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FINAL TECHNICAL REPORT

Contract No. DE-AC01-87CE73046

**Data Analysis, Analytical Support, and Technology Transfer Support
for the Federal Energy Management Program
Office of Conservation and Renewable Energy
Department of Energy**

August 8, 1987 to August 7, 1992

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Submitted to:

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SUMMARY OF ACTIVITIES UNDERTAKEN DURING THE CONTRACT TERM

Under Contract #DE-AC01-87CE73046 to the U.S. Department of Energy, Advanced Sciences, Inc. (ASI) provided information and analytical support services to the Federal Energy Management Program (FEMP). FEMP is responsible for the overall coordination of the Government's energy management and conservation efforts including activities required by the National Energy Conservation Policy Act (NECPA), the Energy Security Act (ESA), the Energy Policy Conservation Act (EPCA), and other legislative and Executive Order authorities. ASI's activities for FEMP included the collecting, reporting, and analysis of Federal energy usage and cost data; development of program guidance and policy analysis; inter-agency liaison; promotion of energy efficiency initiatives; and extensive technology transfer and outreach activities. The contract consisted of three main tasks which were performed concurrently during the entire term of the contract. Because of the support services nature of work under this contract, the activity cycle varied little for each year of the contract (three base years, two option years).

The following table summarizes by task and labor category the manpower hours expended for each year of the contract and for the total five year period. Total labor hours expended in performance of the work totaled 45,691 hours or 95.0 percent of the 48,100 hours estimated in contract. Total dollars billed are also shown in the table for each year of the contract and for the total five year period. The amount billed for all three tasks over the term of the contract and including withheld fee totals \$1,524,175 or 94.7 percent of the \$1,609,089 value of the contract.

Under Task 1, Data Collection, Analysis, and Reporting, ASI collected and verified data on energy consumption in Federal buildings and facilities, vehicles and equipment, and process operations according to 14 energy types, as submitted quarterly by the Federal agencies. In addition, ASI reviewed agency annual reports to collect data on energy costs and square footage as well as energy management programs such as retrofit projects, energy awareness activities, and shared energy savings initiatives undertaken by each agency. In support of this task, ASI designed, developed, and maintained a database management system to facilitate records management, data collection and validation, energy source unit conversion, and generation of complex reports, statistics, analyses, and graphic documents. During the term of this contract, ASI converted the mainframe-based system which was designed and implemented by ASI under its previous contract with FEMP to a microcomputer, network-based system. The database supported numerous project activities performed by ASI including:

- Analysis of progress by individual agencies and overall Federal Government toward mandated energy reduction goals and energy efficiency targets;
- Presentations depicting trends in and comparisons of Federal agency energy use in support of Departmental and inter-agency meetings, energy-related policy development, and program guidance;
- Research and analysis of data related to Federal energy management; and
- Preparation of background material for use in special and annual reports to the Secretary of Energy, the Congress, the President, and other Federal agencies.

Support for FEMP's mandated annual reports to Congress included drafting and editing annual reports, coordinating document reviews and revisions with other Federal agencies, coordinating publication concurrence within the Department of Energy, and supporting production and distribution of the final reports. During the term of the contract, ASI assisted in the completion of the Annual Report to Congress on Federal Energy Management as required by NECPA for the fiscal years 1987, 1988, 1989, 1990, and 1991. During this period, the report underwent substantial changes as it addressed new legislation, particularly the Federal Energy Management Improvement Act of 1988 and Executive Order 12759. Also during this period, ASI assisted in the completion of the Annual Report to Congress on Federal Energy Conservation Programs as required by EPCA for fiscal years 1987 and 1988 and the President's Annual Report to Congress Required by Subtitle H, Title V of the Energy Security Act for the fiscal years 1989, 1990, and 1991.

Under Task 2, Planning, Outreach, and Coordination, ASI assisted FEMP in the planning, outreach, and coordination of activities designed to promote Federal energy efficiency. Task

efforts included providing research, planning, analysis, and logistical support for meetings of the Federal Interagency Energy Policy Committee ("656" Committee), the Federal Interagency Energy Management Task Force, and informational/training sessions for Federal energy coordinators. Assistance in this area included fact finding and research on topics discussed at the meetings, identification of suggested speakers, maintenance of mailing lists and attendee rosters, preparation of background and briefing materials, onsite support including documentation of agenda proceedings, and follow up on issues and data presented at the meetings. During the term of the contract, ASI supported seven "656" Committee meetings and five Task Force meetings, as well as numerous energy coordinator meetings and working groups.

Also under this task, ASI purchased and provided support to a one-day information gathering workshop and report for FEMP staff focusing on State government experiences and perspectives on factors that produce success in energy investment programs for public facilities. The workshop was conducted by the National Association of State Energy Officials (NASEO). Related to this effort, ASI conducted a needs assessment and benefits analysis of a Federal Energy Efficiency Fund as proposed in pending legislation. The study included analyses of existing energy consumption patterns and the funding levels for energy conservation at Federal agencies, provided background information on methods used by agencies to effect energy conservation in buildings and facilities and discussed current attempts to open up other avenues of funding, including shared energy savings contracts, demand side management programs, and other sources of alternative financing.

