0 STATEMENT OF WORK

TASK A: Develop a typology of MOSBs corresponding to the characteristics of MOSBs that have the capability to handle the identifiable business opportunities within the Nuclear Programs of DOE. This listing will also be functional, organized according to subcontracting categories and cross-referenced in terms of other relevant information.

TASK B: Develop an in-depth list of all areas in DOE including program people who could provide contracting opportunities for MBEs. This listing would also identify the level of funding as well as the type of opportunity in the following areas:

- (a) Converter Reactor Systems
- (b) Breeder Reactor Systems
- (c) Special Nuclear Systems
- (d) Advanced Isotope Separation
- (e) Commercial Nuclear Fuel
- (f) Spent Nuclear Fuel
- (g) Uranium Resource Assessment

TASK C: Create a data base of minority scientists and engineers located in industry, universities, and government in fields related to nuclear energy.

TASK D: Develop a network which will facilitate the interaction of MBEs, knowledgeable scientists and engineers, professional associations, and black educational institutions in the fields related to nuclear energy.

3.0 REPORT ON TASK A

3.1 METHODOLOGY

Nuclear energy program contracting opportunities are highly knowledge intensive, focussing many areas of science, engineering and technology. Thus, while many skills are relevant in nuclear program contracting, in order for a would-be contractor to be competitive in bidding contract work, it must be capable of demonstrating the requisite technical depth and performance quality assurance (QA). The SBA with assistance from the DOE has developed the Procurement Automated Source System (PASS) which has been operational for almost two years. It was designed, using a keyword system, to quickly identify and furnish a company profile computer printout of small/disadvantage business (S/DB) enterprises for a particular procurement. Notwithstanding the fact that there are now more than 4,000 minority-owned businesses in that data bank, it is widely felt that PASS is of only greatly limited utility in nuclear program (NE) procurements targeting MOSB involvement. There also exists now a separate SBA developed listing: "Firms in the 8(a) Business Development Program (March 1980)" which contains more than 2,000 MOSBs. The principal problem of both of these sources is their lack of specificity with respect to NE program contracting requirements.

In order to provide a listing/directory of MOSBs which is functional for NE program procurements, a multi-stage effort was undertaken. Its goals were to define a functional MOSB typology and to investigate MOSBs for inclusion. The PASS/SBA listing in that effort served only as points of departure.

In Stage I of our identification of relevant MOSBs, we selected for further consideration only those firms capable of contracting in one or more of the following areas:

- RD&E/A&E consulting studies
- Component/materials manufacturing
- Construction

In Stage II, RD&E/A&E consulting firms were further delimited by including only those who satisfied one or more of the following criteria:

- Professes (by self-description) to be nuclear RD&E/A&E capable.
- Evidences nuclear RD&E/A&E experience through appropriate capability statements (by 254, 255 Forms, for example)
- Shows company/corporation staff with generic nuclear/nuclear-related training (e.g., nuclear sciences, nuclear engineering, health physics)

Relevant component/materials manufacturing firms were typed in Stage II by use of the appropriate Standard Industrial Classification (SIC) codes. They are as follows:

- 2819 Industrial Inorganic Chemicals
- 2869 Industrial Organic Chemicals
- 3443 Fabricated Plate Work (Boiler Shops)
- 3559 Special Industrial Machinery
- 3674 Semiconductors and Related Devices
- 3822 Automatic Controls
- 3823 Industrial Instruments for Measurement, Display
and Control of Process Variables; and Related
Products
- 3829 Measuring and Controlling Devices

Construction firms were included in Stage II which evidence capability in major construction requiring use of reinforced concrete and/or pre-stressed concrete elements.

In Stage III (Refinement), all MOSBs ultimately retained were contacted by telephone and/or site-visited by AMAF staff to ensure accuracy of our typing of them as relevant to and capable of NE contract activity. That effort resulted in a list/typology of MOSBs which has built into it a much higher relevance and confidence level than has heretofore been available.

3.2 FORMAT OF PRESENTATION

The directory/typology is presented (in Appendix A) in two parts:

1. an alphabetical listing of firms, and
2. a capability matrix of these firms.

The alphabetical listing of firms contains the firm's name, address, presiding (or contacting) officer, phone number, minority ownership code, year established, 8(a) status, and a brief description of the firm's type of work.

The capability matrix is also arranged in alphabetical order, showing firms's name, city, and state, and alongside each firm, an 'X' under the appropriate capability category.

Minority Ownership Code

- 0 = Black
- 1 = Puerto Rican
- 2 = American Indian
- 3 = Spanish American
- 4 = Asian
- 5 = Eskimo
- 6 = Undetermined
- 7 = Others, including White and Female

8(a) Status Code

- Y = Yes
- N = No
- P = Pending
- U = Undetermined

3.3 RECOMMENDATIONS

3.31. The current directory/typology generated in execution of Task A is by no means exhaustive. We are continuing to receive brochures and capability statements which will allow for further refinement and expansion beyond the current 66 MOSBs now included. Thus, we recommend that OMEI/NE-DOE provide funds for the maintenance of this directory/typology.

3.32 Many more MOSBs could have been listed if we had rather than a strict criterion of current capability one of interest in developing capability, to participate in NE contracting. We recommend careful review be given to the growth potential of NE programs in the 1980's to determine the extent to which currently identified MOSBs are adequate to meet the demand for contractors. NE in conjunction with OMEI should develop information materials and programs suited to supporting MOSB contractor development in the NE program areas.

4.0 REPORT ON TASK B: OPPORTUNITIES

4.1 METHODOLOGY

Considerable evidence supports the projection that the nuclear program, both nuclear fission and waste management, will expand significantly in the 1980's. There is certain to be within that climate a substantial growth in contracting opportunities for capable MOSBs. In order to better specify such opportunities the following persons/DOE organizations were contacted with reference to this task for steerage and information.

1. Our OMEI - Project Manager (B. Haley)
2. Our NE - Project Manager (R. Rosselli)
3. The Office of Small & Disadvantaged Business Utilization, DOE (L. Miranda)
4. NE program managers (R. Dowling, H. Rome, J. Ford)
5. DOE - SB/DB Program Coordinators (M. Carcamo - SFO, J. Wilcynski - FFTF, W. Spicer - ANL, D. J. Freed - HEDL, W. D. Joyner - Union Carbide, P.K.S. Lau - EG&G, J. Kirk - ONWI)
6. The DOE "Gold" Books: Fission Energy Program of the USDOE, Nuclear Waste Management Program Summary Document (FY81)

4.2 FY81 NUCLEAR PROGRAM APPROPRIATIONS

The Office of the Assistant Secretary for Nuclear Energy (ASNE) is responsible for nuclear research and development and for conducting subcommercial demonstrations of new nuclear energy technologies.

It supervises the nuclear fission program and the nuclear waste management (NEW) program (commercial and defense). The FY 81 Budget for the Office of the Assistant Secretary can be detailed as follows (in millions):

| | |
|--|----------|
| Commercial Nuclear Waste | \$ 245.6 |
| Defense Nuclear Waste | 300.2 |
| Naval Reactors | 303.4 |
| Spent Nuclear Fuel | 22.5 |
| Advanced Isotope Separation Technology | 80.2 |

| | |
|------------------------------|------------------|
| Conventional Reactor Systems | 105.5 |
| Breeder Reactor Systems * | 469.3 |
| Advanced Nuclear Systems | <u>42.0</u> |
| Total ASNE | <u>\$1,568.7</u> |

* Does not include the Clinch River Breeder

4.3 MOSB PROCUREMENT GOALS (re: R. Rosselli)

A scale for the magnitude of FY81 nuclear procurement opportunities for MOSBs can be obtained from the recently defined ASNE goal:

| | |
|-----------------------|-----------------|
| Procurement Base : | \$1,500 million |
| (%) MOSB Goal FY81: | 1% |
| (\$) MOSB Goal FY81: | \$15 million |

This goal, though quite modest, does afford significant MOSB procurement opportunities for FY81 if applied appropriately to generic R&D, nuclear manufacturing and nuclear construction areas. It is important to observe that the 1% MOSB procurement goal is not defined against the eight disaggregated NE program areas previously listed but against the aggregate NE budget as a realistic target level for total MOSB procurement.

4.4 COMMENTS

Even though extensive information gathering contacts were effected in performing on Task B, little specific opportunities in the generic nuclear areas were identified. Indeed, it appears that

1. the trend-line data is simply not available to establish an historical pattern for nuclear generic (as contrasted with nuclear program allocated) MOSB procurements
2. little precedence is available in many NE program areas for the use of MOSBs
3. there is, however, a willingness at the program manager levels to at least consider a MOSB if candidates could be identified in a timely and efficient manner
4. NE opportunities will surface only within new program level understandings of both the existence of and structure of the universe of relevant MOSB contractors

4.5 RECOMMENDATIONS

4.5.1 NE Program Opportunity Notices (PON's) and Program Research and Development Announcements (PRDA's) should be sent to all MOSBs identified in Task A on a regular basis.

4.5.2 A detailed analysis should be undertaken, through the Office of ASNE in conjunction with OMEI, of the level of nuclear generic procurement activity with MOSBs out of total NE procurements. This would provide a basis for defining trends and for highlighting both areas of opportunity and those requiring special attention.

4.5.3 We consider the SB/DB Subcontracting Plan developed at Argonne National Laboratory (W. Massey, W. Spicer) to be enlightened - a exemplar for other DOE laboratories and facilities. It defines a level of commitment through FY 85, a process for implementation, and targeted products/services for subcontracting.

Although their choice (elimination) of some DB areas for subcontracting could be questioned, the overall tone of the plan merits wide emulation.

4.5.4 We urge the Assistant Secretary for Nuclear Energy to define specific goals for each major program area of NE so as to realize an overall level of 2% MOSB procurements in FY81 for NE. This level of nuclear generic procurement would be in keeping with the significant new insights brought forward by this Final Report as to the extent that MOSBs are presently capable of such contracting.

5.0 REPORT ON TASK C: INDIVIDUALS

5.1 METHODOLOGY

It is typical for even minorities with nuclear generic training to underestimate the trained minority pool size. Many dated and uncorrelated rosters existed from which an extensive identification effort was initiated. Our current roster contains 35 names of highly trained minorities for which we have nearly complete data. The roster grows daily as those already contacted refer others to us. The roster will easily grow to 70 should this effort continue and will most probably saturate (show effort marginality) near 100 should the current wisdom prevail. In almost every case a name included has been verified by a direct telephone contact.

5.2 FORMAT OF PRESENTATION (Appendix B)

The directory was prepared with the following format:

LAST NAME, First Name, Initials.

- a. Highest relevant degree, University, year
- b. Area(s) of relevant expertise
- c. Current title/responsibility within organization
- d. Organization where employed
- e. Address of Organization

Only individuals with nuclear energy related expertise (e.g., nuclear physics, nuclear engineering, health physics) are included.

5.3 RECOMMENDATIONS

5.3.1 Almost every minority contacted expressed willingness to aid the expansion of the roster if they could receive a copy of it in its current stage. We recommend that OMEI/NE provide support for the continued expansion of this roster by making possible both its wide (though selective) distribution and appropriate follow-up responses to leads as they develop.

5.3.2 A sizable majority of those contacted expressed enthusiastic interest in possibly participating in minority professional/MB development support activities that would increase nuclear program opportunities for minorities. Whereas many of these nuclear trained minorities are currently in influential positions in the public and private sectors, we recommend that well focussed mechanisms be devised to tap their collective potential of enhancing minority economic impacts of NE programs.

6.0 REPORT ON TASK D

6.1 PHASE II - CAPACITY BUILDING

Completion of Tasks A, B, and C has demonstrated that there are MOSBs and highly trained minority individuals ready and eager to take advantage of nuclear program opportunities that heretofore have been latent. The missing element has been the catalytic center to actualize the developmental capacities in the public and private sectors towards enhanced minority participation. The overall process can be viewed as taking place in two stages or phases: Phase I and Phase II.

Phase I (the essentials of which have been accomplished under Tasks A, B, and C) was defined by "opportunity identification" activities. The climate of opportunity has been defined by P.L. 95-507, in the Supreme Court decision to uphold the "set-aside" provisions in the Public Works Employment Act of 1977 (Fullilove v. Klutznick, Secretary of Commerce), in recent procurement goal positions taken by the Secretary of Energy and in the clear commitment to such goals evidenced by the actions of the Assistant Secretary of Nuclear Energy.

The next step then is "capacity building" - Phase II. No phrase better captures the essential developmental character of opportunity actualization than "capacity building." The important idea being recognized here is that the actualization of opportunity requires the construction of organizational configurations - functional systems - which can participate in end-focused activities. The "capacity building" program would be structured to deliver necessary technical manpower resources and knowledge bases for the purpose of strengthening the existing corporate capabilities of MOSBs. In "capacity building" firms would be given access to the most recent R&D results, technological innovations, performance standards and industry/governmental regulatory requirements. Thus, the nuclear contracting capabilities developed by the participating minority businesses would be consistent with the performance standards established by government and industry guidelines. In this way the opportunity for MOSBs to contribute to the advancement of the technology would be assured.

6.2 THE NETWORK PROPOSAL

The working hypothesis of "capacity building" is that opportunities can be actualized by the assembly of the correct "ingredients" in the presence of a "catalytic core." The operative ingredients are easily identified as

- DOE
- MOSBs (MBEs)
- Minority Academic Institutions
- Major Nuclear Industries
- Minority Professional/Nuclear Trade Associations

The primary contributions made by each "ingredient" would be as follows:

DOE: Contracting opportunities

MOSBs: Potential resources

Minority Academic Institutions: Technical manpower resources

Major Nuclear Industries: Contracting opportunities

Minority/Trade Associations: Technology/innovations transfers

The requisite "catalytic core" would be provided in a cost-effective and expedient manner by AMAF Industries through its wholly owned Institute for Research, Development and Engineering in Nuclear Energy (IRDEN).

The network concept is conveyed diagrammatically in Figure 1. IRDEN is shown at the core acting, through its direct interfaces, to hold in interaction those elements whose relationships would be insufficient alone for capacity building. Thus, IRDEN, we argue is essential for realization of capacity building in NE program areas.

The specific goals of IRDEN, as a DOE supported Institute, are immediately relevant to capacity building:

- Foster greater minority business participation in the nuclear field
- Increase participation of minority scientists and engineers in nuclear energy programs
- Strengthen the manpower resource pool capable of contributing to nuclear technology development

Two points argue persuasive for the optimal involvement of AMAF/IRDEN as the core element in the networking of capacity building.

1. IRDEN is a viable, currently functioning structure (an Overview and Organizational Structure is provided in Appendix C)
2. AMAF is a 7J "call contractor" (as defined by P.L. 95-507) and is currently providing support services to other 8(a) firms on a contract task ordered basis by the SBA.

NETWORKING NUCLEAR PROGRAM OPPORTUNITIES

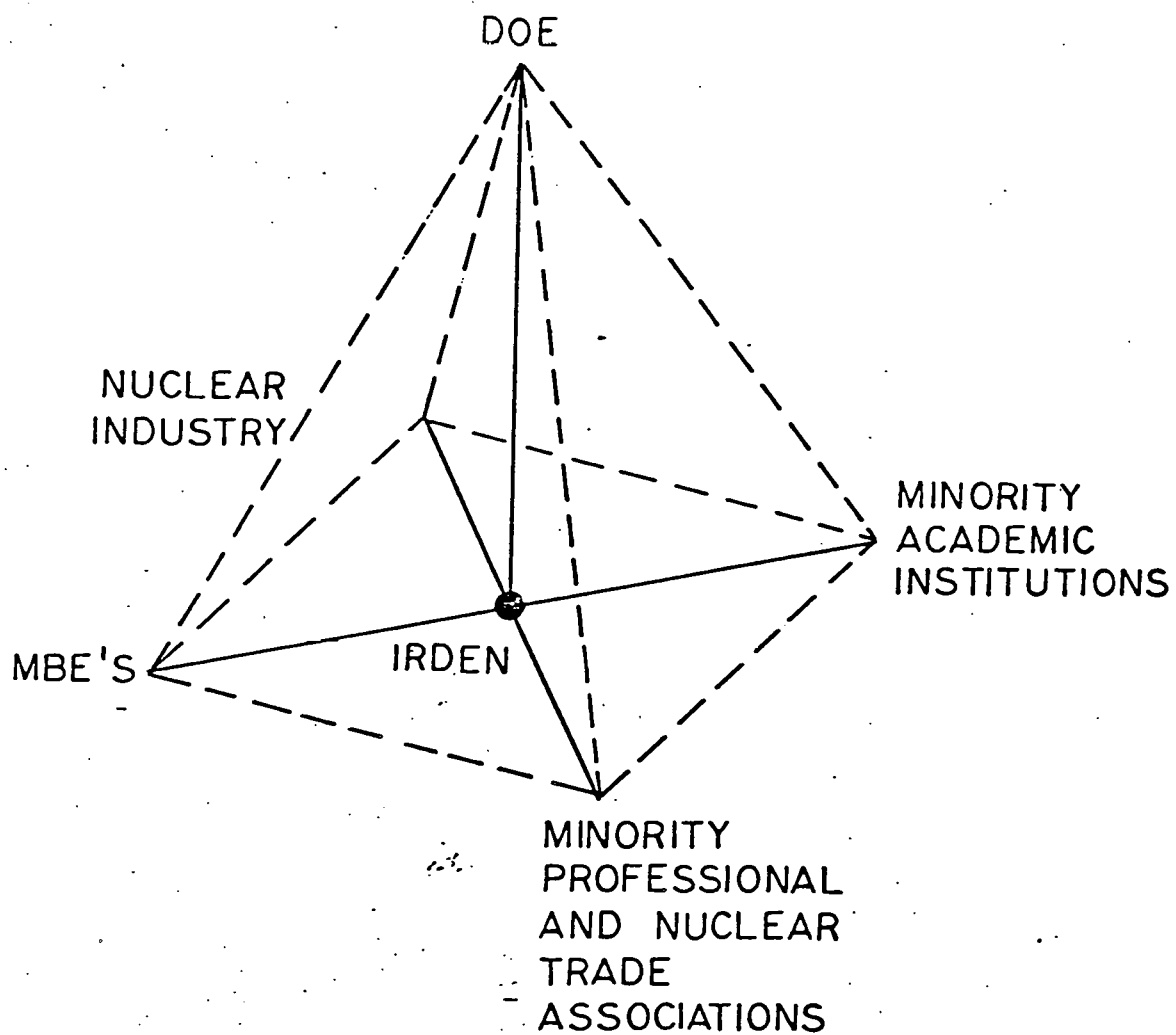


FIGURE 1

We therefore propose to make a significant modification in the current organizational structure of IRDEN. The current structure provides for three (3) activity offices: the Office of Health and Environmental Impact, the Office of Research, Development and Engineering, and the Office of Socioeconomic Impact. Each of these offices has a chief administrative person (an Associate Director) and technical staff support. We propose to implement the concept of MOSB capacity building through an Office of Minority Business Opportunity Development. Thus the IRDEN organizational structure would appear as in Figure 2.

The function of the MB Opportunity Development Office would be to foster greater minority business participation in the nuclear field. Its goals would be to:

- Provide coupling of the capabilities of minority owned small businesses with nuclear energy program needs.
- Assist the development of competitive contract proposals and responses to RFPs.
- Inform minority owned small businesses of the current development priorities and technical requirements within the nuclear program areas.
- Facilitate the involvement of minority owned small businesses by provision of other technical and managerial services.

6.3 CONTACTS MADE TOWARDS THE NETWORK

Preliminary organizational contacts which establish the desirability and the viability of a MOSB "networking" model (though no specific model has been universally endorsed) include the following:

American Association of Blacks in Energy (AABE)
Mr. Rufus McKinney (Chairman)

American Consulting Engineers Council
Mr. Edward Lisee (Project Manager)

American Nuclear Society
NEED Committee
Dr. Warren Miller (Chairman)

American Society for Engineering Education
Mr. Tim Bradley (Director, Special and Federal Projects)

Atomic Industrial Forum
Mr. Les Ransy (Education Services Manager)

Health Physics Society
Affirmative Action Committee
Ms. Hattie Carwell (former Chairperson)

IRDEN
ORGANIZATIONAL
STRUCTURE
(PROPOSED MODIFICATION)

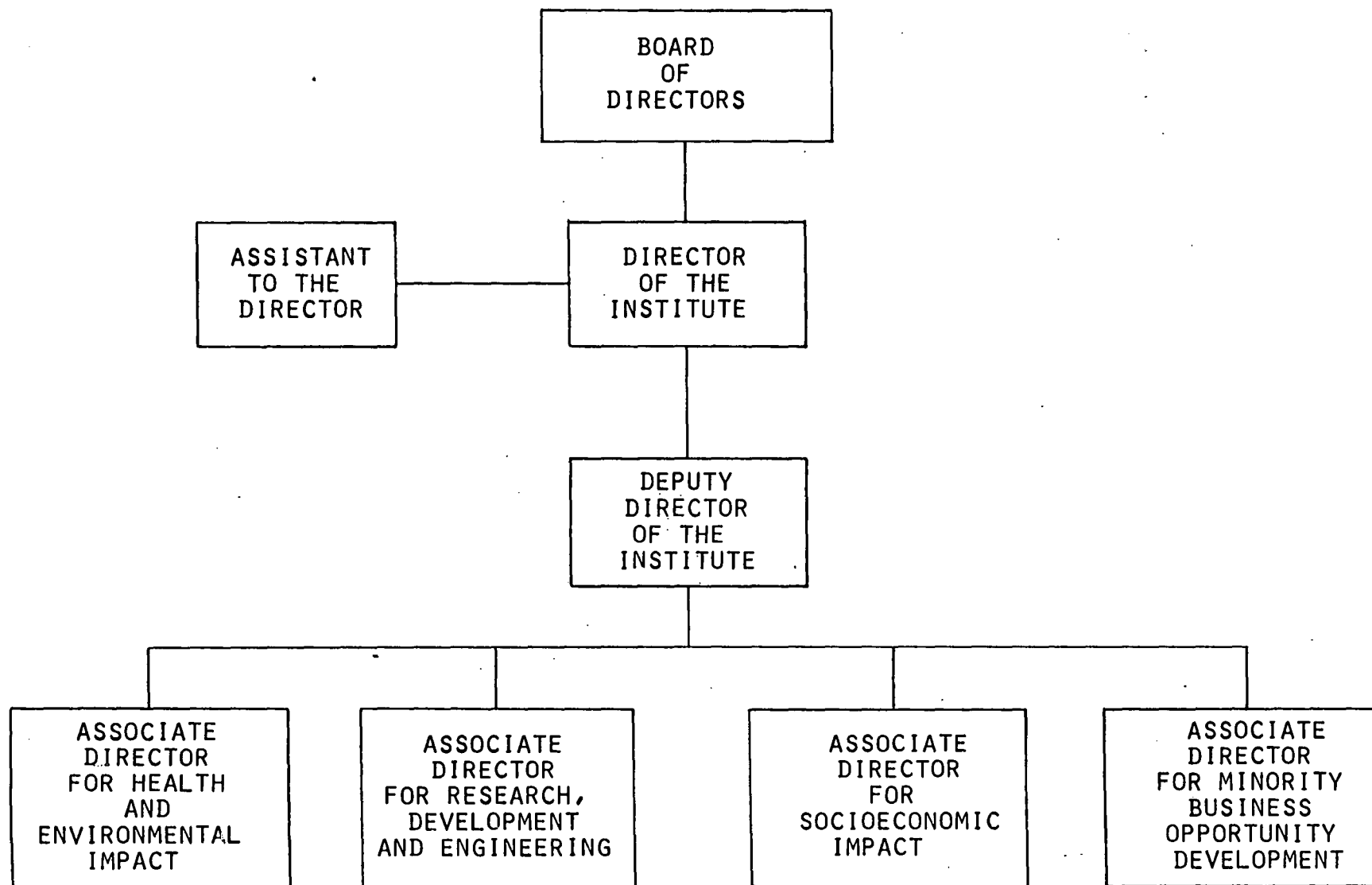


FIGURE 2

National Technical Association
Ms. Willa Parker (Executive Director)

Society of Black Physicists
Dr. Shirley Jackson (President)

University Research Association
Mr. Tim Matheson (Vice President)

6.4 RECOMMENDATIONS

6.4.1 The DOE-NE should enter sole source negotiations with AMAF Industries of an appropriate contract work statement to implement Phase II - Capacity Building.

