Solar Information
User Priority
Study

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1617 Cole Boulevard
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Operated for the
U.S. Department of Energy
under Contract No. EG-77-C-01-4042
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SOLAR INFORMATION USER
PRIORITY STUDY

WILLIAM W. BELEW
BARBARA L. WOOD

MAY 1980

PREPARED UNDER TASK NOS 8133, 8420.14
AS A PART OF THE SOLAR
INFORMATION NEEDS ASSESSMENT
STUDY

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FOREWORD

This report identifies for each solar technology those members or potential members of the solar community who, either currently or in the future, will require solar information. In addition, it rates each user's relative need for information within the next three years. This information will be used as input for subsequent studies that will identify specific user needs information. These studies, in turn, will be the basis for information product and data base development for the Solar Energy Information Data Bank (SEIDB). In addition, they will be input for the Technical Information Dissemination (TID) Program.

This study was performed under Contract No. EG-77C-01-4042, FY79 Task Number 8133.

Paul Notari, Chief
Information Dissemination and Outreach Branch

Approved for:
SOLAR ENERGY RESEARCH INSTITUTE
Herbert B. Landau, Division Manager
Information Systems Division
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The authors appreciate the technical advice received from the Mid-American Solar Energy Complex, the Northeast Solar Energy Center, Western Sun, and the National Solar Heating and Cooling Information Center. The following persons at the Solar Energy Research Institute (SERI) provided valuable technical advice or review:

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The authors would also like to thank the following for their participation in the peer-review process.

J. F. Banas
Sandia Laboratory

R. Barbieri
Jet Propulsion Laboratory

Gerald E. Bennington
MITRE Corporation

Steven A. Bluhm
Jet Propulsion Laboratory

Beverly Berger
U.S. Department of Energy

Robert Cohen
U.S. Department of Energy

D. M. Dodge
Rockwell International

Virgil L. Dugan
Sandia Laboratory

Dave Eissenberg
Oak Ridge National Laboratory

Larry H. Gordon
National Aeronautics and Space Administration

Tom Hamilton
Jet Propulsion Laboratory

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Global Marine Development, Inc.

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Rockwell International

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Tennessee Valley Authority
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INTRODUCTION

It is generally agreed that the solar community needs information immediately. To address this need, on 26 October 1974, Congress mandated that a Solar Energy Information Data Bank (SEIDB) be created to provide information to the members of the solar community. The Information Systems Division (ISD) at SERI is responsible for the design, development, and coordination of this information network. To disseminate information about solar energy, the ISD is building data bases, collecting solar information, and preparing and distributing information products and services.

In the past decade information scientists have studied many organizations responsible for data collection and information product development. A consistent finding of this research is that a key to the successful, efficient operation of such an organization is to design the entire system with the potential information user in mind. It is essential that development of information products and data bases be targeted for specific users rather than merely developed spontaneously. The information users, their information needs, and the priority of those needs must all be identified before effective information products and services can be developed efficiently. To ensure that SEIDB is responsive to the high-priority information needs of the solar community, the Information Market Research Section of ISD is performing the following tasks:

1. Defining the community of solar information users,
2. Setting priorities as to which groups of information users have the most important near-term information needs,
3. Determining the near-term information needs of the high-priority users,
4. Determining the information channels that can be effectively used to reach the high-priority users,
5. Determining what high-priority information needs are being met fully by existing products and services, and
6. Recommending additional, targeted, cost-effective information products and services to meet high-priority needs.

This document presents the results of the first two tasks: First, identifying for each solar technology those members or potential members of the solar community who will need solar information; second, describing the relative importance of meeting the near-term information needs of each group of information users. This document provides guidelines to SEIDB planners as to who might be using the SEIDB and whose near-term needs are the most important. Since this document specifies only near-term priorities, it will need revision as the status of each technology changes and as additional data become available. It is currently anticipated that this report will be updated every two years and that every attempt will be made to increase the quantity of inputs to this process of determining priorities. In future editions these ratings will be expanded to give both near-term and long-term priorities for each major application within a technology (e.g., for photovoltaics separate ratings will be given for remote systems, residential systems, intermediate-load centers, and central systems).

A set of nine additional reports describes the results of the third and fourth steps. These reports document the high-priority information needs and the most familiar information channels for each of 86 groups that were surveyed by telephone. To produce final information product recommendations, data from these reports are combined with other
user needs data obtained from many diverse sources: contacts with SERI specialists; review of the Annual Operating Plans, Institutional Plans, and Program Plans of DOE and SERI; reviews of other solar literature; development of an "information user profile" database from mailing list response cards; information user panels; direct contacts with members of the solar community at conferences, training sessions, etc.; visits to headquarters of national associations of users; and feedback provided by users of existing information products. This investigation of user needs will determine (along with the priorities) which new information products and services the SEIDB network—and other solar information outreach organizations—should be preparing for and disseminating to the solar community.

**SCOPE**

Tables 1 through 9 list the groups of solar information users and the priority ranking of each user group for each of the following solar technologies or applications:

- Active Solar Heating and Cooling
- Passive Solar Heating and Cooling
- Photovoltaics
- Solar Thermal Electric Power
- Industrial Process Heat
- Biomass Energy Systems
- Wind Energy Systems
- Ocean Energy Systems
- Advanced Solar Storage Systems

For the purpose of this document, Advanced Solar Storage Systems are defined as including those concepts for energy storage other than low-temperature, diurnal, sensible heat storage (e.g., rock beds, water walls, masonry walls). Included are such means for energy storage as: phase change materials, photochemical, electrochemical, hydrogen production, long-term heat sensible storage (solar ponds, aquifers), super-conducting magnets, fly wheels, pumped hydroelectric, compressed air, high-temperature sensible heat storage, and industrial waste heat recovery and storage systems.

**METHODOLOGY**

The following method was used to develop these lists. For each technology, a preliminary list of potential information users was developed by the Information Market Research Section of the Information Systems Division. Each list was then reviewed by:

- approximately three SERI experts in that field;
- three additional SERI experts with a broad knowledge in all solar fields; and
- experts from The National Solar Heating and Cooling Center, the Northeast Solar Energy Center, the Mid-American Solar Energy Center, and Western Sun. The Southern Solar Energy Center was contacted but elected not to participate.
Each reviewer (for a list of the people involved, see the Acknowledgements) was given the following instructions:

The attached sheets are preliminary, unprioritized lists of groups of potential users...

First... please add any additional potential user groups of which you are aware.

Second, please assign priorities to all user groups... The criterion for prioritization should be based upon the importance (to the speedy, economic use of solar) of getting a particular user group the solar information it will need in the next three years. Please assign each user group one of the following ratings:

A - absolutely necessary to provide information (to this group) in the next three years.
B - very important...
C - important...
D - moderately important...
E - not at all important...

The responses were tabulated by calculating the average rating given to each group.

Once these preliminary ratings were completed, the results were reviewed for each technology by the appropriate SERI program manager. Additionally, these results were sent both to DOE program managers and to over 25 experts in the solar community (see Acknowledgements) for peer review. Based upon their comments, the ratings have been revised to compile this final document. These priority ratings are given in Tables 1 through 9.

USE OF PRIORITY RANKINGS IN SEIDB PLANNING

The rankings assigned to each group determine what priority should be given to that group in the development of SEIDB information products and databases. The needs of all groups receiving an A or B priority will be given immediate attention within the means of manpower and funding as specified in the SERI Annual Operating Plan for the Information Systems Program. The needs of all groups receiving C or a lower ranking will be accommodated as the availability of funding allows.

SPECIAL CONSIDERATIONS IN INTERPRETING THE PRIORITY RATINGS

In interpreting the priority ratings given each user group, the following points should be considered:

- The highest priority was given to the group whose receipt of (or failure to receive) solar information would have the greatest impact upon the rapid commercialization of that solar technology.
• Ratings were based upon near-term information needs, specifically those needs that should be met within the next three years. As the various technologies progress, some groups that are currently important (e.g., PV researchers) will become less important while some of the groups that are not currently as important (e.g., homeowners with PV systems) will become more important.

• Priority assignments did not consider whether a group was already receiving sufficient solar information. The adequacy of existing information will be considered later when the specific information needs of high-priority groups are compared to both potential and existing information products or services.

• Priority assignments did not consider either the type and the amount of information needed or the method of delivering the information. Only the importance of meeting the needs was considered.

• The priorities implicitly considered the size of one group as compared to another.

• The priorities assigned are based upon a national average viewpoint of these groups. For some groups these priorities could vary from state to state (or even community to community).

• There was a great initial tendency on the part of the reviewers to assign almost all groups an A priority. When faced with a choice of which of two ratings to give a group, the authors assigned the lower rating. To do otherwise would have ignored the practical limitations imposed by program funding.

• It has been commented that it is difficult to assign a realistic priority for a group without having a specific information product in mind. To the authors it seems much more difficult to make programmatic decisions as to which products to design without knowing which groups have the highest priority needs.

SOLAR INFORMATION USER CLASSIFICATION SYSTEM

To best understand the roles of different users, it is important to assign information users who have similar needs to common groups. This grouping by roles allows development of efficient, targeted information products to meet needs of specific users without inundating other members of the solar community with unnecessary information. In this regard, the following user classification system has been employed for each solar technology (see Tables 1-9.)

Level 1 - User Groups

An information User Group is the most basic category of users who can be combined under one definitive title (e.g., civil engineers). A single user group should be addressable by many specific information products. The purpose of defining distinct information user groups is to identify a single set of users who can be served by the same information product (e.g., civil engineers' handbook).

Level 2 - User Classes

An information User Class is a set of information user groups that have many common distinguishing characteristics (e.g., solar facility or system designers). A single user class should be served by many general information products. The purpose of defining
separate information user classes is to identify sets of two or more groups of users who can be served by similar information products (e.g., solar heating and cooling system design models).

**Level 3 – Target Audiences**

A Target Audience is a set of information user classes that have some common distinguishing characteristics (e.g., researchers). A single target audience should be served by one or more distinct information products. The purpose of defining separate information user target audiences is to identify broad sets of users who can use the same generic types of information products (e.g., scientific bibliographies).

**DEFINITION OF TARGET AUDIENCES**

All solar information users fall within one or more of five target audiences that are used in Tables 1-9 and are defined as follows:

1.0 Researchers - those who actively research, develop, test, or appraise new technologies in solar energy.

2.0 Applications Technologists - those who translate research and results into marketable equipment and services. This classification includes manufacture, distribution, design, installation, and maintenance of solar systems or components.

3.0 Facilitators - those whose actions can directly affect the commercialization of solar energy, either positively or negatively. Examples of facilitators include congressmen who can pass legislation giving incentives; lobbyists who can influence legislation; state energy offices that can initiate demonstration projects; and EPA that can forbid construction of a solar satellite receiver station at a specific site.

4.0 Users or Prospective Users - those individuals or organizations who have already applied or may apply solar energy technologies in their operations.

