DIST-3 I-28522 OR-2011-3

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MARTIN MARIETTA

Nuclear Power Options
Viability Study

Volume IV, Bibliography

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J. W. Sims

OPERATED BY
MARTIN MARIETTA ENERGY SYSTEMS, INC.
FOR THE UNITED STATES
DEPARTMENT OF ENERGY

Printed in the United States of America. Available from National Technical Information Service
U.S. Department of Commerce
5285 Port Royal Road, Springfield, Virginia 22161
NTIS price codes—Printed Copy: A06 Microfiche A01

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# MASTER

## NUCLEAR POWER OPTIONS VIABILITY STUDY

ORNL/TM--9780/V4

DE87 001614

VOLUME IV, BIBLIOGRAPHY

Editors:

D. B. Trauger J. D. White J. W. Sims

Date Published - September 1986

Prepared for the
Office of the Assistant Secretary for Nuclear Energy
U.S. Department of Energy

Prepared by the
OAK RIDGE NATIONAL LABORATORY
Oak Ridge, Tennessee 37831
operated by
MARTIN MARIETTA ENERGY SYSTEMS, INC.
for the
U.S. DEPARTMENT OF ENERGY
under Contract No. DE-AC05-840R21400



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## **ABSTRACT**

Documents in the Nuclear Power Options Viability Study (NPOVS) bibliography are classified under one of four headings or categories as follows:

- Nuclear Options,
- Light Water Reactors,
- Liquid Metal Reactors, and
- High Temperature Reactors.

The collection and selection of these documents, beginning early in 1984 and continuing through March of 1986, was carried out in support of the study's objective: to explore the viabilities of several nuclear electric power generation options for commercial deployment in the United States between 2000 and 2010. There are approximately 550 articles, papers, reports, and books in the bibliography that have been selected from some 2000 surveyed. The citations have been made computer accessible to facilitate rapid on-line retrieval by keyword, author, corporate author, title, journal name, or document number.

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#### 1. INTRODUCTION

## 1.1 BACKGROUND OF THE STUDY

The Nuclear Power Options Viability Study (NPOVS) was initiated at the beginning of calendar year 1984 by Oak Ridge National Laboratory (ORNL). The objective of NPOVS was to explore the viabilities of several nuclear electric power generation options for commercial deployment within the United States beginning in the 2000-2010 time frame. Important efforts included the identification and development of criteria and characteristics for evaluating new reactor concepts. Innovative concepts were identified that may be marketable at the time when the demand for new electrical energy capacity is expected to increase significantly. These concepts were considered and evaluated, with respect to the criteria and with emphasis on cost, safety features, operability, constructibility, regulation, research needs, and market acceptance. Nuclear reactors are recognized as a vital resource to meet future energy demands.

The NPOVS proceeded in steps: (1) a literature search and development of a bibliography; (2) development of criteria for evaluation of nuclear plant designs and plans; (3) evaluation of selected design concepts using these criteria as a guide; and (4) recommendations for areas of research and development (R&D) needed to reduce uncertainties in the viabilities of options. The approach used in evaluation was to compile detailed information on the various reactor concepts of interest, synthesize that information in accordance with specific technical areas, develop an understanding of how design features influence the overall cost of generating power, and consider how changes in the design might accomplish improved economic performance and acceptance by regulators and the public. In addition to technical evaluations, assessments were made of the various nontechnical factors that influence commercial use such as regulatory requirements, industry perspectives on future technologies, market acceptance, electric power growth needs, and economic conditions.

The report of the NPOVS is organized into four volumes, as follows:

- Volume I, Executive Summary<sup>1</sup>
- Volume II, Reactor Concepts, Descriptions, and Assessments<sup>2</sup>
- Volume III, Nuclear Discipline Topics<sup>3</sup>
- Volume IV, Bibliography.

The evaluative criteria established in this study are as follows:

- 1. The calculated risk to the public due to accidents is less than or equal to the calculated risk associated with the best modern LWRs.
- 2. The probability of events leading to loss of investment is less than or equal to 10<sup>-4</sup> per year (based on plant costs).
- 3. The economic performance of the nuclear plant is at least equivalent to that for coalfired plants. (Financial goals for the utility are met, and busbar costs are acceptable to the public utility commissions.)

- 4. The design of each plant is complete enough for analysis to show that the probability of significant cost/schedule overruns is acceptably low.
- 5. Official approval of a plant design must be given by the U.S. Nuclear Regulatory Commission (NRC) to assure the investor and the public of a high probability that the plant will be licensed on a timely basis if constructed in accordance with the approved design.
- 6. For a new concept to become attractive in the marketplace, demonstration of its readiness to be designed, built, and licensed and to begin operations on time and at projected cost is necessary.
- 7. The design should include only those nuclear technologies for which the prospective owner/operator has demonstrated competence or can acquire competent managers and operators.

These criteria obviously are not independent since items 1 and 2 deal with the probabilities for successful operation or failure, items 3 to 6 are primarily economic, and item 7 relates to demonstrated operational experience. However, we deem each criterion to have sufficient stand-alone merits to justify separate consideration.

The criteria are augmented by a list of characteristics that provide further guidance for properties judged to be of importance to nuclear power viability. The characteristics chosen are not as quantifiable or demonstrable as are the criteria and have been chosen to include features that complement and amplify the criteria.

In selecting the concepts to be studied, three ground rules were used:

- 1. The nuclear plant design option should be developed sufficiently that an order could be placed in the 2000-2010 time period.
- 2. The design option should be economically competitive with environmentally acceptable coal-fired plants.
- 3. The design option should possess a high degree of passive safety to protect the public health and property and the owner's investment. ("Passive safety" refers to the reliance on natural physical laws and properties of materials to effect shutdown and radioactive decay heat removal.)

The concepts selected are considered advanced and have various degrees of innovation as compared to current concepts. For convenience, the selected concepts were classified in the traditional way by their coolants and respective generic names. The concepts selected are

- 1. Light-Water Reactors (LWRs)
  - PIUS (Process Inherent Ultimate Safety) promoted by ASEA-ATOM of Sweden
  - Small BWR (Boiling Water Reactor) promoted by General Electric (GE)

## 2. Liquid Metal Reactors (LMRs)

- PRISM (Power Reactor Intrinsically Safe Module) The GE advanced concept supported by DOE
- SAFR (Sodium Advanced Fast Reactor) The Rockwell International (RI) advanced concept supported by DOE
- LSPB (Large-Scale Prototype Breeder) The Electric Power Research Institute-Consolidated Management Office (EPRI-CoMO) concept supported by EPRI and DOE

## 3. High-Temperature Reactors (HTR)

• Side-by-Side Modular - The core and steam generator in separate steel vessels in a side-by-side configuration. The concept is supported by DOE and promoted by Gas-Cooled Reactor Associates (GCRA) and industrial firms.

## 1.2 SELECTION AND UTILIZATION OF APPROPRIATE DOCUMENTS

Information pertinent to the study was gathered by participants through discussions with organizations in the nuclear field and by collecting appropriate documents from the open literature. Discussions were held with 31 companies including reactor vendors, architect-engineers, utility companies and utility associations, laboratories, institutions, and universities. From the approximately 2,000 documents collected, some 550 were selected for inclusion in the bibliography. The collection consists of journal articles, reports, papers, presentations, and books covering Nuclear Options, Light Water Reactors, Liquid Metal Reactors, and High Temperature Reactors.

The selected documents were assigned keywords, categorized, and cataloged utilizing a computer. Current listings were distributed periodically to the NPOVS staff with additions to the collection flagged for their attention. New documents with particular relevance to the study or providing timely input were also routed to the concept leaders and other appropriate members of the staff. In addition, staff members visited the physical collection to access material pertinent to their area of the study. In these ways, the document collection has been utilized extensively in the course of the study.

## 1.3 DESCRIPTION OF THE COLLECTION

The types of documents in the collection range from newspaper clippings to books, and their length varies from one to several hundred pages. Approximately 30% of the documents are reprints of articles from journals such as <a href="Nuclear Engineering International">Nuclear Engineering International</a>, <a href="Power Engineering">Power Engineering</a>, <a href="Electrical World">Electrical World</a>, <a href="Energy Policy">Energy Policy</a>, <a href="Science and Public Policy">Science and Public Policy</a>, and <a href="Technology Review">Technology Review</a>. Reports and presentations produced by the 31 companies and laboratories in the nuclear field and which were contacted by NPOVS staff comprise another 20% of the collection. A wide spectrum of topics from broad overviews to specific assessments are covered in the collection.

#### 2. ORGANIZATION AND RETRIEVAL

## 2.1 PHYSICAL COLLECTION

The physical collection is arranged by NPOVS access number and is housed in the NPOVS office at Oak Ridge National Laboratory. There are four major divisions:

- Nuclear Options,
- Light Water Reactors,
- Liquid Metal Reactors, and
- High Temperature Reactors.

Within these divisions, entries are listed by first author or corporate author. Each entry includes in order: name(s) of author or corporate author; title; publication description; corporate author(s); address of corporate author(s); publication date; NPOVS access code (in parentheses); and keywords assigned (in parentheses at the end of the entry).

The documents are filed in a series of notebooks and file boxes numbered sequentially under each major heading. The notebooks are divided into sections, and sections are divided with a tab for each document.

Subjects of interest may be found by using the keyword index (Chapter 4) or referring to the alphabetical listings by author presented in the four major classifications: Nuclear Options (Chapter 5); Light Water Reactors (Chapter 6); Liquid Metal Reactors (Chapter 7); and High Temperature Reactors (Chapter 8).

The NPOVS access code is an alphanumeric key to the physical location of the document. The code consists of two or three letters followed by three sets of two-digit numbers such as NO-03-02-05. The letters refer to the heading (NO = Nuclear Options, LWR = Light Water Reactors, LMR = Liquid Metal Reactors, and HTR = High Temperature Reactors). The first set of digits refers to the notebook number within the heading, the second set of digits to the section within the notebook (when these digits are preceded by the letter "B," the document is found in the appropriate file box rather than in a notebook), and the third set of digits to the item number within the section. The coding is illustrated below for NO-03-02-05.

NO = Nuclear Options

03 = Notebook No. 3 (or File Box No. 3 if coded "B03")

02 = Section No. 2 of the notebook

05 = Item No. 5 in the section.

## 2.2 KEYWORDS

The keywords selected and used in this collection are shown in Chapter 3, Table 3.1.

To facilitate locating citations or documents by subject, a keyword index is provided as Chapter 4. Please refer to Chapter 4 for details and instructions for utilizing the keyword index.

## 2.3 COMPUTER SEARCHES

The bibliographic data base resides in the ORNL IBM 3033 mainframe computer (System 2 on ORNL'S System Select Network) and is accessible to ORNL staff via a search program called ORLOOK. After log on and initialization of ORLOOK, the user makes the following selections: "private" data base, named "NPOVS," and file number "1."

Searches may be made of the fields <AUTHOR>, <TITLE>, <PUB DES> (publication description), <CORPAUTH> (corporate author), and <KEYWORDS> or a blanket search (covering all fields) might be made. A blanket search for, as an example, "ASEA-ATOM" would produce citations where ASEA-ATOM is the author or corporate author as well as citations where ASEA-ATOM is a part of the title.

Combination searches for a maximum of 4 words are also possible, thereby tailoring the search to fit the needs of the user. For example, a search might be made for 'costs', 'international', 'construction'. Combination searches limit the area searched and produce a shorter list of citations.

For information on other search combinations and detailed information about ORLOOK searches, please refer to ORNL-4951 (Rev. 1) by V. A. Singletary.<sup>4</sup>

Results of computer searches may be transmitted rapidly via the ITT DIALCOM electronic mail network to ITT DIALCOM subscribers at DOE Headquarters.

#### 2.4 ASSISTANCE OR ADDITIONAL INFORMATION

For assistance in using the collection or with computer searches contact Jackie W. Sims, and for further information regarding the bibliography contact Donald B. Trauger. Both may be reached at the following address and phone:

Nuclear Power Options Viability Study Oak Ridge National Laboratory P. O. Box X, Building 4500-N, Room I-208 Oak Ridge, TN 37831 PHONE: (615) 576-6730 or FTS 626-6730.

#### 3. KEYWORD LIST

An alphabetical listing of the keywords used in this bibliography is given in Table 3.1. Acronyms used as keywords are defined in Table 3.2.

Table 3.1 Keywords used in NPOVS bibliography<sup>a</sup>

accidents future pool prefabrication advanced reactors GAT priorities air ingress **GCRA** analysis **GCRs** project management ANL GE project organization **ASEA-ATOM** Germany projections proliferation attitudes graphite public acceptance availability factor growth breeders heat exchangers **PWRs BWRs** pyrochemical **HTRs**<sup>b</sup> **CANDU** human resources rates capacity recycling **IAEA** capacity factor regulation **IFRs** capital CNSS reprocessing innovation requirements INPO coal research instruments codes resources international programs cogeneration risk Japan commercialization Rockwell labor construction large reactors safety **SECURE** controls licensing costs shop fabrication LMRs<sup>b</sup> decisions small reactors loop demand standardization LWRs<sup>b</sup> deployment steam generators maintenance design steam-cooled reactors management development strategy markets district heating supply materials Three Mile Island DOE metal fuel economics utilities Mitsubishi electricity waste modular reactors engineering Westinghouse MSRs environment **NASAP EPRI NRC ERAB** nuclear options<sup>b</sup> fast reactors NUPACK financing **OECD** fission operations fossil pebble bed France performance fuel ÞIUS fuel cycle

bThe bibliographic citations are already sorted by heading as either Nuclear Options, Liquid Metal Reactors, High Temperature Reactors, or Light Water Reactors. Searches for these keywords will generate those citations plus any under other headings utilizing the keyword. For Example, a search for the keyword "HTRs" will generate all the citations under the High Temperature Reactors heading plus documents from other headings with HTRs as an assigned keyword.

<sup>&</sup>lt;sup>a</sup>Acronyms are defined in Table 3.2.

Table 3.2 Acronyms and definitions used in NPOVS bibliography

Acronym	Definition		
ANL	Argonne National Laboratory		
ASEA-ATOM	Atomic division of ASEA, Vasteras, Sweden		
BWRs	Boiling Water Reactors		
CANDU	Canadian Deuterium Uranium Reactor		
CNSS	Consolidated Nuclear Steam Supply		
DOE	U.S. Department of Energy		
EPRI	Electric Power Research Institute		
ERAB	Energy Research Advisory Board		
GAT	GA Technologies, Inc.		
GCRA	Gas-Cooled Reactor Associates		
GCRs	Gas-Cooled Reactors		
GE	General Electric Company		
HTRs	High Temperature Reactors		
IAEA	International Atomic Energy Agency		
IFRs	Integral Fast Reactors		
INPO	Institute of Nuclear Power Operations		
LMRs	Liquid Metal Reactors		
LWRs	Light Water Reactors		
MSRs	Molten Salt Reactors		
NASAP	Nonproliferation Alternative Systems Assessment Progra		
NRC	U.S. Nuclear Regulatory Commission		
NUPACK	Nuclear Package		
OECD	Organisation for Economic Co-Operation and Developme		
PIUS	Process Inherent Ultimate Safety		
PWRs	Pressurized Water Reactors		
SECURE	Selfprotecting, Eversubmerged Core, Utility Reactor		

## 4. KEYWORD INDEX

In the index beginning on the following page, each keyword is listed alphabetically, followed by an alphabetical list of the first author of document(s) assigned that keyword. The NPOVS access code, an alphanumeric code for the physical location of the document (see Section 2.1), follows the author's name. Multiple NPOVS access codes will appear when there is more than one document with the same first author.

Once the NPOVS access code and the first author are determined, the complete citation can be located by referring to the appropriate chapter indicated by the code, locating the author, and then locating the specific code:

NO (Nuclear Options) = Chapter 5 LWR (Light Water Reactors) = Chapter 6 LMR (Liquid Metal Reactors) = Chapter 7 HTR (High Temperature Reactors) = Chapter 8

For retrieval of the document itself from the physical collection, the NPOVS access code (as explained in Section 2.1) serves as an alphanumeric location guide.