Also under Task 2, ASI provided planning and coordination support associated with the annual Federal Energy Efficiency Awards Program and energy awareness activities. Support included organization and evaluation of award nominations submitted by Federal agencies; writing, editing, and distribution of program materials such as award notification correspondence, award brochures, and publicity; and a full range of logistics support for the awards presentation including coordinating accommodation requirements of the awardees, arranging the awards ceremony and luncheon for over 200 attendees, and providing onsite and follow-up assistance for the awards program.

Under Task 3, Technology Transfer, ASI assisted FEMP in providing technical information and transferring technology on energy conservation opportunities and research and development initiatives for increasing energy efficiency within the Federal Government. A primary task activity entailed the research, writing, editing, and production of a quarterly publication

distributed to approximately 5,000 Federal, State, and local government officials, facility and energy management personnel, and Federal Executive Boards. The publication addressed program developments, energy efficiency techniques and innovations, agency energy management and shared energy savings initiatives, and energy-related training programs. Other task activities involved development of technical information and reports on issues related to Federal energy management, maintenance of mailing lists which target specific audiences for the various activities under this task, and interface with Federal agencies on specific topics and issues. In addition, ASI assisted in the distribution of computer software and publications on life-cycle costing (LCC) methodology and the Architect's and Engineer's Guide to Energy Conservation in Existing Buildings.

A detailed summary of specific activities carried out under each task follows.

TASK ONE DATA COLLECTION, ANALYSIS, AND REPORTING

Description of Work Under Task Assignment:

Provide comprehensive support in collecting, analyzing, and reporting data on Federal energy consumption, cost, and program initiatives, as well as other developments related to Federal energy management. The energy consumption data will be collected through Quarterly Energy Usage Reports and annual reports submitted to FEMP by Federal agencies, and from other sources as directed. Maintain a computer management information system (MIS) in order to generate complex reports, statistics, analyses, and graphic documents which will support FEMP in numerous applications.

Activities Completed During the Most Recent Option Year:

Federal Energy Database

- Collected and entered energy use data for the first, second, third, and fourth quarters of FY 1991 and revisions to previous quarters.
- Drafted letters to agency energy coordinators asking them to review and verify data in Federal energy database and generated reports for each agency from FY 1985 to FY 1991 for enclosure with the letters.
- Updated the agency log record indicating receipt date of quarterly data and subsequent revisions, conversations, and decisions regarding data.
- Generated current data tables and graphs for incorporation into the FY 1990 NECPA annual report.
- Performed on-going work on refining and documenting the microcomputer-based management information system.
- Modified screen-generating source code to ease user interface. These modifications included changes in the colors of the screens for clarity and better contrast and changes to the data entry screens to include commas when entering data values.
- Modified source code for generating data tables which show source consumption of energy to reflect change in the conversion factor for purchased steam.
- Updated the source code for generating data tables to incorporate FY 1991 data.
- Modified all records in Federal Energy Database which show consumption of purchased steam in buildings or process operations to reflect the site conversion factor of 1,000 Btu's per pound rather than the source conversion factor of 1,390 Btu's per pound.
- Wrote source code for generating a data table to show agency gross square footage for fiscal years 1985 to 1991, and incorporated the program in the report selection menu.
- Wrote source code for generating the following data tables and incorporated the programs into the report selection menu. These report programs enable the user to select the year for which data is to be generated.
 - Annual buildings and facilities consumption in reporting units by agency and fuel type
 - Annual vehicles and equipment consumption in reporting units by agency and fuel type