5.0 General Public - those individuals or organizations who, though not likely to use solar energy in the near future, can influence the course of solar energy through political influence. This audience will tend to be uninformed about solar technologies; many members will need the most elementary education.

Although a group may perform in several functional classifications, only its principal classification is used. Some users, however, will legitimately fall into several categories. For example, some utilities may participate in DOE-sponsored solar research (Researchers), other utilities may purchase wind energy conversion systems (Users), and yet other utilities may oppose congressional shifting of DOE funds from nuclear projects to solar projects (Facilitators). In such a case the group would be listed in all relevant classifications.
TABLE 1. PRIORITY OF INFORMATION USERS FOR ACTIVE SOLAR HEATING AND COOLING SYSTEMS
TABLE 1. PRIORITY OF INFORMATION USERS FOR ACTIVE SOLAR HEATING AND COOLING SYSTEMS

<table>
<thead>
<tr>
<th>Target Audiences&lt;sup&gt;a&lt;/sup&gt;</th>
<th>Priority of Needs Over Next Three Years&lt;sup&gt;b&lt;/sup&gt;</th>
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<tbody>
<tr>
<td>1.0 Researchers</td>
<td></td>
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<tr>
<td>1.1 DOE-Funded Researchers and Developers</td>
<td>C</td>
</tr>
<tr>
<td>Contractors</td>
<td></td>
</tr>
<tr>
<td>National Laboratories</td>
<td>C</td>
</tr>
<tr>
<td>1.2 Non-DOE, Federally-Funded Researchers and Developers</td>
<td>C</td>
</tr>
<tr>
<td>Department of Housing and Urban Development (HUD)</td>
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</tr>
<tr>
<td>1.3 Nonfederally-Funded Researchers and Developers</td>
<td></td>
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<tr>
<td>Universities</td>
<td>C</td>
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<tr>
<td>Solar Manufacturers</td>
<td>B</td>
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<tr>
<td>Trade Research Associations</td>
<td></td>
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<tr>
<td>Electric Power Research Institute (EPRI)</td>
<td>B</td>
</tr>
<tr>
<td>Gas Research Institute</td>
<td>B</td>
</tr>
<tr>
<td>Independent Research Organizations</td>
<td>C</td>
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<tr>
<td>Utilities</td>
<td>C</td>
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<td>2.0 Applications Technologists</td>
<td></td>
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<td>2.1 Active SHAC or SHAC-Related Manufacturers</td>
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<tr>
<td>Hot Water Systems Manufacturers</td>
<td>B</td>
</tr>
<tr>
<td>Collector Manufacturers</td>
<td>B</td>
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<tr>
<td>Component Manufacturers</td>
<td>B</td>
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<tr>
<td>2.2 Active SHAC Facility or System Designers</td>
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<tr>
<td>Architects</td>
<td>A</td>
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<tr>
<td>System Designers/Engineers</td>
<td>A</td>
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<tr>
<td>Architectural/Engineering Design Firms</td>
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<tr>
<td>Mechanical Engineers</td>
<td>C</td>
</tr>
<tr>
<td>Heating, Ventilating, and Air Conditioning (HVAC) Engineers</td>
<td>A</td>
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<tr>
<td>2.3 Builders, Developers, or Contractors</td>
<td></td>
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<tr>
<td>Homebuilders, Developers</td>
<td>A</td>
</tr>
<tr>
<td>General Contractors</td>
<td>B</td>
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<sup>a</sup>Target Audiences are indicated by the underlined first-level sections. User Classes of the Target Audience are shown by the numbered second-level sections. Unnumbered third-level sections beneath the User Class present the User Groups.

<sup>b</sup>A is the highest priority, E the lowest.
ACTIVE SOLAR HEATING AND COOLING SYSTEMS (continued)

Architectural/Engineering Construction Firms A
Mechanical Engineering Contractors C
HVAC Contractors A
Plumbing Contractors A
Construction Engineers C

2.4 Active SHAC Installers and Maintainers
Installers A
Carpenters D
Plumbers B
Electricians D
HVAC Installers D
Sheet Metal Workers A
Solar Maintenance Workers B
Construction Workers D
Roofing Contractors C

2.5 Active SHAC Equipment Distributors A

2.6 Technical Specialists for Utility, Government, Commercial, or Industrial Organization Using an Active SHAC System
Operation Managers D
Planners C

3.0 Facilitators

3.1 Legislators and Staff
Congressmen B
Congressional Committee Staff A
State Legislators B
National Conference of State Legislators B

3.2 Local Government Organizations
County Government Officials B
Local Government Officials B
Municipal Planners B
Tax Assessors and Officials C

3.3 Government Solar-Active Organizations
DOE—Conservation and Solar Energy (C&SE) A
DOE—Energy Information Administration (EIA) C
DOE—Regional Solar Energy Centers (RSECs) A
DOE/HUD—National Solar Heating and Cooling Information Center (NSHCIC) A
DOE—Regional Energy Offices C
ACTIVE SOLAR HEATING AND COOLING SYSTEMS (continued)

DOE—Energy Extension Service A
United States Department of Agriculture (USDA) B
—Cooperative Extension Service B
USDA—Other B
HUD A
Department of Labor (DOL)—Comprehensive Employment and Training Act (CETA) B
Tennessee Valley Authority (TVA) A
National Center for Appropriate Technology (NCAT) B
State Governors' Offices B
State Energy Offices B
State Solar Energy Offices A
State Agricultural Offices B
Municipal Energy Offices B

3.4 Government Solar-Concerned Organizations
General Services Administration (GSA) C
Department of Defense (DOD) C
Small Business Administration (SBA) D
Internal Revenue Service (IRS) C
Council on Environmental Quality (CEQ) C
Department of Commerce (DOC) D

3.5 Nongovernment Solar-Active Organizations
Solar Trade Associations B
Solar Professional Societies B
Solar Public Interest Groups B
Solar Lobbyists B

3.6 Nongovernment Solar-Concerned Organizations
Community/Home Improvement Associations B
Public Interest Organizations B
Environmental Organizations B
Chambers of Commerce C
Nonsolar Professional Societies B
Nonsolar Trade Associations B
Farmer Co-ops C
Farmer's Education and Cooperative Union of America C

3.7 Regulatory, Codes, and Standards Community
Environmental Protection Agency (EPA) D
Occupational Safety and Health Administration (OSHA) D
American Society of Heating, Refrigerating, and Air Conditioning Engineers (ASHRAE) B
American National Standards Institute (ANSI) B
Building Officials and Code Administrators (BOCA), Council of American Building Officials (CABO),
International Conference of Building Officials (ICBO, Southern Building Code Congress (SBCC)) B
ACTIVE SOLAR HEATING AND COOLING SYSTEMS (continued)

American Society of Mechanical Engineers (ASME) B
Better Business Bureaus C
Building Inspectors B

3.8 Utility Community
Electric Power Companies C
Gas Utilities C
National Association of
   Regulatory Utility Commissioners C
State Utility Commissions C
Utility Trade Associations D
Federal Power Marketing Agencies
   DOI—Bonneville Power Administration C
Tennessee Valley Authority (TVA) B

3.9 Financial Community
Bankers A
Venture Capital Brokers B
Government Loan Agencies B
Stockbrokers D

3.10 Legal Community C

3.11 Real Estate Community
Agencies C
Salesmen B
Appraisers B

3.12 Insurance Community
Management C
Agents B
Actuaries C

3.13 Educational Community
High School Science Teachers B
University Faculty B
Vocational Instructors B
Career Counselors C
Seminar Organizers and Instructors C

3.14 Information Intermediaries
Federal Technical Libraries C
Industrial Technical Libraries C
Academic or Nonprofit Technical Libraries B
Public Libraries B
Federal Information Centers B
On-Line Information Services B
Bookstores A
Film Distributors D
ACTIVE SOLAR HEATING AND COOLING SYSTEMS (concluded)

3.15 Media
Newspapers and Magazines B
Technical and Trade Journals B
Television B
Radio B
Book Publishers B
Newspaper Farm Editors of America B

3.16 Labor Organizations
Carpentry Unions D
Construction Unions C
Sheet Metal Workers' International Association (SMWIA) B
Plumber Unions C
Electrical Unions D

4.0 Users or Prospective Users

4.1 Government, Commercial, or Industrial Users
Department of Defense (DOD) A
GSA—Public Building Service A
U.S. Department of Agriculture (USDA) A
Other Federal/State/Local Agencies Owning or Holding Titles to Buildings A
Owners of Large Buildings
New B
Retrofits C
Owners of Small Buildings
New B
Retrofits B

4.2 Residential or Farming Users
Homeowners
Custom Homes A
Speculative Houses B
Retrofits A
Farmers, Ranchers B
Pool Owners B
Mobile Home Owners D

5.0 General Public
Secondary School Students B
College Students B
Adults B
TABLE 2. PRIORITY OF INFORMATION USERS FOR PASSIVE SOLAR SYSTEMS
### TABLE 2. PRIORITY OF INFORMATION USERS FOR PASSIVE SOLAR SYSTEMS

<table>
<thead>
<tr>
<th>Target Audiences&lt;sup&gt;a&lt;/sup&gt;</th>
<th>Priority of Needs Over Next Three Years&lt;sup&gt;b&lt;/sup&gt;</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.0 Researchers</td>
<td></td>
</tr>
<tr>
<td>1.1 DOE-Funded Researchers and Developers</td>
<td>A</td>
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<tr>
<td>Contractors</td>
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</tr>
<tr>
<td>National Laboratories</td>
<td>B</td>
</tr>
<tr>
<td>1.2 Non-DOE, Federally-Funded Researchers and Developers</td>
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<tr>
<td>Department of Housing and Urban Development (HUD)</td>
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</tr>
<tr>
<td>1.3 Nonfederally-Funded Researchers and Developers</td>
<td>C</td>
</tr>
<tr>
<td>Universities</td>
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</tr>
<tr>
<td>Solar Manufacturers</td>
<td>B</td>
</tr>
<tr>
<td>Trade Research Associations</td>
<td></td>
</tr>
<tr>
<td>Electric Power Research Institute (EPRI)</td>
<td>B</td>
</tr>
<tr>
<td>Gas Research Institute</td>
<td>C</td>
</tr>
<tr>
<td>Independent Research Organizations</td>
<td>C</td>
</tr>
<tr>
<td>Utilities</td>
<td>C</td>
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<tr>
<td>2.0 Applications Technologists</td>
<td></td>
</tr>
<tr>
<td>2.1 Passive or Passive-Related Manufacturers</td>
<td>B</td>
</tr>
<tr>
<td>Passive Equipment Manufacturers</td>
<td>A</td>
</tr>
<tr>
<td>Prefabricated Home Manufacturers</td>
<td>B</td>
</tr>
<tr>
<td>Mobile Home Manufacturers</td>
<td>C</td>
</tr>
<tr>
<td>Building Materials Manufacturers</td>
<td>B</td>
</tr>
<tr>
<td>2.2 Passive Facility or System Designers</td>
<td></td>
</tr>
<tr>
<td>Architects</td>
<td>A</td>
</tr>
<tr>
<td>System Designers/Engineers</td>
<td>A</td>
</tr>
<tr>
<td>Architectural/Engineering Design Firms</td>
<td>A</td>
</tr>
<tr>
<td>Mechanical Engineers</td>
<td>A</td>
</tr>
<tr>
<td>Heating, Ventilating, and Air Conditioning (HVAC) Engineers</td>
<td>B</td>
</tr>
<tr>
<td>2.3 Builders, Developers, or Contractors</td>
<td></td>
</tr>
<tr>
<td>Homebuilders, Developers</td>
<td>A</td>
</tr>
<tr>
<td>Home Remodeling Contractors</td>
<td>B</td>
</tr>
<tr>
<td>General Contractors</td>
<td>C</td>
</tr>
<tr>
<td>Architectural/Engineering Construction Firms</td>
<td>A</td>
</tr>
</tbody>
</table>

<sup>a</sup>Target Audiences are indicated by the underlined first-level sections. User Classes of the Target Audience are shown by the numbered second-level sections. Unnumbered third-level sections beneath the User Class present the User Groups.