#### accidents

American Physical Society Study Group (NO-17-03-01)

Brandstetter, A. (HTR-03-03-12)

Burke, R. P. (LWR-B01-01-07)

Cherry, B. H. (NO-02-01-11)

Chexal, B. (LWR-05-01-09)

Combustion Engineering, Inc. (NO-08-01-08)

Fassbender, J. A. et al. (HTR-03-03-13)

Fussell, J. B. (NO-B02-01-08)

Fussell, J. B. (NO-17-03-07)

Grav. O. E. III (LMR-03-01-05)

Haque, H. et al. (HTR-04-01-02)

Kasten, P. R. (HTR-03-03-15)

Lam, P. (LWR-06-02-06)

Lanning, D. D. (HTR-04-01-05)

Mattson, R. J. (NO-15-01-01)

Medwid, W. (HTR-04-01-08)

Moormann, R. (HTR-03-01-01)

Peters, K. (HTR-04-01-09)

Phung, D. L. (LWR-B01-01-05)

Rayner, S. (NO-17-02-03)

Rayner, S. (NO-17-02-04)

Savage, M. G. (HTR-B01-01-03)

Stevenson, J. D. (NO-13-01-02)

Sweeney, T. M. (HTR-04-01-13)

Tadmor, J. (NO-17-03-12)

Technology for Energy Corp. (NO-B05-

01-02)

Wald, M. J. (NO-17-02-08)

Young, J. C. (LWR-01-01-03)

#### advanced reactors

Babala, D. (LWR-06-02-01)

Braun, C. (NO-17-03-02)

Cole, T. E. (LWR-06-02-03)

Dircks, W. J. (NO-14-01-12)

Federal Register (NO-17-03-05)

Massachusetts Institute of Technology

(HTR-05-01-10)

Meyers, G. W. (LMR-03-01-07)

Olds, F. C. (NO-17-03-11)

Rytkonan, B. B. (LWR-02-01-08)

Speis, T. P. (NO-14-01-04)

Spiewak, I. (LWR-03-01-05)

Stahlkopf, K. E. (LWR-01-01-05)

Till, C. E. (LMR-03-01-13)

Trauger, D. B. (NO-17-03-15)

Trauger, D. B. (NO-17-03-18)

Ushio, S. (LWR-01-01-07)

Vaughan, J. W. Jr. (NO-11-01-02) Young, J. C. (LWR-01-01-09)

#### air ingress

Brandstetter, A. (HTR-03-03-12) Moormann, R. (HTR-03-01-01)

#### analysis

Brandstetter, A. (HTR-03-03-12)

Braun, C. (NO-17-03-02)

Desert Research Institute (NO-06-01-09)

Fussell, J. B. (NO-17-03-07)

Keeney, R. L. (NO-07-01-09)

Medwid, W. (HTR-04-01-08)

Peters, K. (HTR-04-01-09)

Savage, M. G. (HTR-B01-01-03)

Sweeney, T. M. (HTR-04-01-13)

#### ANL

Anderson, C. A., Jr. (LMR-02-03-10)

Argonne National Laboratory (LMR-B01-01-04)

Argonne National Laboratory (LMR-01-

04-01)

Argonne National Laboratory (LMR-01-04-02)

Argonne National Laboratory (LMR-02-01-04)

Argonne National Laboratory (NO-06-

Chicago, University of (LMR-03-01-02)

Kasten, P. R. (LMR-02-03-04)

Pelton, A. D. (LMR-03-02-06)

Till, C. (LMR-03-02-11)

Till, C. E. (LMR-03-01-13)

Walters, L. C. (LMR-03-01-14)

#### ASEA-ATOM

ASEA-ATOM (LWR-04-03-05)

Babala, D. (LWR-06-02-01)

Cole, T. E. (LWR-06-02-03)

Golay, M. W. (LWR-01-01-11)

Kasten, P. R. (LWR-02-01-01)

King, T. L. (LWR-06-01-04)

Pedersen, T. (LWR-06-01-05)

Pind, C. (LWR-06-01-06)

Pind, C. (LWR-06-01-07)

Skygge, C. (LWR-06-01-09)

Tiren, I. (LWR-B01-01-01)

Ushio, S. (LWR-01-01-07)

Wilkins, D. R. (LWR-01-01-12)

Young, J. C. (LWR-01-01-03)

Young, J. C. (LWR-01-01-09)

#### attitudes

Anonymous (NO-13-01-03) Arnold, W. H. (NO-03-01-10) Arnott, D. (NO-09-02-04)

Atomic Industrial Forum (NO-13-01-13)

Barkenbus, J. N. (NO-B01-01-07)

Berton, L. (NO-14-01-01) Brightsen, R. A. (NO-05-01-11) Carnes, S. A. et al. (NO-B03-01-02)

Cherry, B. H. (NO-02-01-11) Cook, J. (NO-03-01-12) Doub, W. O. (NO-04-01-01) DuPont, R. L. (NO-02-02-21)

Edison Electric Institute (NO-15-02-11)

Ellwood, W. (NO-06-01-02) Fells, I. (NO-05-01-12)

Firebaugh, M. W. (NO-02-01-09)

Fussell, J. B. (NO-B02-01-08)

Golay, M. W. (NO-03-01-07) Greenberger, M. (NO-16-01-04)

Greenhalgh, G. (NO-16-01-06)

Grey, J. (ed.) (NO-B03-01-04)

Haefele, W. (NO-05-01-08)

Haefele, W. (NO-07-01-04)

Haefele, W. (NO-07-01-11)

Jackson, S. V. (NO-03-01-13)

Jones, E. G. (NO-17-01-01)

King, T. (NO-02-01-05)

Laue, H. J. (NO-09-03-02)

Lewins, et al. (NO-02-02-16)

Marshall, W. (NO-17-01-05)

Mayo, L. H., et al. (NO-10-01-02)

Mitchell, R. C. (NO-17-01-09)

Myers, R. (NO-01-01-15)

Netter, T. W. (NO-11-02-10)

Nucleonics Week (NO-13-01-06)

Office of Technology Assessment (NO-05-01-03)

Ohanian, M. J. (NO-05-01-13)

Ohanian, M. J. (NO-08-01-06)

Phung, D. L. (NO-01-01-11)

Rayner, S. (NO-17-02-03)

Rayner, S. (NO-17-02-04)

Reekie, W. (NO-17-02-05)

Reynolds, M. (NO-13-01-08)

Rose, D. J. (NO-02-01-12)

Salisbury, D. F. (NO-05-01-05)

Salisbury, D. F. (NO-05-01-06)

Shapiro, I. S. (NO-09-03-01)

Smart, I. (NO-07-01-06)

Sommers, P. (NO-01-01-06)

Southern States Energy Board, Oak Ridge

National Laboratory, and Energy Impact

Assoc., Inc. (NO-B01-01-03)

Starr, C. (NO-02-02-18)

Stoler, P. (NO-01-01-08)

Subrahmanyam, K. V. (NO-04-01-02)

The Energy Daily (NO-01-01-12)

Tschaeche, A. N. (NO-02-01-10)

Turnbull, P. W. (NO-17-02-07)

Turner, P. (NO-14-01-20)

U.S. Department of Commerce (NO-06-

Weinberg, A. M., et al. (NO-B02-01-03)

Wilbanks, T. J. (NO-03-01-03)

Wolfe, B. (NO-01-01-13)

Zinberg, D. S. (NO-06-01-06)

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Atomic Industrial Forum, Inc. (NO-05-01-02)

Hannerz, K. (LWR-05-01-01)

International Energy Associates Ltd.

(NO-16-02-02)

Miller, D. J. (HTR-05-01-08)

MPR Associates, Inc. (LWR-04-03-02)

#### breeders

Argonne National Laboratory (LMR-B01-01-04)

Berke, C. et al. (LMR-03-01-01)

Chicago, University of (LMR-03-01-02)

Difransico, T. W. (LMR-03-02-02)

Driscoll, M. J. (LMR-03-01-04)

Electric Power Research Institute (LMR-

03-02-03)

Electric Power Research Institute (LMR-03-02-10)

Garwin, R. L. (LMR-02-03-13)

Gray, O. E. III (LMR-03-01-05)

Hunt, S. E. (LMR-02-01-01)

Kasten, P. R. (NO-03-01-01)

Magnus, J. D. (LMR-03-02-05)

Myers, R. (LMR-02-03-02)

Ohanian, M. J., ed. (NO-B01-01-02)

Reynolds, M. (NO-13-01-08)

Shivley, J. M. (LMR-03-01-10)

Twichell, P. W. (LMR-03-02-09)

United Engineers and Constructors Inc.

(LMR-03-02-01)

Vaughan, J. W. Jr. (NO-11-01-02)

Wilcox, L. C. (LMR-03-01-15)

#### **BWRs**

Bray, P. (NO-14-01-22) Budwani, R. N. (NO-07-01-12) Chexal, B. (LWR-05-01-09) Drake, R. (NO-17-03-04) Duncan, J. D. (LWR-02-01-07) Forsberg, C. W. (LWR-02-01-05) Forsberg, C. W. (LWR-06-02-04) General Electric Company (LWR-05-01-10)Lam, P. (LWR-06-02-06) Sawyer, C. D. (LWR-04-02-04) Spiewak, I. (LWR-B01-01-07) Spiewak, I. (LWR-03-01-05) Technology for Energy Corp. (NO-B05-01-02)Trauger, D. B. (NO-17-03-15) Ushio, S. (LWR-01-01-07) Wilkins, D. R., et al. (LWR-05-01-05)

## **CANDU**

International Atomic Energy Agency (NO-16-02-01) Rippon, S. (NO-10-02-09)

Young, J. C. (LWR-01-01-09)

Anonymous (NO-11-01-08f)

#### capacity

Argonne National Laboratory (NO-06-01-10)
Brigham, E. F. (NO-11-01-08d)
Cavanaugh, H. A. (NO-03-01-09)
Chapel, S. W. (NO-B02-01-10)
Congressional Research Service (NO-13-01-05)
Electrical World (NO-01-01-17)
Jackson, S. V. (NO-03-01-13)
Kaufman, A. (NO-08-01-04)
Lester, R. K. (NO-09-01-03)
Sutherland, R. J. et al. (NO-B02-01-07)
Trauger, D. B. (NO-17-03-17)

## capacity factor

Atomic Industrial Forum, Inc. (NO-05-01-02) Lester, R. K. (NO-17-03-08)

#### capital

Bechtel National Inc. (HTR-05-01-01) Bradshaw, D. T. (NO-18-01-02) Braun, C. (NO-18-01-01) Coxe, R. L. Jr. (HTR-B01-01-02)
Energy Impact Associates Inc. for the
Southern States Energy Board (NO-B0301-03)
Energy Impact Associates Inc. for the
Southern States Energy Board (NO-B0301-11)
The Energy Daily (NO-01-01-09)
U.S. Department of Energy (NO-B0301-08)
U.S. Department of Energy (NO-1801-06)
United Engineers and Constructors Inc.
(LMR-03-02-01)

#### **CNSS**

Babcock and Wilcox Company, Inc. (LWR-02-01-03)
Babcock and Wilcox Company, Inc. (LWR-02-01-04)
Ransom and Casazza, Inc. (LWR-03-01-02)
Scott, D. (LWR-03-01-01)
United Engineers and Constructors, Inc. (LWR-05-01-07)

Argonne National Laboratory (NO-06-

#### coal

Atomic Industrial Forum, Inc. (NO-05-01-02)Bradshaw, D. T. (NO-18-01-02) Braun, C. (LWR-06-02-02) Budwani, R. N. (NO-07-01-12) Cavanaugh, H. A. (NO-03-01-09) Chapel, S. W. (NO-B02-01-10) Congressional Research Service (NO-13-01-05) Delene, J. G., et al. (NO-B01-01-06) Desert Research Institute (NO-06-01-09) Fisher, C. F. Jr. (NO-09-03-05) Gas-Cooled Reactor Associates (HTR-03-03-09)International Atomic Energy Agency (NO-01-01-29) Loose, V. W. (NO-15-01-06) Marshall, W. (NO-17-01-05) Masters, R. (NO-17-01-06) Masters, R. (NO-17-01-07) Nuclear Energy Agency (NO-18-01-04) Phung, D. L. (NO-11-02-11)

Reichle, L. F. C. (NO-09-02-02) Siegel, J. R. (NO-15-01-03) Smolen, G. R., et al. (NO-B01-02-02) U.S. Department of Energy (NO-B02-Ziegler, E. J. (NO-17-02-11)

#### codes

Delene, J. G., et al. (NO-B01-01-06) Honekamp, J. R., Inc. (LWR-01-01-13)

## cogeneration

Burwell, C. C. (NO-B04-01-03) Haefele, W. (NO-04-01-04) Myers, R. (NO-17-02-01)

#### commercialization

Abernathy, W. J. (NO-15-02-01) Bhaneja, B. (NO-15-02-02) Chapel, S. W. (NO-B02-01-10) Cook, J. (NO-03-01-12) Driscoll, M. J. (LMR-03-01-04) Electric Power Research Institute (LWR-05-01-03) Ettlie, J. E. (NO-16-01-01) Frewer, H. (HTR-03-03-14) Gray, O. E. III (LMR-03-01-05) Hannerz, K. (LWR-01-01-01) Herrington, J. S. (NO-16-01-08) Jackson, S. V. (NO-03-01-13) Jones, E. G. (NO-17-01-01) Lester, R. K. et al. (NO-B03-01-05) Lester, R. K. et al. (NO-B04-01-04) Oak Ridge National Laboratory (LMR-02-02-03) Reekie, W. (NO-17-02-05) Turnbull, P. W. (NO-17-02-07) Young, J. C. (LWR-01-01-09)

## construction

Applied Decision Analysis, Inc. (NO-B03-Applied Decision Analysis, Inc. (NO-B04-01-01)Atomic Industrial Forum (NO-13-01-13) Atomic Industrial Forum, Inc. (NO-05-01-02)Bean, E. (NO-02-01-01) Berton, L. (NO-14-01-01) Braun, C. (LWR-06-02-02) Braun, C. (NO-13-01-11)

Braun, C. (NO-14-01-05) Braun, C. et al. (NO-15-02-04) Braun, H. E. et al. (LWR-06-01-01) Budwani, R. N. (NO-07-01-12) Carnes, J. M. (NO-14-01-13) Chapel, S. W. (NO-B02-01-10) Clark, C. E. Jr. (NO-15-01-02) Cook, J. (NO-03-01-12) Cruickshank, A. (LMR-03-01-03) Davis, D. (NO-15-02-10) de Torquat, C. (NO-17-03-14) Decision Focus Incorporated (NO-06-01-12)Desert Research Institute (NO-06-01-09) Difransico, T. W. (LMR-03-02-02) Edison Electric Institute (NO-15-02-11) ENR (NO-14-01-14) Esselman, W. H. (NO-05-01-04) Fisher, C. F. Jr. (NO-09-03-05) Fisher, C. F. Jr. (NO-17-03-06) Frewer, H. (HTR-03-03-14) GA Technologies Inc. (HTR-03-03-16) Grey, J. (ed.) (NO-B03-01-04) Hafele, W. (LMR-01-01-07) Herrington, J. S. (NO-16-01-08) Hill, L. J., et al. (NO-B01-02-01) Honekamp, J. R., Inc. (LWR-01-01-13) Hori, Y. (NO-14-01-19) Hug, M. (LWR-06-02-05) Institute of Nuclear Power Operations (LWR-02-01-02) Institute of Nuclear Power Operations (LWR-03-01-08) International Atomic Energy Agency (NO-10-02-02) Jenkin, F. P. (NO-17-01-02) Jones, P. M. S. (NO-17-01-03) Komanoff, C. (NO-02-01-23) Lanning, D. D. (HTR-04-01-05) Loose, V. W. (NO-15-01-06) MacLachan, A. (NO-11-01-09) Martel, L. J. (LWR-06-02-07) Mason, G. E., et al. (NO-03-01-02) Merrow, E. W. (NO-B02-01-01) Merrow, R. W. (NO-06-01-11) Miller, D. J. (HTR-05-01-08) Myers, R. (NO-01-01-10) Nuclear Engineering International (NO-01-02-20) Nuclear Engineering International (NO-

17-03-10)

Braun, C. (NO-14-01-03)

Nucleonics Week (NO-12-01-03) Oak Ridge National Laboratory (LMR-02-02-03) Paulson, C. K. (NO-03-01-14) Runzler, L. M. (NO-01-01-07) Rytkonan, B. B. (LWR-02-01-08) Sargent and Lundy Engineers (NO-04-01-08)Schmidt, R. (NO-01-02-30) Schmidt, R. (NO-15-01-07) Shivley, J. M. (LMR-03-01-10) Siegel, J. R. (NO-15-01-03) Sillin, J. O. (NO-02-01-23) Stahlkopf, K. (NO-09-03-04) Stoler, P. (NO-01-01-08) Sutherland, R. J. et al. (NO-B02-01-07) Tatum, C. B. (NO-04-01-07) Tatum, C. B. (NO-05-01-01) Tatum, C. B. (NO-10-01-01) Tatum, C. B. (NO-10-02-11) Tatum, C. B. (NO-12-01-04) Tatum, C. B. (NO-14-01-15) Tatum, C. B. (NO-17-03-13) Taylor, J. J. (LMR-03-01-12) U.S. Department of Energy (NO-18-01-06) U.S. Department of Energy and U.S. Department of Labor (NO-B02-01-05) Vaughan, J. W. Jr. (NO-11-01-02) Wald, M. L. (NO-10-02-06) Westinghouse Electric Corporation (LMR-01-01-01) Wilcox, L. C. (LMR-03-01-15) Wilford, J. N. (NO-10-02-07) Young, J. C. (NO-14-01-17)

#### controls

GA Technologies Inc. (HTR-03-03-16) Grey, J. (ed.) (NO-B03-01-04) Manno, V. P. (NO-17-01-04) Schultz, M. A. (LWR-06-01-08) U.S. Nuclear Regulatory Commission (NO-B03-01-09) Vaughan, J. W. Jr. (NO-11-01-02)

#### costs

Anonymous (NO-11-01-08f) Anonymous (NO-13-01-03) Applied Decision Analysis, Inc. (NO-B04-01-01) Armijo, J. S. (LMR-02-03-12) Arnold, W. H. (LMR-01-01-05) Atomic Industrial Forum (NO-13-01-13) Atomic Industrial Forum, Inc. (NO-05-01-02)Babcock and Wilcox Company, Inc. (LWR-02-01-03) Bean, E. (NO-02-01-01) Bechtel National Inc. (HTR-05-01-01) Berton, L. (NO-14-01-01) Bowers, H. I. (NO-10-01-03) Braun, C. (NO-13-01-11) Braun, C. (NO-14-01-03) Braun, C. (NO-14-01-05) Braun, C. (NO-17-03-02) Braun, C. (NO-18-01-01) Braun, C. et al. (NO-15-02-04) Braun, H. E. et al. (LWR-06-01-01) Budwani, R. N. (NO-07-01-12) Burke, R. P. (NO-15-02-05) Caldwell, L. S. (NO-15-02-07) Cantor, R. (NO-17-03-03) Cantor, R. (NO-18-02-01) Chapel, S. W. (NO-B02-01-10) Clark, C. E. Jr. (NO-15-01-02) Cook, J. (NO-03-01-12) Coxe, R. L. Jr. (HTR-B01-01-02) Davis, D. (NO-15-02-10) de Torquat, C. (NO-17-03-14) Dean Witter Reynolds, Inc. (NO-01-Decision Focus Incorporated (NO-06-Delene, J. G., et al. (NO-B01-01-06) Desert Research Institute (NO-06-01-09) Difransico, T. W. (LMR-03-02-02) Drake, R. (NO-17-03-04) Duncan, J. D. (LWR-02-01-07) Energy World (NO-01-01-02) Esselman, W. H. (NO-05-01-04) Fisher, C. F. Jr. (NO-09-03-05) Fisher, C. F. Jr. (NO-17-03-06) Frewer, H. (HTR-03-03-14) Fussell, J. B. (NO-B02-01-08) Going, M. C. (NO-11-01-01) Hill, L. J., et al. (NO-B01-02-01) Howard, R. A. (NO-16-01-10) International Atomic Energy Agency (NO-01-01-29) Iwler, L. (NO-15-01-04) Jenkin, F. P. (NO-17-01-02)

Jones, E. G. (NO-17-01-01) Jones, P. M. S. (NO-17-01-03) Kasten, P. R. (HTR-03-03-15) Komanoff, C. (NO-02-01-23) Lanning, D. D. (HTR-04-01-05) Lester, R. K. (NO-17-03-08) Lidsky, L. M. (NO-03-01-08) Loose, V. W. (NO-15-01-06) MacLachan, A. (NO-11-01-09) Masters, R. (NO-01-02-28) Masters, R. (NO-17-01-07) Merrow, E. W. (NO-B02-01-01) Merrow, R. W. (NO-06-01-11) Miller, D. J. (HTR-05-01-08) Myers, R. (LMR-02-03-15) Myers, R. (NO-01-01-10) Navarro, P. (NO-02-01-17) Nuclear Energy Agency (NO-18-01-04) Nuclear Engineering International (NO-10-02-01) Nuclear Engineering International (NO-17-03-10) Osborne, R. J. (NO-11-01-08g) Peck, S. C. (NO-11-01-08a) Phung, D. L. (NO-11-02-11) Reutler, H. (HTR-04-01-11) Runzler, L. M. (NO-01-01-07) Rytkonan, B. B. (LWR-02-01-08) Salisbury, D. F. (NO-05-01-06) Sandberg, R. O. (NO-14-01-02) Schmidt, R. (NO-01-02-30) Schmidt, R. (NO-15-01-07) Siegel, J. R. (NO-15-01-03) Sillin, J. O. (NO-02-01-23) Smolen, G. R., et al. (NO-B01-02-02) Stevenson, J. D. (NO-13-01-02) Stoler, P. (NO-01-01-08) Sutherland, R. J. et al. (NO-B02-01-07) Tatum, C. B. (NO-10-01-01) Tatum, C. B. (NO-10-02-11) Tatum, C. B. (NO-17-03-13) The Energy Daily (NO-01-01-09) Turnbull, P. W. (NO-17-02-07) U.S. Department of Energy (NO-B02-01-04)U.S. Department of Energy (NO-B03-U.S. Department of Energy and U.S. Department of Labor (NO-B02-01-05) United Engineers and Constructors Inc.

