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# DEFENSE UTILITY ENERGY REPORTING SYSTEM

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ACQUISITION

November 24, 1993

(DUSD/ES)

FOREWORD

This Manual is reissued under the authority of DoD Directive 5126.46, "Defense Energy Information System (DEIS)," December 2, 1987. Its purpose is to provide clear, reliable, timely, accurate, and objective energy information; prescribe instructions for the preparation and submission of utility energy data to support the Defense Utility Energy Reporting System (DUERS) of DEIS; and furnish information on the use of the DUERS.

DoD 5126.46-M, "Defense Energy Information System," February 1990, is hereby canceled.

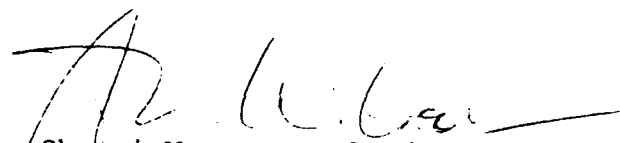
This Manual applies to the Office of the Secretary of Defense (OSD), the Military Departments, and the Defense Agencies (hereafter referred to collectively as "the DoD Components.") The term "Military Services," as used herein, refers to the Army, the Navy, the Air Force, and the Marine Corps.

This Manual is effective immediately and is mandatory for use by all the DoD Components. Supplementary instructions by the DoD Components are discouraged and should only be issued when necessary to define terms in support of the DUERS or for Service-unique requirements.

Send recommended changes to this Manual through channels to:

ASSISTANT DEPUTY UNDER SECRETARY OF DEFENSE  
CONSERVATION & INSTALLATIONS  
400 ARMY NAVY DRIVE, SUITE 206  
ARLINGTON, VIRGINIA 22204-2884

The DoD Components may obtain copies of this Manual through their own publications channels. Other Federal Agencies and the public may obtain copies from the National Technical Information Service, 5285 Port Royal Road, Springfield, VA. 22161.

  
Sherri Wasserman Goodman  
Deputy Under Secretary of Defense  
(Environmental Security)

*Environmental Security -- Defending Our Future*

## TABLE OF CONTENTS

|   | <u>Page</u> |
|---|-------------|
| FOREWORD  | i           |
| TABLE OF CONTENTS   | ii          |
| TABLES  | iii         |
| REFERENCES  | iv          |
| CHAPTER 1. GENERAL INFORMATION  | 1-1         |
| CHAPTER 2. REPORTING REQUIREMENTS   | 2-1         |
| A. DEFENSE UTILITY ENERGY REPORTING SYSTEM  | 2-1         |
| B. INFORMATION REQUIREMENTS   | 2-5         |
| CHAPTER 3. DUERS DATA TRANSMISSION  | 3-1         |
| A. DEFENSE DATA NETWORK   | 3-1         |
| B. FLOPPY DISKETTE SUBMISSION   | 3-1         |
| C. TAPE SUBMISSION  | 3-2         |
| D. DOD AUTOMATIC ADDRESS CENTER (DODAAC)  | 3-2         |
| CHAPTER 4. DUERS REPORTING FORMAT   | 4-1         |
| A. MEB 2 INVENTORY AND CONSUMPTION RECORD   | 4-1         |
| B. MEB 3 INDUSTRIAL PROCESS ENERGY RECORD   | 4-3         |
| C. MEB 4 WEATHER DATA RECORD  | 4-4         |
| D. MEB 5 POPULATION RECORD  | 4-6         |
| E. MEB 6 BUILDING AND SQUARE FOOTAGE RECORD                                       | 4-6         |
| F. MEB 7 ENERGY CERTIFICATION RECORD  | 4-9         |
| G. MEB 8 INDUSTRIAL PROCESS PRODUCTIVITY RECORD                                   | 4-10        |
| CHAPTER 5. PRODUCTS, PRODUCT CODES, AND BTU CONTENT<br>VALUES FOR DUERS REPORTING | 5-1         |
| CHAPTER 6. USE OF THE DUERS   | 6-1         |
| A. DUERS USER'S GUIDE   | 6-1         |
| B. ACCESS AND PASSWORDS TO THE DUERS  | 6-1         |