<sup>b</sup>A is the highest priority, E the lowest.
PASSIVE SOLAR SYSTEMS (continued)

Mechanical Engineering Contractors  C
HVAC Contractors  B
Plumbing Contractors  D
Construction Engineers  C

2.4 Passive Systems Installers and Maintainers
   Installers  C
   Carpenters  C
   Plumbers  D
   Electricians  D
   Sheet Metal Workers  C
   Solar Maintenance Workers  D

2.5 Passive Equipment Distributors  B

2.6 Technical Specialists for Utility, Government, Commercial, or Industrial Organization Using a Passive System
   Operation Managers  D
   Planners  C

3.0 Facilitators

3.1 Legislators and Staff
   Congressmen  R
   Congressional Committee Staff  A
   State Legislators  B
   National Conference of State Legislators  B

3.2 Local Government Organizations
   County Government Officials  B
   Local Government Officials  B
   Municipal Planners  B
   Tax Assessors and Officials  C

3.3 Government Solar-Active Organizations
   DOE—Conservation and Solar Energy (C&SE)  A
   DOE—Energy Information Administration (EIA)  C
   DOE—Regional Solar Energy Centers (RSECs)  A
   DOE/HUD—National Solar Heating and Cooling Information Center (NSHCIC)  A
   DOE—Regional Energy Offices  C
   DOE—Energy Extension Service  A
   United States Department of Agriculture (USDA)—
      Cooperative Extension Service  B
   USDA—Other  B
   Department of Housing and Urban Development (HUD)  A
PASSIVE SOLAR SYSTEMS (continued)

Department of Labor (DOL)—Comprehensive Employment and Training Act (CETA) C
Tennessee Valley Authority (TVA) A
National Center for Appropriate Technology (NCAT) A
State Governors' Offices B
State Energy Offices B
State Solar Energy Offices A
State Agricultural Offices C
Municipal Energy Offices B

3.4 Government Solar-Concerned Organizations
General Services Administration (GSA) C
Department of Defense (DOD) C
Small Business Administration (SBA) D
Internal Revenue Service (IRS) B
Council on Environmental Quality (CEQ) C

3.5 Nongovernment Solar-Active Organizations
Solar Trade Associations B
Building Materials Trade Association B
Solar Professional Societies B
Solar Public Interest Groups B
Solar Lobbyists D

3.6 Nongovernment Solar-Concerned Organizations
Community/Home Improvement Associations B
Public Interest Organizations B
Environmental Organizations B
Chambers of Commerce C
Nonsolar Professional Societies B
Nonsolar Trade Associations B
Farmer Co-ops C
Farmer's Education and Cooperative Union of America C

3.7 Regulatory, Codes, and Standards Community
Environmental Protection Agency (EPA) E
Occupational Safety and Health Administration (OSHA) E
American Society of Heating, Refrigerating, and Air Conditioning Engineers (ASHRAE) C
American National Standards Institute (ANSI) D
Building Officials and Code Administrators (BOCA), Council of American Building Officials (CABO), International Conference of Building Officials (ICBO), Southern Building Code Congress (SBCCC) C
American Society of Mechanical Engineers (ASME) C
Better Business Bureaus C
Building Inspectors B
PASSIVE SOLAR SYSTEMS (continued)

3.8 Utility Community
   Electric Power Companies D
   Gas Utilities D
   National Association of
      Regulatory Utility Commissioners D
   State Utility Commissions D
   Utility Trade Associations D
   Federal Power Marketing Agencies
      DOE-Bonneville Power Administration C
      Tennessee Valley Authority (TVA) B

3.9 Financial Community
   Bankers R
   Venture Capital Brokers D
   Government Loan Agencies B
   Stock Brokers E

3.10 Legal Community C

3.11 Real Estate Community
   Agencies C
   Salesmen B
   Appraisers B

3.12 Insurance Community
   Management D
   Agents C
   Actuaries D

3.13 Educational Community
   High School Science Teachers B
   University Faculty B
   Vocational Instructors B
   Career Counselors D
   Seminar Organizers and Instructors C

3.14 Information Intermediaries
   Federal Technical Libraries C
   Industrial Technical Libraries D
   Academic or Nonprofit Technical Libraries B
   Public Libraries A
   Federal Information Centers B
   On-Line Information Services B
   Bookstores A
   Film Distributors D

3.15 Media
   Newspapers and Magazines B
   Technical and Trade Journals B
PASSIVE SOLAR SYSTEMS (concluded)

Television B
Radio B
Book Publishers B
Newspaper Farm Editors of America B

3.16 Labor Organizations
Carpentry Unions D
Construction Unions C
Bricklayers' Unions D

4.0 Users or Prospective Users

4.1 Government, Commercial or Industrial Users
Department of Defense (DOD) B
GSA-Public Building Service B
Other Federal/State/Local Agencies Owning or Holding Titles to Buildings B
Owners of Large Buildings
   New B
   Retrofit C
Owners of Small Buildings
   New A
   Retrofit B

4.2 Residential or Farming Users
Homeowners
   Custom Homes A
   Speculative Houses B
   Retrofits A
Mobile Home Owners C
Farmers, Ranchers B

5.0 General Public

Secondary School Students B
College Students B
Adults B
TABLE 3. PRIORITY OF INFORMATION USERS FOR PHOTOVOLTAIC SYSTEMS
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<th>Priority of Needs Over Next Three Years&lt;sup&gt;b&lt;/sup&gt;</th>
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</thead>
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<tr>
<td><strong>1.0 Researchers</strong></td>
<td></td>
</tr>
<tr>
<td>1.1 DOE-Funded Researchers and Developers Contractors National Laboratories</td>
<td>A A</td>
</tr>
<tr>
<td>1.2 Non-DOE, Federally-Funded Researchers and Developers National Aeronautics and Space Administration (NASA) Department of Defense (DOD) National Science Foundation (NSF)</td>
<td>C C C</td>
</tr>
<tr>
<td>1.3 Nonfederally-Funded Researchers and Developers Universities PV Manufacturers or Potential Manufacturers Trade Research Associations Electric Power Research Institute (EPRI) Independent Research Organizations</td>
<td>B A B B</td>
</tr>
<tr>
<td><strong>2.0 Applications Technologists</strong></td>
<td></td>
</tr>
<tr>
<td>2.1 PV or PV-Related Manufacturers PV Cell Manufacturers Component Manufacturers Silicon Producers</td>
<td>A A A</td>
</tr>
<tr>
<td>2.2 PV Facility or System Designers System Designers/Engineers Architectural/Engineering Design Firms Mechanical Engineers Electrical Engineers</td>
<td>B C C D D</td>
</tr>
<tr>
<td>2.3 Builders, Developers, or Contractors General Contractors Architectural/Engineering Construction Firms Mechanical Engineering Contractors Homebuilders, Developers</td>
<td>C C D E</td>
</tr>
</tbody>
</table>

<sup>a</sup>Target Audiences are indicated by the underlined first-level sections. User Classes of the Target Audience are shown by the numbered second-level sections. Unnumbered third-level sections beneath the User Class present the User Groups.

<sup>b</sup>A is the highest priority, E the lowest.
PHOTOVOLTAIC SYSTEMS (continued)

2.4 PV Systems Installers and Maintainers
   Installers
   Electricians
   PV Maintenance Workers

2.5 PV Equipment Distributors

2.6 Technical Specialists for Utility, Government, Commercial, or Industrial Organization Using a PV System
   Operations Managers
   Power Engineers
   Planners

3.0 Facilitators

3.1 Legislators and Staff
   Congressmen
   Congressional Committee Staff
   State Legislators
   National Conference of State Legislators

3.2 Local Government Organizations
   County Government Officials
   Local Government Officials
   Municipal Planners
   Tax Assessors and Officials

3.3 Government Solar-Active Organizations
   DOE—Conservation and Solar Energy (C&SE)
   DOE—Energy Information Administration (EIA)
   DOE—Energy Research (ER)
   DOE—Regional Solar Energy Centers (RSECs)
   DOE—Regional Energy Offices
   DOE—Energy Extension Service
   DOE—Federal Energy Regulation Commission (FERC)
   National Center for Appropriate Technology (NCAT)
   Department of Interior (DOI) Bureau of Land Management (BLM)
   International Energy Agency
   State Energy Offices
   State Solar Energy Offices
   Municipal Energy Offices
   United States Department of Agriculture (USDA)—Cooperative Extension Service (CES)

3.4 Government Solar-Concerned Organizations
   General Services Administration (GSA)
   Department of Defense (DOD)
PHOTOVOLTAIC SYSTEMS (continued)

| National Aeronautics and Space Administration (NASA) | C |
| USDA—Rural Electrification Administration (REA) | C |
| USDA—Other | C |
| Department of Housing and Urban Development (HUD) | D |
| Council on Environmental Quality (CEQ) | C |
| Department of Commerce (DOC)—National Oceanic and Atmospheric Administration (NOAA) | C |
| State Governor's Offices | C |
| State Agricultural Offices | C |
| State Forestry Offices | C |

3.5 Nongovernment Solar–Active Organizations
- Solar Trade Associations | B |
- Solar Professional Societies | B |
- Solar Public Interest Groups | B |
- Solar Lobbyists | B |

3.6 Nongovernment Solar–Concerned Organizations
- Public Interest Organizations | C |
- Environmental Organizations | C |
- Chambers of Commerce | E |
- Nonsolar Professional Societies | B |
- Nonsolar Trade Associations | B |
- Community/Home Improvement Associations | E |

3.7 Regulatory, Codes, and Standards Community
- Environmental Protection Agency (EPA) | C |
- Occupational Safety and Health Administration (OSHA) | D |
- American National Standards Institute (ANSI) | C |
- Building Officials and Code Administrators (BOCA), Council of American Building Officials (CABO), International Conference of Building Officials (ICBO), Southern Building Code Congress (SBCC) | E |
- American Society of Mechanical Engineers (ASME) | C |
- Better Business Bureaus | E |