(LMR-03-02-01)

United Engineers and Constructors, Inc. (LWR-05-01-07)
Vaughan, J. W. Jr. (NO-11-01-02)
Vijuk, R. M. (LMR-01-03-01)
Wald, M. L. (NO-10-02-06)
Wald, M. L. (NO-10-02-08)
Weaver, L. (NO-14-01-08)
Westinghouse Electric Corporation (LMR-B01-01-03)
Westinghouse Electric Corporation (LMR-01-01-01)
Westinghouse Electric Corporation (LMR-02-01-02)
Wilford, J. N. (NO-10-02-07)
Ziegler, E. J. (NO-17-02-11)

#### decisions

Barkenbus, J. N. (NO-08-01-02)
Clark, C. E. Jr. (NO-15-01-02)
Desert Research Institute (NO-06-01-09)
Howard, R. A. (NO-16-01-10)
Jackson, S. V. (NO-03-01-13)
Kaufman, A. (NO-08-01-04)
Keeney, R. L. (NO-07-01-09)
Mitchell, R. C. (NO-17-01-09)
Murray, A. E. (NO-17-01-10)
Winkler, R. L. (NO-08-01-01)

#### demand

American Nuclear Society (NO-11-01-06) Braun, C. (NO-14-01-03) Burwell, C. C. (NO-B04-01-03) Cavanaugh, H. A. (NO-03-01-09) Chapel, S. W. (NO-B02-01-10) Clark, C. E. Jr. (NO-15-01-02) Congressional Research Service (NO-13-01-05) Cook, J. (NO-03-01-12) Crawford, M. (NO15-02-08) Edison Electric Institute (NO-15-02-11) Electrical World (NO-01-01-17) Energy Impact Associates Inc. for the Southern States Energy Board (NO-B03-01-03)Energy Impact Associates Inc. for the Southern States Energy Board (NO-B03-01-11)Energy World (NO-01-01-02) Ford, A. (NO-13-01-01) Giraud, A. (NO-04-01-06) Gustaferro, J. F. (NO-14-01-09)

Haefele, W. (NO-07-01-01) Haefele, W. (NO-09-02-05) Hafele, W. (LMR-01-01-07) Higgins, J. P. (NO-01-01-02) Hudson, C. R., II (NO-B02-01-02) Jaunsen, W. H. (NO-B01-01-07) Kaufman, A. (NO-08-01-04) Laue, H. J. (NO-09-03-02) Lester, R. K. et al. (NO-B03-01-05) Lester, R. K. et al. (NO-B04-01-04) Lester, R. K., et al. (NO-B01-01-05) McCaughey, J. (NO-13-01-10) Mills, M. P. (NO-17-03-09) Murray, A. E. (NO-17-01-10) Office of Technology Assessment (NO-B03-01-06) Office of Technology Assessment (NO-05-01-03)Pine, G. D. (NO-17-02-02) Samuels, G. (NO-13-01-14) Siegel, J. R. (NO-11-01-07) Skeer, J. (NO-07-01-10) Southern States Energy Board, Oak Ridge National Laboratory, and Energy Impact Assoc., Inc. (NO-B01-01-03) Stahlkopf, K. (NO-09-03-04) Sutherland, R. J. (NO-14-01-11) U.S. Department of Energy (NO-B01-01-04)U.S. Department of Energy and U.S. Department of Labor (NO-B02-01-05) Weaver, L. (NO-14-01-08) Weaver, L. E. (NO-17-02-10) Weinberg, A. M., et al. (NO-B02-01-03) Wilcox, L. C. (LMR-03-01-15)

#### deployment

Berke, C. et al. (LMR-03-01-01) Bhaneja, B. (NO-15-02-02) Doub, W. O. (NO-09-02-03) Larson, R. D. (LMR-02-03-05) Larson, R. D. (LMR-02-03-06) Reekie, W. (NO-17-02-05) Simnad, M. T. (NO-07-01-07) Turnbull, P. W. (NO-17-02-07) Vaughan, J. W. Jr. (NO-11-01-02)

#### design

Argonne National Laboratory (LMR-B01-01-04) Arnold, W. H. (LMR-01-01-05) ASEA-ATOM (LWR-04-03-05) Babcock & Wilcox Company, Inc. (LWR-B01-01-06) Babcock and Wilcox Company, Inc. (LWR-02-01-03) Babcock and Wilcox Company, Inc. (LWR-02-01-04) Bechtel Group, Inc. (HTR-02-01-06) Booth, R.S. (LMR-01-04-03) Brandstetter, A. (HTR-03-03-12) Braun, H. E. (LWR-04-03-01) Brown, M. (HTR-01-01-10) Chicago, University of (LMR-03-01-02) Cleveland, J. C. (HTR-03-03-11) Combustion Engineering, Inc. (NO-08-01-08)Dahlheimer, J. A. (NO-08-01-03) Dauterman, W. (NO-02-02-22) Difransico, T. W. (LMR-03-02-02) Duncan, J. D. (LWR-02-01-07) Electric Power Research Institute (LMR-03-02-03) Engel, J. R., et al. (LMR-B01-01-01) Esselman, W. H. (NO-05-01-04) Flinn, W. S. (LWR-06-01-03) Frewer, H. (HTR-03-03-14) GA Technologies (HTR-03-03-02) GA Technologies Inc. (HTR-03-03-16) General Electric Company (LWR-05-01-10)Gray, O. E. III (LMR-03-01-05) Grey, J. (ed.) (NO-B03-01-04) Hafele, W. (LMR-01-01-07) Hannerz, K. (LWR-05-01-01) Haque, H. et al. (HTR-04-01-02) Harde, V. R. (LMR-03-02-04) Honekamp, J. R., Inc. (LWR-01-01-13) Hori, Y. (NO-14-01-19) **INTERATOM (HTR-02-01-02)** International Atomic Energy Agency (NO-10-02-02) Kasten, P. R. (LWR-02-01-01) Lanning, D. D. (HTR-04-01-05) Larson, R. D. (LMR-02-03-05) Larson, R. D. (LMR-02-03-06) Lester, R. K. (NO-09-01-03) Lester, R. K., et al. (NO-B01-01-05) Levy, S., Incorporated (LWR-05-01-11)

Lohnert, G. H. (HTR-04-01-06) MacDonald, J. (LMR-03-02-08)

Magnus, J. D. (LMR-03-02-05)

Manno, V. P. (NO-17-01-04) Martel, L. J. (LWR-06-02-07) Mason, G. E., et al. (NO-03-01-02) Massachusetts Institute of Technology (HTR-05-01-10) McDonald, C. F. (HTR-04-01-07) Medwid, W. (HTR-04-01-08) Merrow, E. W. (NO-B02-01-01) Meyers, G. W. (LMR-03-01-07) MPR Associates, Inc. (LWR-04-03-02) O'Sullivan, D. A. (HTR-02-01-04) Paulson, C. K. (NO-03-01-14) Peters, K. (HTR-04-01-09) Reutler, H. (HTR-04-01-11) Runzler, L. M. (NO-01-01-07) Rytkonan, B. B. (LWR-02-01-08) Schultz, M. A. (LWR-04-03-03) Singh, J. (HTR-04-01-12) Stahlkopf, K. (NO-09-03-04) Stahlkopf, K. E. (LWR-01-01-05) Stevenson, J. D. (NO-13-01-02) Sundqvist, C. (LWR-06-01-10) Tatum, C. B. (NO-17-03-13) Taylor, J. J. (LMR-03-01-12) Till, C. E. (LMR-03-01-13) Westinghouse Electric Corporation (LMR-B01-01-03) Westinghouse Electric Corporation (LMR-01-01-01) Wilkins, D. R. (LWR-01-01-12) Young, J. C. (LWR-01-01-03) Young, J. C. (NO-14-01-17)

#### development

Argonne National Laboratory (LMR-B01-01-04)
ASEA-ATOM (LWR-04-03-05)
Avenhaus, R. (NO-05-01-09)
Berke, C. et al. (LMR-03-01-01)
Ebasco Services Inc. et al. (LMR-02-02-02)
Energy Research Advisory Board (LWR-06-01-02)
Energy Research Advisory Board (NO-13-01-12)
Engel, J. R., et al. (LMR-B01-01-02)

Frewer, H. (HTR-03-03-14) Giraud, A. (NO-04-01-06) Hill, J. (NO-01-03-37) Holte, G. (NO-01-02-34) Iyengar, P. K. (NO-09-01-02) Kasten, P. R. (LWR-02-01-01) Kasten, P. R. (LWR-03-01-06)
Kasten, P. R. (NO-03-01-01)
Marcus, G. H. (NO-01-01-03)
Maxwell, J. R. (LMR-01-01-02)
Mladjenovic, M. S. (NO-01-02-35)
Nuclear Engineering International (NO-01-02-27)
Spiewak, I. (LWR-04-01-03)
Trauger, D. B. (NO-17-03-16)
Vaughan, J. W. Jr. (NO-11-01-02)
Wilcox, L. C. (LMR-03-01-15)
Winkler, R. L. (NO-08-01-01)

## district heating

Olds, F. C. (NO-17-03-11) Pedersen, T. (LWR-06-01-05) Pind, C. (LWR-06-01-06) Pind, C. (LWR-06-01-07) Skygge, C. (LWR-06-01-09)

#### DOE

Argonne National Laboratory (LMR-B01-01-04)Argonne National Laboratory (NO-06-01-10)Cook, J. (NO-03-01-12) Cruickshank, A. (LMR-03-01-03) Energy Research Advisory Board (LWR-B01-01-08) Golay, M. W. (LWR-01-01-11) Repici, D. J. (NO-14-01-23) Skeer, J. (NO-07-01-10) U.S. Nuclear Regulatory Commission (NO-B03-01-09) Vaughan, J. W. Jr. (NO-11-01-02) Wilcox, L. C. (LMR-03-01-15) Young, J. C. (NO-14-01-17)

#### economics

American Nuclear Society (NO-11-01-06)
Anonymous (NO-09-01-01)
Anonymous (NO-11-01-08f)
Arnold, W. H. (NO-03-01-10)
Arnott, D. (NO-09-02-04)
Atomic Industrial Forum (NO-13-01-13)
Atomic Industrial Forum, Inc. (NO-05-01-02)
Bechtel Corporation (NO-B02-01-06)
Behrens, C. E. (NO-06-01-05)
Bower, R. S. (NO-11-01-08c)
Bowers, H. I. (HTR-03-03-03)

Bowers, H. I. (NO-10-01-03) Golay, M. W. (NO-03-01-07) Bradshaw, D. T. (NO-18-01-02) Gravelle, J. G. (NO-11-01-08h) Braun, C. (LWR-06-02-02) Grey, J. (ed.) (NO-B03-01-04) Haefele, W. (NO-04-01-04) Braun, C. (NO-13-01-11) Braun, C. (NO-14-01-03) Haefele, W. (NO-05-01-08) Braun, C. (NO-14-01-05) Haefele, W. (NO-05-01-14) Braun, C. (NO-17-03-02) Haefele, W. (NO-07-01-01) Braun, C. (NO-18-01-01) Haefele, W. (NO-07-01-02) Haefele, W. (NO-07-01-04) Braun, H. E. et al. (LWR-06-01-01) Bray, P. (NO-14-01-22) Haefele, W. (NO-09-02-05) Brigham, E. F. (NO-11-01-08d) Hafele, V. W. (NO-06-01-08) Brightsen, R. A. (NO-05-01-11) Hawkes, G. F. (NO-16-01-07) Burke, R. P. (LWR-B01-01-07) Heising-Goodman, C. D. (NO-01-03-38) Burke, R. P. (NO-15-02-05) Higgins, J. P. (NO-01-01-02) Cantor, R. (NO-17-03-03) Hill, L. J., et al. (NO-B01-02-01) Cantor, R. (NO-18-02-01) Hinsberg, P. (NO-11-01-04) Cavanaugh, H. A. (NO-03-01-09) Howles, L. (NO-11-01-03) Chapel, S. W. (NO-B02-01-10) Hyman, L. S. (NO-11-02-08i) Clark, C. E. Jr. (NO-15-01-02) International Atomic Energy Agency (NO-01-01-29) Combustion Engineering, Inc. (NO-08-International Atomic Energy Agency Congressional Research Service (NO-13-(NO-10-02-02) 01-05)Iwler, L. (NO-15-01-04) Jaunsen, W. H. (NO-B01-01-07) Cook, J. (NO-03-01-12) Coxe, R. L. Jr. (HTR-B01-01-02) Jenkin, F. P. (NO-17-01-02) Crijns, M. J. (NO-15-02-09) Jones, E. G. (NO-17-01-01) Jones, P. M. S. (NO-17-01-03) Cruickshank, A. (LMR-03-01-03) Davis, D. (NO-15-02-10) Kasten, P. R. (HTR-03-03-15) Kaufman, A. (NO-08-01-04) Decision Focus Incorporated (NO-06-Komanoff, C. (NO-02-01-23) 01-12)Delene, J. G., et al. (NO-B01-01-06) Laue, H. J. (NO-09-03-02) Desert Research Institute (NO-06-01-09) Lee, T. H. (NO-11-01-05) Lester, R. K. (NO-09-01-03) Drake, R. (NO-17-03-04) Driscoll, M. J. (LMR-03-01-04) Lester, R. K. et al. (NO-B03-01-05) Lester, R. K. et al. (NO-B04-01-04) Duayer, M. (NO-01-02-33) Elliott, D. (NO-09-02-07) Lester, R. K., et al. (NO-B01-01-05) Energy Impact Associates Inc. for the Lidsky, L. M. (NO-03-01-08) Southern States Energy Board (NO-B03-Loose, V. W. (NO-15-01-06) Marshall, E. (NO-01-02-21) 01-03)Energy Impact Associates Inc. for the Marshall, W. (NO-17-01-05) Southern States Energy Board (NO-B03-Marwah, O. S. (NO-07-01-06) 01-11)Masters, R. (NO-01-02-28) Energy World (NO-01-01-02) Masters, R. (NO-17-01-06) Fells, I. (NO-01-01-04) Masters, R. (NO-17-01-07) Fells, I. (NO-05-01-12) McKenzie, N. C. (NO-09-02-06) Fisher, C. F. Jr. (NO-09-03-05) Miller, D. J. (HTR-05-01-08) Fisher, C. F. Jr. (NO-17-03-06) Murphy, D. (NO-02-01-03) Ford, A. (NO-13-01-01) Myers, R. (NO-01-01-10) Myers, R. (NO-01-01-16) Garwin, R. L. (LMR-02-03-13) Myers, R. (NO-17-02-01) Giraud, A. (NO-04-01-06) Going, M. C. (NO-11-01-01) Nuclear Engineering International (NO-01-02-20)

Nuclear Engineering International (NO-Wacaster, A. J. (ed.) (NO-B03-01-10) Wald, M. L. (NO-10-02-06) 02-01-15) Nuclear Engineering International (NO-Wald, M. L. (NO-10-02-08) 10-02-01) Walske, C. (NO-09-02-01) Webb, J. (NO-01-02-22) Nucleonics Week (NO-12-01-01) Weinberg, A. M., et al. (NO-B02-01-03) Nucleonics Week (NO-13-01-06) Westinghouse Electric Corporation Office of Technology Assessment (NO-05-01-03)(LWR-01-01-08) Osborne, R. J. (NO-11-01-08g) Westinghouse Electric Corporation (NO-Paulson, C. K. (NO-03-01-11) 04-01-09) Whitaker, R. (NO-14-01-10) Peck, S. C. (NO-11-01-08a) Wilcox, L. C. (LMR-03-01-15) Phung, D. L. (NO-01-01-18) Phung, D. L. (NO-08-01-05) Woite, G. (NO-02-01-14) Phung, D. L. (NO-11-02-11) Wolfe, B. (NO-01-01-13) Reichle, L. F. C. (NO-09-02-02) Young, J. C. (LWR-01-01-09) Reutler, H. (HTR-04-01-11) Young, J. C. (NO-14-01-17) Rippon, S. (NO-B05-01-01) Ziegler, E. J. (NO-17-02-11) Roth, E. B. (NO-01-03-36) electricity Salisbury, D. F. (NO-05-01-05) Salisbury, D. F. (NO-05-01-06) Argonne National Laboratory (NO-06-Samuels, G. (NO-13-01-14) Atomic Industrial Forum, Inc. (NO-05-Sandberg, R. O. (NO-14-01-02) 01-02)Schmidt, R. (NO-01-02-30) Bechtel Corporation (NO-B02-01-06) Schmidt, R. (NO-15-01-07) Bray, P. (NO-14-01-22) Shapiro, I. S. (NO-09-03-01) Burwell, C. C. (NO-B04-01-03) Shorrock, T. (NO-06-01-07) Caldwell, L. S. (NO-15-02-07) Siegel, J. R. (NO-11-01-07) Congressional Research Service (NO-13-Skeer, J. (NO-07-01-10) 01-05)Smart, I. (NO-07-01-06) Crawford, M. (NO15-02-08) Smolen, G. R., et al. (NO-B01-02-02) Sommers, P. (NO-01-01-06) Decision Focus Incorporated (NO-06-01-12)Southern States Energy Board, Oak Ridge Desert Research Institute (NO-06-01-09) National Laboratory, and Energy Impact Driscoll, M. J. (LMR-03-01-04) Assoc., Inc. (NO-B01-01-03) Edison Electric Institute (NO-15-02-11) Stahlkopf, K. (NO-09-03-04) Starr, C. (NO-14-01-06) Electrical World (NO-01-01-17) EPRI Journal (NO-01-02-26) Stauffer, T. R. (NO-02-01-13) Ford, A. (NO-13-01-01) Stock, F. (NO-04-01-05) Ford, A. (NO-14-01-07) Stoler, P. (NO-01-01-08) Heising-Goodman, C. D. (NO-01-03-38) Subrahmanyam, K. V. (NO-04-01-02) Higgins, J. P. (NO-01-01-02) Sutherland, R. J. et al. (NO-B02-01-07) Hudson, C. R., II (NO-B02-01-02) The Energy Daily (NO-01-01-12) Iwler, L. (NO-15-01-04) U.S. Department of Commerce (NO-06-Jackson, S. V. (NO-03-01-13) 01-04)Kaufman, A. (NO-08-01-04) U.S. Department of Energy (NO-B01-Komanoff, C. (NO-02-01-23) 01-04)Lee, T. H. (NO-11-01-05) U.S. Department of Energy (NO-B02-Lester, R. K. (NO-09-01-03) 01-04)McCaughey, J. (NO-13-01-10) United Engineers and Constructors, Inc. (LWR-05-01-07) Mills, M. P. (NO-17-03-09) Nuclear Energy Agency (NO-18-01-04) Office of Technology Assessment (NO-B03-01-06)