- Annual process and production consumption in reporting units by agency and fuel type
 - Annual buildings and facilities consumption in BBtu's by agency and fuel type
 - Annual vehicles and equipment consumption in BBtu's by agency and fuel type
 - Annual process and production consumption in BBtu's by agency and fuel type
 - Annual buildings and facilities costs by agency and fuel type and including gross square footage and cost per gross square foot for each agency
 - Annual vehicles and equipment costs by agency and fuel type
 - Annual process and production costs by agency and fuel type
 - Annual buildings and facilities cost per unit of fuel consumed by agency
 - Annual vehicles and equipment cost per unit of fuel consumed by agency
 - Annual process and production cost per unit of fuel consumed by agency
- Obtained list of buildings delegated by GSA to the Treasury Department from Joe Maty at Treasury. Obtained consumption and GSF data from GSA prior to the delegations (FY85) and calculated the percent change in Treasury's performance toward the goal with the delegated buildings included in Treasury's FY85 inventory.
 - Provided to Mr. Millard Carr of DOD data tables on DOD's energy consumption and costs for FY 1990 and FY 1985, tables showing DOD's buildings energy consumption, costs and gross square footage, and a list of contacts at EIA who could assist in providing data for DOD to measure its buildings energy performance against commercial sector building performance.
 - Submitted to Mr. Mark Hopkins of the Alliance to Save Energy a custom data table showing energy costs in buildings by agency for FY 1990 and a data table showing Federal costs for buildings energy in FY 1989.
 - Submitted to Mr. Ingo Thomas of DMJM/HTB complete data on Labor Department energy consumption for FY 1975 and FY 1980 to FY 1985.
 - Submitted to Mr. Jeff Harris of the Office of the Deputy Assistant Secretary for Building Technologies data tables showing total Federal energy consumption, gross square footage, and costs from FY 1975 to FY 1990. The tables also illustrated fuel intensity using site and source conversion factors and reflected fuel prices per Btu and square foot.
 - Submitted to Susan Thompson of Energy Planning, Inc. data tables showing energy consumption by agency and fuel type for FY 1990.
 - Delivered to Sam Brown of EIA data tables showing Government energy consumption by agency and fuel type from 1977 to 1991 and by fuel type for each agency for FY 1981 and FY 1991.
 - Prepared background material, including narrative, data tables, and charts addressing the issue of energy cost increases from 1989 to 1990 and the issue of site vs. source conversion of electricity to Btu's.
 - Provided Mark Ginsberg with data tables and charts showing progress toward efficiency goals for the top five energy consuming agencies and the Federal Government as a whole for preparation of Public Works Committee testimony.
 - Drafted letter to the Equal Employment Opportunity Commission addressing their questions regarding their energy data and their performance.

- Arranged demonstration of TeleMagic software for Mark Ginsberg and Rick Klimkos at their request.
- Initiated work on developing database of Federal energy management contacts and project descriptions using the Telemagic software package.

Reporting

- Provided Rick Klimkos with results of phone canvas for agencies with outstanding data.
- Incorporated changes received from DOE on memoranda and transmittal letters to accompany FY 1990 NECPA through mandatory concurrence.
- Delivered paper and electronic versions of FY 1990 NECPA annual report along with memoranda and transmittal letters to FEMP office for mandatory concurrence.
- Incorporated into FY 1990 NECPA annual report all comments received from DOE during formal concurrence.
- Incorporated changes received during formal concurrence in FY 1990 NECPA annual report memoranda and transmittal letters.
- Delivered to FEMP office final version of FY 1990 NECPA annual report on disk and paper copy.
- Produced and delivered to FEMP office transmittal letters to Congress to accompany FY 1990 NECPA annual report.
- Delivered 25 copies of FY 1990 NECPA annual report to FEMP office for distribution to Congress.
- Delivered to FEMP office excerpts of text and data tables from the NECPA annual report in response to from a request by Mr. Larry Hart of the Office of the Press Secretary.
- Distributed FY 1990 NECPA annual report to Federal energy coordinators.
- Provided FEMP Office with camera-ready copy of FY 1990 NECPA annual report.
- Delivered file on FY 1990 ESA report to FEMP office to assist in preparation of FY 1991 report.
- Prepared draft ESA report for FY 1991 and delivered to FEMP office for review.
- Prepared action memos, transmittal letters, and distribution list to accompany ESA report through concurrence process and delivered to FEMP office for review.
- Assisted in preparing Reporting Guidance for the FY 1991 NECPA/E.O. 12759 annual report incorporating additional reporting requirements of E.O. 12759.
- Drafted and prepared guidance for reporting consumption of alternative motor fuels on the DOE Quarterly Federal Energy Usage Report. Submitted guidance to Mr. Larry Frisbee of GSA's Fleet Management Division for incorporation into GSA regulations for Federal energy management for motor vehicles.

- Incorporated comments and changes received from FEMP and other agencies into the Reporting Guidance for FY 1991 NECPA/E.O. 12759 Annual Report.
- Distributed Reporting Guidance for FY 1991 to Federal agency energy coordinators.
- Provided Ted Collins with copies of Questions and Answers from Congressional testimony in the required written format.
- Met with Rick Klimkos and Mark Friedrichs of the Office of Policy, Planning and Analysis about suggestions for the format of the FY 1991 NECPA annual report.
- Incorporated narrative data received in agency annual reports in draft NECPA report.
- Provided additional copies of FY 1991 ESA report to FEMP office upon request.
- Met with FEMP office and representatives of GAO about agency reporting requirements. Provided FEMP office with copies of past year annual reports and memoranda as well as the Federal 10-Year Buildings Energy Management Plan.
- Conducted background research and incorporated information received from agencies into FY 1991 Annual Report to Congress on Federal Energy Management (NECPA Report).
- Incorporated into FY 1991 ESA report changes or comments received from DOE and delivered report to FEMP office, and provided FEMP office with 10 copies of final FY 1991 ESA report.
- Incorporated all available data into NECPA report and produced draft for FEMP office review.
- Incorporated comments from FEMP office into the NECPA report, updated tables and figures with latest data and produced draft report for agency comments and informal DOE concurrence.
- Drafted and prepared memoranda to accompany the NECPA annual report through distribution to agencies for comment and DOE informal concurrence.
- Made 50 copies of NECPA annual report and distributed to agencies and DOE concurrence offices.