6.4.2 The Office of the Assistant Secretary, after careful review of this Final Report and its recommendations, should endorse the Network Model proposed herein as best expressing the best interests of DOE-NE and implementing their MOSB procurement goals.

7.0 SUMMARY

The actualization by minority owned small businesses of the enhanced opportunities in the nuclear program areas expected to arise in the 1980's will require deliberate and immediate action. The Office of Nuclear Energy, DOE and OMEI must set a policy and funding climate sufficient to support a national program of "capacity building" for minority owned small businesses. This report shows that both the "ingredients" and the "catalytic core" currently exist and can be mobilized. Now is the time to begin this work.

APPENDIX A

DIRECTORY OF MINORITY OWNED SMALL BUSINESSES
CAPABLE OF NUCLEAR ENERGY CONTRACTING

DIRECTORY OF MINORITY OWNED BUSINESSES

This directory is in two parts:

1. An alphabetical listing of firms, and
2. a capability matrix of these firms.

The alphabetical listing of firms contains the firm's name, address, presiding (or contacting) officer, phone number, minority ownership code, year established, 8(a) status, and a brief description of the firm's type of work.

The capability matrix is also arranged in alphabetical order, showing firm's name, city, and state, and alongside each firm, an 'X' under the appropriate capability category.

Minority Ownership Code

- 0 = Black
- 1 = Puerto Rican
- 2 = American Indian
- 3 = Spanish American
- 4 = Asian
- 5 = Eskimo
- 6 = Undetermined
- 7 = Other, including White and Female

8(a) Status Code

- Y = Yes
- N = No
- P = Pending
- U = Undetermined

ALPHABETICAL LISTING OF FIRMS

AGUIRRE ENGINEERING, INC.
14 Inverness Dr. E., Unit 8H
Englewood, CO 80112

Mr. Vukoslav E. Aguirre
303-771-4446
Min. Code: 3; Est.: 1977; 8a: Y
Geotechnical Engineering

ALCO TOOL & MFG. CO.
364 Castroville Road
San Antonio, TX 78207

Mr. Albert Lee
512-434-6376
Min. Code: 4; Est.: 1962; 8a: Y
Component Manufacturing

AMAF INDUSTRIES, INC.
103 Sterrett Building
Columbia, MD 21044

Mr. Robert L. Jones
301-596-5336
Min. Code: 0; Est.: 1976; 8a: Y
Research, Development, & Engineering

AMERICAN CONSOLIDATED TECHNOLOGY,
INC.
800 Charcot Ave.
San Jose, CA 95131

Mr. Hernando G. Caampued
408-946-7811
Min. Code: 3; Est.: ?; 8a: U
Architecture and Engineering

AMERICAN DEVELOPMENT CORP.
2339 Air Park Road
Charleston, SC 29405

Mr. W. Melvin Brown
Min. Code: 0; Est.: 1972; 8a: Y
Component Manufacturing

ASHANTI NUCLEAR CORPORATION
152 W. 34th Street
New York, NY 10001

Mr. K. Ashanti
212-695-5398
Min. Code: 4; Est.: ?; 8a: U
Research and Development

AUTOMATED MANAGEMENT SYSTEMS,
INC.
9301 Annapolis Road, #305
Lanham, MD 20801

Mr. Carlton H. Joseph
301-459-4088
Min. Code: 0; Est.: ?; 8a: Y
Architecture and Engineering

B & M TECHNOLOGICAL SERVICES, INC.
520 Commonwealth Ave.
Boston, MA 02115

Mr. William V. Benjamin
617-247-1040
Min. Code: 0; Est.: 1978; 8a: Y
Research, Development, & Engineering

BAR-PAT MANUFACTURING CO., INC.
437 Howard St.
Bridgeport, CT 06601

Mr. George Bellinger
203-335-2193
Min. Code: 0; Est.: 1970; 8a: Y
Component Manufacturing

BERNERT INTERNATIONAL ENGINEERS
6060 Sunrise Vista Drive, #111
Citrus Heights, CA 95610

Mr. S. F. Lewinski
916-726-0450
Min. Code: 6; Est.: ?; 8a: U
Engineering & Design

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COR, INC.
105 N. Virginia Ave.
Falls Church, VA 22046

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Mr. Tom Teischman
714-851-1877
Min. Code: 2; Est.: 1977; 8a: N
Engineering, Construction &
Testing Services

CENTER FOR RESEARCH & MANAGEMENT,
INC.
1629 K Street, N.W., #500
Washington, DC 20006

Mr. Elgin W. Watkins
202-296-0033
Min. Code: 0; Est.: ?; 8a: U
Occupational Health & Safety

CHAVIS TOOL & MFG. CO., INC.
P.O. Box 746
Florence, SC 29501

Mr. Earl Chavis
803-346-3221
Min. Code: 2; Est.: 1976; 8a: Y
Component Manufacturing

CHRONOMETRICS
13221 Rippling Brook Drive
Silver Spring, MD 20906

Mr. Homer Guerra
301-460-3700
Min. Code: 3; Est.: ?; 8a: Y
Component Manufacturing

CONTRONICS, INC.
835 Busch Ct.
Columbus, OH 43229

Mr. Clifford Rose
614-846-5930
Min. Code: 0; Est.: 1953; 8a: Y
Component Manufacturing

CUSTOM CONTROL PANELS
8333 Chetle Avenue
Santa Fe Springs, CA 90670

Contact:
213-685-3084
Min. Code: 6; Est.: 1966; 8a: U
Component Manufacturing

DAGON DIVERS, INC.
5918 Genoa St.
Oakland, CA 94608

Mr. Roger White
415-428-1982
Min. Code: 6; Est.: 1975; 8a: U
Diving Services/Undersea Construction

DELTA TECHNOLOGIES, INC.
725 Market St.
Wilmington, DE 19801

Mr. William D. King
302-654-6383
Min. Code: 0; Est.: ?; 8a: Y
Research, Development, & Engineering

Alphabetical Listing of Firms (continued)

| | |
|--|---|
| DUGGALS UNITED INTERNATIONAL, INC. 5914 Wisconsin Avenue Chevy Chase, MD 20015 | Mr. D. Paul Duggal 301-656-8610 Min. Code: 4; Est. 1976; 8a: Y Engineering & Construction |
| EC CORPORATION 575 Oak Ridge Turnpike, #200 Oak Ridge, TN 37830 | Dr. Orlindo C. Baldonado 615-482-3681 Min. Code: 3; Est. ?; 8a: U Research, Development, & Engineering |
| ENERGY SYSTEMS ENGINEERING, INC. 11212 Grandview Ave. Wheaton, MD 20902 | Mr. Jose A. Reig 301-942-2427 Min. Code: 3; Est. 1979; 8a: P Research & Development |
| ENGINEERING ANALYSIS & TEST CO., INC. 4676 Admiralty Way Marina Del Ray, CA 90291 | Mr. Raymond Perez 213-822-0931 Min. Code: 3; Est.: 1976; 8a: Y Engineering & Analysis |
| ENVIRONMENTAL MANAGEMENT & RESEARCH, INC. 30 Pamaron Way, #D Ignacio, CA 94947 | Mr. Arthur H. Moriguchi 415-883-7734 Min. Code: 4; Est.: 1974; 8a: U Geotechnical/Civil Engineering |
| EUREKA LABORATORIES, INC. 215 26th St. Sacramento, CA 95816 | Mr. Steve K. Leung 916-443-3932 Min. Code: 4; Est.: ?; 8a: Y Geotechnical/Civil Engineering |
| FITZ CONSULTANTS, INC. 555 Veterans Blvd., Suite 105 Redwood City, CA 94063 | Ms. Leslie Fitz 415-367-8395 Min. Code: 6; Est.: ?; 8a: U Consulting Engineers |
| GENCO TOOL & ENGINEERING COMPANY 2412 Linden Lane Silver Spring, MD 20910 | Mr. George Uzzell 301-587-1841 Min. Code: 0; Est.: ?; 8a: Y Component Manufacturing |
| GEO-RESOURCE CONSULTANTS, INC. 1620 Montgomery St. San Francisco, CA 94111 | Mr. Alvin Joe 415-433-3177 Min. Code: 4; Est.: ?; 8a: U Geotechnical Engineering |
| GLOBETROTTERS ENGINEERING CORP. 1020 S. Wabash Ave., #802 Chicago, IL 60605 | Mr. Niranjana S. Shah 312-922-6400 Min. Code: 4; Est.: ?; 8a: Y Geotechnical/Civil Engineering |

Alphabetical Listing of Firms (continued)

HANSEN/MURAKAMI/ESHIMA
424 2nd Street
Oakland, CA 94607

Mr. Jens H. Hansen
415-444-7959
Min. Code: 4; Est.: 1978; 8a: U
Architectural/Civil Engineering

H.F. HENDERSON INDUSTRIES
45 Fairfield Place
West Caldwell, NJ 07006

Mr. Henry F. Henderson
201-227-9250
Min. Code: 0; Est.: 1953; 8a: Y
Component Manufacturing

INTERTECHNOLOGY CORPORATION
2603 Artie St., #11
Huntsville, AL 35805

Mr. Hanson Howard
205-533-9171
Min. Code: 6; Est.: ?; 8a: U
Research and Development

JAMES ENGINEERING COMPANY
6329 Fairmont Avenue
El Corrito, CA 94530

Mrs. Beverly James
415-525-7350
Min. Code: 7; Est.: ?; 8a: U
Civil & Electrical Engineering

JORDAN/AVENT & ASSOCIATES
111 New Montgomery St.
San Francisco, CA 94105

Mr. Frederick E. Jordan
415-989-1025
Min. Code: 6; Est.: ?; 8a: U
Planning & Engineering

KIRAN ENGINEERS, INC.
6 Hummingbird Lane
Enfield, Ct. 06082

Mr. Kiran Majmudar
203-749-6888
Min. Code: 4; Est.: ?; 8a: U
Consulting Engineering

KYLE MACHINE WORKS, INC.
1913 N. Zaragosa
El Paso, TX 79907

Mr. Fred Kyle
915-859-2010
Min. Code: 3; Est.: 1960; 8a: Y
Component Manufacturing

T.Y. LIN INTERNATIONAL
315 Bay St.
San Francisco, CA 94133

Mr. T.Y. Lin
415-982-1050
Min. Code: 4; Est.: 1954; 8a: U
Civil Engineering

DAVID K. LOW & ASSOCIATES, INC.
47 Lafayette St.
San Francisco, CA 94103

Mr. David K. Low
415-864-2450
Min. Code: 4; Est.: 1966; 8a: U
Consulting Engineering

McWANE & ASSOCIATES
P.O. Box 5175
San Jose, CA 95150

Mr. Odell McWane
408-293-2325
Min. Code: 0; Est.: 1978; 8a: N
Consulting Engineering

Alphabetical Listing of Firms (continued)

| | |
|---|--|
| OCCUPATIONAL & ENVIRONMENTAL HEALTH ANALYSTS, INC. P.O. Box 164 Upton, NY 11973 | Mr. Otto White, Jr. 516-331-1651 Min. Code: 3; Est.: 1979; 8a: U Occupational & Health Safety Studies |
| ODEP ENGINEERING, INC. 550 Seco Road, Bldg. No. 3 Monroeville, PA 15146 | Mr. Oscar De Pineres 412-373-7470 Min. Code: 3; Est.: 1980; 8a: P Geotechnical/Civil Engineering |
| PACIFIC RELAYS, INC. 2929 Exposition Los Angeles, CA 90018 | Mr. William Jankans 213-734-1719 Min. Code: 0; Est.: 1953; 8a: Y Component Manufacturing |
| PAN AMERICAN STEEL CORPORATION 3116 Adeline St. Oakland, CA 94608 | Mr. Gerald Gray 415-654-1489 Min. Code: 0; Est.: 1955; 8a: Y Component Manufacturing |
| PARAMETRIC, INC. 1800 K St., N.W., #718 Washington, DC 20006 | Mr. Marshall Isler 202-467-5533 Min. Code: 0; Est.: 1971; 8a: Y Engineering & Construction |
| PATEL ENTERPRISES, INC. 3400 Blue Springs Road, N.W., #B-3 Huntsville, AL 35810 | Mr. Manu Patel 205-859-5000 Min. Code: 4; Est.: ?; 8a: U Architectural/Geotechnical Engineering |
| PEMBROKE MACHINE CO., INC. P.O. Box 625 Pembroke, NC 28372 | Mr. Ray Lowery 919-521-3411 Min. Code: 2; Est.: 1970; 8a: U Component Manufacturing |
| POWER DESIGN SERVICES 2200 S. Main St., #A Lombard, IL 60148 | Mr. Ken Yoshitami 312-495-9100 Min. Code: 4; Est.: ?; 8a: U Consulting Engineering |
| PROGRESSIVE ENGINEERING CONSULTANTS 15583 Peach Walker Drive Bowie, MD 20716 | Mr. Peter A. Labarta 301-249-1222 Min. Code: 3; Est.: 1979; 8a: P Consulting Engineers |
| REI PYRAMID INTERNATIONAL 430 Franklin Turnpike Ridgewood, NJ 07450 | Mr. Envar Odar 201-444-6220 Min. Code: 4; Est.: 1976; 8a: P Civil/Structural Engineering |

Alphabetical Listing of Firms (continued)

SAM'S ELECTRONIC ASSEMBLY, INC.
105 W. 35th St., Suite M
National City, CA 92050

Ms. Edith V. Wegman
714-426-3401
Min. Code: 2; Est.: 1972; 8a: Y
Component Manufacturing

SCIENCE SYSTEMS & APPLICATIONS,
INC.
10210 Greenbelt Road
Seabrook, MD 20810

Mr. Sarasuati Bahethi
301-794-6633
Min. Code: 4; Est.: 1977; 8a: Y
Research and Development

SCIENTIFIC SYSTEMS, INC.
54 Rindge Ave. Extension
Cambridge, MA 02140

Dr. Raman K. Mehra
617-661-6364
Min. Code: 4; Est.: 1976; 8a: Y
Research and Development

SHELADIA ASSOCIATES, INC.
3833 34th St.
Mt. Rainier, MD 20822

Mr. Pravine Sheladia
301-779-4313
Min. Code: 4; Est.: 1974; 8a: Y
Engineering Services

S. HOUSTON PRECISION MACHINING
SERVICE
1214 VA
S. Houston, TX 77587

Mr. Arturo Gomez
713-946-7595
Min. Code: 3; Est.: 1968; 8a: U
Component Manufacturing

SOUTHEAST MACHINE COMPANY
416 Rotary St.
Hampton, VA 23661

Mr. Luis Cantu
804-838-6155
Min. Code: 3; Est.: ?; 8a: Y
Research and Development

STANDARD ENGINEERING CORPORATION
44800 Industrial Drive
Fremont, CA 94538

Mr. Don Little
415-657-7555
Min. Code: 7; Est.: 1974; 8a: U
Component Manufacturing

STERLING SYSTEMS, INCORPORATED
1749 Old Meadow Road
McLean, VA 22102

Mr. Robert Quinichett
703-827-9000
Min. Code: 0; Est.: 1977; 8a: Y
Consultants

MARION THOMAS ASSOCIATES
914 Silver Spring Ave., #20
Silver Spring, MD 20910

Mr. Marion Thomas
301-588-6403
Min. Code: 0; Est.: ?; 8a: Y
Architectural Engineering

UNIVOX CALIFORNIA, INC.
4505 W. Jefferson Blvd.
Los Angeles, CA 90016

Mr. John Grayson
213-327-7000
Min. Code: 0; Est.: 1970; 8a: Y
Component Manufacturing

Alphabetical Listing of Firms (continued)

VAL-TRONICS, INC.
1 West St.
Fall River, MA 02720

Mr. Gerald Vallee
617-675-7366
Min. Code: 2; Est.: 1970; 8a: Y
Component Manufacturing

VIKING ENERGY CORPORATION
4709 Baum Blvd.
Pittsburgh, PA 15213

Dr. Jagdish Saluja
412-683-6440
Min. Code: 4; Est.: 1977; 8a: Y
Consulting Engineers

WCH INDUSTRIES, INC.
24 Crescent Street
Waltham, MA 02154

Mr. William C. Harrison
617-894-7022
Min. Code: 0; Est.: 1979; 8a: Y
Technical Consultants

WEST ELECTRONICS, INC.
200 C Street, Box 577
Poplar, MT 59255

Mr. Charles Candela
406-768-3471
Min. Code: 2; Est.: 1971; 8a: Y
Component Manufacturing

WILSON & ASSOCIATES, INC.
4439 Reading Road
Cincinnati, OH 45229

Mr. Henry Wilson
513-641-2006
Min. Code: 0; Est.: ?; 8a: Y
Architectecure & Engineering

WOODWARD-CLYDE CONSULTANTS
600 Montgomery St., 30th Floor
San Francisco, CA 94111

Contact:
415-434-1955
Min. Code: 6; Est.: 1950; 8a: U
Consulting Engineering

| | Architecture | Civil Engineering | Component Manufacturing (Agency/Ind. Spec. Certified) | Construction | Electrical Engineering | Fusion | Geotechnical Studies | Geotechnical Engineering | Health Physics | Math Modeling & Analysis | Mechanical Engineering | Nuclear Sciences | Operations Analysis | Radiological Studies | Rad. Waste Mgmt & Analysis | Reactor Engineering | Reactor Physics | Safety & Risk Analysis | Systems Engineering |
|---|--------------|-------------------|--|--------------|------------------------|--------|----------------------|--------------------------|----------------|--------------------------|------------------------|------------------|---------------------|----------------------|----------------------------|---------------------|-----------------|------------------------|---------------------|
| Aguirre Engineers, Inc. Englewood, CO | | | | | | | X | X | | | | | | | | | | | |
| Alco Tool & Mfg. Co. San Antonio, TX | | | X | | | | | | | | | | | | | | | | |
| AMAF Industries, Inc. Columbia, MD | | | | | | X | | | X | X | X | X | X | X | X | X | X | X | X |
| American Consolidated Tech., Inc. San Jose, CA | X | X | | X | X | | | X | | | X | | X | | | | | | |
| American Development Corp. Charleston, SC | | | X | | | | | | | | | | | | | | | | |
| Ashanti Nuclear Corporation New York, NY | | | | | | | X | | | | | X | | X | X | X | X | | X |
| Automated Mgmt. Systems, Inc. Lanham, MD | | X | | | X | | | X | | X | X | | X | | | | | | X |
| B&M Technological Services, Inc. Boston, MA | | X | | | X | | | | | X | X | | | | | | | | |
| Bar-Pat Mfg. Company, Inc. Bridgeport, CT | | | X | | | | | | | | | | | | | | | | |
| Bernert International Engineers Citrus Heights, CA | | X | | | X | | | | | X | X | | | | | | | | |
| C.O.R., Inc. Falls Church, VA | X | | | | | | X | | | | | | | | | | | X | |
| Casde Corp. Torrence, CA | | X | | | X | | X | | | | X | | | | | X | | | |
| Cataract Eng. & Construction Irvine, CA | X | X | X | | | | | | | | | | X | | | X | | | |

| | Architecture | Civil Engineering | Component Manufacturing (Agency/Ind. Spec. Certified) | Construction | Electrical Engineering | Fusion | Geotechnical Studies | Geotechnical Engineering | Health Physics | Math Modeling & Analysis | Mechanical Engineering | Nuclear Sciences | Operations Analysis | Radiological Studies | Rad. Waste Mgmt & Analysis | Reactor Engineering | Reactor Physics | Safety & Risk Analysis | Systems Engineering |
|---|--------------|-------------------|--|--------------|------------------------|--------|----------------------|--------------------------|----------------|--------------------------|------------------------|------------------|---------------------|----------------------|----------------------------|---------------------|-----------------|------------------------|---------------------|
| Center for Research & Mgmt, Inc. Washington, DC | | | | | | | | | X | | | X | | X | | | | | |
| Chavis Tool & Mfg. Co., Inc. Florence, SC | | | X | | | | | | | | | | | | | | | | |
| Chronometrics Silver Spring, MD | | | X | | | | | | | | | | | | | | | | |
| Contronics, Inc. Columbus, OH | | | X | | | | | | | | | | | | | | | | |
| Custom Control Panels Santa Fe Springs, CA | | | X | | | | | | | | | | | | | | | | |
| Dagon Divers, Inc. Oakland, CA | | X | | X | | | | | | | | | | | | | | | |
| Delta Technologies, Inc. Wilmington, DE | | | | | | | | | | X | | X | | | | X | X | | |
| Duggals United Int'l, Inc. Chevy Chase, MD | | X | | X | | | | | | | X | | | | | | | | |
| EC Corporation Oak Ridge, TN | | | | | | X | | | | | | X | | | | | | X | X |
| Energy Systems Engineering, Inc. Wheaton, MD | | | | | | | | | | | | | | | | X | | | X |
| Engineering Analysis & Test Co., Inc. Marina Del Ray, CA | | X | | | | | | X | | X | X | | | | X | X | | X | |
| Environmental Mgmt & Res., Inc. Ignacio, CA | | X | | X | | | X | | | | X | | | | | | | | |
| Eureka Laboratories, Inc. Sacramento, CA | | X | | | | | X | | | | X | | | | X | | | X | |

| | Architecture | Civil Engineering | Component Manufacturing (Agency/Ind. Spec. Certified) | Construction | Electrical Engineering | Fusion | Geotechnical Studies | Geotechnical Engineering | Health Physics | Math Modeling & Analysis | Mechanical Engineering | Nuclear Sciences | Operations Analysis | Radiological Studies | Rad. Waste Mgmt & Analysis | Reactor Engineering | Reactor Physics | Safety & Risk Analysis | Systems Engineering |
|---|--------------|-------------------|--|--------------|------------------------|--------|----------------------|--------------------------|----------------|--------------------------|------------------------|------------------|---------------------|----------------------|----------------------------|---------------------|-----------------|------------------------|---------------------|
| Fitz Consultants, Inc. Redwood City, CA | | | | | | | | | | | | X | X | X | | X | | X | |
| Genco Tool & Eng. Co. Silver Spring, MD | | | X | | | | | | | | | | | | | | | | |
| Geo-Resource Consultants, Inc. San Francisco, CA | | | | | | | X | X | | | | | | | X | | | | |
| Globetrotters Eng. Corporation Chicago, IL | | X | | | | | | X | | | X | | | | | | | | |
| Hansen/Murakami/Eshima Oakland, CA | X | X | | | | | | | | | | | | | | | | | |
| H. F. Henderson Industries West Caldwell, NJ | | | X | | | | | | | | | | | | | | | | |
| Inter Technology Corp. Huntsville, AL | | | | | | X | | | | | | X | | | | | | | |
| James Engineering Co. El Cerrito, CA | | | | | | | | | | X | | X | | | | | | | |
| Jordan/Avent & Associates San Francisco, CA | X | X | | | | | X | | | | | | | | | | | | |
| Kiran Engineers, Inc. Enfield, CT | | X | | | | | X | | | | X | | | | | | | | |
| Kyle Machine Works, Inc. El Paso, TX | | | X | | | | | | | | | | | | | | | | |
| T. Y. Lin International San Francisco, CA | | X | | | | | | | | | | | | | | | | | |
| David K. Low & Assoc., Inc. San Francisco, CA | | X | | | X | | | | | | X | | | | | | | | |