Samuels, G. (NO-13-01-14) Siegel, J. R. (NO-15-01-03) Skeer, J. (NO-07-01-10) Smolen, G. R., et al. (NO-B01-02-02) Southern States Energy Board, Oak Ridge National Laboratory, and Energy Impact Assoc., Inc. (NO-B01-01-03) Starr, C. (NO-14-01-06) Sutherland, R. J. (NO-14-01-11) Sutherland, R. J. et al. (NO-B02-01-07) The Energy Daily (NO-01-01-09) U.S. Department of Energy (NO-B01-01-04)U.S. Department of Energy and U.S. Department of Labor (NO-B02-01-05) Wacaster, A. J. (ed.) (NO-B03-01-10) Weaver, L. E. (NO-17-02-10) Whitaker, R. (NO-14-01-10) Wilcox, L. C. (LMR-03-01-15) Young, J. C. (NO-14-01-17)

## engineering

Australian Institute of Nuclear Science and Engineering (NO-07-01-03)
Babcock & Wilcox Company, Inc. (LWR-B01-01-06)
Braun, C. (NO-13-01-11)
Budwani, R. N. (NO-07-01-12)
Driscoll, M. J. (LMR-03-01-04)
Esselman, W. H. (NO-05-01-04)
Fisher, C. F. Jr. (NO-09-03-05)
Frewer, H. (HTR-03-03-14)
Lester, R. K. (NO-09-01-03)
Rippon, S. (LMR-02-03-03)
Runzler, L. M. (NO-01-01-07)

## environment

Hafele, V. W. (NO-06-01-08) Hunt, S. E. (LMR-02-01-01) John Francis Company, The (NO-14-01-25) Netter, T. W. (NO-11-02-10) Porter, A. (NO-04-01-03)

#### **EPRI**

01-01)
Applied Decision Analysis, Inc. (NO-B04-01-01)
Braun, C. (NO-13-01-11)

Applied Decision Analysis, Inc. (NO-B03-

Braun, C. et al. (NO-15-02-04) Cole, T. E. (LWR-06-02-03) Decision Focus Incorporated (NO-06-01-12)Difransico, T. W. (LMR-03-02-02) Electric Power Research Institute (LMR-03-02-03) Esselman, W. H. (NO-05-01-04) Golay, M. W. (LWR-01-01-11) Gray, O. E. III (LMR-03-01-05) Higgins, P. C. (NO-16-01-09) MacLachan, A. (NO-11-01-09) Martel, L. J. (LWR-06-02-07) Mattson, R. J. (NO-15-01-01) Peck, S. C. (NO-11-01-08a) Rytkonan, B. B. (LWR-02-01-08) Stahlkopf, K. E. (LWR-01-01-05) Stahlkopf, K. E. et al. (LWR-06-01-12) Taylor, J. J. (LMR-03-01-12) U.S. Nuclear Regulatory Commission (NO-B03-01-09)

#### **ERAB**

Energy Research Advisory Board (LWR-B01-01-08)
Energy Research Advisory Board (LWR-06-01-02)
Energy Research Advisory Board (NO-13-01-12)
Spiewak, I. (LWR-04-01-03)

Young, J. C. (LWR-01-01-03)

#### fast reactors

Anderson, C. A., Jr. (LMR-02-03-10)
Argonne National Laboratory (LMR-01-04-02)
Argonne National Laboratory (LMR-02-01-04)
Berke, C. et al. (LMR-03-01-01)
Burch, W. D. et al. (LMR-02-03-11)
Hunt, S. E. (LMR-02-01-01)
Kasten, P. R. (LMR-02-03-04)
MacDonald, J. (LMR-03-02-08)
Till, C. (LMR-03-02-11)
Till, C. E. (LMR-02-03-07)
Trauger, D. B. (NO-17-03-15)
Walgate, R. (NO-01-02-25)

#### financing

Bean, E. (NO-02-01-01) Berton, L. (NO-14-01-01)

Braun, C. (NO-18-01-01) Bray, P. (NO-14-01-22) Caldwell, L. S. (NO-15-02-07) Cantor, R. (NO-18-02-01) Clark, C. E. Jr. (NO-15-01-02) Cook, J. (NO-03-01-12) Dean Witter Reynolds, Inc. (NO-01-01-05)Ford, A. (NO-13-01-01) Komanoff, C. (NO-02-01-23) Lind, R. C. et al. (NO-14-01-18) Marshall, W. (NO-17-01-05) McKenzie, N. C. (NO-09-02-06) Navarro, P. (NO-02-01-17) Nuclear Engineering International (NO-01-02-27) Nucleonics Week (NO-12-01-03) Nucleonics Week (NO-13-01-06) Peck, S. C. (NO-11-01-08a) Stoler, P. (NO-01-01-08) Sutherland, R. J. et al. (NO-B02-01-07) U.S. Department of Energy (NO-18-01-06)

#### fission

Garwin, R. L. (LMR-02-03-13) Kasten, P. R. (NO-03-01-01) Mills, M. P. (NO-17-03-09) Ohanian, M. J. (NO-08-01-06) U.S. Congress (NO-17-03-19) U.S. Congress (NO-17-03-20)

#### fossil

American Nuclear Society (NO-11-01-06) Bowers, H. I. (NO-10-01-03) Braun, C. (NO-14-01-03) Congressional Research Service (NO-13-01-05)Desert Research Institute (NO-06-01-09) Going, M. C. (NO-11-01-01) Hudson, C. R., II (NO-B02-01-02) Mills, M. P. (NO-17-03-09) Myers, R. (NO-17-02-01) Netter, T. W. (NO-11-02-10) Phung, D. L. (NO-11-02-11) Pine, G. D. (NO-17-02-02) Reichle, L. F. C. (NO-09-02-02) Sargent and Lundy Engineers (NO-04-01-08)Smolen, G. R., et al. (NO-B01-02-02) U.S. Department of Energy (NO-B01-01-04)

U.S. Department of Energy (NO-B02-01-04)
U.S. Department of Energy (NO-B03-01-08)
Young, J. C. (NO-14-01-17)

#### France

Braun, C. (NO-13-01-11)
Braun, C. (NO-17-03-02)
Braun, C. et al. (NO-15-02-04)
Bray, P. (NO-14-01-22)
Crijns, M. J. (NO-15-02-09)
de Torquat, C. (NO-17-03-14)
Greenhalgh, G. (NO-16-01-06)
Herrington, J. S. (NO-16-01-08)
Hug, M. (LWR-06-02-05)
MacLachan, A. (NO-11-01-09)
Nuclear Engineering International (NO-17-03-10)
Reynolds, M. (NO-13-01-08)

#### fuel

Anderson, C. A., Jr. (LMR-02-03-10)
Argonne National Laboratory (LMR-01-04-01)
Atomic Industrial Forum, Inc. (NO-05-01-02)
Bechtel Group, Inc. (HTR-02-01-06)
Burch, W. D. et al. (LMR-02-03-11)
Engel, J. R., et al. (LMR-B01-01-01)
Massachusetts Institute of Technology (HTR-05-01-10)
Rippon, S. (NO-B05-01-01)
Simon, W. A. (HTR-01-01-02)
U.S. Department of Energy (NO-B02-01-04)
Walters, L. C. (LMR-03-01-14)

## fuel cycle

Avenhaus, R. (NO-05-01-09)
Bainerman, J. (NO-12-01-05)
Bradshaw, D. T. (NO-18-01-02)
Crijns, M. J. (NO-15-02-09)
Cruickshank, A. (LMR-03-01-03)
Driscoll, M. J. (LMR-03-01-04)
GA Technologies Inc. (HTR-03-03-16)
Hinsberg, P. (NO-11-01-04)
Howles, L. (NO-11-01-03)
Jaunsen, W. H. (NO-B01-01-07)
Lester, R. K. et al. (NO-B03-01-05)

Lester, R. K. et al. (NO-B04-01-04) Magnus, J. D. (LMR-03-02-05) Mayo, L. H., et al. (NO-10-01-02) Miller, D. J. (HTR-05-01-08) Ohanian, M. J., ed. (NO-B01-01-02) Radkowsky, A. (NO-13-01-04) Rippon, S. (NO-B05-01-01) Sandberg, R. O. (NO-14-01-02) Siegel, J. R. (NO-15-01-03) Smolen, G. R., et al. (NO-B01-02-02) Southern States Energy Board, Oak Ridge National Laboratory, and Energy Impact Assoc., Inc. (NO-B01-01-03) Spiewak, I. (NO-02-02-24) Taylor, J. J. (LMR-03-01-12) U.S. Congress (NO-17-03-19) U.S. Congress (NO-17-03-20) U.S. Department of Energy (NO-B03-01-08)Walters, L. C. (LMR-03-01-14) Wolfe, B. (NO-01-01-13)

#### future

American Nuclear Society (NO-11-01-06) Anonymous (NO-11-01-08f) Argonne National Laboratory (NO-06-01-10)Atomic Industrial Forum (NO-13-01-13) Atomic Industrial Forum, Inc. (NO-05-01-02)Bechtel Corporation (NO-B02-01-06) Brigham, E. F. (NO-11-01-08d) Brightsen, R. A. (NO-05-01-11) Cherry, B. H. (NO-02-01-11) Cole, T. E. (LWR-06-02-03) Doub, W. O. (NO-09-02-03) Energy World (NO-01-01-02) Fells, I. (NO-01-01-04) Fells, I. (NO-05-01-12) Gabor, S. (NO-09-03-03) Giraud, A. (NO-04-01-06) Golay, M. W. (NO-03-01-07) Gustaferro, J. F. (NO-14-01-09) Haefele, W. (NO-07-01-02) Haefele, W. (NO-07-01-04) Haefele, W. (NO-09-02-05) Higgins, J. P. (NO-01-01-02) Hinsberg, P. (NO-11-01-04) Hudson, C. R., II (NO-B02-01-02) Ivengar, P. K. (NO-09-01-02) Jaunsen, W. H. (NO-B01-01-07) Laue, H. J. (NO-09-03-02)

Lee, T. H. (NO-11-01-05) Nucleonics Week (NO-12-01-01) Office of Technology Assessment (NO-05-01-03)Ohanian, M. J. (NO-08-01-06) Ohanian, M. J., ed. (NO-B01-01-02) Peck, S. C. (NO-11-01-08a) Phung, D. L. (NO-08-01-05) Reichle, L. F. C. (NO-09-02-02) Samuels, G. (NO-13-01-14) Shapiro, I. S. (NO-09-03-01) Siegel, J. R. (NO-11-01-07) Skeer, J. (NO-07-01-10) Stahlkopf, K. (NO-09-03-04) Stahlkopf, K. E. (LWR-01-01-05) Sutherland, R. J. (NO-14-01-11) The Energy Daily (NO-01-01-09) Wakabayashi, H., et al. (NO-03-01-15) Walske, C. (NO-09-02-01) Weaver, L. (NO-14-01-08) Weinberg, A. M., et al. (NO-B02-01-03)

#### **GAT**

Bechtel Group Inc. (HTR-B01-01-01) GA Technologies (HTR-03-03-02) GA Technologies Inc. (HTR-03-03-16) McMain, A. T. (LWR-04-01-01) Medwid, W. (HTR-04-01-08) Sweeney, T. M. (HTR-04-01-13)

#### **GCRA**

Anonymous (HTR-01-01-06)
Anonymous (HTR-02-01-01)
Bechtel Group Inc. (HTR-B01-01-01)
Bechtel Group Inc. et al (HTR-04-01-14)
Gas-Cooled Reactor Associates (HTR-03-02-01)
Kasten, P. R. (HTR-04-01-03)
Stewart, H. B. (HTR-02-01-05)
Sweeney, T. M. (HTR-04-01-13)

## **GCRs**

Coxe, R. L. Jr. (HTR-B01-01-02) Howles, L. (NO-11-01-03) Marshall, W. (NO-17-01-05)

## GE

Armijo, J. S. (LMR-02-03-12) Duncan, J. D. (LWR-02-01-07) Komanoff, C. (NO-02-01-23) Myers, R. (LMR-02-03-02)

Spiewak, I. (LWR-B01-01-07) Spiewak, I. (LWR-03-01-05) Taylor, J. J. (LMR-03-01-12) United Engineers and Constructors Inc. (LMR-03-02-01)

#### Germany

Bechtel Group Inc. (HTR-B01-01-01) Berke, C. et al. (LMR-03-01-01) Brandstetter, A. (HTR-03-03-12) Cleveland, J. C. (HTR-03-03-10) Frewer, H. (HTR-03-03-14) Golay, M. W. (LWR-01-01-11) Haque, H. et al. (HTR-04-01-02) Harde, V. R. (LMR-03-02-04) Herrington, J. S. (NO-16-01-08) INTERATOM (HTR-02-01-02) Kasten, P. R. (HTR-03-03-15) Lanning, D. D. (HTR-04-01-05) Lohnert, G. H., Pflasterer, G. R. (HTR-05-01-06) Nuclear Engineering International (HTR-05-01-03) Peters, K. (HTR-04-01-09) Reutler, H. (HTR-04-01-11) Singh, J. (HTR-04-01-12) Trauger, D. B. (NO-17-03-17)

## graphite

Moormann, R. (HTR-03-01-01)

## growth

Braun, C. (NO-14-01-03) EPRI Journal (NO-01-02-26) Higgins, J. P. (NO-01-01-02) Hudson, C. R., II (NO-B02-01-02) Jaunsen, W. H. (NO-B01-01-07) McCaughey, J. (NO-13-01-10) Sutherland, R. J. (NO-14-01-11) U.S. Department of Energy (NO-B01-01-04)

## heat exchangers

Pedersen, T. (LWR-06-01-05) Pind, C. (LWR-06-01-06) Pind, C. (LWR-06-01-07) Skygge, C. (LWR-06-01-09)

#### HTRs

Anonymous (HTR-01-01-06) Anonymous (HTR-02-01-01) Bechtel Group Inc. (HTR-B01-01-01) Bechtel Group Inc. et al (HTR-04-01-14) Bechtel Group, Inc. (HTR-02-01-06) Bechtel National Inc. (HTR-05-01-01) Bowers, H. I. (HTR-03-03-03) Bradshaw, D. T. (NO-18-01-02) Brandstetter, A. (HTR-03-03-12) Brown, M. (HTR-01-01-10) Cleveland, J. C. (HTR-03-03-10) Cleveland, J. C. (HTR-03-03-11) Coxe, R. L. Jr. (HTR-B01-01-02) Fassbender, J. A. et al. (HTR-03-03-13) Fisher, C., et al. (HT-B01-01-09) Frewer, H. (HTR-03-03-14) GA Technologies (HTR-03-03-02) GA Technologies Inc. (HTR-03-03-16) GA Technologies Inc. (HTR-05-01-02) Gabor, S. (NO-09-03-03) Gas-Cooled Reactor Associates (HTR-03-02-01)Gas-Cooled Reactor Associates (HTR-03-03-07)Gas-Cooled Reactor Associates (HTR-03-03-09)Goodjohn, A. J. (HTR-01-01-04) Haque, H. et al. (HTR-04-01-02) **INTERATOM (HTR-02-01-02)** International Atomic Energy Agency (NO-10-02-02) International Atomic Energy Agency (NO-16-02-01) Kasten, P. R. (HTR-01-01-01) Kasten, P. R. (HTR-03-03-15) Kasten, P. R. (HTR-04-01-03) Kasten, P. R. (HTR-05-01-09) Kasten, P. R., et al. (NO-12-01-06) Katz, E. M. (NO-B02-01-09) Kruger, K. J. (HTR-05-01-04) Lanning, D. D. (HTR-04-01-05) Lester, R. K. (NO-07-01-08) Lester, R. K. (NO-17-03-08) Lester, R. K. et al. (NO-B03-01-05) Lester, R. K. et al. (NO-B04-01-04) Lester, R. K., et al. (NO-B01-01-05) Lohnert, G. H. (HTR-04-01-06) Lohnert, G. H., Pflasterer, G. R. (HTR-05-01-06) Marshall, E. (HTR-03-03-01) Massachusetts Institute of Technology

(HTR-05-01-10)

Masters, R. (NO-17-01-06)

McDonald, C. F. (HTR-04-01-07) Mears, L. D. (HTR-05-01-07) Medwid, W. (HTR-04-01-08) Miller, D. J. (HTR-05-01-08) Moormann, R. (HTR-03-01-01) Nuclear Engineering International (HTR-05-01-03) O'Farrelly, C. (NO-01-01-04) O'Sullivan, D. A. (HTR-02-01-04) Peters, K. (HTR-04-01-09) Reutler, H. (HTR-01-01-05) Reutler, H. (HTR-04-01-11) Savage, M. G. (HTR-B01-01-03) Simon, W. A. (HTR-01-01-02) Singh, J. (HTR-04-01-12) Speis, T. P. (NO-14-01-04) Stewart, H. B. (HTR-02-01-05) Sweeney, T. M. (HTR-04-01-13) Sweeney, T. M. (HTR-03-02-02) Trauger, D. B. (NO-17-03-15) Trauger, D. B. (NO-17-03-16) Trauger, D. B. (NO-17-03-18) Weinberg, A. M., et al. (NO-B02-01-03)

#### human resources

Miller, J. (NO-10-02-05) Nuclear Utility Management and Human Resources Committee (NO-13-01-07) Stevenson, W. (NO-B03-01-07)

## **IAEA**

Eklund, S. (NO-01-02-32) International Atomic Energy Agency (NO-16-02-01) Schmidt, R. (NO-15-01-07)

#### **IFRs**

Anderson, C. A., Jr. (LMR-02-03-10) Argonne National Laboratory (LMR-B01-01-04) Argonne National Laboratory (LMR-01-04-02)Burch, W. D. et al. (LMR-02-03-11) Chicago, University of (LMR-03-01-02) Kasten, P. R. (LMR-02-03-04) Pelton, A. D. (LMR-03-02-06) Till, C. (LMR-03-02-11) Till, C. E. (LMR-02-03-07) Walters, L. C. (LMR-03-01-14)

#### innovation

Abernathy, W. J. (NO-15-02-01)