TASK TWO PLANNING, OUTREACH, AND COORDINATION

Description of Work Under Task Assignment:

Assist FEMP in the planning, outreach, and coordination of activities designed to promote Federal energy efficiency. Activities include meetings support of Federal Interagency Energy Policy Committee ("656" Committee), the Federal Interagency Energy Management Task Force, and the Federal energy coordinator meetings; and planning and coordination support associated with the Federal Energy Efficiency Awards Program and energy awareness activities. Assistance includes fact finding on energy issues to be discussed at meetings, data analysis and support on energy conservation trends to be presented, and follow up on issues and data presented at meetings.

Also under this task, ASI will purchase and provide support to a one-day information gathering workshop and report for FEMP staff focusing on State government experiences and perspectives on "factors that produce success in energy investment programs for public facilities." The workshop will be conducted by the National Association of State Energy Officials (NASEO).

ASI will conduct a needs assessment and benefits analysis of a Federal Energy Efficiency Fund as proposed in pending legislation. The study will include analyses of existing energy consumption patterns and the funding levels for energy conservation at Federal agencies. The study will provide background information on methods used by agencies to effect energy conservation in buildings and facilities and discuss current attempts to open up other avenues of funding, including shared energy savings contracts, demand side management programs, and other sources of alternative financing. The study will also incorporate information provided by Pacific Northwest Laboratories on the characterization of the energy savings potential of Federal buildings.

Activities Completed During the Most Recent Option Year:

Support to "656" Committee and Federal Energy Managers

- Delivered "656" Committee meeting notification letters and mailing labels to FEMP office for approval and signature for September 20th meeting.
- Delivered copies of agenda from past "656" Committee and Task Force meetings to FEMP office for use in drafting September 20th meeting agenda.
- Faxed agenda for September 20th "656" Committee meeting to Committee members along with list of Committee members.
- Prepared briefing books and name plates for all meeting participants.
- Prepared presentation overheads for use in "656" Committee meeting.
- Provided on-site support for "656" Committee meeting.
- Produced draft memo of record for "656" Committee meeting and submitted to FEMP office for approval.
- Produced final memo of record of September 20, 1991 "656" Committee meeting incorporating changes made by FEMP office.
- Produced and delivered to FEMP office draft and final letters to "656" Committee meeting participants with enclosed memo of record.

- Provided FEMP office with "Memo of Record" of prototype Federal Relighting Initiative Workshop.
- Verified names, titles, addresses and phone numbers for "656" Committee members, Federal Interagency Task Force members, and energy coordinators and provided FEMP office with 50 copies of updated "656" Committee list.
- Drafted letter from J. Michael Davis to Benita Cooper of NASA welcoming her to the "656" Committee, and submitted to FEMP office for review. Provided final letter for signature and mailing.
- Provided Kirk Bond of DOE Kansas City with customized mailing lists for BLCC/ASEAM workshops to be held in Kansas City and St. Louis.
- Provided Kirk Bond with two copies each of BLCC 3.1 in the 5 1/4" and 3 1/2" formats for him to reproduce for workshops.
- Provided color graphics support in producing viewgraphs for Mark Ginsberg's presentation to the Association of State Energy Officers.
- Provided three-color overlay to FEMP office for the production of "I Save DOE Money" buttons. Purchased 250 buttons from Advertising Novelty Company at the direction of the FEMP office.
- Provided Dean DeVine of the FEMP office with historical figures on dollars spent on retrofits in Federal facilities from FY 1975 to FY 1985.
- Provided on-site support for Federal Energy Task Force meeting held on February 20, 1992.
- Purchased refreshments for the Federal Energy Task Force meeting held on February 20, 1992.
- Delivered to FEMP office draft "Memo of Record" of February 20th Task Force meeting.
- Provided Walter Aughenbaugh of USDA with 5 copies each of 10 CFR Part 435 and Part 436 in response to his request made at the February 20th Task Force meeting.
- Drafted letter to Henry Habicht, Deputy Administrator of the Environmental Protection Agency, inviting him to participate as a member of the "656" Committee.
- Delivered to FEMP office final "Memo of Record" of February 20th Task Force meeting incorporating all comments received from the FEMP office.
- Generated follow-up letters to Task Force members and meeting participants, and assembled packages with enclosures including the "Memo of Record" and other background materials.
- Contacted offices of "656" Committee members regarding their availability for a meeting to be held on April 23rd and provided responses to FEMP Office.
- Generated letters to "656" Committee members notifying them of April 23rd "656" Committee meeting.