| | Architecture | Civil Engineering | Component Manufacturing (Agency/Ind. Spec. Certified) | Construction | Electrical Engineering | Fusion | Geotechnical Studies | Geotechnical Engineering | Health Physics | Math Modeling & Analysis | Mechanical Engineering | Nuclear Sciences | Operations Analysis | Radiological Studies | Rad. Waste Mgmt & Analysis | Reactor Engineering | Reactor Physics | Safety & Risk Analysis | Systems Engineering |
|---|--------------|-------------------|--|--------------|------------------------|--------|----------------------|--------------------------|----------------|--------------------------|------------------------|------------------|---------------------|----------------------|----------------------------|---------------------|-----------------|------------------------|---------------------|
| McWane & Associates San Jose, CA | | | | | | | | | | | X | | | | | | | | |
| Occupational & Envir. Health Analysts, Inc., Upton, NY | | | | | | | X | | X | | | | | X | | | | X | |
| ODeP Engineering, Inc. Monroeville, PA | | X | | | | | X | X | | X | | | | | X | | | | |
| Pacific Relays, Inc. Los Angeles, CA | | | X | | | | | | | | | | | | | | | | |
| Pan American Steel Corp. Oakland, CA | | | X | | | | | | | | | | | | | | | | |
| Parametric, Inc. Washington, DC | | X | | | X | | | | | | X | | X | | | | | X | |
| Patel Enterprises, Inc. Huntsville, AL | X | X | | | | | X | X | | X | | X | | | | | | | |
| Pembroke Machine Co., Inc. Pembroke, NC | | | X | | | | | | | | | | | | | | | | |
| Power Design Services Lombard, IL | | X | | | | | X | | | | | | X | | | X | | | |
| Progressive Engineering Consult. Bowie, MD | | X | | | | | X | | | | | | | | | | | | |
| REI Pyramid International Ridgewood, NJ | | X | | | | | | | | | X | | | | | | | | |
| Sam's Electronic Assembly, Inc. National City, CA | | | X | | | | | | | | | | | | | | | | |
| Science Systems & Applications Inc., Seabrook, MD | | X | | | | | | | | X | | | X | X | | X | X | | |

| | Architecture | Civil Engineering | Component Manufacturing (Agency/Ind. Spec. Certified) | Construction | Electrical Engineering | Fusion | Geotechnical Studies | Geotechnical Engineering | Health Physics | Math Modeling & Analysis | Mechanical Engineering | Nuclear Sciences | Operations Analysis | Radiological Studies | Rad. Waste Mgmt & Analysis | Reactor Engineering | Reactor Physics | Safety & Risk Analysis | Systems Engineering |
|---|--------------|-------------------|--|--------------|------------------------|--------|----------------------|--------------------------|----------------|--------------------------|------------------------|------------------|---------------------|----------------------|----------------------------|---------------------|-----------------|------------------------|---------------------|
| McWane & Associates San Jose, CA | | | | | | | | | | | X | | | | | | | | |
| Occupational & Envir. Health Analysts, Inc., Upton, NY | | | | | | | X | | X | | | | | X | | | | X | |
| ODEP Engineering, Inc. Monroeville, PA | | X | | | | | X | X | | X | | | | | X | | | | |
| Pacific Relays, Inc. Los Angeles, CA | | | X | | | | | | | | | | | | | | | | |
| Pan American Steel Corp. Oakland, CA | | | X | | | | | | | | | | | | | | | | |
| Parametric, Inc. Washington, DC | | X | | | X | | | | | | X | | X | | | | | X | |
| Patel Enterprises, Inc. Huntsville, AL | X | X | | | | | X | X | | X | | X | | | | | | | |
| Pembroke Machine Co., Inc. Pembroke, NC | | | X | | | | | | | | | | | | | | | | |
| Power Design Services Lombard, IL | | X | | | | | X | | | | | | X | | | X | | | |
| Progressive Engineering Consult. Bowie, MD | | X | | | | | X | | | | | | | | | | | | |
| REI Pyramid International Ridgewood, NJ | | X | | | | | | | | | X | | | | | | | | |
| Sam's Electronic Assembly, Inc. National City, CA | | | X | | | | | | | | | | | | | | | | |
| Science Systems & Applications Inc., Seabrook, MD | | X | | | | | | | | X | | | X | X | | X | X | | |

| | Architecture | Civil Engineering | Component Manufacturing (Agency/Ind. Spec. Certified) | Construction | Electrical Engineering | Fusion | Geotechnical Studies | Geotechnical Engineering | Health Physics | Math Modeling & Analysis | Mechanical Engineering | Nuclear Sciences | Operations Analysis | Radiological Studies | Rad. Waste Mgmt & Analysis | Reactor Engineering | Reactor Physics | Safety & Risk Analysis | Systems Engineering |
|---|--------------|-------------------|--|--------------|------------------------|--------|----------------------|--------------------------|----------------|--------------------------|------------------------|------------------|---------------------|----------------------|----------------------------|---------------------|-----------------|------------------------|---------------------|
| Scientific Systems, Inc. Cambridge, MA | | | | | | | | | | X | | X | | | X | X | | | |
| Sheladia Associates, Inc. Mt. Rainier, MD | | X | | | X | | X | X | | X | X | | | | | | | X | |
| S. Houston Precision Machining Service, South Houston, TX. | | | X | | | | | | | | | | | | | | | | |
| Southeast Machine Co. Hampton, VA | | X | X | | | | | | X | | | X | | | | X | | | |
| Standard Engineering Corp. Fremont, CA | | | X | | | | | | | | | | | | | | | | |
| Sterling Systems, Inc. McLean, VA | | | | | | | | | | X | | | X | | | | | | |
| Marion Thomas Associates Silver Spring, MD | | X | | | | | | | | | X | | | | X | | | | |
| Univox California, Inc. Los Angeles, CA | | | X | | | | | | | | | | | | | | | | |
| Val-Tronics, Inc. Fall River, MA | | | X | | | | | | | | | | | | | | | | |
| Viking Energy Corporation Pittsburgh, PA | | X | | | | X | X | | X | X | X | X | X | X | | X | X | X | X |
| WCH Industries, Inc. Waltham, MA | | | | | | | X | | | | X | X | | X | X | X | X | X | X |
| West Electronics, Inc. Poplar, MT | | | X | | | | | | | | | | | | | | | | |
| Wilson & Associates, Inc. Cincinnati, OH | X | X | | | | | | | | | | | | X | | | | | |

| | | |
|---|---|--|
| Woodward-Clyde Consultants San Francisco, CA | | Architecture |
| | | Civil Engineering |
| | | Component Manufacturing (Agency/Ind. Spec. Certified) |
| | | Construction |
| | | Electrical Engineering |
| | | Fusion |
| | X | Geotechnical Studies |
| | X | Geotechnical Engineering |
| | | Health Physics |
| | | Math Modeling & Analysis |
| | | Mechanical Engineering |
| | | Nuclear Sciences |
| | | Operations Analysis |
| | | Radiological Studies |
| | | Rad. Waste Mgmt & Analysis |
| | | Reactor Engineering |
| | | Reactor Physics |
| | X | Safety & Risk Analysis |
| | | Systems Engineering |

APPENDIX B

DIRECTORY OF MINORITY INDIVIDUALS WITH
NUCLEAR ENERGY RELATED EXPERTISE

DIRECTORY OF MINORITY INDIVIDUALS

This directory is presented with the following format:

LAST NAME, First Name, Initials

- a. Highest relevant degree, University, year
- b. Area(s) of relevant expertise
- c. Current title/responsibility within organization
- d. Organization where employed
- e. Address of organization

Only individuals with nuclear energy related expertise (e.g., nuclear physics, nuclear engineering, health physics) are included.

Where information was not available a "?" has been inserted.

ADDAE, Dr. Andrew K.

- a. PhD,
- b. Reactor Physics/Nuclear Engineering
- c. Professor of Nuclear Engineering
- d. Howard University
- e. Washington, DC 20059

BLEDSON, Dr. Horace W. L.

- a. PhD, U. of Texas, 1971
- b. Low Energy Nuclear Physics
- c. Professor of Physics
- d. U. of Texas at Odessa
- e. Odessa, Texas 70762

CANO, Dr. Gilbert

- a. PhD, New Mexico State U., 1964
- b. Nuclear Physics
- c.
- d. Sandia Laboratories
- e. Albuquerque, New Mexico 87115

COLLINS, Dr. Warren E.

- a. PhD, Vanderbilt U., 1972
- b. Nuclear Physics
- c. Chairman, Dept. of Physics
- d. Southern University
- e. P. O. Box 10554
- f. Baton Rouge, Louisiana 70813

CORTEZ, Dr. Jose L. M.

- a. PhD, U. of Michigan, 1967
- b. Nuclear Physics/Atomic Physics
- c. Director of Technical Programs, CS-DOE
International Program, CS
- d. 600 E Street, N.W.
- e. Mail Stop 400
Washington, DC 20585

DAVIS, Owen

- a. MS, U. of Pittsburg, 1969
- b. Radiation Health, Nuclear Engineering
- c. Director of Federal Agency Relations
- d. Pacific Gas & Electric
- e. 1050 17th Street, NW, Suite 1180
- f. Washington, DC

DIXON, Dr. Robert

- a. PhD, U. of Maryland, 197
- b. Theoretical Nuclear Physics
- c. Director of the Institute
- d. Suite 500, The Grant Building
- e. 44 Broad Street
- f. Atlanta, Georgia 30303

EARLS, Dr. Julian

- a. PhD, U. of Michigan, 1966
- b. Health Physics
- c. Chief of Environmental Health
- d. NASA Lewis
- e. 21000 Brookpark Road
- f. Cleveland, Ohio

FERGUSON, Dr. George

- a. PhD, Catholic U., 1965
- b. Low Energy Nuclear Physics
- c. Professor & Director, Nuclear Engineering
- d. Howard U.
- e. Washington, DC 20059

GALLEGOS, Dr. Tony F.

- a. PhD, Colorado State U., 1969
- b. Radioecology
- c.
- d. Department of Biology
- e. New Mexico Highland U.
- f. Las Vegas, New Mexico

GREENHOUSE, Nathaniel A., Jr.

- a. MS, U. of Rochester, 1966
- b. Health Physics
- c. Vice President, Occupational & Environmental Health Analysts, Inc.
- d. P. O. Box 164
- e. Upton, New York 11973

HARRISON, Dennis L.

- a. MS, Howard U., 1974
- b. Nuclear Engineering
- c. Mechanical Engineer
- d. Maritime Administration
- e. Office of Ship Construction
- f. Dept. of Commerce
Washington, DC 20230

HOLT, Brenda J.

- a. MS, UCLA, 1973
- b. Health Physics
- c. Engineering Physicist, Radiation Physics Group
- d. Fermi National Laboratory
- e. Mail Stop 119
- f. P. O. Box 500
Batavia, Illinois 60510

JONES, Kenneth A.

- a. MS, Carnegie-Mellon, 197
- b. Nuclear Engineer
- c. Manager of Reactor Protection
- d. Engineering Department, Nuclear Technology Div.
- e. Westinghouse Electric Corp.
- f. Pittsburg, Penn.

JUPITER, Clyde

- a. MS, U. of Notre Dame, 1951
- b. Nuclear Power/Environmental Science
- c. Program Manager, Waste Management Research
- d. Office of Nuclear Regulatory Research
- e. Nuclear Regulator Commission
- f. 7915 Eastern Avenue
- g. Silver Spring, Maryland

KNOX, Wayne H.

- a. MS, Georgia Tech, 1973
- b. Nuclear Engineer/ Health Physics
- c. Project Manager
- d. Institute for Nuclear Power Operations
- e. 1820 Water Place
- f. Atlanta, Georgia 30339

LARKINS, Dr. John T.

- a. PhD,
- b.
- c. Chief, Program Coordination Branch
- d. Office Nuclear Regulatory Research
- e. Nuclear Regulatory Commission
- f. 7915 Eastern Avenue
- g. Silver Spring, Maryland

MCGUIRE, Dr. Stephen C.

- a. PhD, Cornell U., 197
- b. Experimental Nuclear Physics
- c. Nuclear Physicist
- d.
- e. Oak Ridge National Laboratory
- f. Oak Ridge, Tennessee

MILLER, Vandy

- a. MS, U. of Rochester, 1962
- b. Radiobiology/Health Physics
- c. Chief, Materials Licensing Branch
- d. Nuclear Regulatory Commission
- e. 7915 Eastern Avenue
- f. Silver Spring, Maryland

MILLER, Dr. Warren

- a. PhD, Northwestern U.,
- b. Nuclear Engineer/Technical Management
- c. Deputy Associate Director for Nuclear Programs
- d. Los Alamos Scientific Laboratory
- e. Los Alamos, New Mexico 87545

MORALES, Dr. Reynaldo

- a. PhD, U. of Texas, 1967
- b. Nuclear Physics
- c. LASL, Mail Stop 632
- d. Los Alamos, New Mexico 87544

PETTIJOHN, Samuel

- a.
- b. Health Physics
- c. AEOD
- d. Nuclear Regulatory Commission
- e. Washington, DC 20555

PEREZ, Raymond

- a. MS, UCLA, 1974
- b. Nuclear Engineer
- c. President, Engineering Analysis and Test Co., Inc.
- d. 4676 Admiralty Way
- e. Marina Del Rey, California 90291

PERRY, Dr. Benjamin

- a. PhD, U. of Michigan, 1962
- b. Nuclear Astrophysics
- c. Professor of Physics
- d. Dept. of Physics
- e. Howard University
- f. Washington, DC 20059

POE, Robert

- a. MS, Vanderbilt, 1969
- b. Physics/Health Physics
- c. Standards Specialist
- d. Office of Environmental Compliance & Overview
- e. Mail Stop EV-132, Dept. of Energy
- f. Washington, DC 20545

REED, Cordell

- a. BS, U. of Illinois, 19
- b. Mechanical Engineer
- c. Assistant Vice President, Manager of Nuclear Operations
- d. Commonwealth Edison Co.
- e. P. O. Box 767
- f. Chicago, Illinois 60690

RIOS, Dr. Miguel, Jr.

- a. PhD, U. of Maryland, 1972
- b. Experimental Nuclear Physics
- c.
- d. Sandia Laboratories
- e. Albuquerque, N. M. 87115

SHACKLEFORD, William G.

- a. MS, Georgia Tech, 1974
- b. Nuclear Engineering/Health Physics
- c. Director, Dual Degree Engineering
- d. Atlanta University Center, Inc.
- e. Atlanta, Georgia 30314

SHEPARD, Dr. Robert

- a. PhD,
- b. Nuclear/Chem Engineer
- c. Operations Research Analyst
- d. Office of Nuclear Regulatory Research
- e. Nuclear Regulatory Commission
- f. Washington, DC 20555

SIMMONS, Earl

- a. MS, Howard U.
- b. Nuclear Engineering
- c. Mechanical Engineer
- d. Maritime Administration
- e. Office Ship Construction
- f. Department of Commerce
Washington, DC 20230

SLAUGHTER, Dr. Milton

- a. PhD, U. of New Orleans, 1974
- b. Nuclear/Particle Physics
- c. LASL Group T-D0
- d. MS 210
- e. P. O. Box 1663
- f. Los Alamos, New Mexico 87545

VIGIL, Dr. John Carlos

- a. PhD,
- b. Reactor Physics
- c.
- d. Los Alamos Scientific Laboratory
- e. Los Alamos, New Mexico 87545

WILKINS, Dr. J. Ernest , Jr.

- a. PhD, U. of Chicago, 1942
- b. Reactor Theory
- c. Nuclear Physicist
- d. Associate General Manager
- e. EG&G Idaho, Inc.
- f. P. O. Box 1625
- g. Idaho Falls, Idaho 83401

WATKINS, Elgin W.

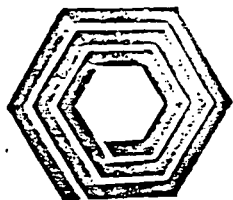
- a. MPH, Yale U., 1967
- b. Health Physics
- c. President, Center for Research & Management, Inc.
- d. 1629 K Street, N.W., Suite 500
- e. Washington, DC 20006

WATKINS, Goldie

- a.
- b. Health Physics
- c. Deputy Commissioner of Health
- d. New York State Department of Health
- e. 4918 Two World Trade Center
- f. New York, New York 10047

APPENDIX C

OVERVIEW OF IRDEN AND THE CURRENT
ORGANIZATIONAL STRUCTURE



IRDEN

Overview

The Institute for Research, Development and Engineering in Nuclear Energy (IRDEN) seeks to enhance the participation of minority institutions in the nuclear energy programs of the Department of Energy. IRDEN, located in Atlanta, Georgia, the home of six historically black institutions of higher education, is a wholly-owned subsidiary of AMAF Industries, Inc. of Columbia, Maryland. The Institute addresses its purpose through the involvement of minority scientists, engineers and students in nuclear technology related research. The focus of IRDEN's program is in the area of nuclear waste management, an area that is vital to the development and use of the nuclear energy alternative.

The Institute promotes and develops research activities in nuclear energy programs through the involvement of minority businesses and academic institutions with the major nuclear energy laboratories. IRDEN provides minority institutions with an information base, technical services and the necessary infrastructure to achieve greater participation in nuclear energy programs. IRDEN recognizes the compelling necessity of utilizing fully the talent pool of the Nation in seeking solutions to nuclear energy problems. Significantly this philosophical underpinning of IRDEN is a foremost element in the Nation's current approach to nuclear waste management, which advocates broad participation by the public and the technical community. The Institute seeks to insure this expanded participation by providing a diverse set of opportunities in engineering and in the biological, physical and social sciences for minority-institution involvement. Particular attention is focused on the historically black academic institutions, which comprise a valuable National resource. These colleges and universities, many with well over a century of service, possess a significant concentration of the Nation's minority scientists and engineers. IRDEN matches elements of this talent pool with viable research opportunities. The specific goals of the Institute are to:

- Foster greater minority business participation in the nuclear field.

- Increase participation of minority scientists and engineers in nuclear energy programs.

- Strengthen the manpower resource pool capable of contributing to nuclear technology development.

IRDEN's pursuit of these goals is realized through an organized and concerted effort to operate within the framework established by the following functions:

- Provide coupling of capability of minority institutions and nuclear energy program needs.

- Assist development of competitive contract proposals.

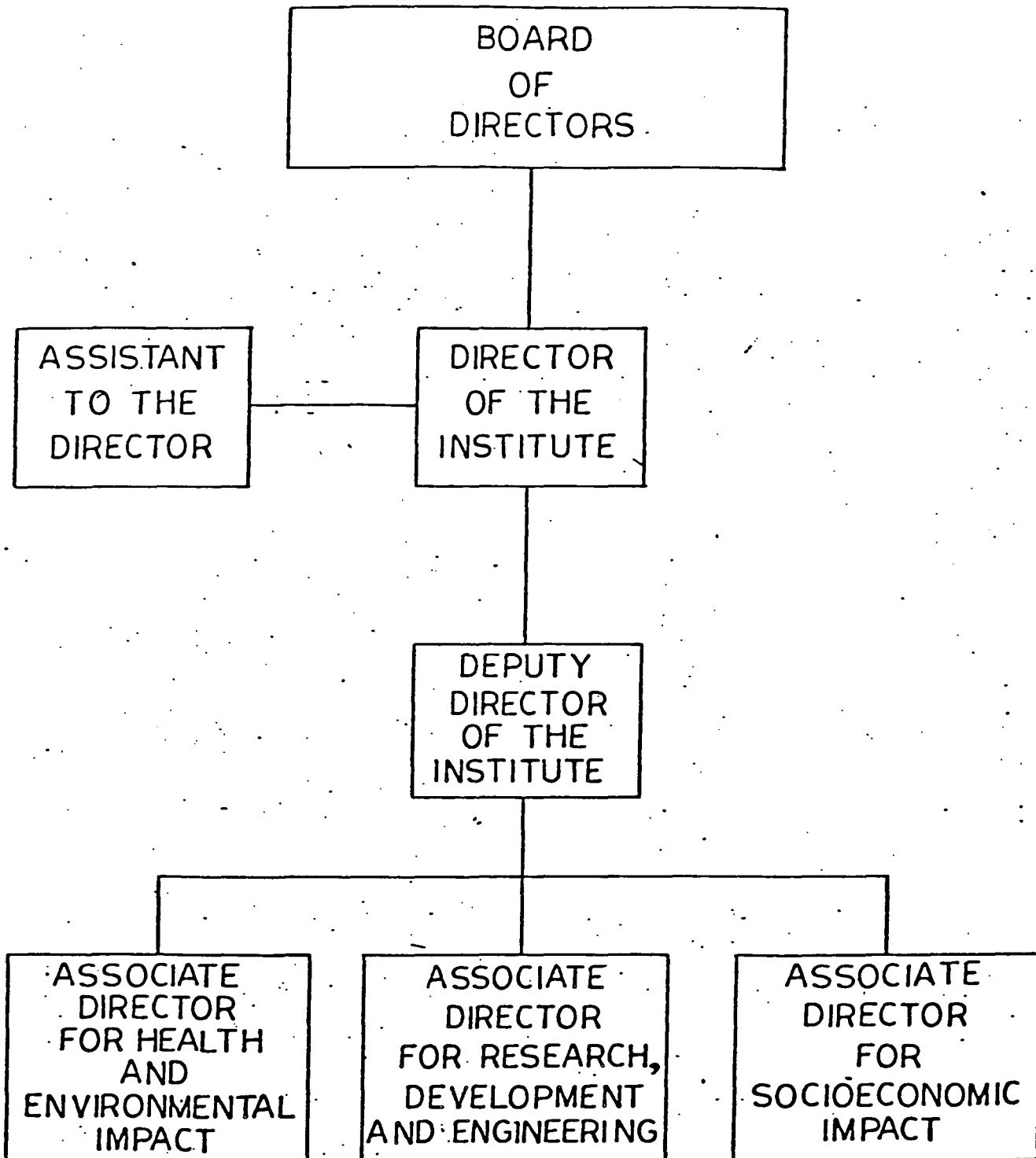
- Provide management of program tasks at minority institutions.

- Inform minority institutions of strategies, plans and technical developments of sponsoring organizations.

- Facilitate involvement of institutions by provision of other technical and managerial services.

These functions reflect the approach of the Institute to enhance minority participation in the nuclear field.

IRDEN ORGANIZATIONAL STRUCTURE



APPENDIX D
STATEMENT OF WORK (UNABRIDGED)

STATEMENT OF WORK

Development of New Business Opportunities for Minorities in Nuclear Energy

I. INTRODUCTION

The Nuclear Program Division of the Department of Energy expects nuclear power's share of electricity generation to increase to over 30 percent by the year 2000, both due to new construction and completion of projects already underway. According to a recent report, nuclear power in the United States currently is produced by seventy-two reactors supplying some 13 percent of the nation's electricity. The Department's budget authority in the nuclear program is as follows: \$1.2 billion in 1979, \$1.18 billion in 1980, and \$925 million in 1981. The thrust of the advanced nuclear technology in the form of the fission breeder reactor offers an approach to meeting the nation's long-term energy objective to make available renewable and essentially inexhaustible sources of energy.

This expansion of nuclear power capability will foster many business opportunities. There are a number of minority owned small businesses (MOSB) which qualify as subcontractors for part of the work under these procurements. However, the impression seems to be, where advanced technology is called for, that minority owned small firms (1) lack the expertise to perform and/or (2) capable of performing only the small and relatively unimportant tasks.

The Office of Minority Economic Impact (OMEI) as part of its mandate serves as the advocate for minorities who seek to do business with DOE. Therefore, OMEI is quite interested in seeing that this problem is eliminated. To accomplish this goal, we plan to assist those program and/or project managers who have indicated that they would be willing to utilize minority firms if they could only find one.