3.8 Utility Community
- Electric Power Companies | B |
- National Association of Regulatory Utility Commissioners | C |
- State Utility Commissions | B |
- Utility Trade Associations | B |
- Federal Power Marketing Agencies
  - DOE–Bonneville Power Administration (BPA) | B |
  - Tennessee Valley Authority (TVA) | B |

3.9 Financial Community
- Bankers | D |
## 3.0 Stakeholders

### 3.10 Legal Community
- Venture Capital Brokers
- Government Loan Agencies
- Stock Brokers

### 3.11 Real Estate Community
- Real Estate Brokers
- Real Estate Investments

### 3.12 Insurance Community
- Insurance Brokers
- Insurance Agents

### 3.13 Educational Community
- High School Science Teachers
- University Faculty
- Vocational Instructors
- Career Counselors
- Seminar Organizers and Instructors

### 3.14 Information Intermediaries
- Federal Technical Libraries
- Industrial Technical Libraries
- Academic or Nonprofit Technical Libraries
- Public Libraries
- Federal Information Centers
- On-Line Information Services
- Bookstores
- Film Distributors

### 3.15 Media
- Newspapers and Magazines
- Technical and Trade Journals
- Television
- Radio
- Book Publishers

### 3.16 Labor Organizations
- Electrical Unions

## 4.0 Users or Prospective Users

### 4.1 Government, Commercial, or Industrial PV Users
- Department of Defense (DOD)
- National Aeronautics and Space Administration (NASA)
- GSA—Public Building Service
- DOC—National Weather Service
- U.S. Coast Guard
- USDA—Forest Service
- National Park Service
- Other Federal/State/Local Agencies Owning or Holding Titles to Buildings
PHOTOVOLTAIC SYSTEMS (concluded)

Electric Utilities
Owners of Microwave or Radio Repeaters
Owners of Impressed Current Protection (ICP)
  Wells, Pipelines, or Bridges
Owners of Outdoor Lighting
Owners of Large Buildings or Complexes
Owners of Small Buildings
Owners of Remote Facilities

4.2 Residential or Farming PV Users
  Homeowners
  Farmers, Ranchers
  Remote Facility Owners

4.3 Foreign PV Users
  Owners of Microwave or Radio Repeaters
  Owners of ICP Wells, Pipelines, or Bridges
  Developers of Remote Rural Telephone Systems
  Developers of Remote Educational TV
  Developers of Remote or Village Power
  Developers of Remote Pumping

5.0 General Public

  Secondary School Students
  College Students
  Adults
TABLE 4. PRIORITY OF INFORMATION USERS FOR SOLAR THERMAL ELECTRIC POWER
**TABLE 4. PRIORITY OF INFORMATION USERS FOR SOLAR THERMAL ELECTRIC POWER**

<table>
<thead>
<tr>
<th>Target Audiences&lt;sup&gt;a&lt;/sup&gt;</th>
<th>Priority of Needs Over Next Three Years&lt;sup&gt;b&lt;/sup&gt;</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.0 Researchers</td>
<td></td>
</tr>
<tr>
<td>1.1 DOE-Funded Researchers and Developers</td>
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<tr>
<td>Contractors</td>
<td>A</td>
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<tr>
<td>National Laboratories</td>
<td>A</td>
</tr>
<tr>
<td>1.2 Non-DOE, Federally-Funded Researchers and Developers</td>
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<tr>
<td>1.3 Nonfederally-Funded Researchers and Developers</td>
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<tr>
<td>Universities</td>
<td>A</td>
</tr>
<tr>
<td>Solar Thermal Manufacturers or Potential Manufacturers</td>
<td>A</td>
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<tr>
<td>Trade Research Associations</td>
<td>A</td>
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<tr>
<td>Electric Power Research Institute (EPRI)</td>
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</tr>
<tr>
<td>Independent Research Organizations</td>
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<tr>
<td>Utilities</td>
<td>B</td>
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<tr>
<td>Solar Thermal Test Facilities Users Association</td>
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<tr>
<td>2.0 Applications Technologists</td>
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<td>2.1 Solar Thermal or Solar Thermal-Related Manufacturers</td>
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<tr>
<td>Component Manufacturers</td>
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<tr>
<td>Solar Thermal Small System Manufacturers</td>
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<tr>
<td>2.2 Solar Thermal Facility or System Designers</td>
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<tr>
<td>System Designers/Engineers</td>
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<tr>
<td>Architectural/Engineering Design Firms</td>
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<tr>
<td>Power Engineers (Industrial)</td>
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<td>Mechanical Engineers</td>
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<tr>
<td>Electrical Engineers</td>
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<td>2.3 Builders, Developers, or Contractors</td>
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<td>General Contractors</td>
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<tr>
<td>Architectural/Engineering Construction Firms</td>
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<tr>
<td>Mechanical Engineering Contractors</td>
<td>C</td>
</tr>
<tr>
<td>Construction Engineers</td>
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</tbody>
</table>

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<sup>b</sup>A is the highest priority, E the lowest.
SOLAR THERMAL ELECTRIC POWER (continued)

2.4 Solar Thermal System Installers and Maintainers
   Installers D
   Carpenters D
   Plumbers D
   Electricians D
   Sheet Metal Workers D
   Solar Maintenance Workers D
   Construction Workers D

2.5 Solar Thermal Equipment Distributors C

2.6 Technical Specialists for Utility, Government, Commercial, or Industrial Organization Using a Solar Thermal System
   Operation Managers C
   Plant Engineers C
   Power Engineers
   Planners B

3.0 Facilitators

3.1 Legislators and Staff
   Congressmen B
   Congressional Committee Staff A
   State Legislators C
   National Conference of State Legislators C

3.2 Local Government Organizations
   County Government Officials E
   Local Government Officials E
   Municipal Planners C
   Tax Assessors and Officials D

3.3 Government Solar-Active Organizations
   DOE—Conservation and Solar Energy (C&SE) A
   DOE—Energy Information Administration (EIA) C
   DOE—Energy Research (ER) B
   DOE—Regional Solar Energy Centers (RSECs) D
   DOE—Regional Energy Offices B
   DOE—Energy Extension Service D
   DOE—Federal Energy Regulation Commission (FERC) B
   National Center for Appropriate Technology (NCAT) E
   International Energy Agency B
   State Governors' Offices D
   State Energy Offices C
   State Solar Energy Offices C
   State Agricultural Offices E
   Municipal Energy Offices D
### SOLAR THERMAL ELECTRIC POWER (continued)

#### 3.4 Government Solar-Concerned Organizations
- Small Business Administration (SBA)
- Council on Environmental Quality (CEQ)

#### 3.5 Nongovernment Solar-Active Organizations
- Solar Trade Associations
- Solar Professional Societies
- Solar Public Interest Groups
- Solar Lobbyists

#### 3.6 Nongovernment Solar-Concerned Organizations
- Public Interest Organizations
- Environmental Organizations
- Chambers of Commerce
- Nonsolar Professional Societies
- Nonsolar Trade Associations

#### 3.7 Regulatory, Codes, and Standards Community
- Environmental Protection Agency (EPA)
- Occupational Safety and Health Administration (OSHA)
- American Society of Heating, Refrigerating and Air Conditioning Engineers (ASHRAE)
- American National Standards Institute (ANSI)
- Business Officials and Code Administrators (BOCA), Council of American Building Officials (CABO), International Conference of Building Officials (ICBO), Southern Building Code Congress (SBCC)
- American Society of Mechanical Engineers (ASME)
- National Bureau of Standards (NBS)

#### 3.8 Utility Community
- Electric Power Companies
- National Association of Regulatory Utility Commissioners
- State Utility Commissions
- Utility Trade Associations
- Federal Power Marketing Agencies
  - DOE-Bonneville Power Administration (BPA)
  - Tennessee Valley Authority (TVA)

#### 3.9 Financial Community
- Bankers
- Venture Capital Brokers
- Government Loan Agencies
- Stock Brokers

#### 3.10 Legal Community

#### 3.11 Real Estate Community
SOLAR THERMAL ELECTRIC POWER (concluded)

3.12 Insurance Community

3.13 Educational Community
- High School Science Teachers
- University Faculty
- Vocational Instructors
- Career Counselors
- Seminar Organizers and Instructors

3.14 Information Intermediaries
- Federal Technical Libraries
- Industrial Technical Libraries
- Academic or Nonprofit Technical Libraries
- Public Libraries
- Federal Information Centers
- On-Line Information Services
- Bookstores
- Film Distributors

3.15 Media
- Newspapers and Magazines
- Technical and Trade Journals
- Television
- Radio
- Book Publishers

3.16 Labor Organizations
- Electrical Unions
- Steamfitters' Unions
- Construction Unions
- Sheet Metal Workers' International Association (SMWIA)

4.0 Users or Prospective Users

4.1 Government, Commercial, or Industrial Users
- Electric Utilities
- Owners of Large Buildings or Complexes
- Owners of Remote Facilities
- Other Commercial Enterprises

4.2 Residential or Farming Users
- Remote Facility Owners

5.0 General Public
- Secondary School Students
- College Students
- Adults

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TABLE 5. PRIORITY OF INFORMATION USERS FOR INDUSTRIAL PROCESS HEAT
<table>
<thead>
<tr>
<th>Target Audiences&lt;sup&gt;a&lt;/sup&gt;</th>
<th>Priority of Needs Over Next Three Years&lt;sup&gt;b&lt;/sup&gt;</th>
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<td>1.2 Non-DOE, Federally-Funded Researchers and Developers</td>
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</tr>
<tr>
<td>National Science Foundation (NSF)</td>
<td></td>
</tr>
<tr>
<td>1.3 Nonfederally-Funded Researchers and Developers</td>
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</tr>
<tr>
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<td>Solar Manufacturers</td>
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<tr>
<td>Trade Research Associations</td>
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<tr>
<td>Independent Research Organizations</td>
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<tr>
<td>Fuel Industry</td>
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<tr>
<td>Chemical Industry</td>
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</tr>
<tr>
<td>Other Industrial Solar Users</td>
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</tr>
<tr>
<td>2.0 Applications Technologists</td>
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</tr>
<tr>
<td>2.1 IPH-Related Manufacturers</td>
<td></td>
</tr>
<tr>
<td>Collector Manufacturers</td>
<td>B</td>
</tr>
<tr>
<td>Component Manufacturers</td>
<td>B</td>
</tr>
<tr>
<td>2.2 IPH Facility or System Designers</td>
<td></td>
</tr>
<tr>
<td>Industrial Architects</td>
<td>A</td>
</tr>
<tr>
<td>System Designers/Engineers</td>
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</tr>
<tr>
<td>Mechanical Engineers</td>
<td>B</td>
</tr>
<tr>
<td>Mechanical; Heating, Ventilating and Air Conditioning (HVAC) Engineers</td>
<td>D</td>
</tr>
<tr>
<td>2.3 Builders, Developers, or Contractors</td>
<td></td>
</tr>
<tr>
<td>General Contractors</td>
<td>C</td>
</tr>
<tr>
<td>Architectural/Engineering Construction Firms</td>
<td>B</td>
</tr>
</tbody>
</table>

<sup>a</sup>Target Audiences are indicated by the underlined first-level sections. User Classes of the Target Audience are shown by the numbered second-level sections. Unnumbered third-level sections beneath the User Class present the User Groups.