- Conducted telephone survey of "656" Committee members to ascertain their availability to attend the April 23rd meeting and provided responses to the FEMP office. Also faxed to their offices copies of the meeting's agenda.
- Produced viewgraph transparencies of the presentations for the "656" Committee, assembled briefing books for Committee members, and made copies of materials for other attendees.
- Provided on-site support for April 23rd meeting.
- Transposed notes from April 23rd meeting, produced Memo of Record, and submitted to FEMP office for approval.
- Updated "656" Committee list with changes provided by FEMP office and agency contacts.
- Provided updated "656" Committee list to FEMP office upon request.
- Prepared notification letters, agenda, and mailing labels for July 30 Interagency Energy Management Task Force meeting and distributed to Task Force members per instructions from FEMP office.
- Reserved ASI conference room and provided on-site logistics support for Interagency Energy Management Task Force meeting.
- Drafted letter regarding three upcoming Federal Relighting Initiative (FRI) workshops and submitted to FEMP office for approval.
- Revised FRI workshops letter per instructions from FEMP and reproduced final signed letter for distribution.
- Developed FRI mailing list using information provided by DOE; input all names and addresses into computer database; and generated 260 mailing labels.
- Assembled 260 FRI letters in envelopes with mailing labels and delivered to DOE mailroom.
- Provided 2 copies of FRI workshops mailing list to FEMP office.

Energy Awareness

- Arranged meeting with Leslie Tyson of National Graphic Center and Rick Klimkos to discuss the purchase of an exhibit for the FEMP Office.
- Researched and wrote "success stories" and requested supporting photographs to be used in display noting the first anniversary of the signing of Executive Order 12759.
- Met with Leslie Tyson of NGC to order the exhibit structure, discuss colors and design, and choose photographs.
- Provided NGC with graphic art transparencies for the FEMP identification panel of the exhibit.

- Drafted FEMP information statement for identification panel and captions for photographs and submitted to FEMP office for approval.
- Picked up display from DOE and arranged for NGC to repair part of the structure.
- Delivered to Rick Klimkos estimates of the cost of shipping the FEMP exhibit to the DOE support offices.
- Purchased table-top exhibit for FEMP office for energy awareness and FEMP-related activities.
- Met with Allan Evans of Princeton Economic Research, Inc. about a technical article he is preparing for the FEMP office.

Federal Energy Efficiency Awards

- Contacted energy coordinators and awardees to request all outstanding information, plaque inscriptions, and photographs of individuals and small groups.
- Logged-in of plaque inscriptions and revised as requested.
- Finalized list plaque inscriptions and delivered to FEMP for engraving.
- Coordinated hotel reservations for awardees and guests.
- developed invitation list, working with agency energy coordinators as needed.
- Logged-in awardee photographs.
- Revised brochure write-ups and delivered final copy in two formats to FEMP together with a computer diskette containing the brochure document to be used by the printer.
- Delivered to FEMP all photographs for brochure.
- Finalized invitation list, addressed and mailed invitations.
- Delivered final Congressional notification letters to FEMP office for signature.
- Addressed Congressional invitations, enclosed with notification letters, provided mailing labels, and hand delivered to Congressional mail rooms.
- Obtained folders and Energy Awareness posters for Awardee packages.
- Ordered floral arrangements and coordinated delivery for Awards luncheon.
- Accepted and logged-in all reservations and regrets for Awards ceremony.
- Contacted individuals who had not responded to the invitation by RSVP date and confirmed reservations and regrets.
- Met with U.S. Senate special events coordinator to confirm logistics for ceremony.
- Met with U.S. Senate caterer to confirm luncheon menu and schedule.

- Drafted room layout, delivered to FEMP office and to U.S. Senate special events coordinator for approval.
- Coordinated plans and schedule for Pentagon tour with Mr. Ed Dyckman of DOD.
- Coordinated plans and schedule for Navy Trio performance at ceremony.
- Drafted schedule and delivered to FEMP office for approval. Sent out approved schedule on request.
- Responded to individual requests for information on awardees, schedule for ceremony, hotel, guests, etc.
- Finalized hotel reservations and delivered rooming list to Marriott Courtyard Hotel.
- Provided hotel confirmation list to attendees on request.
- Drafted and finalized seating charts, working with agency energy coordinators as needed.
- Developed VIP list and head table introduction list and delivered to FEMP office for use at ceremony.
- Produced list of acceptors for awards presentation and delivered to FEMP office.
- Produced list of Congressional attendees and delivered copies to FEMP office and to DOE Congressional Liaison office.
- Produced nametags, placecards, and table numbers for ceremony.
- Reproduced welcome letter from acting director of FEMP office and included in awardee packages.
- Drafted cover design for awardee packages and delivered to FEMP office for approval.
- Reproduced approved cover design and attached to awardee packages. Assembled packages and delivered to hotel and other designated individuals.
- Developed time table and ASI task assignments for day of ceremony.
- Provided on-site support at hotel and for awards ceremony.
- Identified Mr. Mike McAdam from NASA in Award ceremony photographs, arranged for copies to be printed, and delivered photos by Federal Express to Carolyn Harris of NASA.
- Identified Mr. Edward Crozier of the U.S. Coast Guard in Award ceremony photographs and arranged for copies to be printed.
- Mailed package of Coast Guard awardee photos to Commander Van Lear of the U.S. Coast Guard to use in newsletter.