II. OBJECTIVES AND SCOPE

In order to assist the Department in achieving Secretary Duncan's procurement goals and to help ensure that Public Law 95-507 is achieved, OMEI plans to issue an 8(a) contract to analyze the nature of the subcontract market within the nuclear area to (1) identify and find opportunities for new business for minority owned small businesses; and (2) prepare a list of qualified MOSBs who can then be matched with the contracting opportunities uncovered.

III. WORK TO BE ACCOMPLISHED

To take advantage of these opportunities, a comprehensive marketing approach involving many minority institutions and organizations is needed. Also, an analysis of the subcontract market. This analysis will yield information about current and future business opportunities for MOSBs by categories broad enough to permanence of the information while being significantly specific in terms of location, value of business, and time framework to ensure usability. The areas of subcontracting to be determined must therefore be functional.

TASK A: Develop a typology of MOSBs corresponding to the characteristics of MOSBs that have the capability to handle the identifiable business opportunities within the Nuclear Programs of DOE. This listing will also be functional, organized according to subcontracting categories and cross-referenced in terms of other relevant information.

TASK B: Develop an in-depth list of all areas in DOE including program people who could provide contracting opportunities for MBEs. This listing would also identify the level of funding as well as the type of opportunity in the following areas:

- (a) Converter Reactor Systems
- (b) Breeder Reactor Systems
- (c) Special Nuclear Systems
- (d) Advanced Isotope Separation
- (e) Commercial Nuclear Waste
- (f) Spent Nuclear Fuel
- (g) Uranium Resource Assessment

TASK C: Create a data base of minority scientists and engineers located in industry, universities, and government in fields related to nuclear energy.

TASK D: Develop a network which will facilitate the interaction of MBEs, knowledgeable scientists and engineers, professional associations, and black educational institutions in the fields related to nuclear energy.

IV. SPECIAL INFORMATION AND INSTRUCTIONS

In order to accomplish the above tasks, the contractor will need to (1) meet with key personnel within the Office of the Assistant Secretary for Nuclear Programs to clarify the nature and intent of the project; (2) be provided support in approaching suggested prime contractors; (3) be provided with a list of sites to visit and personnel contacts at those sites, as well as Regional Offices corresponding to the areas to be visited; and (4) be provided with appropriate "sanitized" documents.

PART II
MOSB CONTRACTOR'S GUIDE TO
OPPORTUNITY

1.0 THE STRUCTURE OF THE NUCLEAR INDUSTRY

It is important that would-be minority business contractors understand the structure of the industry and the relationship of the DOE Nuclear Energy Office to that industry. Each major sector of the industry represents multi-billions of dollars of activity of a highly varied nature. Each must support other sectors so as to ensure an overall viable industry. Typically an established set of highly specialized small business suppliers of components and services is closely interfaced with a small set of major nuclear industries who essentially dominate the industry. A functional breakdown of the industry is presented in Figure 3.

In Table 1 is presented a matrix of the major industrial participants and their sectors of principal activity. It is typical for significant though minor fractions of their business to involve small business enterprises as subcontractors or suppliers. These relationships have been established over many years (decades) and have given rise to a fully elaborated network of standards and markets for techniques, components, and services which is quite difficult to penetrate for outside contractors. The early developmental history of the industry was strongly influenced and dependent upon government subsidy and the obvious safety and health implications of its operation surrounds it with a tight regulatory climate. The high costs, in capital and/or human welfare, of a component or system failure further closes the activity arena to all but the well established firms.

2.0 FUNCTIONAL BREAKDOWN OF NE PROGRAMS

The Office of the Assistant Secretary for Nuclear Energy of DOE has primary responsibility for nuclear research and development and for conducting subcommercial demonstrations of new nuclear technologies. A good introduction to the major activities within its coordination responsibility can be obtained from the DOE "Gold" books:

- a. Fission Energy Program of the USDOE (FY 81), DOE/NE-0006
- b. Nuclear Waste Management Program Summary Document (FY 81), DOE/NE-0008

Both of the program analyses can be obtained from the National Technical Information Service (NTIS).

STRUCTURE OF THE NUCLEAR INDUSTRY

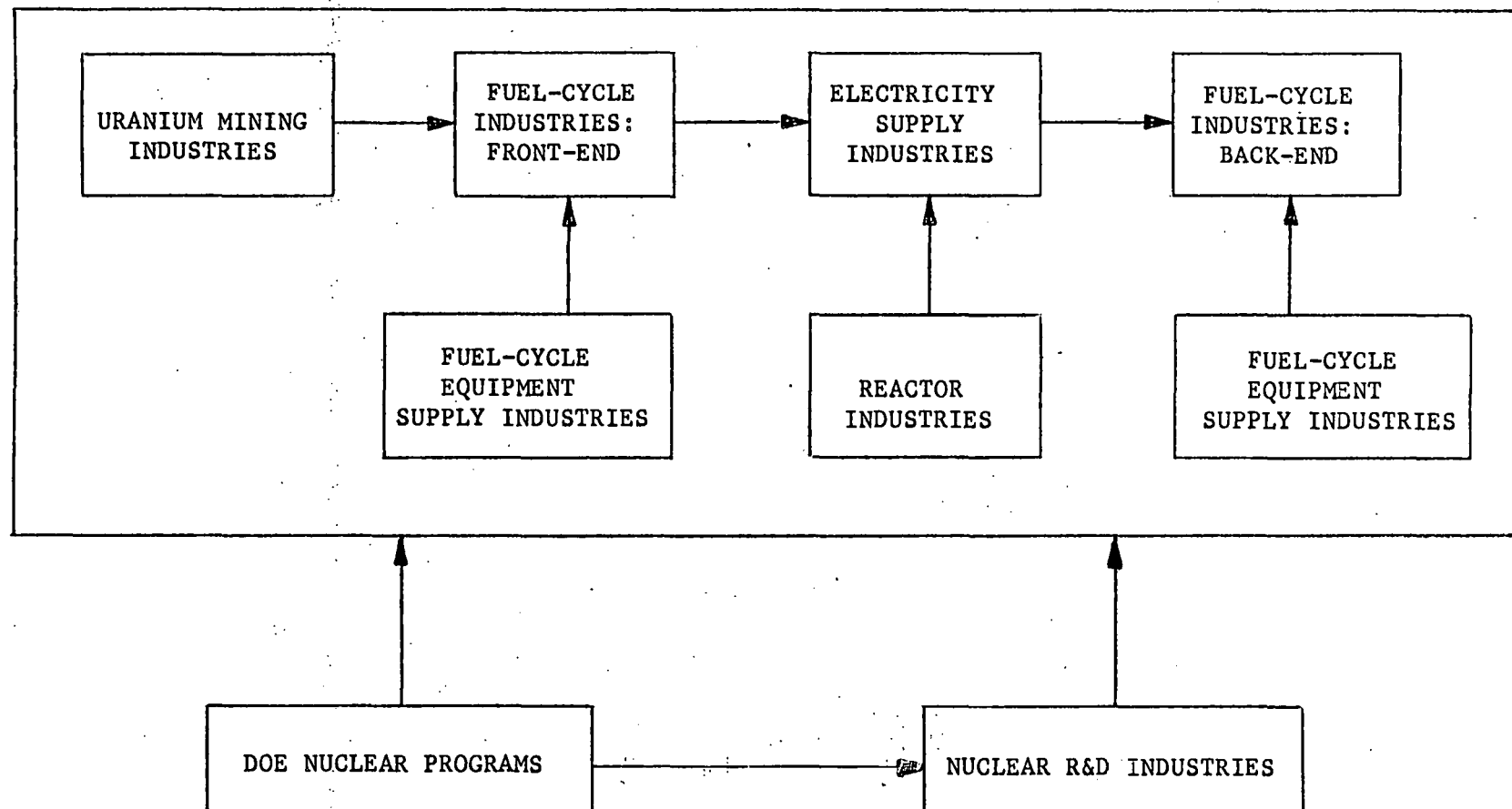


FIGURE 3

TABLE 1
PRINCIPAL COMPANIES OPERATING IN
THE NUCLEAR ENERGY SECTOR

| Company | Uranium Production | Refining | Fuel Fabrication | Reactor Manufacture |
|------------------------------|-----------------------|----------|---------------------|------------------------|
| Allied Chemical Corp. | | X | | |
| Allis Chalmers Corp. | | | | X |
| Anaconda Co. | X | | | |
| Babcock & Wilcox Co. | | | X | X |
| Baker Industries Corp. | | X | | |
| Combustion-Engineering, Inc. | | | X | X |
| Continental Oil Co. | X | | | |
| Exxon Corp. | X | | X | |
| Federal-American Partners | X | | | |
| General Atomic Co. | | | | X |
| General Electric Co. | | | X | X |
| Getty Oil Co. | X | | | |
| (including Skelly Oil Co.) | | | | |
| Gulf Oil Corp. | X | | | |
| Kerr-McGee Corp. | X | X | | |
| Mobile Oil Corp. | X | | | |
| Phelps Dodge Corp | X | | | |
| (Western Nuclear Inc.) | | | | |
| Pioneer Corp. | X | | | |
| Union Carbide Corp. | X | | | |
| Union Pacific Corp. | X | | | |
| United Nuclear Corp. | X | | | |
| Utah International, Inc. | X | | | |
| Westinghouse Electric Corp. | | | X | X |
| (Wyoming Minerals Corp.) | | | | |

Source: Federal Trade Commission, Bureau of Economics

The DOE nuclear energy program has the following (budget category) breakdown:

Commercial Nuclear Waste

- Terminal Isolation Research and Development
- Waste Systems Evaluation and Public Interaction
- Waste Treatment Technology
- Remedial Action Program

Defense Nuclear Waste

- Decontamination and Decommissioning
- Interim Waste Operations
- Long-Term Waste Management Technology
- Terminal Storage
- Transportation Research and Development

Spent Nuclear Fuel

- Domestic Spent Fuel Storage
- International Spent Fuel Storage

Advanced Isotope Separation Technology

- Uranium Enrichment
- Applications and Assessments of Advanced Technologies

Conventional Reactor Systems

- Light Water Reactor Technology
- Three Mile Island Examination Activity

Breeder Reactor Systems

Liquid Metal Fast Breeder Reactor

Water Cooled Breeder

Proof-of-Breeding Analytical Support

Advanced Nuclear Systems

Systems Evaluations

Space and Terrestrial Applications

Naval Reactors

The associated budgets for the major categories for FY 81 are as follows:

| | |
|--|--------------|
| Commercial Nuclear Waste | \$245.6 |
| Defense Nuclear Waste | 300.2 |
| Spent Nuclear Fuel | 22.5 |
| Advanced Isotope Separation Technology | 80.2 |
| Conventional Reactor Systems | 105.2 |
| Breeder Reactor Systems | 469.3 |
| Advanced Nuclear Systems | 42.0 |
| Naval Reactors | <u>303.4</u> |
| Total ASNE | \$1,568.7 |

3.0 BARRIERS TO EXPLOITATION OF OPPORTUNITIES

The nuclear industry is a very difficult marketing arena for entry by a minority owned small business. Some of the problems any MOSB faces are:

- a. The growth climate for the industry is strongly influenced by political and extra-technical issues (environmental, safety, psychological). Thus, there is a high degree of inherent risk in business planning and projection with regards to allocation of investment capital and personnel resources.
- b. The contractors and suppliers are well established and mutually beneficial networks have been set up in such a way as to exclude the need for or interest in new participants.
- c. The DOE nuclear programs are highly decentralized to field and project offices and the program people in those offices typically have come to rely on a small set of business as viable and qualified. There is little benefit and considerable risk for a program manager in involving new contractors.
- d. The intensive regulatory climate in which the industry and program operates dictates very high quality assurance standards which must be met by prospective (MOSB and other) suppliers.

- e. The data keeping in DOE field and project offices makes it extremely difficult to get an accurate fix on past office performance with respect to MOSB nuclear related procurements. Thus, it is difficult to estimate the past and current commitments to such procurements.

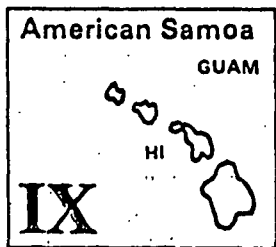
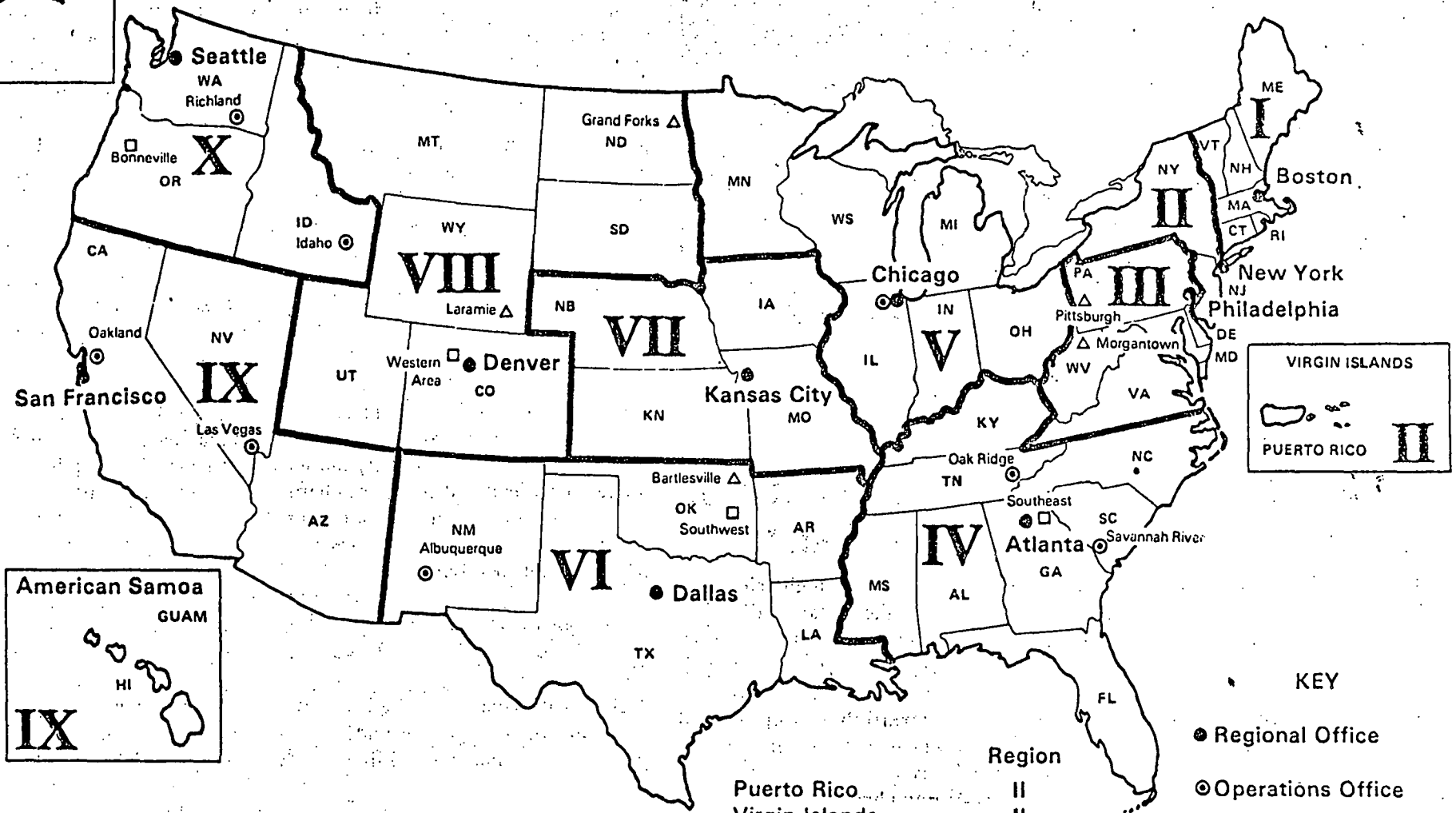
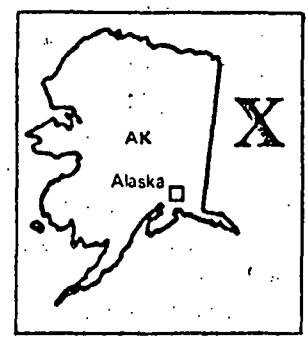
Though problematic, the market is not impossible. Passive approaches to participation simply will not work, however. An effective approach to marketing this arena for MOSBs requires participation in the "capacity building" and "networking" activities proposed in Part I of this report.

4.0 REGIONAL ANALYSIS OF OPPORTUNITIES

This section presents an analysis of the DOE nuclear program opportunities by region. A map defining each geographic region (I - X) is presented in Figure 4. For each region there is given a matrix table presentation of the lead DOE field and project offices and their program responsibilities. The appropriate procurement office and small business/disadvantage business (SB/DB) specialist contacts are provided for each office. A data sheet is provided for each identified minority owned small business. These sheets are grouped according to DOE regions to facilitate contact between DOE and the businesses, and between the businesses themselves.

U.S. DEPARTMENT OF ENERGY

8-II



| Region | |
|-------------------------|----|
| Puerto Rico | II |
| Virgin Islands | II |
| Canal Zone | IV |
| American Samoa | IX |
| Guam | IX |
| Trust Terr. Pacific Is. | IX |

- KEY**
- Regional Office
 - ⊙ Operations Office
 - △ Energy Technology Center
 - Power Administration

FIGURE 4

DEFINITIONS OF DOE FACILITY ACTIVITY ABBREVIATIONS

LWR - Light Water Reactor

AIS - Advanced Isotope Separation

HTR - High Temperature Gas Cooled Reactor

LMFBR - Liquid Metal Fast Breeder Reactor

WCB - Water Cooled Breeder

GCBR - Gas Cooled Breeder Reactor

Adv. Sys. Eval. - Advanced Systems Evaluation

Space & Terr. Appl. - Space & Terrestrial Systems Applications

Region 1; Boston, Mass.

Contains: Connecticut, Maine, Massachusetts, New Hampshire, Rhode Island, Vermont

| LWR | ALS | HTR | LMFER | WCB | GCBR | Adv. Sys. Eval. | Space & Terr. Appl. | Defense Waste | Commercial Waste |
|-----|-----|-----|-------|-----|------|--------------------|------------------------|------------------|---------------------|
|-----|-----|-----|-------|-----|------|--------------------|------------------------|------------------|---------------------|

No major DOE facilities or labs listed

DEPARTMENT OF ENERGY OFFICES & FACILITIES,
GOVERNMENT OWNED/COMPANY OPERATED OFFICES
& FACILITIES, & SMALL/DISADVANTAGED
BUSINESSES LOCATED WITHIN DOE REGION 1

DOE Office

Harold J. Keohane
Regional Representative of
the Secretary, Region 1
Department of Energy
150 Causeway Street, Rm 700
Boston, MA 02114
(617) 223-3701
(FTS 223-3701)

Procurement Office

Diana Salemy
Director of Management
Services
(617) 223-2444
(FTS 223-2444)

SB/DB Specialist

Same

NAME OF FIRM Bar-Pat Manufacturing Co.

MAILING ADDRESS 437 Howard Street

Bridgeport, CT 06601

CONTACT George Ballinger TITLE President

PHONE (203) 335- 2193 EST.: 1970 8(a): Yes

TYPE OF SERVICE OFFERED manufacturing; electronix mfg., testing equipment
usable in nuclear plants

SPECIAL CAPABILITIES _____

PERSONNEL WITH SPECIAL QUALIFICATIONS _____

FIRM MINORITY CODE 0

| | | |
|---------------------|----------------------|---------------------|
| 0 - BLACK | 3 - SPANISH AMERICAN | 6 - UNDETERMINED |
| 1 - PUERTO RICAN | 4 - ASIAN | 7 - OTHER INCLUDING |
| 2 - AMERICAN INDIAN | 5 - ESKIMO AND ALEUT | WHITE |

FEMALE OWNED/OPERATED _____

OTHER COMMENTS OR QUALIFICATIONS MIL-Spec certified; test equipment
for ORNL

NAME OF FIRM Kiran Engineers, Inc.

MAILING ADDRESS 6 Hummingbird Lane

Enfield, CT 06082

CONTACT Kiran Majmudar TITLE _____

PHONE (203) 749 - 6888 EST.: _____ 8(a): _____

TYPE OF SERVICE OFFERED consulting engineers

SPECIAL CAPABILITIES _____

PERSONNEL WITH SPECIAL QUALIFICATIONS _____

work by company personnel on piping and structure. Also, analysis of

reactor and containment.

FIRM MINORITY CODE 4

| | | |
|---------------------|-----------------------|---------------------|
| 0 - BLACK | 3 - SPANISH AMERICAN | 6 - UNDETERMINED |
| 1 - PUERTO RICAN | 4 - ASIAN | 7 - OTHER INCLUDING |
| 2 - AMERICAN INDIAN | 5 - ESKIMO AND ALEUT. | WHITE |

FEMALE OWNED/OPERATED _____

OTHER COMMENTS OR QUALIFICATIONS _____

piping and structural analysis; civil and mechanical engineering

NAME OF FIRM B & M Technological Services, Inc.

MAILING ADDRESS 520 Commonwealth Avenue

Boston, MA 02115

CONTACT William V. Benjamin TITLE _____

PHONE (617) 247-1040 EST.: 1978 8(a): Yes

TYPE OF SERVICE OFFERED research, development, engineering

SPECIAL CAPABILITIES _____

PERSONNEL WITH SPECIAL QUALIFICATIONS individuals with nuclear
experience

FIRM MINORITY CODE 0

| | | |
|---------------------|----------------------|---------------------|
| 0 - BLACK | 3 - SPANISH AMERICAN | 6 - UNDETERMINED |
| 1 - PUERTO RICAN | 4 - ASIAN | 7 - OTHER INCLUDING |
| 2 - AMERICAN INDIAN | 5 - ESKIMO AND ALEUT | WHITE |

FEMALE OWNED/OPERATED _____

OTHER COMMENTS OR QUALIFICATIONS _____

civil, mechanical, electrical engineering, math modeling

NAME OF FIRM Scientific Systems, Inc.

MAILING ADDRESS 54 Rindge Avenue Wxtension

Cambridge, MA 02140

CONTACT Dr. Raman K. Mehra TITLE President

PHONE (617) 661 - 6364 EST.: 1976 8(a): yes

TYPE OF SERVICE OFFERED _____

SPECIAL CAPABILITIES research and development

PERSONNEL WITH SPECIAL QUALIFICATIONS _____

FIRM MINORITY CODE 4

| | | |
|---------------------|-----------------------|---------------------|
| 0 - BLACK | 3 - SPANISH AMERICAN | 6 - UNDETERMINED |
| 1 - PUERTO RICAN | 4 - ASIAN | 7 - OTHER INCLUDING |
| 2 - AMERICAN INDIAN | 5 - ESKIMO AND ALEUT. | WHITE |

FEMALE OWNED/OPERATED _____

OTHER COMMENTS OR QUALIFICATIONS _____

analytical studies in modern system theories, math modeling, survey control

theories, mostly computer related to nuclear, attempted to get core analysis

project, nuclear science, rad waste management.

NAME OF FIRM Val-Tronics, Inc.

MAILING ADDRESS One West Street

Fall River, MA 02720

CONTACT Gerald Vallee TITLE President

PHONE (617) 675- 7366 EST.: 1970 8(a): Yes

TYPE OF SERVICE OFFERED

electronic devices manufacturer

SPECIAL CAPABILITIES

test communication system equipment for FAA

PERSONNEL WITH SPECIAL QUALIFICATIONS

None. Personnel has been involved in a radiation monitoring system for the
Titan II Missile Program and other Radiac detection instruments.