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TABLES

| <u>Table</u> | <u>TITLE</u>                            | <u>Page</u> |
|--------------|---|-------------|
| 1-1          | DEFENSE UTILITY ENERGY REPORTING SYSTEM | 1-2         |
| 4-1          | MEB-2 RECORD                            | 4-3         |
| 4-2          | MEB-3 RECORD                            | 4-4         |
| 4-3          | MEB-4 RECORD                            | 4-5         |
| 4-4          | MEB-5 RECORD                            | 4-6         |
| 4-5          | MEB-6 RECORD                            | 4-8         |
| 4-6          | MEB-7 RECORD                            | 4-10        |
| 4-7          | MEB-8 RECORD                            | 4-11        |
| 4-8          | SUMMARY OF DUERS FORMATS                | 4-12        |

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| A-1               |                   |

#### REFERENCES

- (a) Deputy Secretary of Defense Memorandum, "Defense Industrial Facilities Energy Management," March 13, 1991
- (b) Executive Order 12759, "Federal Energy Management," April 17, 1991
- (c) Section 2865 of Title 10, United States Code
- (d) Comptroller of the Department of Defense and Assistant Secretary of Defense (Production and Logistics) memorandum, "Energy Cost Savings Identification, Retention, and Reuse," June 9, 1992
- (e) Principal Deputy Assistant Secretary of Defense (Production and Logistics) memorandum, "Correction and Clarification of Procedures for Energy Savings Identification, Retention, and Reuse," February 3, 1993

## CHAPTER 1

### GENERAL INFORMATION

A. The Defense Utility Energy Reporting System (DUERS) is an automated management information system with which the Department of Defense monitors its supplies and consumption of energy. It was originally fielded in February 1974 as the Defense Energy Information System (DEIS) to respond to the need to manage DoD energy resources more closely in the aftermath of the 1973 Arab oil embargo. It is primarily used as an energy management tool, providing information about the DoD's inventory and consumption of utility energy. The DUERS is used to:

1. Help formulate energy policy.
2. Prepare management reports for senior Defense managers that address energy-related problems and anticipate those requiring early action.
3. Measure energy conservation achievements and determine progress toward energy goals and targets.
4. Provide DoD energy data to Congress, the Department of Energy, and other Federal Agencies.
5. Provide immediate, on-line access to DoD energy data for all valid users.
6. Identify energy usage and consumption trends.
7. Ensure that all DoD Components' DEIS data subsystems meet DUERS reporting requirements.
8. Export and download energy data to automated systems and microcomputer programs for local, regional, and global analysis.

B. The DEIS consists of two related data systems -- the Defense Mobility Energy Reporting System (DMERS) (5126.46-M-1), and the Defense Utility Energy Reporting System (DUERS) (5126.46-M-2).

1. The DMERS provides information on inventory and issues of petroleum products throughout the Department of Defense.
2. The DUERS identifies inventory for coal, propane and/or liquefied petroleum gas, and wood. It also identifies the

consumption of water and all other purchased utility energy (electricity, fuel oil, natural gas, steam and hot water, coal, and propane and/or liquefied petroleum gas) and renewable energy sources. It compares energy consumption against baseline consumption periods to determine energy conservation achievements. DUERS contains cost data on utility energy and environmental data such as degree-days.

C. The DUERS is intended to provide timely, mission-essential energy management data. The formats of this report were developed to ease preparation by reporting activities, provide for rapid transmission, and simplify automated data processing. Table 1-1 illustrates the types of data fields and displays in the DUERS.

Table 1-1

DEFENSE UTILITY ENERGY REPORTING SYSTEM

|                  |  |
|------------------|--|
| <u>Products</u>  | Electricity<br>Fuel Oil<br>Natural Gas<br>Coal<br>Steam<br>Propane and/or Liquefied Propane Gas<br>Renewable Energy Sources<br>Water Potable<br>Water Recycled                 |
| <u>Fields</u>    | Inventory (for Coal, Propane and/or Liquefied Petroleum Gas, Wood)<br>Consumption<br>BTU Content Conversion Factor<br>Process Energy Consumption<br>Cost<br>Environmental Data |
| <u>Summaries</u> | Reporting Activities<br>Major Commands<br>Military Services<br>Defense Agencies<br>States and Countries<br>CONUS and Worldwide   |

## CHAPTER 2

### REPORTING REQUIREMENTS

This Chapter describes the minimum reporting requirements -- in terms of data elements and reporting frequency -- needed to support the DUERS.