- Mailed extra plaques, programs, and brochures to Battle Creek, Michigan small group awardees and to Lawrence Livermore National Laboratory small group awardees.
- Provided FEMP office with a list of individuals and their addresses to receive thank you letters.
- Identified individuals in all Award photographs.
- Drafted letters to be included with photographs when mailed to Awards participants and submitted to FEMP office for approval.
- Produced 68 letters and mailing labels to be used for distribution of photographs, prepared packages for mailing, and delivered to FEMP office.
- Added awardees to FEMP Update distribution list.
- Completed update of Awards files and notebook with copies of all 1991 documents.
- Drafted Criteria and Guidelines for 1992 Federal Energy Efficiency Awards, per instructions from FEMP office.
- Draft letter soliciting nominations for 1992 Awards and submit to FEMP office for approval.
- Generated final solicitation letters for signature.
- Provided FEMP office with mailing labels, copies of final Criteria and Guidelines, and copies of the updated "656" Committee list for distribution of solicitation packages.
- Typed cover letter and survey form for 1991 Federal Energy Efficiency Awards evaluation, per instructions from FEMP office.
- Generated 16 cover letters and corresponding mailing labels and delivered to FEMP office together with copies of the survey form for distribution to Task Force members and energy coordinators.
- Revised Awards database to generate specialized reports to be used in developing score sheets and tally sheets for Awards evaluation committee.
- Logged-in all nominations and reproduced for evaluation committee.
- Typed letters to "656" Committee members, per instructions from FEMP, notifying them of the selection of evaluators for the Awards and included the schedule for the evaluation process. Prepared final letters, generated mailing labels for originals and copies, and delivered to FEMP office for signatures.
- Produced final list of nominees.
- Developed score sheets to be attached to each nomination.
- Developed tally sheets for evaluators.

- Reproduced score sheets, tally sheets, and list of nominees and included in nomination packages for evaluators.
- Typed solicitation letters for "656" Committee members and others for Federal Solar Energy Awards per instructions from FEMP office.
- Verified addresses for individuals to receive solicitation letters, produced 19 letters, generated and mailing labels for originals and copies, and delivered to FEMP office for signatures and mailing.
- Revised Awards database to include all information on awardees, nominators, senders, energy coordinators, and agency heads.
- Generated four thank you letters to Awards evaluators per FEMP office instructions.
- Identified all Congressional representatives for 32 Awardees and entered information into Awards database.
- Designed special reports for Awards database to produce lists and addresses for Awards notification letters.
- Provided FEMP office with Congressional notification list and Congressional schedule, and typed draft Congressional notification letters, per instructions from FEMP.
- Provided FEMP office with amount of energy cost savings for 1992 Energy Efficiency Awardees.
- Drafted awardee list and delivered to FEMP office for review.
- Abstracted information from nominations for brochure write-ups and submitted to FEMP office for review.
- Typed boilerplate notification letters for agency heads, "656" Committee members, energy coordinators, senders, losers, and awardees, per instructions from FEMP.
- Made appointments with sales personnel at four area hotels; accompanied Helen Krupovich of FEMP Office on site visits of four hotels; and assisted in comparison of hotels.
- Reserved block of rooms at Marriott Courtyard Hotel for October 29-30, for 1992 Federal Energy Efficiency Awardees and guests.
- Obtained, revised, and signed contract with Marriott Courtyard.
- Drafted enclosures providing information on the Marriott Courtyard Hotel for inclusion with Awardee and sender letters.
- Drafted enclosures for notification letters with information on multiple Award winners.
- Produced 112 final notification letters.
- Produced mailing labels for all notification letters.
- Assembled all notification letters and enclosures; made copies for FEMP and ASI files; and prepared packages for mailing through DOE mailroom.

- Typed draft letters for Solar Award nominees who did not win and delivered to FEMP office for approval.

Federal Energy Efficiency Fund Study

- Conducted background research on the Need Assessment and Benefits Analysis for a Federal Energy Efficiency Projects Fund.
- Hosted a one-day workshop on the characteristics of a successful energy efficiency fund presented by the National Association of State Energy Officials. Completed written record of workshop and list of attendees and delivered to FEMP office for review.
- Provided FEMP office with names and addresses of workshop attendees from the three State Energy Offices for mailing of written record.
- Completed draft Need Assessment and Benefits Analysis of a Federal Energy Efficiency Fund and submitted to FEMP office for review.
- Received copies of other components of the Fund study and submitted to FEMP office for review.
- Abstracted information from all components of Fund study and prepared a Preface for the study to include the recommendations of DOE.
- Incorporated Mark Ginsberg's comments and suggestions into the study and submitted to FEMP office for further DOE review.
- Addressed comments and suggestions made by Deputy Assistant Secretary Millhone on the Federal Energy Efficiency Fund Study.