<sup>b</sup>A is the highest priority, E the lowest.
INDUSTRIAL PROCESS HEAT (continued)

Mechanical Engineering Contractors
Construction Engineers

2.4 IPH System Installers and Maintainers
   Installers
   Carpenters
   Plumbers
   Electricians
   Sheet Metal Workers
   Solar Maintenance Workers
   Construction Workers

2.5 IPH Equipment Distributors

2.6 Technical Specialists for Utility, Government, Commercial, or Industrial Organization Using an IPH System
   Operation Managers
   Plant Engineers
   Planners

3.0 Facilitators

3.1 Legislators and Staff
   Congressman
   Congressional Committee Staff
   State Legislators
   National Conference of State Legislators

3.2 Local Government Organizations
   County Government Officials
   Local Government Officials
   Municipal Planners
   Tax Assessors and Officials

3.3 Government Solar-Active Organizations
   DOE—Conservation and Solar Energy (C&SE)
   DOE—Energy Information Administration (EIA)
   DOE—Energy Research (ER)
   DOE—Regional Solar Energy Centers (RSECs)
   DOE—Regional Energy Offices
   DOE—Energy Extension Service
   United States Department of Agriculture (USDA)—Cooperative Extension Service
   USDA—Other
   National Center for Appropriate Technology (NCAT)
   Tennessee Valley Authority (TVA)
   DOE—Federal Energy Regulation Commission
INDUSTRIAL PROCESS HEAT (continued)

International Energy Agency D  
State Governors' Offices C  
State Energy Offices B  
State Solar Energy Offices B  
State Agricultural Offices B  
Municipal Energy Offices D

3.4 Government Solar-Concerned Organizations
Food and Drug Administration (FDA) C  
Small Business Administration (SBA) C  
Internal Revenue Service (IRS) C  
Council on Environmental Quality (CEQ) C

3.5 Non-Government Solar-Active Organizations
Solar Trade Associations B  
Solar Professional Societies B  
Solar Public Interest Groups B  
Solar Lobbyists B

3.6 Nongovernment Solar-Concerned Organizations
Public Interest Organizations B  
Environmental Organizations B  
Chambers of Commerce C  
Nonsolar Professional Societies B  
Nonsolar Trade Associations B  
Farmer Co-ops C  
Farmer's Education and Cooperative Union of America C

3.7 Regulatory, Codes, and Standards Community
Environmental Protection Agency (EPA) B  
Occupational Safety and Health Administration (OSHA) D  
American Society for Heating, Refrigerating, and Air Conditioning Engineers (ASHRAE) C  
American National Standards Institute (ANSI) C  
Building Officials and Code Administrators (BOCA), Council of American Building Officials (CABO), International Conference of Building Officials (ICBO), Southern Building Code Congress (SBCC) C  
American Society of Mechanical Engineers (ASME) C  
Better Business Bureaus D

3.8 Utility Community
Electric Power Companies D  
Gas Utilities D  
National Association of Regulatory Utility Commissioners D

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INDUSTRIAL PROCESS HEAT (continued)

3.9 Financial Community
   Bankers
   Venture Capital Brokers
   Government Loan Agencies
   Stock Brokers

3.10 Legal Community

3.11 Real Estate Community

3.12 Insurance Community

3.13 Educational Community
   High School Science Teachers
   University Faculty
   Vocational Instructors
   Career Counselors
   Seminar Organizers and Instructors

3.14 Information Intermediaries
   Federal Technical Libraries
   Industrial Technical Libraries
   Academic or Nonprofit Technical Libraries
   Public Libraries
   Federal Information Centers
   On-Line Information Services
   Bookstores
   Film Distributors

3.15 Media
   Newspapers and Magazines
   Technical and Trade Journals
   Television
   Radio
   Book Publishers
   Newspaper Farm Editors of America

3.16 Labor Organizations
   Steamfitters' Unions
   Construction Unions
   Sheet Metal Workers' International Association (SMWIA)

4.0 Users or Prospective Users

4.1 Government, Commercial or Industrial Users
   Oil Companies
INDUSTRIAL PROCESS HEAT (concluded)

<table>
<thead>
<tr>
<th>Industry</th>
<th>B</th>
</tr>
</thead>
<tbody>
<tr>
<td>Iron Foundaries</td>
<td>B</td>
</tr>
<tr>
<td>Alumina Industry</td>
<td>B</td>
</tr>
<tr>
<td>Cement Industry</td>
<td>B</td>
</tr>
<tr>
<td>Stone, Clay, and Glass Products Industry</td>
<td>B</td>
</tr>
<tr>
<td>Textile Mills</td>
<td>B</td>
</tr>
<tr>
<td>Brewers</td>
<td>B</td>
</tr>
<tr>
<td>Commercial Laundries</td>
<td>B</td>
</tr>
<tr>
<td>Food Processing Industry</td>
<td>B</td>
</tr>
<tr>
<td>Large Grain or Crop Drying Operations</td>
<td>B</td>
</tr>
<tr>
<td>Commercial Greenhouses</td>
<td>B</td>
</tr>
<tr>
<td>Forest Products Industry</td>
<td>B</td>
</tr>
<tr>
<td>Other Industrial Process Heat Users</td>
<td>B</td>
</tr>
</tbody>
</table>

4.2 Farming Users
Farmers, Ranchers

5.0 General Public

<table>
<thead>
<tr>
<th>Group</th>
<th>B</th>
</tr>
</thead>
<tbody>
<tr>
<td>Secondary School Students</td>
<td>B</td>
</tr>
<tr>
<td>College Students</td>
<td>B</td>
</tr>
<tr>
<td>Adults</td>
<td>B</td>
</tr>
</tbody>
</table>
TABLE 6. PRIORITY OF INFORMATION USERS FOR BIOMASS ENERGY SYSTEMS
### TABLE 6. PRIORITY OF INFORMATION USERS FOR BIOMASS ENERGY SYSTEMS

<table>
<thead>
<tr>
<th>Target Audiences&lt;sup&gt;a&lt;/sup&gt;</th>
<th>Priority of Needs Over Next Three Years&lt;sup&gt;b&lt;/sup&gt;</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.0 Researchers</td>
<td></td>
</tr>
<tr>
<td>1.1 DOE-Funded Researchers and Developers</td>
<td>A</td>
</tr>
<tr>
<td>Contractors</td>
<td>A</td>
</tr>
<tr>
<td>National Laboratories</td>
<td>A</td>
</tr>
<tr>
<td>1.2 Non-DOE, Federally-Funded Researchers and Developers</td>
<td>A</td>
</tr>
<tr>
<td>National Science Foundation (NSF)</td>
<td>A</td>
</tr>
<tr>
<td>United States Department of Agriculture (USDA)</td>
<td>A</td>
</tr>
<tr>
<td>Environmental Protection Agency (EPA)</td>
<td>A</td>
</tr>
<tr>
<td>National Aeronautics and Space Administration (NASA)</td>
<td>A</td>
</tr>
<tr>
<td>1.3 Nonfederally-Funded Researchers and Developers</td>
<td>A</td>
</tr>
<tr>
<td>Universities</td>
<td>A</td>
</tr>
<tr>
<td>Biomass Equipment Manufacturers or Potential Manufacturers</td>
<td>A</td>
</tr>
<tr>
<td>Trade Research Associations</td>
<td></td>
</tr>
<tr>
<td>Electric Power Research Institute (EPRI)</td>
<td>B</td>
</tr>
<tr>
<td>Gas Research Institute</td>
<td>A</td>
</tr>
<tr>
<td>Independent Research Organizations</td>
<td>B</td>
</tr>
<tr>
<td>Industrial Solar Users</td>
<td>B</td>
</tr>
<tr>
<td>2.0 Applications Technologists</td>
<td></td>
</tr>
<tr>
<td>2.1 Biomass-Related Manufacturers</td>
<td></td>
</tr>
<tr>
<td>Boiler Manufacturers</td>
<td>B</td>
</tr>
<tr>
<td>Woodstove and Pre-Fabricated Fireplace Manufacturers</td>
<td>B</td>
</tr>
<tr>
<td>Incinerator Manufacturers</td>
<td>B</td>
</tr>
<tr>
<td>Biomass Conversion Equipment Manufacturers</td>
<td>B</td>
</tr>
<tr>
<td>De-watering Equipment Manufacturers</td>
<td>B</td>
</tr>
<tr>
<td>Fermentation and Distillation Equipment Manufacturers</td>
<td>A</td>
</tr>
<tr>
<td>Anaerobic Digestor Manufacturers</td>
<td>B</td>
</tr>
<tr>
<td>Agricultural or Forestry Equipment Manufacturers</td>
<td>B</td>
</tr>
<tr>
<td>Auto Manufacturers</td>
<td>D</td>
</tr>
</tbody>
</table>

<sup>a</sup>Target Audiences are indicated by the underlined first-level sections. User Classes of the Target Audience are shown by the numbered second-level sections. Unnumbered third-level sections beneath the User Class present the User Groups.