#### A. DEFENSE UTILITY ENERGY REPORTING SYSTEM

The DUERS collects data on DoD utility energy consumption for buildings and facilities, family housing, mobility substitution energy, and industrial process energy facilities throughout the world.

1. General. The DUERS provides information on the inventory and consumption of all purchased utility and renewable energy sources at all DoD activities for both facility and industrial process energy. This includes energy consumed by all tenants, customers, and remote bases assigned to or supported by the reporting installation. When mutually agreeable between the host and tenant, major energy consuming tenants may report energy consumption through their individual component channels. However, data submitted in this manner shall be coordinated between hosts and tenants to ensure that all consumption is reported only once. Energy consumed and reimbursed by non-DoD Activities or civilian contractors may be excluded from DUERS reporting. Each DoD Component shall determine which activities are consumers of facility energy and which are consumers of industrial process energy. The following criteria will be used:

a. Facilities engaged in manufacturing, repair, materiel storage and distribution, commissary, operational test and evaluation, disposal, incineration and similar activities will be designated industrial process energy activities.

b. Facilities used primarily for administration, housing, education and training, medical, research, staff, and headquarters functions will be designated facility energy activities.

c. Reporting installations may report separately industrial process and facility energy use, when both types of activities are conducted on an installation, or they may choose to designate individual facilities as "process facilities" when process energy consumption is 60 percent or greater than administrative energy use. Only Fiscal Year (FY) 1985 baseline data must be adjusted, if



required by this expanded definition of industrial process energy. Report adjustments in baseline data (i.e. moving administrative energy reporting into process category, or adding process energy that has not been previously reported) using standard DUERS procedures for FY85 data.

d. Facilities designated process energy facilities in FY85 will generally remain in that category, unless mission changes or reporting anomalies dictate.

## 2. Classes of energy that must be reported

a. Utility inventory data is data that measures stocks or stored quantities, such as coal and fuel oil (for tanks greater than 2000 gallons), which will be used to generate energy in a future reporting period but are currently on hand and available for use.

b. Utility energy consumption is the total actual usage of energy during the reporting period. Consumption for metered utility energy is the difference between the last period's ending meter reading and the ending meter reading for the current reporting period; e.g. electricity and natural gas. It may be assumed for reporting purposes that fuel oil distributed to end user tanks is used at the time the custody transfer takes place--usually at the user tank.

c. Industrial process energy is the facility energy directly consumed in the manufacture, maintenance, overhaul, rehabilitation or refurbishment, testing, and destruction of products such as tanks, aircraft, ships, munitions, propellants, and/or the component parts thereof, and energy consumed in the movement of materials in warehouses. This includes Government-owned, Contractor-operated facilities, operational test and evaluation facilities, and commissaries. It excludes energy used for support to ships in port or aircraft on the ground, personal comfort, medical facilities, general administration, research and development activities (except test and evaluation), facility security, staff and headquarters functions, and housekeeping requirements. In support of the industrial energy efficiency goal directed by the Deputy Secretary of Defense Memorandum (reference (a)) and by the President in E.O. 12759 (reference (b)), Defense activities will report industrial process energy consumption separately from energy used in administrative buildings. To ensure consistency when separate reporting of process energy is desired, reporting shall be accomplished on the DUERS MEB 3 Data Record on a monthly basis according to the instruction in Chapter 4.

(1) Each kind of utility energy consumed in an industrial process shall be reported separately. If 60 percent or more of total energy used in a facility is for an industrial process, the entire facility may be reported as a process energy facility by completing the DUERS MEB 6 Data Record.

(2) When a facility is used for more than one purpose, and one of those purposes is an industrial process consuming less than 60 percent of the total energy, that production area will be measured and reported separately.

(3) The requirement to isolate and measure industrial process energy consumption shall be determined at each activity since the requirement may indicate a need to install additional metering devices -- an action that should be taken if found to be cost-effective. Where meters do not exist and installing new ones is not cost-effective, professionally recognized methods of measuring and estimating utility energy usage are acceptable. Where meters do exist, energy consumption figures should be read directly from the meters or utility bills.

(4) Each DoD Component with industrial process activities may create a unit to measure energy efficiency (productivity); i.e., MBTU consumed per unit of output, where output is defined as some reasonable measure of the quantity of the product or service delivered to the military customer from a specific facility.