TASK THREE TECHNOLOGY TRANSFER

Description of Work Under Task Assignment:

Assist FEMP in transferring technology on energy conservation opportunities and research and development initiatives for Federal Government applications. Prepare the FEMP Quarterly Technical Information Updates for distribution to all Federal energy managers. This effort includes research of topical issues, editing, revisions, follow-up analyses and coordination with Federal agencies to confirm facts, rewrites, and as necessary, coordination of the technical Update. Support the coordination of Federal Government activities in shared energy savings. Disseminate publications and software on life-cycle costing and A Simplified Energy Analysis Method and coordinate related workshop activities, and disseminate the "Architect's and Engineer's Guide to Energy Conservation in Existing Buildings". Conduct research into other areas pertinent to FEMP's mission.

Activities Completed During the Most Recent Option Year:

FEMP Technical Information Updates

- Revised FEMP Update distribution list with new and changed addresses received from FEMP staff.
- Delivered draft articles for the FEMP Update 1991, No. 2 to FEMP office for review.
- Formatted and typeset the FEMP Update 1991, No. 2.
- Mailed 50 copies of Winter FEMP Update to Karel Klima at DOE, Chicago office.
- Delivered final formatted camera-ready copy of FEMP Update 1991, No. 2 along with mailing labels to FEMP office for submission to DOE printing.
- Delivered to FEMP office publication request forms and accompanying memo for the FEMP Update 1991, No. 3.
- Delivered to FEMP office list of potential articles for the FEMP Update 1991, No. 3.
- Provided mailing list additions to DOE Printing Operations for the FEMP Update 1991, No. 3.
- Drafted articles for FEMP Update 1991, No. 3 and delivered to FEMP office for approval.
- Distributed back issues of the FEMP Update upon request.
- Revised FEMP Update articles as requested by FEMP office staff.
- Delivered formatted camera-ready version of the FEMP Update 1991, No. 3 and mailing labels to FEMP office for submission to DOE printing.
- Met with FEMP staff to discuss changes in format and publication of the Technical Information Update.

- Met with printer to obtain estimates of printing and distribution costs for reformatted, bimonthly Technical Information Update.
- Developed ideas for changes in name and logo for Technical Information Update and submitted to FEMP office for review.
- Provided FEMP office with copy of FEMP Update mailing list for review.
- Developed and reproduced the FEMP Update readership survey, customized the survey forms with individual mailing labels which could be revised by the recipients, and mailed surveys to the 2,080 subscribers.
- Designed a new layout and format for the FEMP Technical Information Update to be called the FEMP Focus.
- Researched articles for the premier issue of the FEMP Focus and submitted list of potential articles to the FEMP office.
- Obtained appropriate photographs from DOE for inclusion in the premier issue of the FEMP Focus.
- Completed draft articles for premier issue of FEMP Focus and incorporated into a sample color format for submission to FEMP office for review.
- Keyed in comments received from responses to the readership survey, analyzed and quantified responses and submitted conclusions along with the text of all comments to the FEMP office.
- Met with John Sample of Balmar Printing about revised estimates for printing the FEMP Focus.
- Updated FEMP Focus distribution list with new and revised addresses received from the readership survey responses.
- Verified content of draft articles with appropriate contacts.
- Submitted premier issue of FEMP Focus to printer after receiving approval from DOE.
- Provided Rick Klimkos of FEMP office with list of proposed articles for FEMP Focus, issue number 2.
- Conducted research and wrote articles for the FEMP Focus, issue number 2.

Technical Information Transfer

- Abstracted information received from utilities about demand side management programs, and entered information into utility DSM database.
- Prepared and delivered SES special response letters and information packages to recipients as directed by the FEMP office.
- Developed list of utility companies to be used in phone canvas to expand and update utility DSM database.

- Distributed updated source sheet on Federal SES project initiatives to individuals on mailing list.
- Updated source sheet on Federal SES project initiatives as information was received.
- Provided Ted Collins of FEMP with mailing labels for distribution of workshop information.
- Provided Jim Duskosil of DOE, Texas, with copies of P.L. 100-615 with LCC section highlighted.
- Provided John Lyddon of Green Technologies with customized printout of DSM programs from utility database.
- Provide Ted Collins of FEMP office with 12 copies of SES Source Sheet.
- Generated approximately 1,500 mailing labels from BLCC database and delivered to Ted Collins for use in a FEMP special mailing.