FIRM MINORITY CODE 2

| | | |
|---------------------|-----------------------|---------------------|
| 0 - BLACK | 3 - SPANISH AMERICAN | 6 - UNDETERMINED |
| 1 - PUERTO RICAN | 4 - ASIAN | 7 - OTHER INCLUDING |
| 2 - AMERICAN INDIAN | 5 - ESKIMO AND ALEUT. | WHITE |

FEMALE OWNED/OPERATED

OTHER COMMENTS OR QUALIFICATIONS

able to manufacture panel control meter (radioactive meter), MIL spec

certified (MIL-STD-810) & (MIL-I-45208A)

NAME OF FIRM WCH Industries, Inc.

MAILING ADDRESS 24 Crescent Street

Waltham, MA 02154

CONTACT William C. Harrison TITLE President

PHONE (617) 894-7022 EST.: 1979 8(a): Yes

TYPE OF SERVICE OFFERED

technical consultants

SPECIAL CAPABILITIES

PERSONNEL WITH SPECIAL QUALIFICATIONS

President is retired U.S. Lt. Colonel in Army Chemical Corps working with

nuclear environmental areas, company personnel with Storm & Webster, have access

to machine shop with nuclear QA trained personnel

FIRM MINORITY CODE 0

0 - BLACK

3 - SPANISH AMERICAN

6 - UNDETERMINED

1 - PUERTO RICAN

4 - ASIAN

7 - OTHER INCLUDING

2 - AMERICAN INDIAN

5 - ESKIMO AND ALEUT.

WHITE

FEMALE OWNED/OPERATED

OTHER COMMENTS OR QUALIFICATIONS

nuclear science, radiological studies, geotechnical studies, radiac waste

management, safety & risk, system engineering, ME, reactor engineer, reactor

physicists

Region 2; New York, New York

Contains: New Jersey, New York, Puerto Rico, Virgin Islands

| | LWR | AIS | HTR | LMFBR | WCB | GCBR | Adv. Sys. Eval. | Space & Terr. Appl. | Defense Waste | Commercial Waste |
|-----------------------------|-----|-----|-----|-------|-----|------|--------------------|------------------------|------------------|---------------------|
| NEW YORK | | | | | | | | | | |
| Brookhaven Natl. Lab. | | | | | | | | | | |
| Upton | | | | | | | | | | |
| Knolls Atomic Power Lab. | | | | | | | | | | |
| Schenectady | | | | | | | | | | |

DEPARTMENT OF ENERGY OFFICES & FACILITIES,
GOVERNMENT OWNED/COMPANY OPERATED OFFICES
& FACILITIES, & SMALL/DISADVANTAGED
BUSINESSES LOCATED WITHIN DOE REGION 2

DOE Office

Robert A. Low
Regional Representative of
the Secretary, Region 2
Department of Energy
26 Federal Plaza, Rm 3206
New York, NY 10007
(212) 264-1021
(FTS 264-1021)

Barry M. Erickson, Manager
Schenectady Naval Reactors
Office
Through: Division of Naval
Reactors
Department of Energy
P.O. Box 1069
Schenectady, NY 12301
(518) 393-6611, x4441
(FTS 563-4441)

David Schweller, Manager
Brookhaven Area Office
Department of Energy
Upton, NY 11973
(516) 345-3424
(FTS 666-3424)

H.L. Volchok, Director
Environmental Measurements
Laboratory
376 Hudson Street
New York, NY 10014
(212) 620-3616
(FTS 660-3616)

Dr. J. Nelson Grace,
Director
Princeton Area Office
Department of Energy
P.O. Box 102
Princeton, NJ 08540
(609) 683-3700
(FTS 340-3700)

Procurement Office

William V. Wood
Contracting Officer
(212) 264-1021
(FTS 264-1021)

Peter F. Emmi, Director
Contracts Division
(518) 393-6611, x4231
(FTS 563-4231)

Joseph F. Frino, Chief
Administrative Branch
(516) 345-3436
(FTS 666-3436)

Jonathan P. Ford
Administrative Branch Chief
(212) 620-3607
(FTS 660-3607)

John Hart
Administrative Branch
(609) 683-3709
(FTS 340-3709)

SB/DB Specialist

Same

Contact Through:
John Herring 557-5567

Mary Ann Petricca
Contract Specialist
(518) 393-6611, x4446
(FTS 563-4446)

Gregory J. Ageka
Senior Contract
Specialist
(516) 345-3439
(FTS 666-3439)

Jonathan Ford
(212) 620-3607
(FTS 620-3607)

Jerry Faul
SB/MB Program
(609) 683-3706
(FTS 340-3706)

GOVERNMENT OWNED/COMPANY OPERATED - SB/DB SPECIALISTS

| <u>Office</u> | <u>Office Head</u> | <u>SB/DB Specialist</u> |
|---|---|--|
| The Lummus Company 1515 Broad Street Bloomfield, NJ 07007 | S.E. Carson, Manager (201) 893-3888 (FTS 341-3000) | Benjamin P. Holmes Contracts Administrator (201) 893-3888 (FTS 341-3000) |
| Princeton Plasma Physics Laboratory Princeton University P.O. Box 451 Princeton, NJ 08540 | M.B. Gottlieb, Director (609) 683-5600 (FTS 340-5600) | John King Purchasing Manager (609) 683-2069 (FTS 340-2069) |
| Brookhaven National Laboratory Associated Universities, Inc. Upton, NY 11973 | George H. Vineyard Director (516) 345-3335 (FTS 666-4787) | Joseph D. Haeg Special Procurement Administrator (516) 345-3161 (FTS 666-3161) |
| | Alfred P. Lewis Director, Contracts and Procurement (516) 345-3140 (FTS 666-3145) | |

NAME OF FIRM H. F. Henderson Industries

MAILING ADDRESS 45 Fairfield Place

West Caldwell, NJ 07006

CONTACT Henry F. Henderson TITLE President

PHONE (201) 227- 9250 EST.: 1953 8(a): yes

TYPE OF SERVICE OFFERED manufacturing

SPECIAL CAPABILITIES _____

PERSONNEL WITH SPECIAL QUALIFICATIONS _____

FIRM MINORITY CODE 0

| | | |
|---------------------|-----------------------|---------------------|
| 0 - BLACK | 3 - SPANISH AMERICAN | 6 - UNDETERMINED |
| 1 - PUERTO RICAN | 4 - ASIAN | 7 - OTHER INCLUDING |
| 2 - AMERICAN INDIAN | 5 - ESKIMO AND ALEUT. | WHITE |

FEMALE OWNED/OPERATED _____

OTHER COMMENTS OR QUALIFICATIONS _____

presently constructing rad waste and decontamination stations for Korean

nuclear plants. Also conveyor systems and control panels.

NAME OF FIRM REI Pyramid International

MAILING ADDRESS 430 Franklin Turnpike

Ridgewood, NJ 07450

CONTACT Envar Odar TITLE _____

PHONE (201) 444-6220 EST.: 1976 8(a): P

TYPE OF SERVICE OFFERED _____

civil and structural engineering

SPECIAL CAPABILITIES _____

PERSONNEL WITH SPECIAL QUALIFICATIONS _____

3 men-7 years in nuclear field, structural engineers, procurement of nuclear
construction materials, structural analysis (Gibson Hill, Ebasco, Burns & Roe)

FIRM MINORITY CODE 4

| | | |
|---------------------|-----------------------|---------------------|
| 0 - BLACK | 3 - SPANISH AMERICAN | 6 - UNDETERMINED |
| 1 - PUERTO RICAN | 4 - ASIAN | 7 - OTHER INCLUDING |
| 2 - AMERICAN INDIAN | 5 - ESKIMO AND ALEUT. | WHITE |

FEMALE OWNED/OPERATED _____

OTHER COMMENTS OR QUALIFICATIONS _____

CE, ME

NAME OF FIRM Ashanti Nuclear Corporation

MAILING ADDRESS 152 W. 34th Street

New York, NY 10001

CONTACT K. Ashanti TITLE

PHONE (212) 695 - 5398 EST.: 8(a):

TYPE OF SERVICE OFFERED research, development, engineering.

SPECIAL CAPABILITIES

PERSONNEL WITH SPECIAL QUALIFICATIONS

FIRM MINORITY CODE 0

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|---------------------|----------------------|---------------------|
| 0 - BLACK | 3 - SPANISH AMERICAN | 6 - UNDETERMINED |
| 1 - PUERTO RICAN | 4 - ASIAN | 7 - OTHER INCLUDING |
| 2 - AMERICAN INDIAN | 5 - ESKIMO AND ALEUT | WHITE |

FEMALE OWNED/OPERATED

OTHER COMMENTS OR QUALIFICATIONS systems engineering, reactor

engineering and physics, Monte Carlo Techniques, math modeling and analysis,

environmental studies, radiation engineering, waste studies and mgmt.,

risk analysis.

NAME OF FIRM Occupational and Environmental Health Analysts, Inc.

MAILING ADDRESS P.O. Box 164

Upton, NY 11973

CONTACT Otto White, Jr. TITLE President

PHONE (516) 331- 1651 EST.: 1979 8(a): U

TYPE OF SERVICE OFFERED _____

environmental sciences, occupational safety and health

SPECIAL CAPABILITIES _____

PERSONNEL WITH SPECIAL QUALIFICATIONS _____

FIRM MINORITY CODE 0

| | | |
|---------------------|-----------------------|---------------------|
| 0 - BLACK | 3 - SPANISH AMERICAN | 6 - UNDETERMINED |
| 1 - PUERTO RICAN | 4 - ASIAN | 7 - OTHER INCLUDING |
| 2 - AMERICAN INDIAN | 5 - ESKIMO AND ALEUT. | WHITE |

FEMALE OWNED/OPERATED _____

OTHER COMMENTS OR QUALIFICATIONS _____

safety and risk analysis; health physics, radiological studies;

geotechnical studies; waste management

Region 3; Philadelphia, PA

Contains: Delaware, Maryland, Pennsylvania, Virginia, Washington, DC, West Virginia

| LWR | AIS | HTR | LMEBR | WCB | GCBR | Adv. Sys. Eval. | Space & Terr. Appl. | Defense Waste | Commercial Waste |
|-----|-----|-----|-------|-----|------|--------------------|------------------------|------------------|---------------------|
|-----|-----|-----|-------|-----|------|--------------------|------------------------|------------------|---------------------|

PENNSYLVANIA
Bettis Atomic Power
Lab.
West Mifflin

X

DEPARTMENT OF ENERGY OFFICES & FACILITIES,
GOVERNMENT OWNED/COMPANY OPERATED OFFICES
& FACILITIES, & SMALL/DISADVANTAGED
BUSINESSES LOCATED WITHIN DOE REGION 3

DOE Office

Obra S. Kernodle
Regional Representative of
the Secretary, Region 3
Department of Energy
1421 Cherry Street, Rm 1001
Philadelphia, PA 19102
(215) 597-3890
(FTS 597-3890)

Carl K. Gaddis, Manager
Pittsburgh Naval Reactors
Office
Through: Division of
Naval Reactors
Department of Energy
P.O. Box 109
West Mifflin, PA 15122
(412) 462-5000, x0240
FTS 721-0240)

Procurement Office

Richard Scottoline
Support Services Manager
(215) 597-9067
(FTS 597-9067)

George B. Strasbaugh
Director, Contracts Division
(412) 462-5000, x0246
(FTS 721-0246)

SB/DB Specialist

Same

Contact Through:
John Herring 557-5567

Debra E. Ball
Contract Administrator
(412) 462-5000, x0246
(FTS 721-0246)

GOVERNMENT OWNED/COMPANY OPERATED - SB/DB SPECIALISTS

| <u>Office</u> | <u>Office Head</u> | <u>SB/DB Specialist</u> |
|--|---|--|
| General Electric/MATSCO P.O. Box 8555 Room 9104 Philadelphia, PA 19101 | L.D. DeDominicis Manager, PETC Program (215) 962-1339 (FTS 726-2781) | Same |
| Bettis Atomic Power Laboratory Westinghouse Electric Corp. P.O. Box 79 West Mifflin, PA 15122 | A.C. Davis General Manager (412) 462-5000, x0200 (FTS 721-0200) | <u>SB</u> James A. Spangler Manager Purchasing (412) 462-5000, x0235 (FTS 721-0235) |
| | | <u>DB</u> Emerson Dietrich, Buyer (412) 462-5000, x6920 (FTS 721-6920) |

NAME OF FIRM Delta Technologies, Inc.

MAILING ADDRESS 725 Market Street

Wilmington, DE 19801

CONTACT William D. King TITLE _____

PHONE (302) 654-6383 EST.: _____ 8(a): yes

TYPE OF SERVICE OFFERED research, development, engineering

SPECIAL CAPABILITIES nuclear personnel; reactor engineering, nuclear

physicists, access to consultants

PERSONNEL WITH SPECIAL QUALIFICATIONS _____

FIRM MINORITY CODE 0

0 - BLACK

1 - PUERTO RICAN

2 - AMERICAN INDIAN

3 - SPANISH AMERICAN

4 - ASIAN

5 - ESKIMO AND ALEUT

6 - UNDETERMINED

7 - OTHER INCLUDING
WHITE

FEMALE OWNED/OPERATED _____

OTHER COMMENTS OR QUALIFICATIONS _____

major contract with Westinghouse; BWI - Hunt Valley (strictly nuclear), other

energy related work. Math modeling, reactor engineering and physics, nuclear

sciences.

NAME OF FIRM Automated Management Systems, Inc.

MAILING ADDRESS 9301 Annapolis Road, Suite 305

Lanham, MD 20801

CONTACT Carlton H. Joseph TITLE _____

PHONE (301) 459 -4088 EST.: _____ 8(a): Yes

TYPE OF SERVICE OFFERED Architecture, engineering, software

SPECIAL CAPABILITIES _____

PERSONNEL WITH SPECIAL QUALIFICATIONS various nuclear personnel

FIRM MINORITY CODE 0

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|---------------------|----------------------|---------------------|
| 0 - BLACK | 3 - SPANISH AMERICAN | 6 - UNDETERMINED |
| 1 - PUERTO RICAN | 4 - ASIAN | 7 - OTHER INCLUDING |
| 2 - AMERICAN INDIAN | 5 - ESKIMO AND ALEUT | WHITE |

FEMALE OWNED/OPERATED _____

OTHER COMMENTS OR QUALIFICATIONS design studies, mechanical engineering

studies, operations analysis, civil engineering, electrical engineering,

systems engineering, math modeling, geotechnical engineering

NAME OF FIRM AMAF Industries, Inc.

MAILING ADDRESS 103 Sterrett Building

Columbia, MD 21044

CONTACT Robert L. Jones, Jr. TITLE President

PHONE (301) 995-1919 EST.: 1976 8(a): yes

TYPE OF SERVICE OFFERED research, development, engineering

SPECIAL CAPABILITIES light manufacturing capability

PERSONNEL WITH SPECIAL QUALIFICATIONS various personnel with

nuclear or advanced physics backgrounds

FIRM MINORITY CODE 0

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|---------------------|----------------------|---------------------|
| 0 - BLACK | 3 - SPANISH AMERICAN | 6 - UNDETERMINED |
| 1 - PUERTO RICAN | 4 - ASIAN | 7 - OTHER INCLUDING |
| 2 - AMERICAN INDIAN | 5 - ESKIMO AND ALEUT | WHITE |

FEMALE OWNED/OPERATED _____

OTHER COMMENTS OR QUALIFICATIONS fusion, math modeling, mechanical

engineering, health physics, nuclear sciences, operations analysis, radiological

studies, Rad. Waste Mgmt & Analysis, reactor engineering, reactor physics,

safety and risk analysis, systems engineering

NAME OF FIRM Chronometrics

MAILING ADDRESS 13221 Rippling Brook Drive

Silver Spring, MD 20906

CONTACT Homer Guerra TITLE _____

PHONE (301) 460-3700 EST.: _____ 8(a): Yes

TYPE OF SERVICE OFFERED mfg.

SPECIAL CAPABILITIES _____

PERSONNEL WITH SPECIAL QUALIFICATIONS _____

access to nuclear capable consultants

FIRM MINORITY CODE 3

| | | |
|---------------------|----------------------|---------------------|
| 0 - BLACK | 3 - SPANISH AMERICAN | 6 - UNDETERMINED |
| 1 - PUERTO RICAN | 4 - ASIAN | 7 - OTHER INCLUDING |
| 2 - AMERICAN INDIAN | 5 - ESKIMO AND ALEUT | WHITE |

FEMALE OWNED/OPERATED _____

OTHER COMMENTS OR QUALIFICATIONS _____

have manufactured timing and related components for NASA and radiological

diagnostic devices for NIH (Neuro-PET, other electronic systems)

NAME OF FIRM Duggals United International, Inc.

MAILING ADDRESS 5914 Wisconsin Avenue

Chevy Chase, MD 20015

CONTACT D. Paul Duggal TITLE _____

PHONE (301) 656-8610 EST.: 1976 8(a): Yes

TYPE OF SERVICE OFFERED engineering and construction

SPECIAL CAPABILITIES construction, steel and concrete work, civil

and mechanical engineering

PERSONNEL WITH SPECIAL QUALIFICATIONS _____

architect formerly with Bechtel, civil engineers at Duke Power and Light of

Charlotte, NC

FIRM MINORITY CODE 4

0 - BLACK

1 - PUERTO RICAN

2 - AMERICAN INDIAN

3 - SPANISH AMERICAN

4 - ASIAN

5 - ESKIMO AND ALEUT

6 - UNDETERMINED

7 - OTHER INCLUDING
WHITE

FEMALE OWNED/OPERATED _____

OTHER COMMENTS OR QUALIFICATIONS _____

Piping and stress analysis to Bechtel and NUS

NAME OF FIRM Energy Systems Engineering, Inc.

MAILING ADDRESS 11212 Grandview Avenue

Wheaton, MD 20902

CONTACT Jose A. Reig TITLE President

PHONE (301) 942 -2427 EST.: 1979 8(a): pending

TYPE OF SERVICE OFFERED research and development

SPECIAL CAPABILITIES various energy systems engineering

PERSONNEL WITH SPECIAL QUALIFICATIONS

President performed various assignments in PWR's for Babcock and Wilcox,

other personnel to perform core analysis

FIRM MINORITY CODE 3

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| 0 - BLACK | 3 - SPANISH AMERICAN | 6 - UNDETERMINED |
| 1 - PUERTO RICAN | 4 - ASIAN | 7 - OTHER INCLUDING |
| 2 - AMERICAN INDIAN | 5 - ESKIMO AND ALEUT | WHITE |

FEMALE OWNED/OPERATED

OTHER COMMENTS OR QUALIFICATIONS

core analysis capability, reactor engineering, civil, mechanical engineering

NAME OF FIRM GENCO Tool and Engineering Co.

MAILING ADDRESS 2412 Linden Lane

Silver Spring, MD 20910

CONTACT George Uzzell TITLE _____

PHONE (301) 587-1841 EST.: _____ 8(a): yes

TYPE OF SERVICE OFFERED mfg. and precision machine shop

SPECIAL CAPABILITIES _____

PERSONNEL WITH SPECIAL QUALIFICATIONS _____

FIRM MINORITY CODE 0

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| 0 - BLACK | 3 - SPANISH AMERICAN | 6 - UNDETERMINED |
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| 2 - AMERICAN INDIAN | 5 - ESKIMO AND ALEUT | WHITE |

FEMALE OWNED/OPERATED _____

OTHER COMMENTS OR QUALIFICATIONS _____

MIL-Spec certified; USN certified for manufacture of nuclear parts, electronic

instrument components, missile and ordnance parts.

NAME OF FIRM Marion Thomas Associates

MAILING ADDRESS 914 Silver Spring Avenue, Suite 20

Silver Spring, MD 20910

| | | | |
|---------|---------------|-------|-----------|
| CONTACT | Marion Thomas | TITLE | President |
|---------|---------------|-------|-----------|

PHONE (301) 588-6403 EST.: 8(a): Y

• TYPE OF SERVICE OFFERED

architecture engineering.

SPECIAL CAPABILITIES

PERSONNEL WITH SPECIAL QUALIFICATIONS

mechanical and electrical engineers working on energy savings, some

personnel with structural background in nuclear power plants:

FIRM MINORITY CODE 0 .

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| 1 - PUERTO RICAN | 4 - ASIAN | 7 - OTHER INCLUDING |
| 2 - AMERICAN INDIAN | 5 - ESKIMO AND ALEUT. | WHITE |

FEMALE OWNED/OPERATED

OTHER COMMENTS OR QUALIFICATIONS

have done work for Bechtel on nuclear waste deposits (disposal site). heat

recovery system. CE. ME. radioactive waste

NAME OF FIRM Progressive Engineering Consultants

MAILING ADDRESS 15583 Peach Walker Drive

Bowie, MD 20716

CONTACT Peter A. Labarta TITLE President

PHONE (301) 249- 1222 EST.: 1979 8(a): P

TYPE OF SERVICE OFFERED consultant engineering

SPECIAL CAPABILITIES

PERSONNEL WITH SPECIAL QUALIFICATIONS

one structural engineer worked with Bechtel Power Corp. before, familiar
with nuclear powerplant construction, worked on SNUPPS (Standard Nuclear
Utility Power Plants System) -assistant civil group supervisor

FIRM MINORITY CODE 3

| | | |
|---------------------|-----------------------|---------------------|
| 0 - BLACK | 3 - SPANISH AMERICAN | 6 - UNDETERMINED |
| 1 - PUERTO RICAN | 4 - ASIAN | 7 - OTHER INCLUDING |
| 2 - AMERICAN INDIAN | 5 - ESKIMO AND ALEUT. | WHITE |

FEMALE OWNED/OPERATED

OTHER COMMENTS OR QUALIFICATIONS

very small and new, mostly C.E. structural work in power plants (nuclear too)
and transmission system, bridge work, 5 story building, CE, geotechnical studies.

NAME OF FIRM Science Systems & Applciations, Inc.

MAILING ADDRESS 10210 Greenbelt Road

Seabrook, MD 20810

CONTACT Dr. Sarasuati Bahethi TITLE _____

PHONE (301) 794- 6633 EST.: 1977 8(a): Y

TYPE OF SERVICE OFFERED research and development

SPECIAL CAPABILITIES _____

PERSONNEL WITH SPECIAL QUALIFICATIONS _____

Ph.D's in nuclear physics, reactor physics, shielding, neutron scattering,

consultants available for piping stress analysis and building codes

Monte Carlo technique; cross-section in fusion

FIRM MINORITY CODE 4

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|---------------------|-----------------------|---------------------|
| 0 - BLACK | 3 - SPANISH AMERICAN | 6 - UNDETERMINED |
| 1 - PUERTO RICAN | 4 - ASIAN | 7 - OTHER INCLUDING |
| 2 - AMERICAN INDIAN | 5 - ESKIMO AND ALEUT. | WHITE |

FEMALE OWNED/OPERATED _____

OTHER COMMENTS OR QUALIFICATIONS _____

nuclear engineer, CE, NP, math modeling, radiological studies

NAME OF FIRM Sheladia & Associates, Inc.

MAILING ADDRESS 3833 34th Street

Mt. Rainier, MD 20822

CONTACT Pravine Sheladia TITLE President

PHONE (301) 779-4313 EST.: 1974 8(a): Y

TYPE OF SERVICE OFFERED engineering services

SPECIAL CAPABILITIES

PERSONNEL WITH SPECIAL QUALIFICATIONS structural engineer worked on containment building

FIRM MINORITY CODE 4

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|---------------------|-----------------------|---------------------|
| 0 - BLACK | 3 - SPANISH AMERICAN | 6 - UNDETERMINED |
| 1 - PUERTO RICAN | 4 - ASIAN | 7 - OTHER INCLUDING |
| 2 - AMERICAN INDIAN | 5 - ESKIMO AND ALEUT. | WHITE |

FEMALE OWNED/OPERATED

OTHER COMMENTS OR QUALIFICATIONS

all engineering services; CE types, transportation, geotechnical studies

and engineering, EE, ME, power development, safety analysis, plant siting,

Math modeling & analysis.

NAME OF FIRM ODeP Engineering, Inc.