Bhaneja, B. (NO-15-02-02) Davis, D. (NO-15-02-10) Ettlie, J. E. (NO-16-01-01) Flinn, W. S. (LWR-06-01-03) Forsberg, C. W. (LWR-02-01-05) Golay, M. W. (LWR-01-01-11) Hannerz, K. (LWR-01-01-01) Higgins, P. C. (NO-16-01-09) Lester, R. K. (NO-03-01-06) Lester, R. K., et al. (NO-B01-01-05) Reekie, W. (NO-17-02-05) Schultz, M. A. (LWR-06-01-08) Stahlkopf, K. E. (LWR-01-01-05) Turnbull, P. W. (NO-17-02-07) Vaughan, J. W. Jr. (NO-11-01-02)

#### **INPO**

Institute of Nuclear Power Operations (LWR-02-01-02) Institute of Nuclear Power Operations (LWR-03-01-08) U.S. Nuclear Regulatory Commission (NO-B03-01-09) Weaver, L. (NO-14-01-08)

#### instruments

Forsberg, C. W. (LWR-02-01-05) U.S. Nuclear Regulatory Commission (NO-B03-01-09)

## international programs

Anonymous (NO-05-01-10) Arnott, D. (NO-09-02-04) Australian Institute of Nuclear Science and Engineering (NO-07-01-03) Avenhaus, R. (NO-05-01-09) Barkenbus, J. N. (NO-B01-01-07) Barkenbus, J. N. (NO-08-01-02) Berke, C. et al. (LMR-03-01-01) Bray, P. (NO-14-01-22) Cleveland, J. C. (HTR-03-03-10) Doub, W. O. (NO-04-01-01) Driscoll, M. J. (LMR-03-01-04) Duaver, M. (NO-01-02-33) Eklund, S. (NO-01-02-31) Eklund, S. (NO-01-02-32) Elliott, D. (NO-09-02-07) Energy World (NO-01-01-02) Fells, I. (NO-01-01-04) Fishlock, D. (NO-16-01-03) Gabor, S. (NO-09-03-03)

Goldsmith, K. (NO-02-02-19) Haefele, W. (NO-02-01-06) Haefele, W. (NO-05-01-14) Haefele, W. (NO-07-01-11) Hafele, V. W. (NO-02-01-07) Hafele, W. (LMR-01-01-07) Heising-Goodman, C. D. (NO-01-03-38) Herrington, J. S. (NO-16-01-08) Holte, G. (NO-01-02-34) Hori, Y. (NO-14-01-19) International Atomic Energy Agency (NO-01-01-29) Jaunsen, W. H. (NO-B01-01-07) Kasten, P. R. (HTR-03-03-15) Lanning, D. D. (HTR-04-01-05) Laue, H. J. (NO-09-03-02) MacLachan, A. (NO-11-01-09) Marwah, O. S. (NO-07-01-06) Masters, R. (NO-01-02-28) McKenzie, N. C. (NO-09-02-06) Mladjenovic, M. S. (NO-01-02-35) Nuclear Energy Agency (NO-18-01-04) Nuclear Engineering International (NO-02-01-15) Nuclear Engineering International (NO-10-02-01) Nuclear News (NO-01-01-14) Olds, F. C. (NO-17-03-11) Reynolds, M. (NO-13-01-08) Rippon, S. (LMR-03-02-07) Rippon, S. (NO-10-02-09) Rose, D. J. (NO-02-01-12) Rosen, M. (NO-06-01-03) Roth, E. B. (NO-01-03-36) Runzler, L. M. (NO-01-01-07) Schmidt, R. (NO-01-02-30) Schmidt, R. (NO-15-01-07) Shorrock, T. (NO-06-01-07) Simnad, M. T. (NO-07-01-07) Skjoldebrand, R. (NO-18-01-05) Smart, I. (NO-07-01-06) Stauffer, T. R. (NO-02-01-13) Stevenson, J. D. (NO-13-01-02) Stock, F. (NO-04-01-05) Tiren, I. (LWR-B01-01-01) Trauger, D. B. (NO-17-03-17) Turner, P. (NO-14-01-20) U.S. Department of Energy (NO-06-01-01)Vaughan, J. W. Jr. (NO-11-01-02) Wakabayashi, H. (LWR-06-01-11)

Wakabayashi, H., et al. (NO-03-01-15) Walgate, R. (NO-01-02-25) Wiendieck, K. (NO-10-02-10) Woite, G. (NO-02-01-14) Zinberg, D. S. (NO-06-01-06)

## Japan

Berke, C. et al. (LMR-03-01-01)
Bray, P. (NO-14-01-22)
Golay, M. W. (LWR-01-01-11)
Greenhalgh, G. (NO-16-01-06)
Herrington, J. S. (NO-16-01-08)
Hori, Y. (NO-14-01-19)
Kasten, P. R. (HTR-03-03-15)
Nuclear News (NO-01-01-14)
Runzler, L. M. (NO-01-01-07)
Spiewak, I. (LWR-B01-01-07)
Trauger, D. B. (NO-17-03-17)
Ushio, S. (LWR-01-01-07)
Vaughan, J. W. Jr. (NO-11-01-02)
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#### labor

Braun, C. (NO-13-01-11)
Braun, C. (NO-14-01-05)
Braun, C. et al. (NO-15-02-04)
Budwani, R. N. (NO-07-01-12)
Cook, J. (NO-03-01-12)
Elliott, D. (NO-09-02-07)
MacLachan, A. (NO-11-01-09)
Mason, G. E., et al. (NO-03-01-02)
Runzler, L. M. (NO-01-01-07)
U.S. Department of Energy and U.S.
Department of Labor (NO-B02-01-05)

## large reactors

Bechtel Group Inc. et al (HTR-04-01-14)
Braun, C. (NO-13-01-11)
Braun, C. et al. (NO-15-02-04)
Cook, J. (NO-03-01-12)
Difransico, T. W. (LMR-03-02-02)
Fisher, C. F. Jr. (NO-17-03-06)
Gas-Cooled Reactor Associates (HTR-03-03-09)
International Atomic Energy Agency (NO-01-01-29)
Levy, S., Incorporated (LWR-05-01-11)
Loose, V. W. (NO-15-01-06)
Marshall, W. (NO-17-01-05)
Masters, R. (NO-17-01-07)

Rippon, S. (LMR-03-02-07) Runzler, L. M. (NO-01-01-07) Tadmor, J. (NO-17-03-12) Taylor, J. J. (LMR-03-01-12) Technology for Energy Corp. (NO-B05-01-02) Westinghouse Electric Corporation (LWR-01-01-08) Westinghouse Electric Corporation (NO-04-01-09) Ziegler, E. J. (NO-17-02-11)

#### licensing

Applied Decision Analysis, Inc. (NO-B03-01-01)
Applied Decision Analysis, Inc. (NO-B04-01-01)
Asseltine, J. J. (NO-01-02-23)
Barkenbus, J. N. (NO-B01-01-07)
Bechtel Group Inc. et al (HTR-04-01-14)
Brandstetter, A. (HTR-03-03-12)
Braun, C. (NO-13-01-11)
Braun, H. E. et al. (LWR-06-01-01)

Bray, P. (NO-14-01-22) Budwani, R. N. (NO-07-01-12)

Cantor, R. (NO-18-02-01)

Carnes, S. A. et al. (NO-B03-01-02)

Cruickshank, A. (LMR-03-01-03)

Dircks, W. J. (NO-14-01-12) Ebersole, J. C. (NO-14-01-21)

Edison Electric Institute (NO-15-02-11)

Electric Power Research Institute (LMR-03-02-10)

Electric Power Research Institute (LWR-05-01-03)

Frewer, H. (HTR-03-03-14)
Fussell, J. B. (NO-B02-01-08)
Grey, J. (ed.) (NO-B03-01-04)
Hannerz, K. (LWR-02-01-06)
Herrington, J. S. (NO-16-01-08)
Higgins, P. C. (NO-16-01-09)
King, T. L. (LWR-06-01-04)
King, T. L. (NO-15-01-05)

Lanning, D. D. (HTR-04-01-05) Lester, R. K. (NO-07-01-08)

Levy, S., Incorporated (LWR-05-01-11)

Marshall, W. (NO-17-01-05) Martel, L. J. (LWR-06-02-07) Mattson, R. J. (NO-15-01-01) Minogue, R. B. (NO-17-01-08) Nucleonics Week (NO-12-01-03)

Owen, W. (NO-10-02-04)

Ray, J. (LMR-02-03-09) Rayner, S. (NO-17-02-03) Rayner, S. (NO-17-02-04)

Rockwell International (LMR-03-01-08)

Rytkonan, B. B. (LWR-02-01-08)

Seitz, F. (NO-14-01-24)

Sutherland, R. J. et al. (NO-B02-01-07)

Tatum, C. B. (NO-10-01-01) Taylor, J. J. (LMR-03-01-12)

Technology for Energy Corp. (NO-B05-

01-02)

Trauger, D. B. (NO-17-03-15) Twichell, P. W. (LMR-03-02-09) U.S. Congress (NO-17-03-19) U.S. Congress (NO-17-03-20)

Vaughan, J. W. Jr. (NO-11-01-02)

Wald, M. J. (NO-17-02-08)

Weaver, L. E. (NO-17-02-10) Wiendieck, K. (NO-10-02-10)

Wilkinson, E. P. (NO-10-02-03)

Young, J. C. (LWR-01-01-03)

Young, J. C. (LWR-01-01-09)

Young, J. C. (NO-14-01-17)

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Anderson, C. A., Jr. (LMR-02-03-10) Argonne National Laboratory (LMR-B01-01-04)

Argonne National Laboratory (LMR-01-04-01)

Argonne National Laboratory (LMR-01-04-02)

Argonne National Laboratory (LMR-02-01-04)

Armijo, J. S. (LMR-02-03-12)

Arnold, W. H. (LMR-01-01-04) Arnold, W. H. (LMR-01-01-05)

Barnett, R. J., et al. (LMR-02-02-04)

Berke, C. et al. (LMR-03-01-01)

Bethe, H. A. (LMR-01-01-06)

Booth, R.S. (LMR-01-04-03)

Burch, W. D. et al. (LMR-02-03-11) Chicago, University of (LMR-03-01-02)

Cruickshank, A. (LMR-03-01-03) de Torquat, C. (NO-17-03-14) Difransico, T. W. (LMR-03-02-02) Driscoll, M. J. (LMR-03-01-04)

Ebasco Services Inc. et al. (LMR-02-

02-02)

Electric Power Research Institute (LMR-03-02-03)

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Engel, J. R., et al. (LMR-B01-01-01) Engel, J. R., et al. (LMR-B01-01-02) Garwin, R. L. (LMR-02-03-13) Gat, U. (LMR-01-02-01) Gray, O. E. III (LMR-03-01-05) Hafele, W. (LMR-01-01-07) Hampson, D. C. (LMR-02-03-14) Harde, V. R. (LMR-03-02-04) Hunt, S. E. (LMR-02-01-01) Kasten, P. R. (LMR-02-03-04) Kasten, P. R., et al. (NO-12-01-06) Katz, E. M. (NO-B02-01-09) Larson, R. D. (LMR-02-03-05) Larson, R. D. (LMR-02-03-06) Lester, R. K. (NO-07-01-08) Lester, R. K. (NO-17-03-08) Lester, R. K. et al. (NO-B03-01-05) Lester, R. K. et al. (NO-B04-01-04) MacDonald, J. (LMR-03-02-08) MacPherson, H. G. (LMR-02-02-05) Magnus, J. D. (LMR-03-02-05) Maxwell, J. R. (LMR-01-01-02) McDonald, J. (LMR-03-01-06) Meyers, G. W. (LMR-03-01-07) Myers, R. (LMR-02-03-01) Myers, R. (LMR-02-03-02) Myers, R. (LMR-02-03-15) Myers, R. (LMR-02-03-16) Nuclear Engineering International (NO-17-03-10) O'Farrelly, C. (NO-01-01-04) Oak Ridge National Laboratory (LMR-02-02-03) Pelton, A. D. (LMR-03-02-06) Ray, J. (LMR-02-03-09) Repici, D. J. (NO-14-01-23) Rippon, S. (LMR-02-03-03) Rippon, S. (LMR-03-02-07) Rockwell International (LMR-02-01-03) Rockwell International (LMR-03-01-08) Schmidt, J. E. et al. (LMR-03-01-09) Shivley, J. M. (LMR-03-01-10) Speis, T. P. (NO-14-01-04) Su, S. F. (LMR-03-01-11) Taylor, J. J. (LMR-03-01-12) Till, C. (LMR-03-02-11) Till, C. E. (LMR-02-03-07) Till, C. E. (LMR-02-03-08) Till, C. E. (LMR-03-01-13) Trauger, D. B. (NO-17-03-15)

Trauger, D. B. (NO-17-03-16) Trauger, D. B. (NO-17-03-18) Twichell, P. W. (LMR-03-02-09) United Engineers and Constructors Inc. (LMR-03-02-01) Vaughan, J. W. Jr. (NO-11-01-02) Vijuk, R. M. (LMR-01-03-01) Walgate, R. (NO-01-02-25) Walters, L. C. (LMR-03-01-14) Westinghouse Electric Corporation (LMR-B01-01-03) Westinghouse Electric Corporation (LMR-01-01) Westinghouse Electric Corporation (LMR-01-01-03) Westinghouse Electric Corporation (LMR-02-01-02) Wilcox, L. C. (LMR-03-01-15) Wolfe, B. (NO-01-01-13) Zebroski, E. L. (LMR-03-01-16)

## loop

Booth, R.S. (LMR-01-04-03) Difransico, T. W. (LMR-03-02-02) Gray, O. E. III (LMR-03-01-05) Myers, R. (LMR-02-03-01)

#### **LWRs**

Arnott, D. (NO-09-02-04) ASEA-ATOM (LWR-04-03-05) Babala, D. (LWR-06-02-01) Babcock & Wilcox Company, Inc. (LWR-B01-01-06) Babcock and Wilcox Company, Inc. (LWR-02-01-03) Babcock and Wilcox Company, Inc. (LWR-02-01-04) Bean, E. (NO-02-01-01) Berton, L. (NO-14-01-01) Bowers, H. I. (NO-10-01-03) Braun, C. (LWR-06-02-02) Braun, C. (NO-13-01-11) Braun, H. E. (LWR-04-03-01) Braun, H. E. et al. (LWR-06-01-01) Bray, P. (NO-14-01-22) Burke, R. P. (LWR-B01-01-07) Burke, R. P. (NO-15-02-05) Business Week (NO-15-02-06) Cantor, R. (NO-17-03-03) Cantor, R. (NO-18-02-01) Chapel, S. W. (NO-B02-01-10)

Chexal, B. (LWR-05-01-09) Cole, T. E. (LWR-06-02-03) Duncan, J. D. (LWR-02-01-07) Edison Electric Institute (NO-15-02-11) Electric Power Research Institute (LWR-05-01-03) Energy Research Advisory Board (LWR-B01-01-08) Energy Research Advisory Board (LWR-06-01-02) Fischhoff, B. (NO-16-01-02) Fishlock, D. (NO-16-01-03) Flinn, W. S. (LWR-06-01-03) Forsberg, C. W. (LWR-02-01-05) Forsberg, C. W. (LWR-06-02-04) Gabor, S. (NO-09-03-03) Gas-Cooled Reactor Associates (HTR-03-General Electric Company (LWR-05-Golay, M. W. (LWR-01-01-11) Hannerz, K. (LWR-B01-01-02) Hannerz, K. (LWR-01-01-01) Hannerz, K. (LWR-02-01-06) Hannerz, K. (LWR-05-01-01) Herrington, J. S. (NO-16-01-08) Higgins, P. C. (NO-16-01-09) Hinsberg, P. (NO-11-01-04) Honekamp, J. R., Inc. (LWR-01-01-13) Hori, Y. (NO-14-01-19) Howles, L. (NO-11-01-03) Hug, M. (LWR-06-02-05) Institute of Nuclear Power Operations (LWR-02-01-02) Institute of Nuclear Power Operations (LWR-03-01-08) International Atomic Energy Agency (NO-01-01-29) International Atomic Energy Agency (NO-10-02-02) International Atomic Energy Agency (NO-16-02-01) Kasten, P. R. (LWR-02-01-01) Kasten, P. R. (LWR-03-01-06) Kasten, P. R., et al. (NO-12-01-06) Katz, E. M. (NO-B02-01-09) King, T. L. (LWR-06-01-04) Lam, P. (LWR-06-02-06) Lester, R. K. (NO-09-01-03) Lester, R. K. et al. (NO-B03-01-05) Lester, R. K. et al. (NO-B04-01-04)

Lester, R. K., et al. (NO-B01-01-05) Levy, S., Incorporated (LWR-05-01-11) MacLachan, A. (NO-11-01-09) Marshall, W. (NO-17-01-05) Martel, L. (LWR-01-01-14) Martel, L. J. (LWR-06-02-07) Masters, R. (NO-17-01-06) McMain, A. T. (LWR-04-01-01) Miller, J. (NO-10-02-05) MPR Associates, Inc. (LWR-04-03-02) Nuclear Engineering International (NO-17-03-10) Office of Technology Assessment (LWR-B01-01-03) Ohanian, M. J., ed. (NO-B01-01-02) Owen, W. (NO-10-02-04) Pedersen, T. (LWR-06-01-05) Phung, D. L. (LWR-B01-01-05) Phung, D. L. (LWR-01-01-02) Pind, C. (LWR-06-01-06) Pind, C. (LWR-06-01-07) Ransom and Casazza, Inc. (LWR-03-01-02)Rippon, S. (NO-10-02-09) Rytkonan, B. B. (LWR-02-01-08) Sawyer, C. D. (LWR-04-02-04) Schultz, M. A. (LWR-02-01-09) Schultz, M. A. (LWR-04-02-01) Schultz, M. A. (LWR-04-03-03) Schultz, M. A. (LWR-06-01-08) Scott, D. (LWR-03-01-01) Seifritz, W. (LWR-05-01-04) Skygge, C. (LWR-06-01-09) Spiewak, I. (LWR-B01-01-07) Spiewak, I. (LWR-03-01-05) Spiewak, I. (LWR-04-01-03) Stahlkopf, K. E. (LWR-01-01-05) Stahlkopf, K. E. et al. (LWR-06-01-12) Stern, T. (LWR-01-01-06) Stevenson, W. (NO-B03-01-07) Sundqvist, C. (LWR-06-01-10) Sutherland, R. J. et al. (NO-B02-01-07) Tatum, C. B. (NO-17-03-13) Tiren, I. (LWR-B01-01-01) Tower, S. N. (LWR-03-01-03) Trauger, D. B. (NO-17-03-16) Trauger, D. B. (NO-17-03-17) Trauger, D. B. (NO-17-03-18) U.S. Department of Energy (NO-18-01-06)United Engineers and Constructors, Inc. (LWR-04-01-02)