(a) The DoD Components may propose an aggregate efficiency measure for all its process energy use. If such a measure is proposed, the work load units must be reported along with the energy usage data.

(b) If the DoD Component chooses not to report an efficiency measure, OSD will measure gross industrial process energy use reduction on a "per gross square foot" basis for that Component against the FY85 industrial process energy baseline.

d. Family housing and mobility substitution energy shall each be reported at an activity using a separate Department of Defense Activity Address Code (DoDAAC). As an example, the Naval Shipyard in Philadelphia, PA, reports its installation utility energy under DoDAAC N00151, its family housing utility energy under DoDAAC D00151, and its mobility substitution energy under DoDAAC B00151. Mobility substitution energy is defined as the facilities' energy that directly substitutes for mobility energy to achieve greater

efficiency. Examples include cold iron ships support, aircraft, ship and weapons systems (e.g., tanks), simulator energy use, and central flight line aircraft power systems. Energy reported in these categories should be directly metered. Since the use of mobility substitution energy improves the overall energy efficiency of Defense energy usage, and improves readiness training and weapon system maintenance, its increased use should be actively encouraged.

3. Cost Savings Retention Certification. In support of the cost savings retention and reuse authority provided by 10 U.S.C. 2865 (reference (c)) and the joint Comptroller of the Department of Defense and Assistant Secretary of Defense (Production and Logistics) Memorandum (reference (d)), each installation's Post Engineer or Public Works Officer will file, as part of the fourth quarter report, the amount of energy cost savings in thousands of dollars including the Government's share from shared energy savings or performance contracts achieved during the past FY (i.e. the year covered by the report, see Chapter 4, MEB 7 Data Record). Also reported will be the Government's share from such contracts, cost savings used or earmarked for discretionary use, and cost savings used or to be used for additional energy conservation projects. This information will be reported annually as of September 30 for the preceding FY with normal reporting submissions. The first report will be submitted for FY 1993.

4. Report Frequency. Individual activities shall report separate monthly DUERS MEB 2, MEB 3, and MEB 4 records, as described in Chapter 4, at the close of each fiscal quarter. The DUERS data cutoff of monthly records shall be determined by the commercial utilities' billing schedules at each reporting activity. Report the monthly breakout of MEB 2 and MEB 3 records based upon utilities' billing schedules. For example, this may be the 12th of May to the 11th of June, or any other combination of dates. Report all energy purchased since the previous billing. MEB 5, MEB 6, MEB 7 and MEB 8 records shall be submitted annually following the fourth quarter of each FY. The DoD Component must submit DUERS data no later than 60 days following the end of the reporting period. The DoD Components shall submit requests for deviations from the reporting procedure to the Office of the Deputy Under Secretary of Defense for Environmental Security. (The report may be required on a monthly basis by the DUSD(ES) in the event of a peacetime energy emergency). Refer to Chapters 3 and 4 for instructions on how to prepare DUERS data for submission and the address to which the data is sent. In the event of a declared national security emergency or war, DUERS reporting shall be suspended for all

military theaters actively engaged in war fighting. DUERS reporting shall be maintained in CONUS to ensure that the Department of Defense is receiving adequate supplies of facilities energy, unless reporting waivers are granted by the OSP.

5. Data Lines. A summary of the utility reports is listed below.

a. At least one data line -- the MEB 2 Inventory and Consumption Record -- shall be prepared for each utility energy product consumed, stored, or issued by the reporting activity.

b. The MEB 3 Industrial Process Energy Record shall be prepared by those activities that consume and choose to segregate process energy.

c. The MEB 4 Weather Data Record is an optional submission by activities wishing to report weather data that differs from what is reported locally by the weather service.

d. The MEB 5 Population Record is submitted annually to report authorized population of an activity.

e. The MEB 6 Building and Square Footage Record is also reported annually to reflect the gross square footage of buildings that consume energy.

f. The MEB 7 Energy Certification Record is submitted annually to report energy cost savings and that portion of the savings retained for reinvestment according to 10 U.S.C. 2865 (reference (c)) at individual facilities (i.e. DoDAACS).

g. The MEB 8 record is submitted annually to reflect the output measure of the industrial process activity. Each DoD Component may establish guidelines for measuring process outputs with the default being industrial process energy consumed per gross square feet.

h. The data in the MEB 4, MEB 5, and MEB 6 records are reported because they are variables that affect energy consumption on an installation. Refer to Chapter 4 for detailed instructions on preparing the MEB data records.