MAILING ADDRESS 550 Seco Road, Building No. 3

Monroeville, PA 15146

CONTACT Oscar DePineres TITLE Owner, General Manager

PHONE (412) 373- 7470 EST.: 1980 8(a): P

TYPE OF SERVICE OFFERED

civil, structural, subsoil, geology, seismic, environmental

SPECIAL CAPABILITIES

PERSONNEL WITH SPECIAL QUALIFICATIONS

7 years with Westinghouse (nuclear systems, CE) waste studies

FIRM MINORITY CODE 3

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|---------------------|-----------------------|---------------------|
| 0 - BLACK | 3 - SPANISH AMERICAN | 6 - UNDETERMINED |
| 1 - PUERTO RICAN | 4 - ASIAN | 7 - OTHER INCLUDING |
| 2 - AMERICAN INDIAN | 5 - ESKIMO AND ALEUT. | WHITE |

FEMALE OWNED/OPERATED

OTHER COMMENTS OR QUALIFICATIONS

geotechnical studies; CE; radioactive waste studies; math modeling;

structural analysis

NAME OF FIRM Viking Energy Corporation

MAILING ADDRESS 4709 Baum Boulevard

Pittsburgh, PA 15213

CONTACT Dr. Jagdish (Jack) Saluja TITLE President

PHONE (412) 683 - 6440 EST.: 1977 8(a): Yes

TYPE OF SERVICE OFFERED

consulting engineering (nuclear)

SPECIAL CAPABILITIES

PERSONNEL WITH SPECIAL QUALIFICATIONS

President involved in nuclear field for 24 years (has very extensive

nuclear experience)

FIRM MINORITY CODE 4

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|---------------------|-----------------------|---------------------|
| 0 - BLACK | 3 - SPANISH AMERICAN | 6 - UNDETERMINED |
| 1 - PUERTO RICAN | 4 - ASIAN | 7 - OTHER INCLUDING |
| 2 - AMERICAN INDIAN | 5 - ESKIMO AND ALEUT. | WHITE |

FEMALE OWNED/OPERATED

OTHER COMMENTS OR QUALIFICATIONS

Reactor engineers, reactor physicists, safety & risk, operational, math

modeling, systems engineers, geotechnical studies, radiological studies,

CE, ME fusion, nuclear science, health physicist.

NAME OF FIRM C.O.R. Inc.

MAILING ADDRESS 105 N. Virginia Avenue

Falls Church, VA 22046

CONTACT Mr. Harjit Chopra TITLE _____

PHONE (703) 534-0012 EST.: _____ 8(a): Yes

TYPE OF SERVICE OFFERED architecture and engineering firm

SPECIAL CAPABILITIES _____

PERSONNEL WITH SPECIAL QUALIFICATIONS _____

former NRC GS-15 involved with safety and risk analysis experience

FIRM MINORITY CODE 4

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|---------------------|----------------------|---------------------|
| 0 - BLACK | 3 - SPANISH AMERICAN | 6 - UNDETERMINED |
| 1 - PUERTO RICAN | 4 - ASIAN | 7 - OTHER INCLUDING |
| 2 - AMERICAN INDIAN | 5 - ESKIMO AND ALEUT | WHITE |

FEMALE OWNED/OPERATED _____

OTHER COMMENTS OR QUALIFICATIONS _____

safety studies, radiological studies, geotechnical studies

NAME OF FIRM Southeast Machine Co.

MAILING ADDRESS 416 Rotary Street

Hampton, VA 23661

CONTACT Lewis Cantu TITLE _____

PHONE (804) 838 - 6155 EST.: _____ 8(a): Y

TYPE OF SERVICE OFFERED _____

research and development; manufacturing

SPECIAL CAPABILITIES _____

PERSONNEL WITH SPECIAL QUALIFICATIONS _____

nuclear personnel (President is health physicist)

other personnel have worked with PEPCO, VEPCO - Surrey Plant

FIRM MINORITY CODE 3

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|---------------------|-----------------------|---------------------|
| 0 - BLACK | 3 - SPANISH AMERICAN | 6 - UNDETERMINED |
| 1 - PUERTO RICAN | 4 - ASIAN | 7 - OTHER INCLUDING |
| 2 - AMERICAN INDIAN | 5 - ESKIMO AND ALEUT. | WHITE |

FEMALE OWNED/OPERATED _____

OTHER COMMENTS OR QUALIFICATIONS _____

limited R&D work. fiber glass sheet, component manufacturing, some nuclear

work, prototype work for Westinghouse, CE, Health physicist, reactor engineer,

doing some classified R&D work

NAME OF FIRM Sterling Systems, Inc.

MAILING ADDRESS 1749 Old Meadow Road

McLean, VA 22102

CONTACT Robert L. Quinichett TITLE President

PHONE (703) 827- 9000 EST.: 1977 8(a): Y

TYPE OF SERVICE OFFERED

consultants

SPECIAL CAPABILITIES

PERSONNEL WITH SPECIAL QUALIFICATIONS

nuclear personnel (masters and Ph.Ds)

FIRM MINORITY CODE 0

0 - BLACK

1 - PUERTO RICAN

2 - AMERICAN INDIAN

3 - SPANISH AMERICAN

4 - ASIAN

5 - ESKIMO AND ALEUT.

6 - UNDETERMINED

7 - OTHER INCLUDING
WHITE

FEMALE OWNED/OPERATED

OTHER COMMENTS OR QUALIFICATIONS

DOE contracts but not nuclear

System analysis work, operational analysis, math modeling

NAME OF FIRM Center for Research & Management Inc.

MAILING ADDRESS 1629 K Street, NW, Suite 500

Washington, DC 20006

CONTACT Elgin W. Watkins TITLE _____

PHONE (202) 296 - 0033 EST.: _____ 8(a): _____

TYPE OF SERVICE OFFERED occupational health & safety

SPECIAL CAPABILITIES _____

PERSONNEL WITH SPECIAL QUALIFICATIONS _____

FIRM MINORITY CODE 0

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| 0 - BLACK | 3 - SPANISH AMERICAN | 6 - UNDETERMINED |
| 1 - PUERTO RICAN | 4 - ASIAN | 7 - OTHER INCLUDING |
| 2 - AMERICAN INDIAN | 5 - ESKIMO AND ALEUT | WHITE |

FEMALE OWNED/OPERATED _____

OTHER COMMENTS OR QUALIFICATIONS _____

nuclear sciences, health and radiological studies

NAME OF FIRM Parametric, Inc.

MAILING ADDRESS 1800 K. Street, NW, Suite 718

Washington, DC 20006

CONTACT Marshall Isler TITLE _____

PHONE (202) 467- 5533 EST.: 1971 8(a): Y

TYPE OF SERVICE OFFERED _____

engineering, constuction management

SPECIAL CAPABILITIES _____

PERSONNEL WITH SPECIAL QUALIFICATIONS _____

engineer with piping experience in powerplant; engineer worked with PEPCO;

access to Howard University Nuclear energy department on consulting basis

FIRM MINORITY CODE 0

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|---------------------|-----------------------|---------------------|
| 0 - BLACK | 3 - SPANISH AMERICAN | 6 - UNDETERMINED |
| 1 - PUERTO RICAN | 4 - ASIAN | 7 - OTHER INCLUDING |
| 2 - AMERICAN INDIAN | 5 - ESKIMO AND ALEUT. | WHITE |

FEMALE OWNED/OPERATED _____

OTHER COMMENTS OR QUALIFICATIONS _____

operations analysis, safety and risk analysis, EE, CE, ME

Region 4; Atlanta, GA

Contains: Alabama, Florida, Georgia, Kentucky, Mississippi, North Carolina, South Carolina, Tennessee,
Panama Canal

| | LWR | AIS | HTR | LMFBR | WCB | GCBR | Adv. Sys. Eval. | Space & Terr. Appl. | Defense Waste | Commercial Waste |
|----------------------|-----|-----|-----|-------|-----|------|--------------------|------------------------|------------------|---------------------|
| <hr/> | | | | | | | | | | |
| SOUTH CAROLINA | | | | | | | | | | |
| Savannah River Plant | | | | | | | | X | X | X |
| Aiken | | | | | | | | | | |
| | | | | | | | | | | |
| TENNESSEE | | | | | | | | | | |
| Gaseous Diff. Plant | | X | | | | | | | | |
| K-25 | | | | | | | | | | |
| Oak Ridge | | | | | | | | | | |
| Oak Ridge Natl. Lab. | | | | X | | | X | X | X | X |
| Oak Ridge | | | | | | | | | | |
| OY-12 Plant | | X | | | | | | | | |
| Oak Ridge . | | | | | | | | | | |

DEPARTMENT OF ENERGY OFFICES & FACILITIES,
GOVERNMENT OWNED/COMPANY OPERATED OFFICES
& FACILITIES, & SMALL/DISADVANTAGED
BUSINESSES LOCATED WITHIN DOE REGION 4

| <u>DOE Office</u> | <u>Procurement Office</u> | <u>SB/DB Specialist</u> |
|--|---|--|
| Dr. Louis F. Centofanti Regional Representative of the Secretary, Region 4 Department of Energy 1655 Peachtree Street, N.E. Eighth Floor Atlanta, GA 30309 (404) 881-2837 (FTS 257-2837) | Walter Butler Director, Management Division (404) 881-2887 (FTS 257-2887) | Same |
| P.M. Ramey, Manager Pinellas Area Office Department of Energy P.O. Box 11500 St. Petersburg, FL 33733 (813) 541-8196 (FTS 350-8196) | Everett E. Matthews Administrative Specialist (813) 541-8696 (FTS 350-8696) | Same |
| R.L. Morgan, Manager Savannah River Operations Office Department of Energy P.O. Box A Aiken, SC 29801 (803) 725-2277 (FTS 239-2277) | Robert A. McFeely Director, Contracts & Services Division (803) 725-2841 (FTS 239-2841) | <u>SB</u> Neil Farfour Senior Contract Specialist (803) 725-3098 (FTS 239-3098) |
| | | <u>DB</u> Grady Copeland (803) 725-2638 (FTS 239-2638) |
| Robert J. Hart, Manager Oak Ridge Operations Office Department of Energy P.O. Box E Oak Ridge, TN 37830 (615) 576-4444 (FTS 626-4444) | John D. Wagoner Director, Proc & Contracts Division (615) 576-0795 (FTS 626-0795) | Billy D. Bennett (615) 576-0786 (FTS 626-0786) |

DEPARTMENT OF ENERGY OFFICES & FACILITIES,
GOVERNMENT OWNED/COMPANY OPERATED OFFICES
& FACILITIES, & SMALL/DISADVANTAGED
BUSINESSES LOCATED WITHIN DOE REGION 4

DOE Office

L.W. Caffey, Director
Clinch River Breeder Reactor
Plant Project Office
Department of Energy
P.O. Box U
Oak Ridge, TN 37830
(615) 576-6008
(FTS 626-6008)

Procurement Office

George C. Grisaffe
Assistant Director for
Procurement
(615) 576-6070
(FTS 626-6070)

SB/DB Specialist

Norman J. Howard
Contract Administrator
(615) 576-6076
(FTS 626-6076)

GOVERNMENT OWNED/COMPANY OPERATED - SB/DB SPECIALISTS

| <u>Office</u> | <u>Office Head</u> | <u>SB/DB Specialist</u> |
|---|---|---|
| General Electric Company Neutron Devices Dept. P.O. Box 11508 St. Petersburg, FL 33733 | S.N. Suci General Manager (813) 541-8173 (FTS 350-8173) | Mrs. J. Birice Packer SB, DB, LSA Program Liaison Officer (813) 541-8116 (FTS 350-8116) |
| Union Carbide Corporation Nuclear Division P.O. Box M Oak Ridge, TN 37830 | H.H. Osborne Manager, Purchasing (615) 576-1512 (FTS 626-1512) | W.D. Joyner, Manager Small & Minority Business Programs (615) 576-2090 (FTS 626-2090) |
| Rust Engineering Company P.O. Box 587 Oak Ridge, TN 37830 | R.C. Stuck Project Manager (615) 574-3052 (FTS 624-3052) | Allen J. Stack (615) 574-3019 (FTS 624-3019) |
| Oak Ridge Associated Universities P.O. Box 117 Oak Ridge, TN 37830 | P.L. Johnson Executive Director (615) 576-3300 (FTS 626-3300) | Clifford W. Flegal, Jr. (615) 576-3049 (FTS 626-3049) |

NAME OF FIRM Intertechnology Corp.

MAILING ADDRESS 2603 Artic Street, Suite 11

Huntsville, AL 35805

CONTACT Hanson Howard TITLE _____

PHONE (205) 593 - 9171 EST.: _____ 8(a): _____

TYPE OF SERVICE OFFERED _____

SPECIAL CAPABILITIES _____

PERSONNEL WITH SPECIAL QUALIFICATIONS _____

FIRM MINORITY CODE 0

| | | |
|---------------------|-----------------------|---------------------|
| 0 - BLACK | 3 - SPANISH AMERICAN | 6 - UNDETERMINED |
| 1 - PUERTO RICAN | 4 - ASIAN | 7 - OTHER INCLUDING |
| 2 - AMERICAN INDIAN | 5 - ESKIMO AND ALEUT. | WHITE |

FEMALE OWNED/OPERATED _____

OTHER COMMENTS OR QUALIFICATIONS _____

fusion, nuclear sciences, nuclear hardening and blast effects.

NAME OF FIRM Pembroke Machine Co, Inc.

MAILING ADDRESS P.O. Box 625

Pembroke, NC 28372

CONTACT Ray Lowery TITLE President

PHONE (919) 521-3411 EST.: 1971 8(a): Y

TYPE OF SERVICE OFFERED _____

machine shop parts, 55 percent military work

SPECIAL CAPABILITIES _____

have manufactured parts for nuclear plants in their facility

PERSONNEL WITH SPECIAL QUALIFICATIONS _____

FIRM MINORITY CODE 2

| | | |
|---------------------|-----------------------|---------------------|
| 0 - BLACK | 3 - SPANISH AMERICAN | 6 - UNDETERMINED |
| 1 - PUERTO RICAN | 4 - ASIAN | 7 - OTHER INCLUDING |
| 2 - AMERICAN INDIAN | 5 - ESKIMO AND ALEUT. | WHITE |

FEMALE OWNED/OPERATED _____

OTHER COMMENTS OR QUALIFICATIONS _____

manufacturing machine parts for Westinghouse used in nuclear powerplant

(Westinghouse Nuclear Program); MIL specification

NAME OF FIRM American Development Corporation

MAILING ADDRESS 2339 Air Park Road

Charleston, SC 29405

CONTACT W. Melvin Brown TITLE President

PHONE (803) 744-4241 EST.: 1972 8(a): Yes

TYPE OF SERVICE OFFERED component mfg; mfg test equipment for D.O.D.

SPECIAL CAPABILITIES no

PERSONNEL WITH SPECIAL QUALIFICATIONS none

FIRM MINORITY CODE 0

| | | |
|---------------------|----------------------|---------------------|
| 0 - BLACK | 3 - SPANISH AMERICAN | 6 - UNDETERMINED |
| 1 - PUERTO RICAN | 4 - ASIAN | 7 - OTHER INCLUDING |
| 2 - AMERICAN INDIAN | 5 - ESKIMO AND ALEUT | WHITE |

FEMALE OWNED/OPERATED _____

OTHER COMMENTS OR QUALIFICATIONS \$130 million sales, principally
communications equipment, also Equip-Vans for Army

NAME OF FIRM Chavis Tool & Mfg. Co., Inc.

MAILING ADDRESS P.O. Box 746

Florence, SC 29501

CONTACT Earl Chavis TITLE President

PHONE (803) 346-3221 EST.: 1976 8(a): Yes

TYPE OF SERVICE OFFERED manufacturing

SPECIAL CAPABILITIES high technology mfg, automotive and
automated industrial components

PERSONNEL WITH SPECIAL QUALIFICATIONS

FIRM MINORITY CODE 2

| | | |
|---------------------|----------------------|---------------------|
| 0 - BLACK | 3 - SPANISH AMERICAN | 6 - UNDETERMINED |
| 1 - PUERTO RICAN | 4 - ASIAN | 7 - OTHER INCLUDING |
| 2 - AMERICAN INDIAN | 5 - ESKIMO AND ALEUT | WHITE |

FEMALE OWNED/OPERATED

OTHER COMMENTS OR QUALIFICATIONS

aluminum rings in reactors; mfr parts for Westinghouse Columbia plant

NAME OF FIRM E.C. Corporation

MAILING ADDRESS 575 Oak Ridge Turnpike, Suite 200

Oak Ridge, TN 37830

CONTACT Dr. Orlindo C. Baldonado TITLE _____

PHONE (615) 482- 3681 EST.: _____ 8(a): _____

TYPE OF SERVICE OFFERED _____

SPECIAL CAPABILITIES research, development, and engineering

PERSONNEL WITH SPECIAL QUALIFICATIONS _____

numerous personnel with nuclear related degrees

FIRM MINORITY CODE 3

| | | |
|---------------------|----------------------|---------------------|
| 0 - BLACK | 3 - SPANISH AMERICAN | 6 - UNDETERMINED |
| 1 - PUERTO RICAN | 4 - ASIAN | 7 - OTHER INCLUDING |
| 2 - AMERICAN INDIAN | 5 - ESKIMO AND ALEUT | WHITE |

FEMALE OWNED/OPERATED _____

OTHER COMMENTS OR QUALIFICATIONS _____

uranium enrichment (gaseous diff. & centrifuge), nuclear plant design.

LMFBR, nuclear sciences, fusion, reactor engineering and physics, systems

engineering

Region 5; Chicago, IL

Contains: Illinois, Indiana, Michigan, Minnesota, Ohio, Wisconsin, Samoa, Guam, Pacific Isles

| | LWR | AIS | HTR | LMEBR | WCB | GCBR | Adv. Sys. Eval. | Space & Terr. Appl. | Defense Waste | Commercial Waste |
|--|-----|-----|-----|-------|-----|------|--------------------|------------------------|------------------|---------------------|
| ILLINOIS | | | | | | | | | | |
| Argonne Nat'l Lab, East Argonne | | | | X | X | | X | | | |
| OHIO | | | | | | | | | | |
| Mound Laboratory Miamisburg | | X | | | | | | X | | |
| Office of Nuclear Waste Isolation Columbus | | | | | | | | | | X |

DEPARTMENT OF ENERGY OFFICES & FACILITIES,
GOVERNMENT OWNED/COMPANY OPERATED OFFICES
& FACILITIES, & SMALL/DISADVANTAGED
BUSINESSES LOCATED WITHIN DOE REGION 5

DOE Office

Robert H. Bauer, Manager and
Regional Representative of
the Secretary, Region 5
Chicago Operations and
Regional Office
Department of Energy
9800 South Cass Avenue
Argonne, IL 60439
(312) 972-2110
(FTS 972-2110)

Wilbur L. Walker, Manager
Portsmouth Area Office
Department of Energy
P.O. Box 628
Piketon, OH 45661
(614) 289-5010
(FTS 975-5010)

Harry N. Hill, Manager
Dayton Area Office
Department of Energy
P.O. Box 66
Miamisburg, OH 45342
(513) 865-3271
(FTS 774-3271)

Andrew E. Mravca, Manager
Batavia Area Office
Department of Energy
P.O. Box 2000
Batavia, IL 60510
(312) 840-3281
(FTS 370-3281)

Procurement Office

Harold N. Miller
Assistant Manager for
Acquisition and Assistance
(312) 972-2544
(FTS 972-2544)

Gene Gillespie
Chief, Procurement
(614) 289-5018
(FTS 975-5018)

R.M. Munson, Chief
Administrative Branch
(513) 865-3270
(FTS 774-3270)

Ronald F. Zeitler
Contract Specialist
(312) 840-3282
(FTS 370-3282)

SB/DB Specialist

Louis A. Parys
Contract Specialist
(312) 972-2125
(FTS 972-2135)

SB/LSA
Gene Gillespie
Chief, Procurement
(614) 289-5018
(FTS 975-5018)

DB
Kenneth Tate
(614) 289-5016
(FTS 975-5016)

Same

Same

GOVERNMENT OWNED/COMPANY OPERATED -- SB/DB SPECIALISTS

| <u>Office</u> | <u>Office head</u> | <u>SB/DB Specialist</u> |
|---|--|--|
| Argonne National Laboratory The University of Chicago 9700 South Cass Avenue Argonne, IL 60439 | W.E. Massey Director (312) 972-5555 (FTS 972-5555) | William Spicer Asst. Dir. of Procurement (312) 972-7028 (FTS 972-7028) |
| Fermi National Accelerator Laboratory P.O. Box 500 Batavia, IL 60510 | Leon Lederman Director (312) 840-3211 (FTS 370-3211) | Richard Aukalnis Purchasing Manager (312) 840-4167 (FTS 370-4167) |
| Ames Laboratory Iowa State University 139 Research Building Ames, IA 50011 | R.S. Hansen Director (515) 294-2770 (FTS 865-3852) | Thomas F. Rush Head, Procurement & Property Office (515) 294-1780 (FTS 865-1780) |
| RMI Company P.O. Box 579 Ashtabula, OH 44004 | R.D. Heiser Manager, Extrusion Plant (216) 997-5141 (FTS 291-1500) | John Gozzard Purchasing Agent (216) 997-5141 (FTS 291-1500) |
| National Lead Company of Ohio P.O. Box 39158 Cincinnati, OH 45239 | S.F. Audia Manager (513) 738-1151, x8444 (FTS 774-8444) | W.W. Wright (513) 738-1151, x8382 (FTS 774-8382) |
| Mound Facility Monsanto Research Corporation P.O. Box 32 Miamisburg, OH 45342 | J.R. McClain Vice President Director (513) 865-3222 (FTS 774-3222) | R.A. Benson (513) 865-3967 (FTS 774-3967) |
| Goodyear Atomic Corporation P.O. Box 628 Piketon, OH 45661 | Nathan H. Hurt General Manager (614) 289-2331, x2101 (FTS 975-2101) | SB O.E. Gleim Purchasing Agent (614) 289-2311, x2186 (FTS 975-2186) |
| | | DB Eugene Mutter, Buyer (614) 289-2331, x2629 (FTS 975-2629) |

NAME OF FIRM Power Design Services

MAILING ADDRESS 2200 S. Main Street, Building A

Lombard, IL 60148

CONTACT Ken Yoshitami TITLE

PHONE (312) 495- 9100 EST.: 8(a): U

TYPE OF SERVICE OFFERED

consulting engineering

SPECIAL CAPABILITIES

PERSONNEL WITH SPECIAL QUALIFICATIONS

6 or more personnel, nuclear trained, worked on various plants, one operation
expertise

FIRM MINORITY CODE 4

| | | |
|---------------------|-----------------------|---------------------|
| 0 - BLACK | 3 - SPANISH AMERICAN | 6 - UNDETERMINED |
| 1 - PUERTO RICAN | 4 - ASIAN | 7 - OTHER INCLUDING |
| 2 - AMERICAN INDIAN | 5 - ESKIMO AND ALEUT. | WHITE |

FEMALE OWNED/OPERATED

OTHER COMMENTS OR QUALIFICATIONS

Quad Cities Nuclear Station, operation analysis, geotechnical studies, CE,

nuclear engineering, seismic resistriants on piping

NAME OF FIRM Globetrotters Engineering Corporation

MAILING ADDRESS 1020 S. Wabash Avenue, Room 802

Chicago, IL 60605

CONTACT Niranjan S. Shah TITLE _____

PHONE (312) 922-6400 EST.: _____ 8(a): yes

TYPE OF SERVICE OFFERED _____

geotechnical and civil and engineering

SPECIAL CAPABILITIES _____

PERSONNEL WITH SPECIAL QUALIFICATIONS _____

civil and structural E's performed work on Fossil and nuclear plants

FIRM MINORITY CODE 4

0 - BLACK

1 - PUERTO RICAN

2 - AMERICAN INDIAN

3 - SPANISH AMERICAN

4 - ASIAN

5 - ESKIMO AND ALEUT

6 - UNDETERMINED

7 - OTHER INCLUDING
WHITE

FEMALE OWNED/OPERATED _____

OTHER COMMENTS OR QUALIFICATIONS _____

structural, civil and mechanical engineers, geotechnical engineering,

piping and stress analysis.