United Engineers and Constructors, Inc. (LWR-05-01-07) Ushio, S. (LWR-01-01-07) Vigander, S. (LWR-B01-01-04) Wakabayashi, H. (LWR-03-01-04) Wakabayashi, H. (LWR-06-01-11) Wald, M. J. (NO-17-02-08) Weaver, L. (NO-14-01-08) Weinberg, A. M. (NO-05-01-07) Weinberg, A. M., et al. (NO-B02-01-03) Westinghouse Electric Corporation (LWR-01-01-08) Westinghouse Electric Corporation (NO-04-01-09) Wiendieck, K. (NO-10-02-10) Wilkins, D. R. (LWR-01-01-12) Wilkins, D. R., et al. (LWR-05-01-05) Wilkinson, E. P. (NO-10-02-03) Young, J. C. (LWR-01-01-03) Young, J. C. (LWR-01-01-09)

#### maintenance

Hannerz, K. (LWR-05-01-01) Los Alamos Technical Associates, Inc. (NO-09-03-06) MPR Associates, Inc. (LWR-04-03-02) Sundqvist, C. (LWR-06-01-10) U.S. Department of Energy (NO-B03-01-08)

#### management

Applied Decision Analysis, Inc. (NO-B03-01-01)
Bhaneja, B. (NO-15-02-02)
Cook, J. (NO-03-01-12)
Davis, D. (NO-15-02-10)
Herrington, J. S. (NO-16-01-08)
Howard, R. A. (NO-16-01-10)
Los Alamos Technical Associates, Inc. (NO-09-03-06)
Miller, J. (NO-10-02-05)
Nuclear Utility Management and Human
Resources Committee (NO-13-01-07)
Office of Technology Assessment (NO-B03-01-06)

# markets

Abernathy, W. J. (NO-15-02-01)

Runzler, L. M. (NO-01-01-07)

Sillin, J. O. (NO-02-01-23)

Tatum, C. B. (NO-12-01-04)

Avenhaus, R. (NO-05-01-09) Berton, L. (NO-14-01-01) Ettlie, J. E. (NO-16-01-01) Giraud, A. (NO-04-01-06) Haefele, W. (NO-04-01-04) Haefele, W. (NO-05-01-14) Higgins, J. P. (NO-01-01-02) Hinsberg, P. (NO-11-01-04) Jackson, S. V. (NO-03-01-13) John Francis Company, The (NO-14-01-25)Jones, E. G. (NO-17-01-01) Myers, R. (NO-17-02-01) Office of Technology Assessment (NO-05-01-03)Reekie, W. (NO-17-02-05) Reichle, L. F. C. (NO-09-02-02) Rippon, S. (NO-B05-01-01) Schmidt, R. (NO-15-01-07) Siegel, J. R. (NO-15-01-03) Skjoldebrand, R. (NO-18-01-05) Stock, F. (NO-04-01-05) Sutherland, R. J. (NO-14-01-11) Sutherland, R. J. et al. (NO-B02-01-07) Trauger, D. B. (NO-17-03-16) Turnbull, P. W. (NO-17-02-07) Walske, C. (NO-09-02-01) Westinghouse Electric Corporation (LWR-01-01-08)

#### materials

Braun, C. (NO-14-01-03)
Braun, C. et al. (NO-15-02-04)
Budwani, R. N. (NO-07-01-12)
Cook, J. (NO-03-01-12)
Hori, Y. (NO-14-01-19)
Kasten, P. R. (LWR-02-01-01)
Nuclear News (NO-01-01-14)
Shivley, J. M. (LMR-03-01-10)
Sillin, J. O. (NO-02-01-23)
Vaughan, J. W. Jr. (NO-11-01-02)

#### metal fuel

fuel
Anderson, C. A., Jr. (LMR-02-03-10)
Argonne National Laboratory (LMR-B01-01-04)
Argonne National Laboratory (LMR-01-04-02)
Argonne National Laboratory (LMR-02-01-04)
Cruickshank, A. (LMR-03-01-03)

Driscoll, M. J. (LMR-03-01-04)
Kasten, P. R. (LMR-02-03-04)
Larson, R. D. (LMR-02-03-05)
McDonald, J. (LMR-03-01-06)
Pelton, A. D. (LMR-03-02-06)
Schmidt, J. E. et al. (LMR-03-01-09)
Su, S. F. (LMR-03-01-11)
Till, C. (LMR-03-02-11)
Till, C. E. (LMR-03-07)
Walters, L. C. (LMR-03-01-14)
Zebroski, E. L. (LMR-03-01-16)

## Mitsubishi

Ushio, S. (LWR-01-01-07) Wakabayashi, H. (LWR-03-01-04)

#### modular reactors

Anonymous (HTR-02-01-01) Bechtel Group Inc. (HTR-B01-01-01) Bechtel Group, Inc. (HTR-02-01-06) Bechtel National Inc. (HTR-05-01-01) Brandstetter, A. (HTR-03-03-12) Braun, C. (LWR-06-02-02) Braun, H. E. et al. (LWR-06-01-01) Chapel, S. W. (NO-B02-01-10) Cleveland, J. C. (HTR-03-03-11) Coxe, R. L. Jr. (HTR-B01-01-02) Cruickshank, A. (LMR-03-01-03) Dahlheimer, J. A. (NO-08-01-03) Decision Focus Incorporated (NO-06-01-12)Frewer, H. (HTR-03-03-14) GA Technologies Inc. (HTR-03-03-16) Haque, H. et al. (HTR-04-01-02) INTERATOM (HTR-02-01-02) International Atomic Energy Agency (NO-16-02-01) Kasten, P. R. (HTR-01-01-01) Kasten, P. R. (HTR-03-03-15) Kasten, P. R. (HTR-05-01-09) Kasten, P. R. (LWR-02-01-01) Lanning, D. D. (HTR-04-01-05) Lester, R. K. (NO-07-01-08) Lester, R. K. (NO-17-03-08) Lohnert, G. H. (HTR-04-01-06) Lohnert, G. H., Pflasterer, G. R. (HTR-05-01-06) MacDonald, J. (LMR-03-02-08) McDonald, C. F. (HTR-04-01-07) McDonald, J. (LMR-03-01-06)

Mears, L. D. (HTR-05-01-07)

Medwid, W. (HTR-04-01-08) Myers, R. (LMR-02-03-15) Nuclear Engineering International (HTR-05-01-03) O'Sullivan, D. A. (HTR-02-01-04) Peters, K. (HTR-04-01-09) Reutler, H. (HTR-01-01-05) Reutler, H. (HTR-04-01-11) Runzler, L. M. (NO-01-01-07) Schmidt, J. E. et al. (LMR-03-01-09) Schmidt, R. (NO-15-01-07) Simon, W. A. (HTR-01-01-02) Singh, J. (HTR-04-01-12) Stahlkopf, K. E. et al. (LWR-06-01-12) Su, S. F. (LMR-03-01-11) Sutherland, R. J. et al. (NO-B02-01-07) Sweeney, T. M. (HTR-04-01-13) Sweeney, T. M. (HTR-03-02-02) United Engineers and Constructors Inc. (LMR-03-02-01) Walters, L. C. (LMR-03-01-14) Weinberg, A. M. (NO-05-01-07) Wilcox, L. C. (LMR-03-01-15) Zebroski, E. L. (LMR-03-01-16)

#### **MSRs**

Ebasco Services Inc. et al. (LMR-02-02-02) Engel, J. R., et al. (LMR-B01-01-01) Engel, J. R., et al. (LMR-B01-01-02) Oak Ridge National Laboratory (LMR-02-02-03)

#### NASAP

Barnett, R. J., et al. (LMR-02-02-04)

#### NRC

Asseltine, J. J. (NO-01-02-23)
Barkenbus, J. N. (NO-B01-01-07)
Bray, P. (NO-14-01-22)
Cook, J. (NO-03-01-12)
Dircks, W. J. (NO-14-01-12)
Ebersole, J. C. (NO-14-01-21)
Federal Register (NO-17-03-05)
Fischhoff, B. (NO-16-01-02)
Higgins, P. C. (NO-16-01-09)
Hinsberg, P. (NO-11-01-04)
King, T. L. (LWR-06-01-04)
King, T. L. (NO-15-01-05)
Massachusetts Institute of Technology (HTR-05-01-10)

Miller, J. (NO-10-02-05) Minogue, R. B. (NO-17-01-08) Owen, W. (NO-10-02-04) Ray, J. (LMR-02-03-09) Speis, T. P. (NO-14-01-04) The Energy Daily (NO-01-02-24) U.S. Nuclear Regulatory Commission (NO-B03-01-09) U.S. Nuclear Regulatory Commission (NO-13-01-09) Wald, M. J. (NO-17-02-08) Wilkinson, E. P. (NO-10-02-03)

#### nuclear options

Abernathy, W. J. (NO-15-02-01) American Nuclear Society (NO-11-01-06) American Physical Society Study Group (NO-17-03-01) Anonymous (NO-05-01-10) Anonymous (NO-09-01-01) Anonymous (NO-11-01-08f) Anonymous (NO-13-01-03) Applied Decision Analysis, Inc. (NO-B03-01-01)Applied Decision Analysis, Inc. (NO-B04-01-01)Argonne National Laboratory (NO-06-01-10)Arnold, W. H. (NO-03-01-10) Arnott, D. (NO-09-02-04) Asseltine, J. J. (NO-01-02-23) Atomic Industrial Forum (NO-13-01-13) Atomic Industrial Forum, Inc. (NO-05-01-02)Australian Institute of Nuclear Science and Engineering (NO-07-01-03) Avenhaus, R. (NO-05-01-09) Bainerman, J. (NO-12-01-05) Barkenbus, J. N. (NO-B01-01-07) Barkenbus, J. N. (NO-08-01-02)

Bean, E. (NO-02-01-01) Bechtel Corporation (NO-B02-01-06) Behrens, C. E. (NO-06-01-05) Berlin, E. (NO-11-0l-08e) Berton, L. (NO-14-01-01) Bhaneja, B. (NO-15-02-02) Blumenthal, M. (NO-15-02-03) Bower, R. S. (NO-11-01-08c) Bowers, H. I. (NO-10-01-03) Bradshaw, D. T. (NO-18-01-02) Braun, C. (NO-13-01-11) Braun, C. (NO-14-01-03)

Braun, C. (NO-14-01-05) Braun, C. (NO-17-03-02) Braun, C. (NO-18-01-01) Braun, C. et al. (NO-15-02-04) Bray, P. (NO-14-01-22) Brigham, E. F. (NO-11-01-08d) Brightsen, R. A. (NO-05-01-11) Brunings, J. E., et al. (NO-01-02-19) Budwani, R. N. (NO-07-01-12) Burke, R. P. (NO-15-02-05) Burwell, C. C. (NO-B04-01-03) Business Week (NO-15-02-06) Caldwell, L. S. (NO-15-02-07) Cantor, R. (NO-17-03-03) Cantor, R. (NO-18-02-01) Carnes, J. M. (NO-14-01-13) Carnes, S. A. et al. (NO-B03-01-02) Cavanaugh, H. A. (NO-03-01-09) Chapel, S. W. (NO-B02-01-10) Cherry, B. H. (NO-02-01-11) Clark, C. E. Jr. (NO-15-01-02) Combustion Engineering, Inc. (NO-08-01-08)Congressional Research Service (NO-13-01-05)Cook, J. (NO-03-01-12) Crawford, M. (NO15-02-08) Crijns, M. J. (NO-15-02-09) Dahlheimer, J. A. (NO-08-01-03) Dauterman, W. (NO-02-02-22) Davis, D. (NO-15-02-10) de Torquat, C. (NO-17-03-14) Dean Witter Reynolds, Inc. (NO-01-01-05)Decision Focus Incorporated (NO-06-

01-12)

Delene, J. G., et al. (NO-B01-01-06) Denton, H. R. (NO-01-01-01)

Desert Research Institute (NO-06-01-09)

Dircks, W. J. (NO-14-01-12) Doub, W. O. (NO-04-01-01) Doub, W. O. (NO-09-02-03) Drake, R. (NO-17-03-04) Duayer, M. (NO-01-02-33) DuPont, R. L. (NO-02-02-21) Ebersole, J. C. (NO-14-01-21)

Edison Electric Institute (NO-15-02-11)

Eklund, S. (NO-01-02-31) Eklund, S. (NO-01-02-32) Electrical World (NO-01-01-17) Elliott, D. (NO-09-02-07)

Ellwood, W. (NO-06-01-02) Energy Impact Associates Inc. for the Southern States Energy Board (NO-B03-01-03)Energy Impact Associates Inc. for the Southern States Energy Board (NO-B03-Energy Research Advisory Board (NO-13-01-12)Energy World (NO-01-01-02) ENR (NO-14-01-14) EPRI Journal (NO-01-02-26) Esselman, W. H. (NO-05-01-04) Ettlie, J. E. (NO-16-01-01) Federal Register (NO-17-03-05) Fells, I. (NO-01-01-04) Fells, I. (NO-05-01-12) Firebaugh, M. W. (NO-02-01-09) Fischhoff, B. (NO-16-01-02) Fisher, C. F. Jr. (NO-09-03-05) Fisher, C. F. Jr. (NO-17-03-06) Fishlock, D. (NO-16-01-03) Ford, A. (NO-13-01-01) Ford, A. (NO-14-01-07) Fussell, J. B. (NO-B02-01-08) Fussell, J. B. (NO-17-03-07) Gabor, S. (NO-09-03-03) Giraud, A. (NO-04-01-06) Going, M. C. (NO-11-01-01) Golay, M. W. (NO-03-01-07) Goldsmith, K. (NO-02-02-19) Gravelle, J. G. (NO-11-01-08h) Greenberger, M. (NO-16-01-04) Greenhalgh, G. (NO-16-01-06) Grey, J. (ed.) (NO-B03-01-04) Gustaferro, J. F. (NO-14-01-09) Haefele, W. (NO-02-01-06) Haefele, W. (NO-04-01-04) Haefele, W. (NO-05-01-08) Haefele, W. (NO-05-01-14) Haefele, W. (NO-07-01-01) Haefele, W. (NO-07-01-02) Haefele, W. (NO-07-01-04) Haefele, W. (NO-07-01-11) Haefele, W. (NO-09-02-05) Hafele, V. W. (NO-02-01-07) Hafele, V. W. (NO-06-01-08) Hawkes, G. F. (NO-16-01-07) Heising-Goodman, C. D. (NO-01-03-38) Herrington, J. S. (NO-16-01-08)

Higgins, J. P. (NO-01-01-02)

Higgins, P. C. (NO-16-01-09) Hill, J. (NO-01-03-37) Hill, L. J., et al. (NO-B01-02-01) Hinsberg, P. (NO-11-01-04) Holte, G. (NO-01-02-34) Hori, Y. (NO-14-01-19) Howard, R. A. (NO-16-01-10) Howles, L. (NO-11-01-03) Hudson, C. R., II (NO-B02-01-02) Hyman, L. S. (NO-11-02-08i) International Atomic Energy Agency (NO-01-01-29) International Atomic Energy Agency (NO-10-02-02) International Atomic Energy Agency (NO-16-02-01) International Energy Associates Ltd. (NO-16-02-02) Iwler, L. (NO-15-01-04) Iyengar, P. K. (NO-09-01-02) Jackson, S. V. (NO-03-01-13) Jaunsen, W. H. (NO-B01-01-07) Jenkin, F. P. (NO-17-01-02) John Francis Company, The (NO-14-01-25)Jones, E. G. (NO-17-01-01) Jones, P. M. S. (NO-17-01-03) Kasten, P. R. (NO-03-01-01) Kasten, P. R., et al. (NO-12-01-06) Katz, E. M. (NO-B02-01-09) Kaufman, A. (NO-08-01-04) Keeney, R. L. (NO-07-01-09) King, T. (NO-02-01-05) King, T. L. (NO-15-01-05) Komanoff, C. (NO-02-01-23) Laue, H. J. (NO-09-03-02) Lave, L. B. (NO-11-01-12) Lee, T. H. (NO-11-01-05) Lester, R. K. (NO-03-01-06) Lester, R. K. (NO-07-01-08) Lester, R. K. (NO-09-01-03) Lester, R. K. (NO-17-03-08) Lester, R. K. et al. (NO-B03-01-05) Lester, R. K. et al. (NO-B04-01-04) Lester, R. K., et al. (NO-B01-01-05) Levine, S. (NO-03-01-05) Lewins, et al. (NO-02-02-16) Lidsky, L. M. (NO-03-01-08) Lind, R. C. et al. (NO-14-01-18) Loose, V. W. (NO-15-01-06) Los Alamos Technical Associates, Inc. (NO-09-03-06)

MacKenzie, J. J. (NO-03-01-04) MacLachan, A. (NO-11-01-09) Manno, V. P. (NO-17-01-04) Marcus, G. H. (NO-01-01-03) Marshall, E. (NO-01-02-21) Marshall, W. (NO-17-01-05) Marwah, O. S. (NO-07-01-06) Mason, G. E., et al. (NO-03-01-02) Masters, R. (NO-01-02-28) Masters, R. (NO-17-01-06) Masters, R. (NO-17-01-07) Mattson, R. J. (NO-15-01-01) Mayo, L. H., et al. (NO-10-01-02) McCaughey, J. (NO-13-01-10) McKenzie, N. C. (NO-09-02-06) Merrow, E. W. (NO-B02-01-01) Merrow, R. W. (NO-06-01-11) Miller, J. (NO-10-02-05) Mills, M. P. (NO-17-03-09) Minogue, R. B. (NO-17-01-08) Mitchell, R. C. (NO-17-01-09) Mladjenovic, M. S. (NO-01-02-35) Murphy, D. (NO-02-01-03) Murray, A. E. (NO-17-01-10) Myers, R. (NO-01-01-10) Myers, R. (NO-01-01-15) Myers, R. (NO-01-01-16) Myers, R. (NO-17-02-01) Navarro, P. (NO-02-01-17) Netter, T. W. (NO-11-02-10) Nuclear Energy Agency (NO-18-01-04) Nuclear Engineering International (NO-01-02-20Nuclear Engineering International (NO-01-02-27Nuclear Engineering International (NO-02-01-15) Nuclear Engineering International (NO-10-02-01) Nuclear Engineering International (NO-17-03-10)

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Nucleonics Week (NO-13-01-06)
O'Farrelly, C. (NO-01-01-04)