<sup>b</sup>A is the highest priority, E the lowest.
2.2 Biomass Facility or System Designers
System Designers/Engineers
Architectural/Engineering Design Firms
Mechanical Engineers
Chemical Engineers
Biochemical Engineers
Sanitary Engineers

2.3 Builders, Developers, or Contractors
Homebuilders
General Contractors
Architectural/Engineering Construction Firms
Mechanical Engineering Contractors
Construction Engineers

2.4 Biomass Systems Installers and Maintainers
Woodstove Installers
Chimneysweeps
Stonemasons
Pipefitters
Carpenters
Plumbers
Sheet Metal Workers
Maintenance Workers
Construction Workers

2.5 Biomass Equipment and Product Distributors

2.6 Technical Specialists for Utility, Government, Commercial, or Industrial Organization Using a Biomass System
Operation Managers
Plant Engineers
Planners

2.7 Producers or Collectors of Biomass Feedstock
Owners of Farms
Owners of Private Forests
Owners of Livestock Feedlots
Wood Products Industry
Pulp and Paper Industry
Food Processing Industry
Agricultural Engineers
Foresters
Forest Managers
Silviculture Experts
Aquaculture Experts
Biomass Energy Systems (continued)

2.8 Convertors or Vendors of Biomass Fuels or Byproducts
- Gasoline Stations
- Municipal Waste and Refuse Departments
- Petrochemical Industry
- Alcohol Production Industry
- Producers of Gaseous Fuels
- Chemical Industry
- Ammonia Producing Industry
- Animal Feed Producers
- Biochemists
- Agricultural Engineers

3.0 Facilitators

3.1 Legislators and Staff
- Congressmen
- Congressional Committee Staff
- State Legislators
- National Conference of State Legislators

3.2 Local Government Organizations
- County Government Officials
- Local Government Officials
- Municipal Planners
- Municipal Waste and Sewage Departments
- Tax Assessors and Officials

3.3 Government Solar-Active Organizations
- DOE—Conservation and Solar Energy (C&SE)
- DOE—Energy Information Administration (EIA)
- DOE—Energy Research (ER)
- DOE—Regional Solar Energy Centers (RSECs)
- DOE—Regional Energy Offices
- DOE—Energy Extension Service
- National Center for Appropriate Technology (NCAT)
- USDA—Cooperative Extension Service
- USDA—Forest Products Lab
- USDA—Other
- International Energy Agency
- State Governors’ Offices
- State Energy Offices
- State Solar Energy Offices
- State Agricultural Offices
- State Forestry Offices
- Municipal Energy Offices

3.4 Government Solar-Concerned Organizations
- General Services Administration (GSA)
- Department of Defense (DOD)
BIOMASS ENERGY SYSTEMS (continued)

Small Business Administrative (SBA) C
USDA-Rural Electrification Administration (REA) D
Internal Revenue Service (IRS) C
Council on Environmental Quality (CEQ) C
Bureau of Alcohol, Tobacco, and Firearms B
Department of Transportation (DOT) C
Department of Interior (DOI)—Bureau of Land Management (BLM) C
General Accounting Office (GAO) C

3.5 Nongovernment Solar-Active Organizations

Solar Trade Associations B
Solar Professional Societies B
Solar Public Interest Groups
   The Alternate Energy Institute B
   Wood Energy Institute B
   Bio-Energy Council B
   Complete Tree Institute, U. of Maine B
   National Gasohol Commission B
   Biomass Energy Institute, Inc. B
   New England Solar Energy Congress B
   Solar Lobbyists B

3.6 Nongovernment Solar-Concerned Organizations

Public Interest Organizations B
Environmental Organizations B
Future Farmers of America C
Chambers of Commerce E
Non-Solar Professional Societies
   National Solid Waste Management Association C
   American Chemical Society B
Non-Solar Trade Associations
   Forest Industrial Council C
   National Cattlemen's Association C
   American Pulpwood Association C
   American Paper Institute C
   Farmer Co-ops R
   American Farm Bureau Federation B
   Farmer's Education and Cooperative Union of America B
   Home Improvement Associations B

3.7 Regulatory, Codes, and Standards Community

Environmental Protection Agency (EPA) B
Occupational Safety and Health Administration (OSHA) E
American National Standards Institute (ANSI) D
American Society of Mechanical Engineers (ASME) D
Federal Drug Administration (FDA) C
Better Business Bureaus C

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BIOMASS ENERGY SYSTEMS (continued)

3.8 Utility Community
   Municipally-Owned Gas and Electric Utilities
   Electric Power Companies
   Gas Utilities
   National Association of
   Regulatory Utility Commissioners
   State Utility Commissions
   Utility Trade Associations
   Federal Power Marketing Agencies
   DOE—Bonneville Power Administration (BPA)
   Tennessee Valley Authority (TVA)

3.9 Financial Community
   Bankers
   Venture Capital Brokers
   Government Loan Agencies
   USDA—Farmer's Home Administration (FHA)
   USDA—Commodity Credit Corporation (CCC)
   Stock Brokers

3.10 Legal Community

3.11 Real Estate Community

3.12 Insurance Community
   Management
   Agents
   Actuaries

3.13 Educational Community
   High School Science Teachers
   University Faculty
   Vocational Instructors
   Career Counselors
   Seminar Organizers and Instructors

3.14 Information Intermediaries
   Federal Technical Libraries
   Industrial Technical Libraries
   Academic or Nonprofit Technical Libraries
   Public Libraries
   Federal Information Centers
   On-Line Information Services
   Bookstores
   Film Distributors

3.15 Media
   Newspapers and Magazines
Biomass Energy Systems (concluded)

Technical and Trade Journals  B
Television  C
Radio  C
Book Publishers  B
Newspaper Farm Editors of America  B

3.16 Labor Organizations
Steamfitters' Unions  D
Construction Unions  D
Farmworkers' Unions  D

4.0 Users or Prospective Users

4.1 Government, Commercial or Industrial Users
Department of Defense (DOD)  B
Owners of Large Transportation Fleets  A
Electric Utilities  C
Industries Requiring Ammonia  C
Gas Utilities  B
Glass Manufacturers  C
Industrial Process Heat Users  C
Industries Requiring Gaseous Fuels  C
Industries Using Boilers  A
Food Processing Industry  B
Pulp and Paper Industry  A
Logging Industry  A
Forest Products Industry  A
Other Industries Producing Organic Waste or Refuse  C
Owners of Large Buildings or Complexes  D
Owners of Small Buildings  D
Owners of Remote Facilities  B

4.2 Residential or Farming Users
Homeowners
Custom Homes  A
Speculative Houses  B
Retrofits  A
Farmers, Ranchers  B
Car Owners  B
Mobile Home Owners  C
Remote Facility Owners  B

5.0 General Public
Secondary School Students  B
College Students  B
Adults  B

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### TABLE 7. PRIORITY OF INFORMATION USERS FOR WIND ENERGY SYSTEMS

<table>
<thead>
<tr>
<th>Priority</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>High</td>
</tr>
<tr>
<td>2</td>
<td>Medium</td>
</tr>
<tr>
<td>3</td>
<td>Low</td>
</tr>
</tbody>
</table>

53
TABLE 7. PRIORITY OF INFORMATION USERS FOR WIND ENERGY SYSTEMS

<table>
<thead>
<tr>
<th>Target Audiences^a</th>
<th>Priority of Needs Over Next Three Years^b</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>1.0 Researchers</strong></td>
<td></td>
</tr>
<tr>
<td>1.1 DOE-Funded Researchers and Developers Contractors National Laboratories</td>
<td>A B</td>
</tr>
<tr>
<td>1.2 Non-DOE, Federally-Funded Researchers and Developers National Aeronautics and Space Administration (NASA) Department of Commerce (DOC)-National Oceanic and Atmospheric Administration (NOAA) Department of Interior (DOI)-Bureau of Reclamation (BOR) United States Department of Agriculture (USDA)</td>
<td>A B B</td>
</tr>
<tr>
<td>1.3 Nonfederally-Funded Researchers and Developers Universities Wind Manufacturers Trade Research Associations Electric Power Research Institute (EPRI) Independent Research Organizations Industrial Solar Users Utilities</td>
<td>C B A</td>
</tr>
<tr>
<td><strong>2.0 Applications Technologists</strong></td>
<td></td>
</tr>
<tr>
<td>2.1 Wind or Wind-Related Manufacturers Wind System Manufacturers Wind System Components Manufacturers</td>
<td>A A</td>
</tr>
<tr>
<td>2.2 Wind Facility or System Designers System Designers/Engineers Architectural/Engineering Design Firms Power Engineers (Industrial) Electrical Engineers Mechanical Engineers</td>
<td>A B C C C</td>
</tr>
<tr>
<td>2.3 Builders, Developers, or Contractors General Contractors Architectural/Engineering Construction Firms</td>
<td>C C</td>
</tr>
</tbody>
</table>

^aTarget Audiences are indicated by the underlined first-level sections. User Classes of the Target Audience are shown by the numbered second-level sections. Unnumbered third-level sections beneath the User Class present the User Groups.

^bA is the highest priority, E the lowest.
## WIND ENERGY SYSTEMS (continued)

Mechanical Engineering Contractors  
Construction Engineers  

### 2.4 Wind System Installers and Maintainers

<table>
<thead>
<tr>
<th>Role</th>
<th>Code</th>
</tr>
</thead>
<tbody>
<tr>
<td>Installers</td>
<td>B</td>
</tr>
<tr>
<td>Electricians</td>
<td>C</td>
</tr>
<tr>
<td>Wind Maintenance Workers</td>
<td>C</td>
</tr>
</tbody>
</table>

### 2.5 Wind Equipment Distributors

<table>
<thead>
<tr>
<th>Role</th>
<th>Code</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>B</td>
</tr>
</tbody>
</table>

### 2.6 Technical Specialists for Utility, Government, Commercial, or Industrial Organization Using a Wind System

<table>
<thead>
<tr>
<th>Role</th>
<th>Code</th>
</tr>
</thead>
<tbody>
<tr>
<td>Operation Managers</td>
<td>C</td>
</tr>
<tr>
<td>Power Engineers</td>
<td>C</td>
</tr>
<tr>
<td>Planners</td>
<td>B</td>
</tr>
</tbody>
</table>

### 3.0 Facilitators

#### 3.1 Legislators and Staff

<table>
<thead>
<tr>
<th>Role</th>
<th>Code</th>
</tr>
</thead>
<tbody>
<tr>
<td>Congressmen</td>
<td>B</td>
</tr>
<tr>
<td>Congressional Committee Staff</td>
<td>A</td>
</tr>
<tr>
<td>State Legislators</td>
<td>B</td>
</tr>
<tr>
<td>National Conference of State Legislators</td>
<td>B</td>
</tr>
</tbody>
</table>

#### 3.2 Local Government Organizations

<table>
<thead>
<tr>
<th>Role</th>
<th>Code</th>
</tr>
</thead>
<tbody>
<tr>
<td>County Government Officials</td>
<td>C</td>
</tr>
<tr>
<td>Local Government Officials</td>
<td>C</td>
</tr>
<tr>
<td>Municipal Planners</td>
<td>C</td>
</tr>
<tr>
<td>Tax Assessors and Officials</td>
<td>D</td>
</tr>
</tbody>
</table>

#### 3.3 Government Solar-Active Organizations

<table>
<thead>
<tr>
<th>Role</th>
<th>Code</th>
</tr>
</thead>
<tbody>
<tr>
<td>DOE—Conservation and Solar Energy (C&amp;SE)</td>
<td>A</td>
</tr>
<tr>
<td>DOE—Energy Information Administration (EIA)</td>
<td>C</td>
</tr>
<tr>
<td>DOE—Energy Research (ER)</td>
<td>B</td>
</tr>
<tr>
<td>DOE—Regional Solar Energy Centers (RSECs)</td>
<td>A</td>
</tr>
<tr>
<td>DOE—Regional Energy Offices</td>
<td>C</td>
</tr>
<tr>
<td>DOE—Energy Extension Service</td>
<td>B</td>
</tr>
<tr>
<td>DOE—Federal Energy Regulation Commission (FERC)</td>
<td>A</td>
</tr>
<tr>
<td>USDA—Cooperative Extension Service</td>
<td>A</td>
</tr>
<tr>
<td>USDA—Other</td>
<td>A</td>
</tr>
<tr>
<td>National Center for Appropriate Technology (NCAT)</td>
<td>B</td>
</tr>
<tr>
<td>DOI-Bureau of Land Management</td>
<td>B</td>
</tr>
<tr>
<td>Department of Commerce (DOC)</td>
<td>C</td>
</tr>
<tr>
<td>International Energy Agency</td>
<td>D</td>
</tr>
<tr>
<td>State Governors' Office</td>
<td>B</td>
</tr>
<tr>
<td>State Energy Offices</td>
<td>B</td>
</tr>
<tr>
<td>State Solar Energy Offices</td>
<td>A</td>
</tr>
<tr>
<td>State Agricultural Offices</td>
<td>B</td>
</tr>
</tbody>
</table>
**WIND ENERGY SYSTEMS** (continued)