LCC, ASEAM, and A&E Guide Support

- Updated Federal and non-Federal LCC mailing lists.
- Responded to telephone inquiries for basic information and technical support for ASEAM and BLCC software.
- Generated mailing labels and distributed BLCC replacement diskettes on request.
- Distributed copies of BLCC and ASEAM software, Handbook 135, and the Architects and Engineers Guide to Energy Conservation in Existing Buildings upon request.
- Sent by Federal Express one copy each of BLCC 3.0 and ASEAM 3.0 to Mr. Walter Statt of EPA in Norwood, Ohio.
- Developed and distributed software availability notices to 57 attendees of the DOD presentation held at Wright-Patterson AFB and added their names to the FEMP Update distribution list.
- Delivered 20 copies each of the A&E Guide, Handbook 135, Energy Prices and Discount Factors, SES Source Sheet, and current FEMP Update to DOE Kansas City Support Office for DOE presentation.
- Produced presentation overheads and information packages for Kansas City presentation.
- Mailed BLCC 3.0 and ASEAM 3.0 software programs to DOE Kansas City Support Office for use in presentation.
- Delivered 40 copies of ASEAM 3.0 and BLCC 3.0 software to the National Institute of Standards and Technology in support of workshops held in Rockville, MD, August 27-29th.
- Provided Mr. Ted Collins of the FEMP office with customized mailing labels generated from the LCC lists.

- Delivered by courier to Ms. Jennifer Patterson of the Internal Revenue Service 14 copies of Handbook 135 and the 1990 Energy Prices and Discount Factors.
- Sent 100 copies of the Architects and Engineers Guide to Ms. Linda Montalvo of Johnson Controls in Milwaukee, WI.
- Distributed copies of BLCC and ASEAM software, Handbook 135, and the Architects and Engineers Guides upon request.
- Distributed 300 copies of 1992 Energy Prices and Discount Factors to individuals on LCC mailing list.
- Drafted and mailed memo to LCC mailing list recipients regarding availability of new BLCC version 3.1 computer program.
- Formatted 5.25" and 3.5" diskettes in preparation for the copying and distribution of BLCC 3.1 computer program.
- Distributed 650 copies of 1992 Energy Prices and Discount Factors to individuals on LCC mailing list.
- Provided Jim Woods of GSA with 10 sets of BLCC 3.1 computer program for regional GSA offices.
- Sent 25 copies of A&E Guide to Don Case of GSA in Atlanta for field offices.
- Distributed 700 copies of 1992 Energy Prices and Discount Factors to individuals on LCC mailing list.
- Provided Rajinder Garg of the Department of Veterans Affairs with 150 copies of the 1992 Energy Prices and Discount Factors.
- Formatted, copied, and distributed 70 sets of BLCC software and brochures to Mr. Charlie Pittinger of NASA Headquarters.
- Provided Douglas Decker of Johnson Controls with 250 copies of the A&E Guide to Energy Conservation in Existing Buildings.
- Provided Carl Syverson of the U.S. Navy with 50 copies of the A&E Guide to Energy Conservation in Existing Buildings.
- Distributed NIST brochure on upcoming BLCC/ASEAM workshops to mailing list recipients.
- Revised existing copies of BLCC 3.1 with modified program file provided by Steve Peterson of the National Institute of Standards and Technology.
- Obtained estimates from printers on copying the ASEAM Users Guide.
- Designed cover for ASEAM Users Guide, printed out camera-ready copy of Users Guide and delivered to the FEMP office for submission to DOE printing.

- Provided Alex Willman of National Energy Management Institute with copy of ASEAM 3.0 and assisted with its installation in his Alexandria office.
- Provided Bob Cusick of the University Extension Center in St. Louis with two copies each of BLCC 3.1 and ASEAM 3.0 in both formats for use in the Kansas City and St. Louis workshops.
- Provided Linde Fuller of NIST with 40 sets each of BLCC 3.1 and ASEAM 3.0 for use in the Kansas City and St. Louis workshops.
- Provided Kirk Bond of DOE/Kansas City Support Office with 100 copies of the A&E Guide and the ASEAM Users Guide for distribution at the Kansas City and St. Louis workshops.
- Provided Angie Bridges of GSA, San Francisco with 30 copies each of ASEAM 3.0, BLCC 3.1, A&E Guide, and ASEAM User's Guide for distribution at San Francisco workshop.
- Requested additional printing of Handbook 135 from NIST.
- Provided hard copies of ASEAM 3.0 User's Guide to 26 individuals who had previously requested it.
- Provided Linde Fuller of NIST with 33 sets each of BLCC 3.1 and ASEAM 3.0 for use in the Gaithersburg, Maryland workshops.
- Generated 380 labels from specialized BLCC mailing list, provided labels, and electronically generated list to Gene Meyer of Kansas State University, per instructions from Kirk Bond of DOE, Kansas City Support Office.
- Provided Kirk Bond with computer disk containing complete BLCC mailing list.
- Sent out 26 sets of ASEAM 3.0 to 21 individuals per request from Mark Burger of DOE Chicago Support Office.

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