B03-01-06) Office of Technology Assessment (NO-05-01-03)Ohanian, M. J. (NO-05-01-13) Ohanian, M. J. (NO-08-01-06) Ohanian, M. J., ed. (NO-B01-01-02) Olds, F. C. (NO-17-03-11) Osborne, R. J. (NO-11-01-08g) Owen, W. (NO-10-02-04) Paulson, C. K. (NO-03-01-11) Paulson, C. K. (NO-03-01-14) Peck, S. C. (NO-11-01-08a) Perl, L. J. (NO-11-01-08b) Phung, D. L. (NO-01-01-11) Phung, D. L. (NO-01-01-18) Phung, D. L. (NO-08-01-05) Phung, D. L. (NO-11-02-11) Pine, G. D. (NO-17-02-02) Porter, A. (NO-04-01-03) Radkowsky, A. (NO-13-01-04) Rayner, S. (NO-17-02-03) Rayner, S. (NO-17-02-04) Reekie, W. (NO-17-02-05) Reichle, L. F. C. (NO-09-02-02) Repici, D. J. (NO-14-01-23) Revnolds, M. (NO-13-01-08) Rippon, S. (NO-B05-01-01) Rippon, S. (NO-02-01-08) Rippon, S. (NO-10-02-09) Rose, D. J. (NO-02-01-12) Rosen, M. (NO-06-01-03) Roth, E. B. (NO-01-03-36) Runzler, L. M. (NO-01-01-07) Salisbury, D. F. (NO-05-01-05) Salisbury, D. F. (NO-05-01-06) Samuels, G. (NO-13-01-14) Sandberg, R. O. (NO-14-01-02) Sargent and Lundy Engineers (NO-04-01-08)Schmidt, R. (NO-01-02-30) Schmidt, R. (NO-15-01-07) Seitz, F. (NO-14-01-24) Shaiken, H. (NO-17-02-06) Shapiro, I. S. (NO-09-03-01) Shorrock, T. (NO-06-01-07) Siegel, J. R. (NO-11-01-07) Siegel, J. R. (NO-15-01-03) Sillin, J. O. (NO-02-01-23) Simnad, M. T. (NO-07-01-07) Skeer, J. (NO-07-01-10)

Office of Technology Assessment (NO-

Skjoldebrand, R. (NO-18-01-05) 01-06)Smart, I. (NO-07-01-06) Smolen, G. R., et al. (NO-B01-02-02) Sommers, P. (NO-01-01-06) Southern States Energy Board, Oak Ridge National Laboratory, and Energy Impact Assoc., Inc. (NO-B01-01-03) Speis, T. P. (NO-14-01-04) Spiewak, I. (NO-02-02-24) Stahlkopf, K. (NO-09-03-04) Starr, C. (NO-02-02-18) Starr, C. (NO-14-01-06) Stauffer, T. R. (NO-02-01-13) Stevenson, J. D. (NO-13-01-02) Stevenson, W. (NO-B03-01-07) Stock, F. (NO-04-01-05) Stoler, P. (NO-01-01-08) Subrahmanyam, K. V. (NO-04-01-02) Sutherland, R. J. (NO-14-01-11) Sutherland, R. J. et al. (NO-B02-01-07) Tadmor, J. (NO-17-03-12) Tatum, C. B. (NO-04-01-07) Tatum, C. B. (NO-05-01-01) Tatum, C. B. (NO-10-01-01) Tatum, C. B. (NO-10-02-11) Tatum, C. B. (NO-12-01-04) Tatum, C. B. (NO-14-01-15) Tatum, C. B. (NO-17-03-13) Technology for Energy Corp. (NO-B05-01-02)The Energy Daily (NO-01-01-09) The Energy Daily (NO-01-01-12) The Energy Daily (NO-01-02-24) Trauger, D. B. (NO-17-03-15) Trauger, D. B. (NO-17-03-16) Trauger, D. B. (NO-17-03-17) NUPACK Trauger, D. B. (NO-17-03-18) Tschaeche, A. N. (NO-02-01-10) Turner, P. (NO-14-01-20) U.S. Congress (NO-17-03-19) U.S. Congress (NO-17-03-20) U.S. Department of Commerce (NO-06-**OECD** 01-04)U.S. Department of Energy (NO-B01-01-04)U.S. Department of Energy (NO-B02operations 01-04)U.S. Department of Energy (NO-B03-U.S. Department of Energy (NO-06-01-01)

U.S. Department of Energy (NO-18-U.S. Department of Energy and U.S. Department of Labor (NO-B02-01-05) U.S. Nuclear Regulatory Commission (NO-B03-01-09) U.S. Nuclear Regulatory Commission (NO-13-01-09) Vaughan, J. W. Jr. (NO-11-01-02) Wacaster, A. J. (ed.) (NO-B03-01-10) Wakabayashi, H. (LWR-06-01-11) Wakabayashi, H., et al. (NO-03-01-15) Wald, M. L. (NO-10-02-06) Wald, M. L. (NO-10-02-08) Walgate, R. (NO-01-02-25) Walske, C. (NO-09-02-01) Weaver, L. (NO-14-01-08) Weaver, L. E. (NO-17-02-10) Webb, J. (NO-01-02-22) Weinberg, A. M. (NO-05-01-07) Weinberg, A. M., et al. (NO-B02-01-03) Westinghouse Electric Corporation (NO-04-01-09) Whitaker, R. (NO-14-01-10) Wiendieck, K. (NO-10-02-10) Wilbanks, T. J. (NO-03-01-03) Wilford, J. N. (NO-10-02-07) Wilkinson, E. P. (NO-10-02-03) Winkler, R. L. (NO-08-01-01) Woite, G. (NO-02-01-14) Wolfe, B. (NO-01-01-13) Young, J. C. (NO-14-01-17) Ziegler, E. J. (NO-17-02-11) Zinberg, D. S. (NO-06-01-06)

Braun, H. E. (LWR-04-03-01) Braun, H. E. et al. (LWR-06-01-01) Higgins, P. C. (NO-16-01-09) Spiewak, I. (LWR-B01-01-07)

Higgins, J. P. (NO-01-01-02) Nuclear Energy Agency (NO-18-01-04)

Hannerz, K. (LWR-05-01-01) Higgins, P. C. (NO-16-01-09) Kruger, K. J. (HTR-05-01-04) Lam, P. (LWR-06-02-06) Lester, R. K. (NO-09-01-03)

Miller, D. J. (HTR-05-01-08)
MPR Associates, Inc. (LWR-04-03-02)
Sundqvist, C. (LWR-06-01-10)
U.S. Department of Energy (NO-B03-01-08)
U.S. Nuclear Regulatory Commission (NO-B03-01-09)
United Engineers and Constructors, Inc. (LWR-04-01-02)

## pebble bed

Bechtel Group Inc. (HTR-B01-01-01) Brandstetter, A. (HTR-03-03-12) Cleveland, J. C. (HTR-03-03-10) Frewer, H. (HTR-03-03-14) GA Technologies Inc. (HTR-03-03-16) Gas-Cooled Reactor Associates (HTR-03-03-09)Haque, H. et al. (HTR-04-01-02) Kasten, P. R. (HTR-03-03-15) Kruger, K. J. (HTR-05-01-04) Lanning, D. D. (HTR-04-01-05) Lester, R. K. (NO-07-01-08) Lohnert, G. H. (HTR-04-01-06) Lohnert, G. H., Pflasterer, G. R. (HTR-05-01-06) Medwid, W. (HTR-04-01-08) Moormann, R. (HTR-03-01-01) O'Sullivan, D. A. (HTR-02-01-04) Reutler, H. (HTR-04-01-11) Savage, M. G. (HTR-B01-01-03) Singh, J. (HTR-04-01-12) Sweeney, T. M. (HTR-04-01-13) Sweeney, T. M. (HTR-03-02-02)

#### performance

Congressional Research Service (NO-13-01-05)
Duncan, J. D. (LWR-02-01-07)
Going, M. C. (NO-11-01-01)
Howles, L. (NO-11-01-03)
International Energy Associates Ltd.
(NO-16-02-02)
Merrow, E. W. (NO-B02-01-01)
Nuclear Utility Management and Human Resources Committee (NO-13-01-07)
Nucleonics Week (NO-12-01-02)

#### **PIUS**

ASEA-ATOM (LWR-04-03-05) Babala, D. (LWR-06-02-01)

Bray, P. (NO-14-01-22) Cole, T. E. (LWR-06-02-03) Forsberg, C. W. (LWR-02-01-05) Forsberg, C. W. (LWR-06-02-04) Hannerz, K. (LWR-B01-01-02) Hannerz, K. (LWR-01-01-01) Hannerz, K. (LWR-02-01-06) Hannerz, K. (LWR-05-01-01) Higgins, P. C. (NO-16-01-09) Kasten, P. R. (LWR-02-01-01) Kasten, P. R. (LWR-03-01-06) King, T. L. (LWR-06-01-04) Lester, R. K. (NO-07-01-08) Lester, R. K. (NO-17-03-08) Lester, R. K. et al. (NO-B03-01-05) Lester, R. K. et al. (NO-B04-01-04) Lester, R. K., et al. (NO-B01-01-05) MPR Associates, Inc. (LWR-04-03-02) O'Farrelly, C. (NO-01-01-04) Pedersen, T. (LWR-06-01-05) Phung, D. L. (LWR-01-01-02) Pind, C. (LWR-06-01-06) Pind, C. (LWR-06-01-07) Schultz, M. A. (LWR-06-01-08) Skygge, C. (LWR-06-01-09) Sundqvist, C. (LWR-06-01-10) Tiren, I. (LWR-B01-01-01) Trauger, D. B. (NO-17-03-15) Vigander, S. (LWR-B01-01-04) Wakabayashi, H. (LWR-06-01-11) Weinberg, A. M. (NO-05-01-07) Weinberg, A. M., et al. (NO-B02-01-03) Wilkins, D. R. (LWR-01-01-12) Young, J. C. (LWR-01-01-03) Young, J. C. (LWR-01-01-09)

#### pool

Booth, R.S. (LMR-01-04-03) Kasten, P. R. (LWR-02-01-01) Myers, R. (LMR-02-03-01) Taylor, J. J. (LMR-03-01-12) Till, C. (LMR-03-02-11)

#### prefabrication

Bechtel National Inc. (HTR-05-01-01) Myers, R. (LMR-02-03-15) Runzler, L. M. (NO-01-01-07) Schmidt, R. (NO-15-01-07)

# priorities

Argonne National Laboratory (NO-06-01-10)

Energy Research Advisory Board (NO-13-01-12)Mitchell, R. C. (NO-17-01-09) Rayner, S. (NO-17-02-04) U.S. Nuclear Regulatory Commission (NO-13-01-09) Young, J. C. (NO-14-01-17)

#### project management

Applied Decision Analysis, Inc. (NO-B04-01-01)Carnes, J. M. (NO-14-01-13) Decision Focus Incorporated (NO-06-01-12)Merrow, R. W. (NO-06-01-11) Tatum, C. B. (NO-05-01-01) Tatum, C. B. (NO-10-01-01)

Tatum, C. B. (NO-10-02-11)

Tatum, C. B. (NO-14-01-15)

#### project organization

01-01)Carnes, J. M. (NO-14-01-13) Decision Focus Incorporated (NO-06-Merrow, R. W. (NO-06-01-11) Tatum, C. B. (NO-05-01-01) Tatum, C. B. (NO-10-01-01) Tatum, C. B. (NO-10-02-11)

Tatum, C. B. (NO-14-01-15)

Applied Decision Analysis, Inc. (NO-B04-

#### projections

Argonne National Laboratory (NO-06-01-10)Cantor, R. (NO-17-03-03) Cantor, R. (NO-18-02-01) Congressional Research Service (NO-13-01-05)Electrical World (NO-01-01-17) EPRI Journal (NO-01-02-26) Giraud, A. (NO-04-01-06) Haefele, W. (NO-07-01-01) Haefele, W. (NO-07-01-02) Hafele, V. W. (NO-02-01-07) Kaufman, A. (NO-08-01-04)

Navarro, P. (NO-02-01-17) Office of Technology Assessment (NO-05-01-03)

Lester, R. K., et al. (NO-B01-01-05) McCaughey, J. (NO-13-01-10)

Ohanian, M. J. (NO-08-01-06) Phung, D. L. (NO-01-01-18) Shapiro, I. S. (NO-09-03-01) Skeer, J. (NO-07-01-10) Smolen, G. R., et al. (NO-B01-02-02) Stauffer, T. R. (NO-02-01-13) Stevenson, W. (NO-B03-01-07) Sutherland, R. J. et al. (NO-B02-01-07) Tschaeche, A. N. (NO-02-01-10) U.S. Department of Commerce (NO-06-01 - 04)U.S. Department of Energy (NO-B01-01 - 04)Wacaster, A. J. (ed.) (NO-B03-01-10)

### proliferation

Bainerman, J. (NO-12-01-05) Engel, J. R., et al. (LMR-B01-01-02) Hampson, D. C. (LMR-02-03-14) Ohanian, M. J. (NO-05-01-13) Radkowsky, A. (NO-13-01-04) Rippon, S. (NO-B05-01-01) Rose, D. J. (NO-02-01-12) Wilcox, L. C. (LMR-03-01-15)

### public acceptance

Anonymous (NO-13-01-03) Atomic Industrial Forum (NO-13-01-13) Barkenbus, J. N. (NO-B01-01-07) Berton, L. (NO-14-01-01) Burke, R. P. (NO-15-02-05) Carnes, S. A. et al. (NO-B03-01-02) Cherry, B. H. (NO-02-01-11) Combustion Engineering, Inc. (NO-08-01-08)Dean Witter Reynolds, Inc. (NO-01-01-05)DuPont, R. L. (NO-02-02-21) Edison Electric Institute (NO-15-02-11) Firebaugh, M. W. (NO-02-01-09) Greenberger, M. (NO-16-01-04) Greenhalgh, G. (NO-16-01-06) Grev. J. (ed.) (NO-B03-01-04) Haefele, W. (NO-07-01-01) Herrington, J. S. (NO-16-01-08) Katz, E. M. (NO-B02-01-09) King, T. (NO-02-01-05) Lave, L. B. (NO-11-01-12)

Lewins, et al. (NO-02-02-16)

(NO-09-03-06)

Los Alamos Technical Associates, Inc.

Marshall, W. (NO-17-01-05) Mayo, L. H., et al. (NO-10-01-02) Mitchell, R. C. (NO-17-01-09) Myers, R. (NO-01-01-15) Office of Technology Assessment (NO-B03-01-06) Olds, F. C. (NO-17-03-11) Phung, D. L. (NO-01-01-11) Rayner, S. (NO-17-02-03) Rayner, S. (NO-17-02-04) Reynolds, M. (NO-13-01-08) Rippon, S. (NO-B05-01-01) Rose, D. J. (NO-02-01-12) Sommers, P. (NO-01-01-06) Southern States Energy Board, Oak Ridge National Laboratory, and Energy Impact Assoc., Inc. (NO-B01-01-03) Starr, C. (NO-02-02-18) Sundqvist, C. (LWR-06-01-10) The Energy Daily (NO-01-01-12) Tschaeche, A. N. (NO-02-01-10) Turner, P. (NO-14-01-20) U.S. Department of Commerce (NO-06-U.S. Nuclear Regulatory Commission (NO-B03-01-09) Weinberg, A. M., et al. (NO-B02-01-03) Wilbanks, T. J. (NO-03-01-03) Zinberg, D. S. (NO-06-01-06)

#### **PWRs**

ASEA-ATOM (LWR-04-03-05) Babala, D. (LWR-06-02-01) Babcock & Wilcox Company, Inc. (LWR-B01-01-06) Babcock and Wilcox Company, Inc. (LWR-02-01-03) Babcock and Wilcox Company, Inc. (LWR-02-01-04) Berton, L. (NO-14-01-01) Braun, H. E. (LWR-04-03-01) Budwani, R. N. (NO-07-01-12) Cole, T. E. (LWR-06-02-03) de Torquat, C. (NO-17-03-14) Drake, R. (NO-17-03-04) Fishlock, D. (NO-16-01-03) Flinn, W. S. (LWR-06-01-03) Hannerz, K. (LWR-B01-01-02) Hannerz, K. (LWR-01-01-01) Hannerz, K. (LWR-05-01-01) Higgins, P. C. (NO-16-01-09)

Hug, M. (LWR-06-02-05) Kasten, P. R. (LWR-03-01-06) Lester, R. K. (NO-07-01-08) Lester, R. K. (NO-17-03-08) Lester, R. K. et al. (NO-B03-01-05) Lester, R. K. et al. (NO-B04-01-04) Manno, V. P. (NO-17-01-04) Marshall, W. (NO-17-01-05) MPR Associates, Inc. (LWR-04-03-02) Phung, D. L. (LWR-01-01-02) Ransom and Casazza, Inc. (LWR-03-01-02)Scott, D. (LWR-03-01-01) Seifritz, W. (LWR-05-01-04) Spiewak, I. (LWR-B01-01-07) Sundqvist, C. (LWR-06-01-10) Sutherland, R. J. et al. (NO-B02-01-07) Technology for Energy Corp. (NO-B05-01-02)Tiren, I. (LWR-B01-01-01) Tower, S. N. (LWR-03-01-03) United Engineers and Constructors, Inc. (LWR-05-01-07) Wakabayashi, H. (LWR-03-01-04) Wilkins, D. R. (LWR-01-01-12)

#### pyrochemical

Anderson, C. A., Jr. (LMR-02-03-10) Hampson, D. C. (LMR-02-03-14)

#### rates

Berton, L. (NO-14-01-01)
Bower, R. S. (NO-11-01-08c)
Chapel, S. W. (NO-B02-01-10)
Clark, C. E. Jr. (NO-15-01-02)
Decision Focus Incorporated (NO-06-01-12)
Drake, R. (NO-17-03-04)
Hyman, L. S. (NO-11-02-08i)
Marshall, W. (NO-17-01-05)
Osborne, R. J. (NO-11-01-08g)
Perl, L. J. (NO-11-01-08b)
Sutherland, R. J. et al. (NO-B02-01-07)
Wald, M. L. (NO-10-02-08)

## recycling

Argonne National Laboratory (LMR-01-04-01)
Till, C. (LMR-03-02-11)

#### regulation

American Nuclear Society (NO-11-01-06

Anonymous (NO-11-01-08f) Applied Decision Analysis, Inc. (NO-B03-01-01)Applied Decision Analysis, Inc. (NO-B04-01-01)Asseltine, J. J. (NO-01-02-23) Barkenbus, J. N. (NO-B01-01-07) Berton, L. (NO-14-01-01) Bower, R. S. (NO-11-01-08c) Braun, C. (NO-13-01-11) Braun, C. (NO-14-01-03) Bray, P. (NO-14-01-22) Brigham, E. F. (NO-11-01-08d) Caldwell, L. S. (NO-15-02-07) Carnes, S. A. et al. (NO-B03-01-02) Congressional Research Service (NO-13-01-05)Cook, J. (NO-03-01-12) Dean Witter Reynolds, Inc. (NO-01-01 - 05)Drake, R. (NO-17-03-04) Edison Electric Institute (NO-15-02-11) Energy Impact Associates Inc. for the Southern States Energy Board (NO-B03-01 - 03)Energy Impact Associates Inc. for the Southern States Energy Board (NO-B03-01 - 11)Federal Register (NO-17-03-05) Fischhoff, B. (NO-16-01-02) Grey, J. (ed.) (NO-B03-01-04) Herrington, J. S. (NO-16-01-08) Higgins, P. C. (NO-16-01-09) Hill, L. J., et al. (NO-B01-02-01) Iwler, L. (NO-15-01-04) John Francis Company, The (NO-14-01-25)Lave, L. B. (NO-11-01-12) Lester, R. K. (NO-07-01-08) Lester, R. K. (NO-09-01-03) Los Alamos Technical Associates, Inc. (NO-09-03-06) MacLachan, A. (NO-11-01-09) Marshall, W. (NO-17-01-05) Mattson, R. J. (NO-15-01-01) Minogue, R. B. (NO-17-01-08) Myers, R. (NO-17-02-01) Office of Technology Assessment (NO-B03-01-06) Ohanian, M. J., ed. (NO-B01-01-02) Osborne, R. J. (NO-11-01-08g)