NAME OF FIRM Contronics, Inc.

MAILING ADDRESS 835 Busch Court

Columbus, OH 43229

CONTACT Clifford Rose TITLE President

PHONE (614) 846 - 5930 EST. 1953 8(a): yes

TYPE OF SERVICE OFFERED electronic manufacturing

SPECIAL CAPABILITIES control panels for nuclear plants

PERSONNEL WITH SPECIAL QUALIFICATIONS

FIRM MINORITY CODE 0

| | | |
|---------------------|----------------------|---------------------|
| 0 - BLACK | 3 - SPANISH AMERICAN | 6 - UNDETERMINED |
| 1 - PUERTO RICAN | 4 - ASIAN | 7 - OTHER INCLUDING |
| 2 - AMERICAN INDIAN | 5 - ESKIMO AND ALEUT | WHITE |

FEMALE OWNED/OPERATED

OTHER COMMENTS OR QUALIFICATIONS

control panels, security work. Have performed work for Westinghouse; 10-15 people

5-7

Region 6; Dallas, Texas

Contains: Arkansas, Louisiana, New Mexico, Oklahoma, Texas

| | LWR | AIS | HTR | LMFBR | WCB | GCBR | Adv. Sys. Eval. | Space & Terr. Appl. | Defense Waste | Commercial Waste |
|------------------------|-----|-----|-----|-------|-----|------|--------------------|------------------------|------------------|---------------------|
| <hr/> | | | | | | | | | | |
| NEW MEXICO | | | | | | | | | | |
| Los Alamos Scient. Lab | | X | | X | | | | X | X | X |
| Los Alamos | | | | | | | | | | |
| Sandia Laboratories | X | | | | | | | X | X | X |
| Albuquerque | | | | | | | | | | |

DEPARTMENT OF ENERGY OFFICES & FACILITIES,
GOVERNMENT OWNED/COMPANY OPERATED OFFICES
& FACILITIES, & SMALL/DISADVANTAGED
BUSINESSES LOCATED WITHIN DOE REGION 6

DOE Office

Procurement Office

SB/DB Specialist

G. Dan Rambo
Regional Representative of
the Secretary, Region 6
Department of Energy
P.O. Box 35228
Dallas, TX 75235
(214) 749-7345
(FTS 749-7345)

Paul R. Wagner, Manager
Amarillo Area Office
Department of Energy
P.O. Box 30030
Amarillo, TX 79120
(806) 335-1581, x2151
(FTS 572-2151)

Kenneth R. Braziel, Manager
Los Alamos Area Office
Department of Energy
Los Alamos, NM 87544
(505) 667-5105
(FTS 843-5105)

Herman E. Roser, Manager
Albuquerque Operations Office
Department of Energy
P.O. Box 5400
Albuquerque, NM 87115
(505) 844-7231
(FTS 844-7231)

Gil E. Cordova, Manager
Sandia Area Office
Department of Energy
P.O. Box 5400
Albuquerque, NM 87115
(505) 844-7285
(FTS 844-7285)

Jim Ross
Support Services Supervisor
(214) 767-7711
(FTS 729-7711)

C.E. Gay, Chief
Administrative Branch
(806) 335-1581, x2153
(FTS 572-2153)

Art Hastings
Procurement Analyst
(505) 667-6146
(FTS 843-6146)

Kent Campbell
Director, Contracts &
Procurement Div.
(505) 844-7251
(FTS 844-7251)

Peter Sowa
Procurement Specialist
(505) 844-6072
(FTS 844-6072)

Marvin De Moss
Director, Office of
Management & Support
(214) 749-7701
(FTS 749-7701)

Don White
SB/MB Program Coord.
(806) 335-1581, x2153
(FTS 572-2153)

Same

C.R. Cabeza deBaca
(505) 844-7182
(FTS 844-7182)
Royce D. Taylor
(505) 844-7837
(FTS 844-7837)

Same

GOVERNMENT OWNED/COMPANY OPERATED -- SB/DE SPECIALISTS

Office

Office Fax

SB/DE Special

Mason & Hanger -
Silas Mason Co., Inc.
P.O. Box 30020
Amarillo, TX 79177

C.R. Poole
Plant Manager,
Plantex Plant
(806) 335-1581, x2111
(FTS 572-2111)

Jim Schulte
(806) 335-1581, x2219
(FTS 572-2219)

Sandia Laboratories
P.O. Box 5800
Albuquerque, NM 87185

Dr. Morgan Sparks
President
(505) 844-7261
(FTS 844-7261)

Jay W. Hughes
S & MB Liaison Officer
(505) 844-3970
(FTS 844-3970)

Inhalation Toxicology
Research Institute
P.O. Box 5890
Albuquerque, NM 87115

Dr. R.O. McClellan
Director
(505) 844-6835
(FTS 844-6835)

Gene A. Allen
(505) 844-8295
(FTS 844-8295)

Los Alamos National Scientific
Laboratory
University of California
P.O. Box 1663
Los Alamos, NM 87545

Donald M. Kerr, Jr.
Director
(505) 667-5101
(FTS 843-5101)

Epifanio H. Trujillo
SB/MBE Liaison Officer
P.O. Box 990, M.S. 274
(505) 667-6696
(FTS 843-6696)

The Zia Company
Los Alamos, NM 87544

Thomas J. Cook
Manager
(505) 667-2302
(FTS 843-2302)

Rose Lujan
(505) 667-7223
(FTS 843-7223)

NAME OF FIRM Alco Tool & Mfg. Co.

MAILING ADDRESS 364 Castroville Rd.

San Antonio, TX 78207

CONTACT Albert Lee TITLE President

PHONE (512) 434-6376- EST.: 1962 8(a): yes

TYPE OF SERVICE OFFERED component mfg; machine shop jobbing and repair;
government contract work (military); Cert. MIL-Spec 45208

SPECIAL CAPABILITIES none

PERSONNEL WITH SPECIAL QUALIFICATIONS none

FIRM MINORITY CODE 4

| | | |
|---------------------|----------------------|---------------------|
| 0 - BLACK | 3 - SPANISH AMERICAN | 6 - UNDETERMINED |
| 1 - PUERTO RICAN | 4 - ASIAN | 7 - OTHER INCLUDING |
| 2 - AMERICAN INDIAN | 5 - ESKIMO AND ALEUT | WHITE |

FEMALE OWNED/OPERATED _____

OTHER COMMENTS OR QUALIFICATIONS 20 people, military work,
hydraulic platform, machine work

NAME OF FIRM Kyle Machine Works, Inc.

MAILING ADDRESS 1913 N. Zaragosa

El Paso, TX 79907

CONTACT Fred Kyle TITLE President

PHONE (915) 859 -2010 EST.: 1960 8(a): yes

TYPE OF SERVICE OFFERED manufacturing

SPECIAL CAPABILITIES welding, manufacturing, aerospace tooling design for
commercial industry and military

PERSONNEL WITH SPECIAL QUALIFICATIONS

FIRM MINORITY CODE 3

| | | |
|---------------------|-----------------------|---------------------|
| 0 - BLACK | 3 - SPANISH AMERICAN | 6 - UNDETERMINED |
| 1 - PUERTO RICAN | 4 - ASIAN | 7 - OTHER INCLUDING |
| 2 - AMERICAN INDIAN | 5 - ESKIMO AND ALEUT. | WHITE |

FEMALE OWNED/OPERATED

OTHER COMMENTS OR QUALIFICATIONS

45 people; work performed for many nuclear labs; fuel storage elevators and
containment doors.

NAME OF FIRM South Houston Precision Machining Service

MAILING ADDRESS 1214 Virginia

S. Houston, TX 77587

CONTACT Arturo Gomez TITLE President

PHONE (713) 946-7595 EST.: 1968 8(a): U

TYPE OF SERVICE OFFERED

machine jobbing, mainly machine work only, no manufacturing

SPECIAL CAPABILITIES

PERSONNEL WITH SPECIAL QUALIFICATIONS

none

FIRM MINORITY CODE 3

| | | |
|---------------------|-----------------------|---------------------|
| 0 - BLACK | 3 - SPANISH AMERICAN | 6 - UNDETERMINED |
| 1 - PUERTO RICAN | 4 - ASIAN | 7 - OTHER INCLUDING |
| 2 - AMERICAN INDIAN | 5 - ESKIMO AND ALEUT. | WHITE |

FEMALE OWNED/OPERATED

OTHER COMMENTS OR QUALIFICATIONS

MIL spec certified, have done some machine work for Westinghouse in

nuclear area.

Region 7; Kansas City, MO

Contains: Iowa, Kansas, Missouri, Nebraska

| LWR | AIS | HTR | LMFBR | WCB | GCBR | Adv. Sys. Eval. | Space & Terr. Appl. | Defense Waste | Commercial Waste |
|-----|-----|-----|-------|-----|------|--------------------|------------------------|------------------|---------------------|
|-----|-----|-----|-------|-----|------|--------------------|------------------------|------------------|---------------------|

IOWA
Ames Laboratory
Ames

X

DEPARTMENT OF ENERGY OFFICES & FACILITIES,
GOVERNMENT OWNED/COMPANY OPERATED OFFICES
& FACILITIES, & SMALL/DISADVANTAGED
BUSINESSES LOCATED WITHIN DOE REGION 7

DOE Office

Mary O'Halloran
Regional Representative of
the Secretary, Region 7
Department of Energy
324 East 11th Street
Kansas City, MO 64106
(816) 374-2061
(FTS 758-2061)

James R. Nicks, Manager
Kansas City Area Office
Department of Energy
P.O. Box 202
Kansas City, MO 64141
(816) 997-3341
(FTS 926-3341)

Procurement Office

Ronald J. Brown
Director, Office Management
& Support
(816) 374-5182
(FTS 758 5182)

Dallas Mayfield, Chief
Contracts Section
(816) 997-3349
(FTS 926-3349)

SB/DB Specialist

Same

Alternate
F. Gilbert Lagergren
Chief, Support
Services Branch
(816) 374-5184
(FTS 658-5184)

Same

GOVERNMENT OWNED/CONTROLLED CREATED - SE/DA SPECIALIST

Office

The Bendix Corporation
P.O. Box 1159
Kansas City, MO 64141

Office Manager

V.L. Ritter
Vice President & General
Manager
Kansas City Division
(816) 997-3212
(FTS 926-3212)

SE/DA Specialist

William O. Turner
(816) 997-4289
(FTS 926-4289)

Region 8; Denver, CO

Contains: Colorado, Montana, North Dakota, South Dakota, Utah, Wyoming

| | LWR | AIS | HTR | LMFBR | WCB | GCBR | Adv. Sys. Eval. | Space & Terr. Appl. | Defense Waste | Commercial Waste |
|-------------|-----|-----|-----|-------|-----|------|--------------------|------------------------|------------------|---------------------|
| COLORADO | | | | | | | | | | |
| Rocky Flats | | | | | | | | | X | X |
| Golden | | | | | | | | | | |

DEPARTMENT OF ENERGY OFFICES & FACILITIES,
GOVERNMENT OWNED/COMPANY OPERATED OFFICES
& FACILITIES, & SMALL/DISADVANTAGED
BUSINESSES LOCATED WITHIN DOE REGION 8

DOE Office

Procurement Office

SB/DB Specialist

Charles F. Metzger
Regional Representative of the
Secretary, Region 8
Department of Energy
P.O. Box 26247 - Belmar Branch
Lakewood, CO 80226
(303) 234-2420
(FTS 234-2420)

Don Ofte, Manager
Rocky Flats Area Office
Department of Energy
P.O. Box 928
Golden, CO 80401
(303) 497-2025
(FTS 320-2025)

David C. Rardin, Manager
SERI Site Office
Department of Energy
1617 Cole Boulevard
Golden, CO 80401
(303) 327-1378
(FTS 327-1378)

Donald L. Everhart, Manager
Grand Junction Office
Department of Energy
P.O. Box 2567
Grand Junction, CO 81501
(303) 242-8621, x203
(FTS 322-9203)

Epifanio Vallejo
Director, Management Division
(303) 234-2480
(FTS 234-2480)

C.H. Barkmeier
Chief, Admin. Branch
(303) 497-4263
(FTS 320-4263)

Charles M. Skinner
Contract Specialist
(303) 327-1360
(FTS 327-1360)

William F. Archbold
Director, Procurement &
Services Office
(303) 242-8621, x226
(FTS 322-9226)

J. Gilbert Leyba
Admin Svs Officer
(303) 234-2480
(FTS 234-2480)

Edward J. Green
(303) 497-2492
(FTS 320-2492)

Same

Harold R. Frederickson,
Jr.
Contract Specialist
(303) 242-8621, x228
(FTS 322-9228)

GOVERNMENT OWNED COMPANY OPERATED BY SR/DE SPECIALISTS

Division

Off/Line Reps

SR/DE Specialist

Energy Systems Group
A Division of Rockwell
International Corp.
P.O. Box 464
Golden, CO 80401

R.O. Williams, Jr.
Vice President & General
Manager
Rock Flats Plant
(303) 497-7000, x4361
(FTS 320-4361)

Jerry Loudenburg
(303) 497-7000, x2983
(FTS 320-2983)

Bendix Field Engineering
Corporation
P.O. Box 1569
Grand Junction, CO 81501

C.L. Greenslit
Manager
(303) 242-8621, x262
(FTS 322-9262)

Richard E. Tobias
Contracts Specialist
(303) 242-8621, x358
(FTS 322-9358)

Kaiser Engineers
P.O. Box 768
Butte, MT 59701

Al Orne
Project Manager
(406) 494-7231
(FTS 587-7231)

Chuck Maxon
(406) 494-2433
(FTS 587-2433)

MERDI, Inc.
P.O. Box 3809
Butte, MT 59701

Dr. Jerry Plunkett
Managing Director
(406) 494-6100, x6205
(FTS 587-6205)

John Bishop
(406) 494-6100, x6250
(FTS 587-6250)

NAME OF FIRM Aguirre Engineering, Inc.

MAILING ADDRESS 14 Inverness Drive-E, Unit 8H

Englewood, CO 80112

CONTACT Vukoslav E. Aguirre TITLE _____

PHONE (303) 771-4446- EST.: 1977 8(a): yes

TYPE OF SERVICE OFFERED Geotechnical and Material Studies

SPECIAL CAPABILITIES All geotechnical studies related to 12 or more

nuclear plants (with Low Engineering & Testing Co.).

PERSONNEL WITH SPECIAL QUALIFICATIONS Aguirre; P.E. & consultants

FIRM MINORITY CODE 3

0 - BLACK

1 - PUERTO RICAN

2 - AMERICAN INDIAN

3 - SPANISH AMERICAN

4 - ASIAN

5 - ESKIMO AND ALEUT

6 - UNDETERMINED

7 - OTHER INCLUDING
WHITE

FEMALE OWNED/OPERATED _____

OTHER COMMENTS OR QUALIFICATIONS geotechnical studies and engineering

concrete and asphalt analysis

NAME OF FIRM West Electronics, Inc.

MAILING ADDRESS 200 C Street, Box 577

Oljokar, MT 59255

CONTACT Charles Candela TITLE _____

PHONE (406) 768 -3471 EST.: 1971 8(a): Yes

TYPE OF SERVICE OFFERED _____

SPECIAL CAPABILITIES _____

military contracts

PERSONNEL WITH SPECIAL QUALIFICATIONS _____

FIRM MINORITY CODE 2

| | | |
|---------------------|-----------------------|---------------------|
| 0 - BLACK | 3 - SPANISH AMERICAN | 6 - UNDETERMINED |
| 1 - PUERTO RICAN | 4 - ASIAN | 7 - OTHER INCLUDING |
| 2 - AMERICAN INDIAN | 5 - ESKIMO AND ALEUT. | WHITE |

FEMALE OWNED/OPERATED _____

OTHER COMMENTS OR QUALIFICATIONS _____

MIL spec csrtified

Region 9; San Francisco, CA

Contains: Arizona, California, Nevada

| | LWR | AIS | HTR | LMFBR | WCB | GCBR | Adv. Sys. Eval. | Space & Terr. Appl. | Defense Waste | Commercial Waste |
|---|-----|-----|-----|-------|-----|------|--------------------|------------------------|------------------|---------------------|
| CALIFORNIA | | | | | | | | | | |
| Energy Technology Eng. Ctr. | | | | X | | | | | | |
| Canagoo Park | | | | | | | | | | |
| Jet Propulsion Lab. Pasadena | | | | | | | | X | | |
| Lawrence Berkeley Lab. Berkeley | | X | | | | | | | | |
| Lawrence Livermore Lab. Livermore | | X | | | | | | | | |

DEPARTMENT OF ENERGY OFFICES & FACILITIES,
GOVERNMENT OWNED/COMPANY OPERATED OFFICES
& FACILITIES, & SMALL/DISADVANTAGED
BUSINESSES LOCATED WITHIN DOE REGION 9

DOE Office

Martin Domagala
Acting Regional Representative
of the Secretary, Region 9
Department of Energy
333 Market Street
San Francisco, CA 94105
(415) 764-7014
(FTS 454-7014)

Joe LaGrone, Manager
San Francisco Operations
Office
Department of Energy
1333 Broadway, Wells Fargo
Bldg.
Oakland, CA 94612
(415) 273-7111
(FTS 536-7111)

Mahlon E. Gates, Manager
Nevada Operations Office
Department of Energy
P.O. Box 14100
Las Vegas, NV 89114
(702) 734-3211
(FTS 598-3211)

Procurement Office

Ernie Rios
Contracting Officer
(415) 764-7003
(FTS 454-7003)

Susan R. Brechbill
Director
Procurement Division
(415) 273-4240
(FTS 536-4240)

Daryl B. Morse
Director, Contracts &
Procurement Division
(702) 734-3206
(FTS 598-3206)

SB/DB Specialist

John T. Morgan
Director, Management
Division
(415) 764-7001
(FTS 454-7001)

Maurice Carcamo
Contract Specialist
(415) 273-6031
(FTS 536-6031)

Bradley Bourn
(702) 734-3206
(FTS 598-3206)

GOVERNMENT OWNED/COMPANY OPERATED - SB/DB SPECIALISTS

| <u>Office</u> | <u>Office Head</u> | <u>SB/DB Specialist</u> |
|--|--|--|
| Energy Systems Group A Division of Rockwell International P.O. Box 309 Canoga Park, CA 91304 | Samuel Iacobellis President (213) 341-1000 | M.A. Julian Director, Material (213) 341-1000, x1851 (FTS 791-1120) |
| General Atomic Company P.O. Box 81608 San Diego, CA 92138 | W.W. Finely, Jr. President (714) 455-2080 | Larry Boysen Assistant Director of Procurement (714) 455-3422 |
| General Electric Company 175 Curtner Avenue San Jose, CA 95125 | Dr. Roy H. Beaton Vice President & Group Executive Nuclear Energy Group (408) 925-5581 | Jim Key, Director Procurement (408) 297-3000 |
| Sandia National Laboratories P.O. Box 969 Livermore, CA 94550 | T.B. Cook, Jr. Vice President (415) 422-2211 (FTS 532-2211) | M.L. Glaze (415) 422-2271 (FTS 532-2271) |
| EG&G, Inc. P.O. Box 1912 Las Vegas, NV 89101 | R.L. Hammon General Manager EG&G Las Vegas Area Operations & EG&G DOE Contract Group (702) 739-0281 (FTS 598-0281) | <u>SB</u> Paul Adams Purchasing Manager (702) 739-0401 (FTS 598-0401) |
| | | <u>DB</u> Merl Rees Director, Proc. Div. (702) 739-0401 (FTS 598-0401) |
| Fenix & Scisson, Inc. P.O. Box 15408 Las Vegas, NV 89114 | R.H. Ashlock Manager (702) 734-3481 (FTS 598-3481) | Harry L. Jacocks Contract & Procurement Specialist (702) 734-3481 (FTS 598-3481) |
| Holmes & Narver, Inc. P.O. Box 14340 Las Vegas, NV 89114 | Augustine E. Gurrola General Manager, OCTD (702) 734-3411 (FTS 598-3411) | John McGuffin Manager, Procurement (702) 734-3266 (FTS 598-3266) |
| Reynolds Electrical & Engineering Co., Inc. P.O. Box 14400 Las Vegas, NV 89114 | H.D. Cunningham General Mana (702) 734-3379 (FTS 598-3379) | Edward Ortiz Manager Procurement (702) 734-3355 (FTS 598-3355) |

Region 10; Seattle, WA

Contains: Alaska, Hawaii, Idaho, Oregon, Washington

| | LWR | AIS | HTR | LMFBR | WCB | GCBR | Adv. Sys. Eval. | Space & Terr. Appl. | Defense Waste | Commercial Waste |
|--|-----|-----|-----|-------|-----|------|--------------------|------------------------|------------------|---------------------|
| IDAHO | | | | | | | | | | |
| Argonne Natl. Labs West Idaho Falls | | | | X | | | | | | |
| Idaho Natl. Eng. Lab. Idaho Falls | | | | X | | | | | X | |
| Idaho Operations Off. | | X | | | | | | | | |
| WASHINGTON | | | | | | | | | | |
| Hanford Eng. Devel. Lab. Richland | | | | X | | | X | | X | X |
| Hanford Operations (Rockwell Int'l) Richland | | | | | | | | | X | X |
| Pacific Northwest Lab. Richland | | | | X | | | | X | X | X |

DEPARTMENT OF ENERGY OFFICES & FACILITIES,
GOVERNMENT OWNED/COMPANY OPERATED OFFICES
& FACILITIES, & SMALL/DISADVANTAGED
BUSINESSES LOCATED WITHIN DOE REGION 10

DOE Office

Procurement Office

SB/DB Specialist

Jack B. Robertson
Regional Representative of the
Secretary, Region 10
Department of Energy
915 Second Avenue
1992 Federal Building
Seattle, WA 98174
(206) 442-7280
(FTS 399-7280)

Alphonse Denson
Office Service Manager
(206) 442-7290
(FTS 399-7290)

Same

C.S. Carlisle, Director
Fast Flux Test Facility
Project Office
Department of Energy
P.O. Box 550
Richland, WA 99352
(509) 376-5481
(FTS 444-5481)

Robert D. Larson
Director, Contracts &
Administration Division
(509) 376-5556
(FTS 444-5556)

John M. Wilczynski
Contract Specialist
(509) 376-5267
(FTS 444-5467)

Jack B. Robertson
Regional Representative of
the Secretary, Region 10
Department of Energy
915 Second Avenue
1992 Federal Building
Seattle, WA 98174
(206) 442-7280
(FTS 399-7280)

Alphonse Denson
Office Service Manager
(206) 442-7290
(FTS 399-7290)

Same

A.G. Fremling, Manager
Richland Operations Office
Department of Energy
P.O. Box 550
Richland, WA 99352
(509) 376-7395
(FTS 444-7395)

Jack C. Cummings
Director, Procurement
Division
(509) 376-7271
(FTS 444-7271)

Tony Pace
Assistant to Director
Proc. Division
(509) 376-7271
(FTS 444-7271)

Charles E. Williams, Manager
Idaho Operations Office
Department of Energy
550 Second Street
Idaho Falls, ID 83401
(208) 526-1322
(FTS 583-1322)

Nell W. Fraser
Director, Contracts
Management Div.
(208) 526-1347
(FTS 583-1347)

Joe Price
SB/DB Specialist
(208) 526-1347
(FTS 583-0642)

GOVERNMENT OWNED/COMPANY OPERATED - SB/DB SPECIALISTS

| <u>Office</u> | <u>Office Head</u> | <u>SB/DB Specialist</u> |
|---|--|---|
| Battelle - Pacific Northwest Laboratories P.O. Box 999 Richland, WA 99352 | Douglas E. Olesen Director (509) 375-2201 (FTS 444-7511, x375-2201) | Mendel Gragg Procurement Support Services Manager (509) 376-0240 (FTS 444-0240) |
| J.A. Jones Construction Services Company 801 First Street Richland, WA 99352 | L.B. Leonard, Jr. President (509) 376-6707 (FTS 444-6707) | Ray Edler SB Liaison Officer (509) 376-6260 (FTS 444-6260) |
| Rockwell Hanford Operations P.O. Box 800 Richland, WA 99352 | D.J. Cockeram VP/Genrl Manager (509) 373-1277 (FTS 444-1277) | Sandra M. Rowley S & DB Representative (509) 376-8521 (FTS 444-8521) |
| UNC Nuclear Industries, Inc. P.O. Box 490 Richland, WA 99352 | R.E. Dunn President (509) 376-6248 (FTS 444-6248) | O.T. Boness Senior Buyer (509) 376-6225 (FTS 444-6225) |
| M-K National Corporation P.O. Box 1745 Idaho Falls, ID 83401 | Peter Miller Project Manager (208) 526-3471 (FTS 583-3471) | B.B. Schroeder (208) 526-2474 (FTS 583-2474) |
| EG&G Idaho, Inc. P.O. Box 1625 Idaho Falls, ID 83415 | R.W. Kiehn General Manager (208) 526-1905 (FTS 583-1905) | <u>SB</u> Larry H. Kent, Manager Subcontract Administration (208) 526-1304 (FTS 583-1304) |
| | | <u>DB</u> Errol D. Covington Manager, Procurement Support Branch (208) 526-1362 (FTS 583-1362) |
| Exxon Idaho Nuclear, Inc. 550 Second Street Idaho Falls, ID 83401 | R.W. McCullugh President (208) 526-0679 (FTS 583-0679) | None |
| Catalytic, Inc. P.O. Box 3000 Idaho Falls, ID 83401 | R. Mandler Project Manager (208) 526-1190 (FTS 583-1190) | Dean Pettit (208) 526-1192 (FTS 583-1192) |

GOVERNMENT OWNED/COMPANY OPERATED -- SB/DB SPECIALISTS

Office:

Jones/Boecon
P.O. Box 2591
Idaho Falls, ID 83401

Office Head:

Robert Hambright
(208) 526-3612
(FTS 583-3612)

SB/DB Specialist:

Tom Pearce
Procurement Manager
(208) 526-3745
(FTS 583-3745)

NAME OF FIRM American Consolidated Technology Inc.