Municipal Energy Offices

3.4 Government Solar-Concerned Organizations
- Federal Communications Commission (FCC)  
- Small Business Administration (SBA)  
- USDA-Rural Electrification Administration (REA)  
- Council for Environmental Quality (CEQ)

3.5 Nongovernment Solar-Active Organizations
- Solar Trade Associations
- Solar Professional Societies
- American Wind Energy Association
- Solar Public Interest Groups
- The Alternate Energy Institute
- Solar Lobbyists

3.6 Nongovernment Solar-Concerned Organizations
- Home Improvement Associations
- Public Interest Organizations
- Environmental Organizations
- Nonsolar Professional Societies
- Nonsolar Trade Associations
- Farmer Co-ops
- Farmer's Education and Cooperative Union of America

3.7 Regulatory, Codes, and Standards Community
- Environmental Protection Agency (EPA)
- Occupational Safety and Health Administration (OSHA)
- American National Standards Institute (ANSI)
- American Society of Mechanical Engineers (ASME)
- Better Business Bureaus
- American Society for Testing Materials (ASTM)

3.8 Utility Community
- Electric Power Companies
- National Association of Regulatory Utility Commissioners
- State Utility Commissions
- Utility Trade Associations
- American Public Power Association
- National Rural Electrification Association
- Federal Power Marketing Agencies
- DOE—Bonneville Power Administration
- Tennessee Valley Authority (TVA)
- Municipally-Owned Gas and Electric Utilities

3.9 Financial Community
- Bankers
- Venture Capital Brokers
WIND ENERGY SYSTEMS (continued)

3.10 Legal Community
3.11 Real Estate Community
3.12 Insurance Community
    Management
    Agents
    Actuaries
3.13 Educational Community
    High School Science Teachers
    University Faculty
    Vocational Instructors
    Career Counselors
    Seminar Organizers and Instructors
3.14 Information Intermediaries
    Federal Technical Libraries
    Industrial Technical Libraries
    Academic or Nonprofit Technical Libraries
    Public Libraries
    Federal Information Centers
    On-Line Information Services
    Bookstores
    Film Distributors
3.15 Media
    Newspapers and Magazines
    Technical and Trade Journals
    Television
    Radio
    Book Publishers
    Newspaper Farm Editors of America
3.16 Labor Organizations
    Electrical Unions
    Carpentry Unions
    Construction Unions
    Aerospace Unions
4.0 Users or Prospective Users
4.1 Government, Commercial, or Industrial Users
    Electric Utilities
    Owners of Large Buildings or Complexes
    Owners of Small Buildings
WIND ENERGY SYSTEMS (concluded)

Other Commercial, Industrial Users
Foreign Users
Owners of Remote Facilities

4.2 Residential or Farming Users

Homeowners
Farmers, Ranchers
Remote Facility Owners

5.0 General Public

Secondary School Students
College Students
Adults
TABLE 8. PRIORITY OF INFORMATION USERS FOR OCEAN ENERGY SYSTEMS
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<table>
<thead>
<tr>
<th>Target Audiences&lt;sup&gt;a&lt;/sup&gt;</th>
<th>Priority Of Needs Over Next Three Years</th>
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<tbody>
<tr>
<td><strong>1.0 Researchers</strong></td>
<td></td>
</tr>
<tr>
<td>1.1 DOE-Funded Researchers and Developers</td>
<td>A</td>
</tr>
<tr>
<td>Contractors</td>
<td></td>
</tr>
<tr>
<td>National Laboratories</td>
<td>A</td>
</tr>
<tr>
<td>1.2 Non-DOE, Federally-Funded Researchers and Developers</td>
<td>A</td>
</tr>
<tr>
<td>Department of Commerce (DOC)-Maritime Administration (MARAD)</td>
<td>A</td>
</tr>
<tr>
<td>DOC—National Oceanic and Atmospheric Administration (NOAA)</td>
<td>A</td>
</tr>
<tr>
<td>US Navy</td>
<td>C</td>
</tr>
<tr>
<td>National Aeronautics and Space Administration (NASA)</td>
<td>C</td>
</tr>
<tr>
<td>National Science Foundation (NSF)</td>
<td>C</td>
</tr>
<tr>
<td>1.3 Nonfederally-Funded Researchers and Developers</td>
<td>C</td>
</tr>
<tr>
<td>Universities</td>
<td></td>
</tr>
<tr>
<td>Ocean Energy System—Related Manufacturers or Potential Manufacturers</td>
<td>B</td>
</tr>
<tr>
<td>Trade Research Associations</td>
<td></td>
</tr>
<tr>
<td>Electric Power Research Institute (EPRI)</td>
<td>A</td>
</tr>
<tr>
<td>Utilities</td>
<td>B</td>
</tr>
<tr>
<td>National Energy Laboratory of Hawaii</td>
<td>A</td>
</tr>
<tr>
<td>Ammonia Producing Industry</td>
<td>A</td>
</tr>
<tr>
<td><strong>2.0 Applications Technologists</strong></td>
<td></td>
</tr>
<tr>
<td>2.1 Ocean Energy System—Related Manufacturers</td>
<td>A</td>
</tr>
<tr>
<td>Cold Water Pipe Manufacturers</td>
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</tr>
<tr>
<td>Wire and Cable Companies</td>
<td>A</td>
</tr>
<tr>
<td>Aerospace Industry</td>
<td>C</td>
</tr>
<tr>
<td>Shipbuilding Industry</td>
<td>A</td>
</tr>
<tr>
<td>Offshore Drilling Platform Construction Industry</td>
<td>A</td>
</tr>
<tr>
<td>Platform Components Manufacturers</td>
<td>A</td>
</tr>
<tr>
<td>Heat Exchanger Manufacturers</td>
<td>A</td>
</tr>
<tr>
<td>Pump Manufacturers</td>
<td>A</td>
</tr>
<tr>
<td>Rotary Equipment Manufacturers</td>
<td>A</td>
</tr>
<tr>
<td>Other Ocean Energy Systems Component Manufacturers</td>
<td>A</td>
</tr>
</tbody>
</table>

<sup>a</sup>Target Audiences are indicated by the underlined first-level sections. User Classes of the Target Audience are shown by the numbered second-level sections. Unnumbered third-level sections beneath the User Class present the User Groups.

<sup>b</sup>A is the highest priority, E the lowest.
OCEAN ENERGY SYSTEMS (continued)

2.2 Ocean Energy Facility or System Designers
   System Designers/Engineers
   Architectural/Engineering Design Firms
   Power Engineers
   Mechanical Engineers
   Corrosion Engineers
   Marine Engineers/Architects
   Marine Surveyors
   Electrical Engineers

2.3 Builders, Fabricators, or Contractors
   General Contractors
   Architectural/Engineering Construction Firms
   Construction Engineers
   Mechanical Engineering Contractors
   Shipbuilders
   Aerospace Contractors
   Marine Construction Contractors

2.4 Ocean Energy Facility Service Workers
   Shipbuilding Workers
   Marine Construction Workers
   Maintenance Workers

3.0 Facilitators

3.1 Legislators and Staff
   Congressmen
   Congressional Committee Staff
   State Legislators in Florida, Hawaii, and Puerto Rico
   National Conference of State Legislators

3.2 Local Government Organizations

3.3 Government Solar-Active Organizations
   DOE—Conservation and Solar Energy (C&SE)
   DOE—Energy Information Administration (EIA)
   DOE—Energy Research (ER)
   DOE—Regional Energy Offices
   DOE—Federal Energy Regulation Commission (FERC)
   International Energy Agency
   DOC—NOAA
   DOC—MARAD
   Florida, Hawaii, and Puerto Rico State Governments
   Other Seacoast State Governments
### OCEAN ENERGY SYSTEMS (continued)

<table>
<thead>
<tr>
<th>Section</th>
<th>Category</th>
<th>Type</th>
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<tbody>
<tr>
<td>3.4</td>
<td>Government Solar-Concerned Organizations</td>
<td>Council on Environmental Quality (CEQ)</td>
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<tr>
<td>3.5</td>
<td>Nongovernment Solar-Active Organizations</td>
<td>Solar Trade Associations</td>
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<tr>
<td></td>
<td></td>
<td>Ocean Energy Council</td>
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<td></td>
<td></td>
<td>Solar Professional Societies</td>
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<tr>
<td></td>
<td></td>
<td>Solar Public Interest Groups</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Solar Lobbyists</td>
</tr>
<tr>
<td>3.6</td>
<td>Nongovernment Solar-Concerned Organizations</td>
<td>Public Interest Organizations</td>
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<tr>
<td></td>
<td></td>
<td>Environmental Organizations</td>
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<td></td>
<td></td>
<td>Nonsolar Professional Societies</td>
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<tr>
<td></td>
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<td>Nonsolar Trade Associations</td>
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<tr>
<td></td>
<td></td>
<td>National Ocean Industry Association</td>
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<td></td>
<td></td>
<td>Atlantic States Fisheries Commission</td>
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<td></td>
<td>Department of Commerce (DOC)</td>
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<td>3.7</td>
<td>Regulatory, Codes, and Standards Community</td>
<td>Environmental Protection Agency (EPA)</td>
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<tr>
<td></td>
<td></td>
<td>Occupational Safety and Health Administration (OSHA)</td>
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<td></td>
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<td>Army Corps of Engineers</td>
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<tr>
<td></td>
<td></td>
<td>American Society for Testing Materials (ASTM)</td>
</tr>
<tr>
<td></td>
<td></td>
<td>National Electrical Manufacturers Association (NEMA)</td>
</tr>
<tr>
<td></td>
<td></td>
<td>American Bureau of Shipping</td>
</tr>
<tr>
<td></td>
<td></td>
<td>U.S. Coast Guard</td>
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<td>3.8</td>
<td>Utility Community</td>
<td>Southeastern State Utility Commissions</td>
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<td></td>
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<td>Utility Trade Associations</td>
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<td></td>
<td></td>
<td>OTEC Utilities Users' Council</td>
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<td></td>
<td></td>
<td>SE USA Electric Utilities</td>
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<tr>
<td></td>
<td></td>
<td>Utilities in Hawaii, Puerto Rico and Maine</td>
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<tr>
<td>3.9</td>
<td>Financial Community</td>
<td>Bankers</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Venture Capital Brokers</td>
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<td>Government Loan Agencies</td>
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<td></td>
<td></td>
<td>Stock Brokers</td>
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<td>3.10</td>
<td>Legal Community</td>
<td>Patent Attorneys</td>
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<tr>
<td></td>
<td></td>
<td>Maritime Lawyers</td>
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<td>Maritime Arbitrators</td>
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<td></td>
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<td>Law of the Sea Institute</td>
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<tr>
<td>3.11</td>
<td>(This class is not applicable for Ocean Energy Systems)</td>
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</tbody>
</table>