Rayner, S. (NO-17-02-03) Rayner, S. (NO-17-02-04) Repici, D. J. (NO-14-01-23) Rockwell International (LMR-03-01-08) Seitz, F. (NO-14-01-24) Southern States Energy Board, Oak Ridge National Laboratory, and Energy Impact Assoc., Inc. (NO-B01-01-03) Speis, T. P. (NO-14-01-04) Sutherland, R. J. et al. (NO-B02-01-07) Trauger, D. B. (NO-17-03-18) U.S. Department of Energy (NO-B01-01-04)Vaughan, J. W. Jr. (NO-11-01-02) Wacaster, A. J. (ed.) (NO-B03-01-10) Wilcox, L. C. (LMR-03-01-15)

#### reprocessing

Armijo, J. S. (LMR-02-03-12) Driscoll, M. J. (LMR-03-01-04) Marshall, W. (NO-17-01-05) Sandberg, R. O. (NO-14-01-02) Walters, L. C. (LMR-03-01-14) Wolfe, B. (NO-01-01-13)

# requirements

Higgins, P. C. (NO-16-01-09) Mears, L. D. (HTR-05-01-07) Stahlkopf, K. E. et al. (LWR-06-01-12)

## research

ASEA-ATOM (LWR-04-03-05) Australian Institute of Nuclear Science and Engineering (NO-07-01-03) Electric Power Research Institute (LMR-03-02-03) Energy Research Advisory Board (LWR-B01-01-08) Energy Research Advisory Board (LWR-06-01-02) Energy Research Advisory Board (NO-13-01-12)Esselman, W. H. (NO-05-01-04) Fassbender, J. A. et al. (HTR-03-03-13) Frewer, H. (HTR-03-03-14) Golay, M. W. (LWR-01-01-11) Hill, J. (NO-01-03-37) Ivengar, P. K. (NO-09-01-02) Kasten, P. R. (LWR-02-01-01) Kasten, P. R. (LWR-03-01-06) Kasten, P. R. (NO-03-01-01)

Lind, R. C. et al. (NO-14-01-18)
Maxwell, J. R. (LMR-01-01-02)
Nuclear Engineering International (NO-17-03-10)
Rockwell International (LMR-02-01-03)
Sargent and Lundy Engineers (NO-04-01-08)
Schultz, M. A. (LWR-02-01-09)
Spiewak, I. (LWR-04-01-03)
U.S. Nuclear Regulatory Commission (NO-13-01-09)
Winkler, R. L. (NO-08-01-01)

#### resources

Anonymous (NO-09-01-01) Arnott, D. (NO-09-02-04) Haefele, W. (NO-07-01-04) Haefele, W. (NO-07-01-11) Haefele, W. (NO-09-02-05) Hafele, W. (LMR-01-01-07) Laue, H. J. (NO-09-03-02) Mills, M. P. (NO-17-03-09) Radkowsky, A. (NO-13-01-04) Wiendieck, K. (NO-10-02-10)

#### risk

American Physical Society Study Group (NO-17-03-01) Braun, H. E. et al. (LWR-06-01-01) Burke, R. P. (LWR-B01-01-07) Burke, R. P. (NO-15-02-05) Clark, C. E. Jr. (NO-15-01-02) Combustion Engineering, Inc. (NO-08-Decision Focus Incorporated (NO-06-01-12)Edison Electric Institute (NO-15-02-11) Electric Power Research Institute (LMR-03-02-10) Energy Impact Associates Inc. for the Southern States Energy Board (NO-B03-01-03)Energy Impact Associates Inc. for the Southern States Energy Board (NO-B03-01-11) Ettlie, J. E. (NO-16-01-01) Fassbender, J. A. et al. (HTR-03-03-13) Fisher, C., et al. (HT-B01-01-09) Fishlock, D. (NO-16-01-03) Fussell, J. B. (NO-17-03-07) GA Technologies Inc. (HTR-05-01-02)

Lave, L. B. (NO-11-01-12) Levine, S. (NO-03-01-05) MacKenzie, J. J. (NO-03-01-04) Marshall, W. (NO-17-01-05) Mayo, L. H., et al. (NO-10-01-02) Peters, K. (HTR-04-01-09) Rayner, S. (NO-17-02-03) Rayner, S. (NO-17-02-04) Rytkonan, B. B. (LWR-02-01-08) Sillin, J. O. (NO-02-01-23) Southern States Energy Board, Oak Ridge National Laboratory, and Energy Impact Assoc., Inc. (NO-B01-01-03) Sutherland, R. J. et al. (NO-B02-01-07) Turnbull, P. W. (NO-17-02-07) Twichell, P. W. (LMR-03-02-09) U.S. Nuclear Regulatory Commission (NO-B03-01-09) Wacaster, A. J. (ed.) (NO-B03-01-10) Wald, M. J. (NO-17-02-08) Weinberg, A. M., et al. (NO-B02-01-03)

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MacDonald, J. (LMR-03-02-08)
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Su, S. F. (LMR-03-01-11)
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Zebroski, E. L. (LMR-03-01-16)

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Anonymous (NO-13-01-03)
Armijo, J. S. (LMR-02-03-12)
Arnold, W. H. (NO-03-01-10)
Atomic Industrial Forum (NO-13-01-13)
Babala, D. (LWR-06-02-01)
Babacock & Wilcox Company, Inc. (LWR-B0-01-06)
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Booth, R.S. (LMR-01-04-03)
Brandstetter, A. (HTR-03-03-12)
Bray, P. (NO-14-01-22)
Burke, R. P. (LWR-B01-01-07)
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Chexal, B. (LWR-05-01-09) Cleveland, J. C. (HTR-03-03-10) Combustion Engineering, Inc. (NO-08-01-08)Cook, J. (NO-03-01-12) Cruickshank, A. (LMR-03-01-03) Driscoll, M. J. (LMR-03-01-04) Duncan, J. D. (LWR-02-01-07) Edison Electric Institute (NO-15-02-11) Electric Power Research Institute (LMR-03-02-10)Energy Research Advisory Board (LWR-06-01-02) Fassbender, J. A. et al. (HTR-03-03-13) Federal Register (NO-17-03-05) Fischhoff, B. (NO-16-01-02) Fisher, C., et al. (HT-B01-01-09) Fishlock, D. (NO-16-01-03) Flinn, W. S. (LWR-06-01-03) Forsberg, C. W. (LWR-02-01-05) Forsberg, C. W. (LWR-06-02-04) Frewer, H. (HTR-03-03-14) Fussell, J. B. (NO-B02-01-08) GA Technologies Inc. (HTR-05-01-02) General Electric Company (LWR-05-01-10)Goodjohn, A. J. (HTR-01-01-04) Gray, O. E. III (LMR-03-01-05) Grey, J. (ed.) (NO-B03-01-04) Haefele, W. (NO-05-01-08) Hannerz, K. (LWR-B01-01-02) Haque, H. et al. (HTR-04-01-02) Higgins, P. C. (NO-16-01-09) Hug, M. (LWR-06-02-05) International Energy Associates Ltd. (NO-16-02-02) Kasten, P. R. (HTR-01-01-01) Kasten, P. R. (HTR-03-03-15) Kasten, P. R. (HTR-05-01-09) Kasten, P. R. (LWR-02-01-01) King, T. L. (NO-15-01-05) Kruger, K. J. (HTR-05-01-04) Lam, P. (LWR-06-02-06) Lanning, D. D. (HTR-04-01-05) Lester, R. K. (NO-07-01-08) Lester, R. K. (NO-17-03-08) Lester, R. K., et al. (NO-B01-01-05) Levy, S., Incorporated (LWR-05-01-11) Los Alamos Technical Associates, Inc. (NO-09-03-06) Manno, V. P. (NO-17-01-04)

Marshall, E. (HTR-03-03-01) Marshall, E. (NO-01-02-21) Marshall, W. (NO-17-01-05) Massachusetts Institute of Technology (HTR-05-01-10) Mattson, R. J. (NO-15-01-01) Mayo, L. H., et al. (NO-10-01-02) McDonald, J. (LMR-03-01-06) McMain, A. T. (LWR-04-01-01) Minogue, R. B. (NO-17-01-08) Nuclear Engineering International (NO-01-02-20) O'Farrelly, C. (NO-01-01-04) Office of Technology Assessment (NO-05-01-03)Ohanian, M. J. (NO-05-01-13) Ohanian, M. J., ed. (NO-B01-01-02) Paulson, C. K. (NO-03-01-14) Peters, K. (HTR-04-01-09) Phung, D. L. (LWR-B01-01-05) Phung, D. L. (LWR-01-01-02) Phung, D. L. (NO-01-01-11) Ray, J. (LMR-02-03-09) Rayner, S. (NO-17-02-03) Rayner, S. (NO-17-02-04) Reutler, H. (HTR-04-01-11) Rosen, M. (NO-06-01-03) Runzler, L. M. (NO-01-01-07) Rytkonan, B. B. (LWR-02-01-08) Schmidt, J. E. et al. (LMR-03-01-09) Schmidt, R. (NO-15-01-07) Seitz, F. (NO-14-01-24) Shapiro, I. S. (NO-09-03-01) Stewart, H. B. (HTR-02-01-05) Su, S. F. (LMR-03-01-11) Sundqvist, C. (LWR-06-01-10) Sweeney, T. M. (HTR-04-01-13) Tadmor, J. (NO-17-03-12) Taylor, J. J. (LMR-03-01-12) Technology for Energy Corp. (NO-B05-01-02)Tiren, I. (LWR-B01-01-01) Trauger, D. B. (NO-17-03-15) Twichell, P. W. (LMR-03-02-09) U.S. Nuclear Regulatory Commission (NO-B03-01-09) Vaughan, J. W. Jr. (NO-11-01-02) Wald, M. J. (NO-17-02-08) Webb, J. (NO-01-02-22) Weinberg, A. M. (NO-05-01-07) Weinberg, A. M., et al. (NO-B02-01-03)

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Wilford, J. N. (NO-10-02-07)
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Blumenthal, M. (NO-15-02-03)

## shop fabrication

Braun, C. (LWR-06-02-02)
Braun, C. (NO-17-03-02)
Braun, C. (NO-18-01-01)
Coxe, R. L. Jr. (HTR-B01-01-02)
Cruickshank, A. (LMR-03-01-03)
GA Technologies Inc. (HTR-03-03-16)
Loose, V. W. (NO-15-01-06)
Myers, R. (LMR-02-03-16)
Olds, F. C. (NO-17-03-11)
Runzler, L. M. (NO-01-01-07)
Rytkonan, B. B. (LWR-02-01-08)
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Frewer, H. (HTR-03-03-14) GA Technologies Inc. (HTR-05-01-02) Gas-Cooled Reactor Associates (HTR-03-03-09)Goldsmith, K. (NO-02-02-19) Haque, H. et al. (HTR-04-01-02) Harde, V. R. (LMR-03-02-04) Heising-Goodman, C. D. (NO-01-03-38) Higgins, J. P. (NO-01-01-02) Higgins, P. C. (NO-16-01-09) INTERATOM (HTR-02-01-02) International Atomic Energy Agency (NO-01-01-29) International Atomic Energy Agency (NO-10-02-02) International Atomic Energy Agency (NO-16-02-01) Kasten, P. R. (HTR-01-01-01) Kasten, P. R. (HTR-03-03-15) Kasten, P. R. (HTR-05-01-09) Kasten, P. R. (LWR-02-01-01) Kasten, P. R., et al. (NO-12-01-06) King, T. L. (LWR-06-01-04) King, T. L. (NO-15-01-05) Kruger, K. J. (HTR-05-01-04) Lanning, D. D. (HTR-04-01-05) Lester, R. K. (NO-03-01-06) Lester, R. K. (NO-07-01-08) Lester, R. K. (NO-17-03-08) Lidsky, L. M. (NO-03-01-08) Lohnert, G. H., Pflasterer, G. R. (HTR-05-01-06) Loose, V. W. (NO-15-01-06) Marcus, G. H. (NO-01-01-03) Masters, R. (NO-01-02-28) Maxwell, J. R. (LMR-01-01-02) McDonald, C. F. (HTR-04-01-07) Mears, L. D. (HTR-05-01-07) Medwid, W. (HTR-04-01-08) Myers, R. (LMR-02-03-02) Myers, R. (LMR-02-03-15) Myers, R. (NO-01-01-10) Myers, R. (NO-01-01-15) Myers, R. (NO-01-01-16) Nuclear Engineering International (HTR-05-01-03) Nuclear Engineering International (NO-01-02-20)Nuclear Engineering International (NO-01-02-27Nucleonics Week (NO-12-01-01)

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Asseltine, J. J. (NO-01-02-23)
Braun, C. (LWR-06-02-02)
Braun, C. (NO-13-01-11)
Braun, C. (NO-14-01-05)
Braun, C. (NO-18-01-01)
Braun, C. et al. (NO-15-02-04)
Bray, P. (NO-14-01-22)
Chapel, S. W. (NO-B02-01-10)
Cook, J. (NO-03-01-12)
Cruickshank, A. (LMR-03-01-03)
de Torquat, C. (NO-17-03-14)
Dircks, W. J. (NO-14-01-12)

Wilcox, L. C. (LMR-03-01-15)

Edison Electric Institute (NO-15-02-11) Frewer, H. (HTR-03-03-14) Grey, J. (ed.) (NO-B03-01-04) Herrington, J. S. (NO-16-01-08) Higgins, P. C. (NO-16-01-09) Hug, M. (LWR-06-02-05) King, T. L. (NO-15-01-05) Lester, R. K. (NO-17-03-08) Levy, S., Incorporated (LWR-05-01-11) Martel, L. J. (LWR-06-02-07) Nuclear Engineering International (NO-01-02-20) Office of Technology Assessment (LWR-B01-01-03) Paulson, C. K. (NO-03-01-14) Reynolds, M. (NO-13-01-08) Rippon, S. (NO-B05-01-01) Trauger, D. B. (NO-17-03-18) Ushio, S. (LWR-01-01-07) Wilcox, L. C. (LMR-03-01-15)

# steam generators

Pedersen, T. (LWR-06-01-05) Pind, C. (LWR-06-01-06) Pind, C. (LWR-06-01-07) Skygge, C. (LWR-06-01-09) Young, J. C. (LWR-01-01-03)

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Schultz, M. A. (LWR-02-01-09) Schultz, M. A. (LWR-04-02-01)

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Abernathy, W. J. (NO-15-02-01)
Berke, C. et al. (LMR-03-01-01)
Bhaneja, B. (NO-15-02-02)
Ettlie, J. E. (NO-16-01-01)
Jones, E. G. (NO-17-01-01)
Lester, R. K. (NO-07-01-08)
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Mills, M. P. (NO-17-03-09)
Pine, G. D. (NO-17-02-02)
Reekie, W. (NO-17-02-05)
Vaughan, J. W. Jr. (NO-11-01-02)

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Cavanaugh, H. A. (NO-03-01-09) Chapel, S. W. (NO-B02-01-10) Clark, C. E. Jr. (NO-15-01-02) Congressional Research Service (NO-13-01-05)

Crawford, M. (NO15-02-08) Edison Electric Institute (NO-15-02-11) Electrical World (NO-01-01-17) Gustaferro, J. F. (NO-14-01-09) Haefele, W. (NO-07-01-02) Hafele, W. (LMR-01-01-07) Kaufman, A. (NO-08-01-04) Lester, R. K. et al. (NO-B03-01-05) Lester, R. K., et al. (NO-B01-01-05) Loose, V. W. (NO-15-01-06) Mills, M. P. (NO-17-03-09) Murray, A. E. (NO-17-01-10) Office of Technology Assessment (NO-05-Pine, G. D. (NO-17-02-02) Samuels, G. (NO-13-01-14) Skeer, J. (NO-07-01-10) Sutherland, R. J. et al. (NO-B02-01-07) U.S. Department of Energy (NO-B01-01-04)Weaver, L. E. (NO-17-02-10) Wilcox, L. C. (LMR-03-01-15)

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Marshall, W. (NO-17-01-05)
Phung, D. L. (LWR-B01-01-05)
Weaver, L. (NO-14-01-08)
Wilkins, D. R., et al. (LWR-05-01-05)

Bean, E. (NO-02-01-01)

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Berton, L. (NO-14-01-01) Budwani, R. N. (NO-07-01-12) Caldwell, L. S. (NO-15-02-07) Cantor, R. (NO-17-03-03) Cantor, R. (NO-18-02-01) Cavanaugh, H. A. (NO-03-01-09) Clark, C. E. Jr. (NO-15-01-02) Congressional Research Service (NO-13-01-05) Cook, J. (NO-03-01-12) Crawford, M. (NO15-02-08) Decision Focus Incorporated (NO-06-01-12) Edison Electric Institute (NO-15-02-11) Electrical World (NO-01-01-17) Energy Impact Associates Inc. for the Southern States Energy Board (NO-B03-01-03)

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Shapiro, I. S. (NO-09-03-01) Turner, P. (NO-14-01-20) U.S. Congress (NO-17-03-19) U.S. Congress (NO-17-03-20) Young, J. C. (NO-14-01-17)

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Arnold, W. H. (NO-03-01-10)
Braun, H. E. (LWR-04-03-01)
Braun, H. E. et al. (LWR-06-01-01)
Electric Power Research Institute (LMR-03-02-10)
Komanoff, C. (NO-02-01-23)
Myers, R. (LMR-02-03-15)

Paulson, C. K. (NO-03-01-11)
Spiewak, I. (LWR-B01-01-07)
Stern, T. (LWR-01-01-06)
Tower, S. N. (LWR-03-01-03)
Twichell, P. W. (LMR-03-02-09)
Ushio, S. (LWR-01-01-07)
Westinghouse Electric Corporation
(LMR-B01-01-03)
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6. LIGHT WATER REACTORS CITATIONS

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#### 9. ACKNOWLEDGMENTS

Many members of the NPOVS staff aided in the collection and keywording of documents suggested for inclusion in the bibliography.

The initial collection was cataloged and maintained by J. M. Wyrick, who provided several helpful suggestions for its organization. Ms. Wyrick is now with the Information Research and Analysis Section, Biology Division.

J. H. Scott, Information Research and Analysis Section of the Biology Division, provided valuable assistance in designing and initiating the computerized data base, training for computer input and computer searches, and managing the data base.

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