MAILING ADDRESS 800 Charcot Avenue

San Jose, CA 95131

CONTACT Hernando G. Caampued TITLE _____

PHONE (408) 946-7811 EST.: _____ 8(a): Yes

TYPE OF SERVICE OFFERED architecture and engineering

SPECIAL CAPABILITIES _____

PERSONNEL WITH SPECIAL QUALIFICATIONS _____

FIRM MINORITY CODE 3

| | | |
|---------------------|----------------------|---------------------|
| 0 - BLACK | 3 - SPANISH AMERICAN | 6 - UNDETERMINED |
| 1 - PUERTO RICAN | 4 - ASIAN | 7 - OTHER INCLUDING |
| 2 - AMERICAN INDIAN | 5 - ESKIMO AND ALEUT | WHITE |

FEMALE OWNED/OPERATED _____

OTHER COMMENTS OR QUALIFICATIONS architecture, civil, mechanical,
engineering, electrical engineering, construction, geotechnical engineering,
operations analysis.

NAME OF FIRM Bernert International Engineers

MAILING ADDRESS 6060 Sunrise Vista Drive, Suite 111

Citrus Hgts, CA 95610

| | | | |
|---------|----------------|-------|------|
| CONTACT | S. F. Lewinski | TITLE | V.P. |
|---------|----------------|-------|------|

PHONE (916) 726- 0450 EST.: 8(a):

TYPE OF SERVICE OFFERED engineering and design

SPECIAL CAPABILITIES

PERSONNEL WITH SPECIAL QUALIFICATIONS .

FIRM MINORITY CODE 6

0 - BLACK

1 - PUERTO RICAN

2 - AMERICAN INDIAN

3 - SPANISH AMERICAN

4 - ASIAN

5 - ESKIMO AND ALEUT

6 - UNDETERMINED

7 - OTHER INCLUDING
WHITE

FEMALE OWNED/OPERATED

OTHER COMMENTS OR QUALIFICATIONS

civil, mechanical, electrical engineering, math modeling

NAME OF FIRM Cataract Engineering & Construction

MAILING ADDRESS 19700 Fairchild Street, Suite 370

Irvine, CA 92715

CONTACT Tom Teischman TITLE _____

PHONE (714) 851-1877 EST.: _____ 8(a): no

TYPE OF SERVICE OFFERED engineering, construction, testing services

SPECIAL CAPABILITIES _____

PERSONNEL WITH SPECIAL QUALIFICATIONS _____

FIRM MINORITY CODE 2

| | | |
|---------------------|----------------------|---------------------|
| 0 - BLACK | 3 - SPANISH AMERICAN | 6 - UNDETERMINED |
| 1 - PUERTO RICAN | 4 - ASIAN | 7 - OTHER INCLUDING |
| 2 - AMERICAN INDIAN | 5 - ESKIMO AND ALEUT | WHITE |

FEMALE OWNED/OPERATED _____

OTHER COMMENTS OR QUALIFICATIONS reactor start-up (+ General power plant
start-up), managing or have managed reactor site construction, reactor plant
procedures, reactor engineering, operations analysis, civil engineering,
architecture.

NAME OF FIRM Custom Control Panels

MAILING ADDRESS 8333 Chetle Avenue

Santa Fe Springs, CA 90670

CONTACT _____ TITLE _____

PHONE (213) 685- 3084 EST.: _____ 8(a): _____

TYPE OF SERVICE OFFERED manufacture of control panels

SPECIAL CAPABILITIES _____

PERSONNEL WITH SPECIAL QUALIFICATIONS _____

FIRM MINORITY CODE 6

| | | |
|---------------------|----------------------|---------------------|
| 0 - BLACK | 3 - SPANISH AMERICAN | 6 - UNDETERMINED |
| 1 - PUERTO RICAN | 4 - ASIAN | 7 - OTHER INCLUDING |
| 2 - AMERICAN INDIAN | 5 - ESKIMO AND ALEUT | WHITE |

FEMALE OWNED/OPERATED _____

OTHER COMMENTS OR QUALIFICATIONS _____

small and large industrial process control panels mfg.

NAME OF FIRM Dagon Divers, Inc.

MAILING ADDRESS 5918 Genoa Street

Oakland, CA 94608

CONTACT Roger White TITLE President

PHONE (415) 428 - 1982 EST.: 1975 8(a):

TYPE OF SERVICE OFFERED diving services and undersea construction

SPECIAL CAPABILITIES

PERSONNEL WITH SPECIAL QUALIFICATIONS

divers experienced with underwater construction related to nuclear and

fossil power plants; access to civil and structural energy consultants

FIRM MINORITY CODE 6

0 - BLACK

1 - PUERTO RICAN

2 - AMERICAN INDIAN

3 - SPANISH AMERICAN

4 - ASIAN

5 - ESKIMO AND ALEUT

6 - UNDETERMINED

7 - OTHER INCLUDING
WHITE

FEMALE OWNED/OPERATED

OTHER COMMENTS OR QUALIFICATIONS

civil engineering, construction

NAME OF FIRM Engineering Analysis & Test Co., Inc.

MAILING ADDRESS 4676 Admiralty Way

Marina Del Ray, CA 90291

CONTACT Raymond Perez TITLE _____

PHONE (213) 822-0931 EST.: 1976 8(a): yes

TYPE OF SERVICE OFFERED engineering and analysis

SPECIAL CAPABILITIES _____

PERSONNEL WITH SPECIAL QUALIFICATIONS _____

FIRM MINORITY CODE 3

| | | |
|---------------------|----------------------|---------------------|
| 0 - BLACK | 3 - SPANISH AMERICAN | 6 - UNDETERMINED |
| 1 - PUERTO RICAN | 4 - ASIAN | 7 - OTHER INCLUDING |
| 2 - AMERICAN INDIAN | 5 - ESKIMO AND ALEUT | WHITE |

FEMALE OWNED/OPERATED _____

OTHER COMMENTS OR QUALIFICATIONS _____

nuclear engineering, rad waste management, safety and risk analysis, civil

and mechanical engineering, math modeling, geotechnical engineering

NAME OF FIRM Environmental Management and Research, Inc.

MAILING ADDRESS 30 Pamaron Way, Suite D

Ignacio, CA 94947

CONTACT Arthur H. Moriguchi TITLE President

PHONE (415) 883-7734 EST.: 1974 8(a): yes

TYPE OF SERVICE OFFERED geotechnical and civil engineering

SPECIAL CAPABILITIES _____

PERSONNEL WITH SPECIAL QUALIFICATIONS _____

FIRM MINORITY CODE 4

| | | |
|---------------------|----------------------|---------------------|
| 0 - BLACK | 3 - SPANISH AMERICAN | 6 - UNDETERMINED |
| 1 - PUERTO RICAN | 4 - ASIAN | 7 - OTHER INCLUDING |
| 2 - AMERICAN INDIAN | 5 - ESKIMO AND ALEUT | WHITE |

FEMALE OWNED/OPERATED _____

OTHER COMMENTS OR QUALIFICATIONS _____

geotechnical studies, civil, mechanical engineering, construction

NAME OF FIRM Eureka Laboratories, Inc.

MAILING ADDRESS 215 26th Street

Sacramento, CA 95816

CONTACT Steve K. Leung TITLE _____

PHONE (916) 443 - 3932 EST.: _____ 8(a): yes

TYPE OF SERVICE OFFERED geotechnical/civil engineering firm

SPECIAL CAPABILITIES _____

PERSONNEL WITH SPECIAL QUALIFICATIONS _____

nuclear personnel, engineers, mechanical engineers

FIRM MINORITY CODE 4

| | | |
|---------------------|----------------------|---------------------|
| 0 - BLACK | 3 - SPANISH AMERICAN | 6 - UNDETERMINED |
| 1 - PUERTO RICAN | 4 - ASIAN | 7 - OTHER INCLUDING |
| 2 - AMERICAN INDIAN | 5 - ESKIMO AND ALEUT | WHITE |

FEMALE OWNED/OPERATED _____

OTHER COMMENTS OR QUALIFICATIONS _____

civil, mechanical engineering, geotechnical studies, rad waste studies,

risk analysis

NAME OF FIRM Fitz Consultants, Inc.

MAILING ADDRESS 555 Veterans Blvd., Suite 105

Redwood, CA 94063

CONTACT Mr. Leslie Fitz TITLE _____

PHONE (415) 367 -8395 EST.: _____ 8(a): _____

TYPE OF SERVICE OFFERED consulting engineers

SPECIAL CAPABILITIES _____

PERSONNEL WITH SPECIAL QUALIFICATIONS L. Fitz (NE & ME)

FIRM MINORITY CODE 6

| | | |
|---------------------|----------------------|---------------------|
| 0 - BLACK | 3 - SPANISH AMERICAN | 6 - UNDETERMINED |
| 1 - PUERTO RICAN | 4 - ASIAN | 7 - OTHER INCLUDING |
| 2 - AMERICAN INDIAN | 5 - ESKIMO AND ALEUT | WHITE |

FEMALE OWNED/OPERATED _____

OTHER COMMENTS OR QUALIFICATIONS _____

Consulting engineers to nuclear industry; TMI accident analysis, fuel cycle,
start-up operating procedures, contamination control, ventilation of nuclear
buildings.

NAME OF FIRM Geo-Resource Consultants, Inc.

MAILING ADDRESS 1620 Montgomery Street

San Francisco, CA 94111

CONTACT Alvin Joe TITLE _____

PHONE (415) 433- 3177 EST.: _____ 8(a): _____

TYPE OF SERVICE OFFERED geotechnical engineering

SPECIAL CAPABILITIES _____

PERSONNEL WITH SPECIAL QUALIFICATIONS _____

FIRM MINORITY CODE 4

| | | |
|---------------------|----------------------|---------------------|
| 0 - BLACK | 3 - SPANISH AMERICAN | 6 - UNDETERMINED |
| 1 - PUERTO RICAN | 4 - ASIAN | 7 - OTHER INCLUDING |
| 2 - AMERICAN INDIAN | 5 - ESKIMO AND ALEUT | WHITE |

FEMALE OWNED/OPERATED _____

OTHER COMMENTS OR QUALIFICATIONS _____

geotechnical studies/engineering, reactor plant siting, rad waste studies.

NAME OF FIRM Hansen/Murakami/Eshima

MAILING ADDRESS 424 2nd Street

Oakland, CA 94607

CONTACT Jens H. Hansen TITLE _____

PHONE (415) 444-7959 EST.: 1978 8(a): _____

TYPE OF SERVICE OFFERED architecture and engineering

SPECIAL CAPABILITIES _____

PERSONNEL WITH SPECIAL QUALIFICATIONS _____

FIRM MINORITY CODE 4

| | | |
|---------------------|-----------------------|---------------------|
| 0 - BLACK | 3 - SPANISH AMERICAN | 6 - UNDETERMINED |
| 1 - PUERTO RICAN | 4 - ASIAN | 7 - OTHER INCLUDING |
| 2 - AMERICAN INDIAN | 5 - ESKIMO AND ALEUT. | WHITE |

FEMALE OWNED/OPERATED _____

OTHER COMMENTS OR QUALIFICATIONS _____

architecture, structural and civil engineering, containment.

NAME OF FIRM James Engineering Co.

MAILING ADDRESS 6329 Fairmont Avenue

El Corrito, CA 94530

CONTACT Ms. Beverly James TITLE _____

PHONE (415) 525 -7350 EST.: _____ 8(a): _____

TYPE OF SERVICE OFFERED civil and electrical engineering

SPECIAL CAPABILITIES _____

PERSONNEL WITH SPECIAL QUALIFICATIONS 1 NE and 1 EE

FIRM MINORITY CODE 7

| | | |
|---------------------|-----------------------|---------------------|
| 0 - BLACK | 3 - SPANISH AMERICAN | 6 - UNDETERMINED |
| 1 - PUERTO RICAN | 4 - ASIAN | 7 - OTHER INCLUDING |
| 2 - AMERICAN INDIAN | 5 - ESKIMO AND ALEUT. | WHITE |

FEMALE OWNED/OPERATED _____

OTHER COMMENTS OR QUALIFICATIONS _____

nuclear fuel cycle economics, fuel storage, sanitary and waste water work.

nuclear sciences and math modeling

NAME OF FIRM Jordan/Avent & Associates

MAILING ADDRESS 111 New Montgomery Street

San Francisco, CA 94105

CONTACT Frederick E. Jordan TITLE _____

PHONE (415) 989 - 1025 EST.: _____ 8(a): _____

TYPE OF SERVICE OFFERED planning and engineering

SPECIAL CAPABILITIES _____

PERSONNEL WITH SPECIAL QUALIFICATIONS _____

FIRM MINORITY CODE 6

| | | |
|---------------------|-----------------------|---------------------|
| 0 - BLACK | 3 - SPANISH AMERICAN | 6 - UNDETERMINED |
| 1 - PUERTO RICAN | 4 - ASIAN | 7 - OTHER INCLUDING |
| 2 - AMERICAN INDIAN | 5 - ESKIMO AND ALEUT. | WHITE |

FEMALE OWNED/OPERATED _____

OTHER COMMENTS OR QUALIFICATIONS _____

geotechnical studies, architecture, civil engineering

NAME OF FIRM T. Y. Lin International

MAILING ADDRESS 315 Bay Street

San Francisco, CA 94133

CONTACT T. Y. Lin TITLE _____

PHONE (415) 982- 1050 EST.: 1954 8(a): _____

TYPE OF SERVICE OFFERED civil and structural engineering

SPECIAL CAPABILITIES _____

PERSONNEL WITH SPECIAL QUALIFICATIONS _____

FIRM MINORITY CODE 4

| | | |
|---------------------|-----------------------|---------------------|
| 0 - BLACK | 3 - SPANISH AMERICAN | 6 - UNDETERMINED |
| 1 - PUERTO RICAN | 4 - ASIAN | 7 - OTHER INCLUDING |
| 2 - AMERICAN INDIAN | 5 - ESKIMO AND ALEUT. | WHITE |

FEMALE OWNED/OPERATED _____

OTHER COMMENTS OR QUALIFICATIONS _____

civil and structural engineering (containment buildings for Bechtel)

NAME OF FIRM David K. Low & Associates, Inc.

MAILING ADDRESS 47 Lafayette Street

San Francisco, CA 94103

CONTACT David K. Low TITLE President

PHONE (415) 864 - 2480 EST.: 1966 8(a):

TYPE OF SERVICE OFFERED consultant engineering

SPECIAL CAPABILITIES

PERSONNEL WITH SPECIAL QUALIFICATIONS

FIRM MINORITY CODE 4

| | | |
|---------------------|-----------------------|---------------------|
| 0 - BLACK | 3 - SPANISH AMERICAN | 6 - UNDETERMINED |
| 1 - PUERTO RICAN | 4 - ASIAN | 7 - OTHER INCLUDING |
| 2 - AMERICAN INDIAN | 5 - ESKIMO AND ALEUT. | WHITE |

FEMALE OWNED/OPERATED

OTHER COMMENTS OR QUALIFICATIONS

CE. EE. ME; engineering services; design, atomic energy installation

NAME OF FIRM McWane & Associates

MAILING ADDRESS P.O. Box 5175

San Jose, CA 95150

CONTACT Odell McWane TITLE President

PHONE (408) 293 2325 EST.: 1978 8(a): No

TYPE OF SERVICE OFFERED _____

SPECIAL CAPABILITIES _____

PERSONNEL WITH SPECIAL QUALIFICATIONS _____

FIRM MINORITY CODE 0

| | | |
|---------------------|-----------------------|---------------------|
| 0 - BLACK | 3 - SPANISH AMERICAN | 6 - UNDETERMINED |
| 1 - PUERTO RICAN | 4 - ASIAN | 7 - OTHER INCLUDING |
| 2 - AMERICAN INDIAN | 5 - ESKIMO AND ALEUT. | WHITE |

FEMALE OWNED/OPERATED _____

OTHER COMMENTS OR QUALIFICATIONS _____

basic welding, engineering, QA for nuclear engineering ME

NAME OF FIRM Pacific Relays, Inc.

MAILING ADDRESS 2929 Exposition

Los Angeles, CA 90018

CONTACT William Jankans TITLE President

PHONE (213) 734 - 1719 EST.: 1953 8(a): Y

TYPE OF SERVICE OFFERED design/fabricate relays, manufacture

relays up to 15A; circuit board; missile, aircraft, ground support

SPECIAL CAPABILITIES _____

PERSONNEL WITH SPECIAL QUALIFICATIONS _____

2 consultant engineers

FIRM MINORITY CODE 0

| | | |
|---------------------|-----------------------|---------------------|
| 0 - BLACK | 3 - SPANISH AMERICAN | 6 - UNDETERMINED |
| 1 - PUERTO RICAN | 4 - ASIAN | 7 - OTHER INCLUDING |
| 2 - AMERICAN INDIAN | 5 - ESKIMO AND ALEUT. | WHITE |

FEMALE OWNED/OPERATED _____

OTHER COMMENTS OR QUALIFICATIONS _____

no nuclear work before

NAME OF FIRM Pan American Steel Corp.

MAILING ADDRESS 3116 Adeline Street

Oakland, CA 94608

CONTACT Gerald Gray TITLE President

PHONE (415) 654 4489 EST.: 1955 8(a): Y

TYPE OF SERVICE OFFERED

steel fabrication & erectors, steel frame buildings, platform, structure

steel fabrication

SPECIAL CAPABILITIES

machine quality control

PERSONNEL WITH SPECIAL QUALIFICATIONS

FIRM MINORITY CODE 0

0 - BLACK

1 - PUERTO RICAN

2 - AMERICAN INDIAN

3 - SPANISH AMERICAN

4 - ASIAN

5 - ESKIMO AND ALEUT.

6 - UNDETERMINED

7 - OTHER INCLUDING
WHITE

FEMALE OWNED/OPERATED

OTHER COMMENTS OR QUALIFICATIONS

have not been involved in any nuclear work before, but is capable of

doing this kind of work

NAME OF FIRM Sam's Electronic Assembly, Inc.

MAILING ADDRESS 105 West 35th Street, Suite M

National City, CA 92050

CONTACT Ms. Edith V. Wagman TITLE President

PHONE (714) 426 - 3401 EST.: 1972 8(a): Yes

TYPE OF SERVICE OFFERED

manufacturing electronic components, assembly circuit board, government work,

computer parts, cables
SPECIAL CAPABILITIES

PERSONNEL WITH SPECIAL QUALIFICATIONS

none

FIRM MINORITY CODE 2

0 - BLACK

1 - PUERTO RICAN

2 - AMERICAN INDIAN

3 - SPANISH AMERICAN

4 - ASIAN

5 - ESKIMO AND ALEUT.

6 - UNDETERMINED

7 - OTHER INCLUDING
WHITE

FEMALE OWNED/OPERATED Yes

OTHER COMMENTS OR QUALIFICATIONS

no nuclear work before qualified MIL 45208

NAME OF FIRM Standard Engineering Corporation

MAILING ADDRESS 44800 Industrial Drive

Fremont, CA 94538

CONTACT Don Little TITLE President

PHONE (415) 657 -7555 EST.: 1974 8(a): U

TYPE OF SERVICE OFFERED

component manufacturing

SPECIAL CAPABILITIES

customers included Argonne Lab, Los Alamos Scientific Lab, Lawrence Livermore Lab;
Princeton U. Physics Dept. (fusion), large number of universities.

PERSONNEL WITH SPECIAL QUALIFICATIONS

nuclear physics, nuclear chemistry

FIRM MINORITY CODE 7

0 - BLACK

1 - PUERTO RICAN

2 - AMERICAN INDIAN

3 - SPANISH AMERICAN

4 - ASIAN

5 - ESKIMO AND ALEUT.

6 - UNDETERMINED

7 - OTHER INCLUDING
WHITE

FEMALE OWNED/OPERATED

OTHER COMMENTS OR QUALIFICATIONS

manufacturing modules to CAMAC standard (ANSI IEEE 583) used in nuclear

high energy physics. Laser fusion, particle research, data acquisition (very
quick response)

NAME OF FIRM Univox California, Inc.

MAILING ADDRESS 4505 W. Jefferson Blvd.

Los Angeles, CA 90016

CONTACT John Grayson TITLE President

PHONE (213) 327-7000 EST.: 1970 8(a): Yes

TYPE OF SERVICE OFFERED

electronic components manufacturing. Power supply for Marine Corp, DC

switching supply

SPECIAL CAPABILITIES

high technology equipment, electric products to FAA, cathode ray tube for

FAA, airport tower equipment, cable assembly for DC-9, DC-8, Boeing, Douglas,

General Dynamics, handbook manual.

PERSONNEL WITH SPECIAL QUALIFICATIONS

engineering capability to customers

personnel from TRW, with aerospace associates

FIRM MINORITY CODE 0

| | | |
|---------------------|-----------------------|---------------------|
| 0 - BLACK | 3 - SPANISH AMERICAN | 6 - UNDETERMINED |
| 1 - PUERTO RICAN | 4 - ASIAN | 7 - OTHER INCLUDING |
| 2 - AMERICAN INDIAN | 5 - ESKIMO AND ALEUT. | WHITE |

FEMALE OWNED/OPERATED

OTHER COMMENTS OR QUALIFICATIONS

electronic capability can be modified, with government contracts (this is an

aerospace company)