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OCEAN ENERGY SYSTEMS (concluded)

3.12 Insurance Community

3.13 Educational Community
   High School Science Teachers
   University Faculty
   Vocational Instructors
   Career Counselors
   Seminar Organizers and Instructors

3.14 Information Intermediaries
   Federal Technical Libraries
   Industrial Technical Libraries
   Academic or Nonprofit Technical Libraries
   Public Libraries
   Federal Information Centers
   On-Line Information Services
   Bookstores
   Film Distributors

3.15 Media
   Newspapers and Magazines
   Technical and Trade Journals
   Television
   Radio
   Book Publishers

3.16 Labor Organizations
   Maritime Construction Workers Unions
   Aerospace Unions
   Maritime Unions
   Shipbuilding Workers Unions

4.0 Users or Prospective Users

4.1 Government, Commercial, or Industrial Users
   Electric Utilities
   Ocean Industries
   U.S. Navy

4.2 Residential or Farming Users

5.0 General Public
   Secondary School Students
   College Students
   Adults
TABLE 9. PRIORITY OF INFORMATION USERS FOR ADVANCED SOLAR STORAGE SYSTEMS

<table>
<thead>
<tr>
<th>User Priority</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Highest priority</td>
</tr>
<tr>
<td>2</td>
<td>Medium priority</td>
</tr>
<tr>
<td>3</td>
<td>Lowest priority</td>
</tr>
</tbody>
</table>
### TABLE 9. PRIORITY OF INFORMATION USERS FOR ADVANCED SOLAR STORAGE SYSTEMS

<table>
<thead>
<tr>
<th>Target Audiences&lt;sup&gt;a&lt;/sup&gt;</th>
<th>Priority of Needs Over Next Three Years&lt;sup&gt;b&lt;/sup&gt;</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>1.0 Researchers</strong></td>
<td></td>
</tr>
<tr>
<td>1.1 DOE-Funded Researchers and Developers</td>
<td>A</td>
</tr>
<tr>
<td>Contractors</td>
<td></td>
</tr>
<tr>
<td>National Laboratories</td>
<td>A</td>
</tr>
<tr>
<td>1.2 Non-DOE, Federally-Funded Researchers and Developers</td>
<td>A</td>
</tr>
<tr>
<td>National Aeronautics and Space Administration (NASA)</td>
<td>A</td>
</tr>
<tr>
<td>National Science Foundation (NSF)</td>
<td>D</td>
</tr>
<tr>
<td>Department of Defense (DOD)</td>
<td>B</td>
</tr>
<tr>
<td>1.3 Nonfederally-Funded Researchers and Developers</td>
<td>A</td>
</tr>
<tr>
<td>Universities</td>
<td></td>
</tr>
<tr>
<td>Solar Manufacturers or Potential Manufacturers</td>
<td>B</td>
</tr>
<tr>
<td>Independent Research Organizations</td>
<td>A</td>
</tr>
<tr>
<td>Institute of Gas Technology</td>
<td></td>
</tr>
<tr>
<td>Trade Research Associations</td>
<td>A</td>
</tr>
<tr>
<td>Gas Research Institute</td>
<td>A</td>
</tr>
<tr>
<td>Electric Power Research Institute (EPRI)</td>
<td>A</td>
</tr>
<tr>
<td>Ammonia Producers</td>
<td>B</td>
</tr>
<tr>
<td>Chemical Industry</td>
<td>B</td>
</tr>
<tr>
<td>Fuel Industry</td>
<td>B</td>
</tr>
<tr>
<td><strong>2.0 Applications Technologists</strong></td>
<td></td>
</tr>
<tr>
<td>2.1 Storage-Related Manufacturers</td>
<td>B</td>
</tr>
<tr>
<td>Photovoltaics System Manufacturers</td>
<td>B</td>
</tr>
<tr>
<td>Solar Heating and Cooling (SHAC) Manufacturers</td>
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<tr>
<td>Heating, Ventilating and Air Conditioning (HVAC) Manufacturers</td>
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<tr>
<td>Wind System Manufacturers</td>
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<tr>
<td>Battery Manufacturers</td>
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</tr>
<tr>
<td>2.2 Storage System Designers</td>
<td>C</td>
</tr>
<tr>
<td>System Designers/Engineers</td>
<td></td>
</tr>
</tbody>
</table>

<sup>a</sup>Target Audiences are indicated by the underlined first-level sections. User Classes of the Target Audience are shown by the numbered second-level sections. Unnumbered third-level sections beneath the User Class present the User Groups.

<sup>b</sup>A is the highest priority, E the lowest.
## ADVANCED SOLAR STORAGE SYSTEMS (continued)

Architectural/Engineering Design Firms  
Mechanical Engineers  
Electrical Engineers  
Chemical Engineers

### 2.3 Builders, Developers, or Contractors
- General Contractors
- Architectural/Engineering Construction Firms
- Mechanical Engineering Contractors
- Construction Engineers

### 2.4 Storage System Installers and Maintainers

### 2.5 Storage Equipment Distributors

### 2.6 Technical Specialists for Utility, Government, Commercial, or Industrial Organization Using a Solar Storage System

### 3.0 Facilitators

#### 3.1 Legislators and Staff
- Congressmen
- Congressional Committee Staff
- State Legislators
- National Conference of State Legislators

#### 3.2 Local Government Organizations
- County Government Officials
- Local Government Officials
- Municipal Planners
- Tax Assessors and Officials

#### 3.3 Government Solar-Active Organizations
- DOE—Conservation and Solar Energy (C&SE)
- DOE—Energy Information Administration (EIA)
- DOE—Energy Research (ER)
- DOE—Regional Solar Energy Centers (RSECs)
- DOE—Regional Energy Offices
- DOE—Energy Extension Service
- DOE—Federal Energy Regulation Commission (FERC)
- National Center for Appropriate Technology (NCAT)
- International Energy Agency
- State Energy Offices
- State Solar Energy Offices
- Municipal Energy Offices
- United States Department of Agriculture (USDA)—Cooperative Extension Service
- Department of Commerce (DOC)
ADVANCED SOLAR STORAGE SYSTEMS (continued)

3.4 Government Solar-Concerned Organizations
   General Services Administration (GSA)  D
   Department of Defense (DOD)  D
   Department of Housing and Urban Development (HUD)  D
   USDA-Rural Electrification Administration (REA)  D
   USDA-Other  D
   Council on Environmental Quality (CEQ)  D
   General Accounting Office (GAO)  D
   State Governors' Offices  D
   State Agricultural Offices  D
   State Forestry Offices  D

3.5 Nongovernment Solar-Active Organizations
   Solar Trade Associations  B
   Solar Professional Societies  B
   Solar Public Interest Groups  B
   Solar Lobbyists  B

3.6 Nongovernment Solar-Concerned Organizations
   Public Interest Organizations  C
   Environmental Organizations  C
   Chambers of Commerce  E
   Nonsolar Professional Societies  B
   Nonsolar Trade Associations  B

3.7 Regulatory, Codes, and Standards Community
   Environmental Protection Agency (EPA)  C
   Occupational Safety and Health Administration (OSHA)  D
   American National Standards Institute (ANSI)  E
   Building Officials and Code Administrators (BOCA),
     Council of American Building Officials (CABO),
     International Conference of Building Officials
     (ICBO), Southern Building Code Congress (SBCC)  E
   American Society of Mechanical Engineers (ASME)  E
   Better Business Bureaus  E
   American Society for Testing Materials (ASTM)  E

3.8 Utility Community
   Electric Power Companies  B
   National Association of
     Regulatory Utility Commissioners  C
   State Utility Commissions  B
   Utility Trade Associations  B
   Federal Power Marketing Agencies
     DOE-Bonneville Power Administration  A
     Tennessee Valley Authority (TVA)  B

3.9 Financial Community  E
ADVANCED SOLAR STORAGE SYSTEMS (continued)

### 3.10 Legal Community

- E

### 3.11 Real Estate Community

- E

### 3.12 Insurance Community

- E

### 3.13 Educational Community

- High School Science Teachers: B
- University Faculty: B
- Vocational Instructors: E
- Career Counselors: E
- Seminar Organizers and Instructors: E

### 3.14 Information Intermediaries

- Federal Technical Libraries: B
- Industrial Technical Libraries: B
- Academic or Nonprofit Technical Libraries: B
- Public Libraries: D
- Federal Information Centers: A
- On-Line Information Services: C
- Bookstores: E
- Film Distributors: D

### 3.15 Media

- Newspapers and Magazines: C
- Technical and Trade Journals: B
- Television: C
- Radio: E
- Book Publishers: D

### 3.16 Labor Organizations

- F

### 4.0 Users or Prospective Users

#### 4.1 Government, Commercial, or Industrial Users

- Federal/State/Local Agencies Owning or Holding Titles to Buildings: D
- Electric Utilities: C
- Users of Industrial Process Heat: C
- Owners of Large Buildings or Complexes: D
- Owners of Small Buildings: D
- Owners of Photovoltaic Systems: D
- Owners of Wind Energy Conversion Machines: D

#### 4.2 Residential or Farming Users

- Homeowners: D
- Farmers, Ranchers: D
ADVANCED SOLAR STORAGE SYSTEMS (concluded)

5.0 General Public

Secondary School Students  B
College Students  B
Adults  B
Solar Information User Priority Study

William W. Belew; Barbara L. Wood

Solar Energy Research Institute
1617 Cole Boulevard
Golden, Colorado 80401

Technical Report

16. Abstract (Limit: 200 words) The Information Systems Division (ISD) at SERI is responsible for the design, development, and coordination of the Solar Energy Information Data Bank (SEIDB). Under this effort ISD is building data bases, collecting solar information, and preparing and distributing information products and services. To ensure that SEIDB is responsive to the high-priority information needs of the solar community, ISD is performing the following tasks:

1. Defining the community of solar information users,
2. Setting priorities as to which groups of information users have the most important near-term information needs,
3. Determining the near-term information needs of the high-priority users,
4. Determining the information channels that can be effectively used to reach the high-priority users,
5. Determining what high-priority information needs are being met fully by existing products and services, and
6. Recommending additional, targeted, cost-effective information products and services to meet high-priority needs.

This document presents the results of the first two tasks: First, identifying for each solar technology those members or potential members of the solar community who will need solar information; second, describing the relative importance of meeting the near-term information needs of each group of information users.

17. Document Analysis

a. Descriptors Solar Energy; Information Needs; Information Systems; Information Dissemination; Surveys

b. Identifiers/Open-Ended Terms Solar Energy Information Data Bank (SEIDB)

c. UC Categories

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5285 Port Royal Road
Springfield, Virginia 22161

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$5.25