## B. INFORMATION REQUIREMENTS

The reporting requirements identified in this Manual have been assigned Report Control Symbol DD-A&T(M)1313.

## CHAPTER 3

### DUERS DATA TRANSMISSION

Historically, most of the DUERS data was received through messages automatically generated by punched card images that were input to the old DEIS-II database. This method was relatively efficient but had a high error rate as a result of key punch errors and data communication errors. However, as the DoD Components developed their own DEIS-II data subsystems to facilitate their respective energy management portions of the central DEIS, more efficient and preferred methods of data transmission have become available. Specifically, use of the Defense Data Network and submission of data diskettes and tapes have reduced the need to rely on Automated Digital Network (AUTODIN). The purpose of this Chapter is to provide instructions on how to transmit data to the DUERS.

#### A. DEFENSE DATA NETWORK

The Department of Defense directed the Defense Information Systems Agency (DISA) to implement the Defense Data Network (DDN) as the DoD common-user data communications network. DDN supports local users as well as inter-computer communications. By becoming subscribers to the DDN, the DoD Component's DUERS data subsystems will have the technical means for high speed, automated file and data transfer between computers. For guidance on how to connect to the DDN, contact your organization's office responsible for providing telecommunications services. Specific instructions on how to perform DUERS data submissions using DDN can be obtained by writing:

7th Communications Group/GNE  
ATTN: DUERS  
Room 3D1053  
The Pentagon  
Washington, D.C. 20330-6345

#### B. FLOPPY DISKETTE SUBMISSION

The preferred method of data submission is on a floppy diskette. Data files must be in ASCII text file format on an MS-DOS formatted 3.5" or 5.25" floppy diskette, high or double density (HD or DD). Provide submissions in the DUERS reporting format as specified in Chapter 4 of this Manual. Forward all submissions to the 7th Communications Group at the address in section A, above.

C. TAPE SUBMISSION - (Least Desirable Method of Reporting)

Instead of transmitting data to the DUERS computer via DDN or floppy diskette, the DoD Components may transmit data on a computer tape. By consolidating and transcribing their activity data on a computer tape, a DUERS data subsystem may forward this tape to the central DEIS computer for direct input. Instructions on this process follow: (NOTE: Tape submissions are being phased out and steps should be made to transition to DDN file transfer or floppy disk submission).

1. Tape submissions shall only be made for an activity-wide reporting basis. The DoD Components shall specify transmission instructions for their major commands and installations. Each DoD Component should then forward a tape for DUERS data to the central DUERS computer per reporting period. Tape submissions may be accepted for a limited period from major commands when prior arrangements have been made through the 7th Communications Group. (See subsection C.4., below).

2. All submissions shall be prepared on unlabeled, nine-track magnetic computer tape, BPI (density) 6250, record length 80, block size 6240, record format-fixed block.

3. All data shall be entered in standard DUERS reporting format, as described in Chapter 4 of this Manual. Eighty column record length shall be used (traditional card format).

4. Tape submissions shall be forwarded to the 7th Communications Group at the address in section A, above.

D. DoDAAC

To obtain a DoDAAC, contact: Department of Defense Automatic Addressing Center, 1080 Franklin Street, Gentile Station, Dayton, Ohio 45444-5320.

CHAPTER 4

DUERS FORMAT

DUERS is designed to address the consumption of energy resources used to provide utility energy at DoD activities. The purpose of this Chapter is to provide instructions on how to prepare MEB 2, MEB 3, MEB 4, MEB 5, MEB 6, MEB 7, and MEB 8 records for submission to DUERS. DUERS data elements shall be reported in the format listed in section A. through G., below. Separate records shall be prepared for each applicable product code (e.g. electricity, natural gas, and propane) for each report period. If a particular data element is not applicable, report zeroes in that data field. Also, include leading zeroes to fill unused record columns of data fields (for example, to report 150 short tons consumption of anthracite coal, input 00000150 in Record columns 41-48 of the MEB 2 Record). Corrections to any data element submitted may be made within 120 days of the original report due date. Corrections after 120 days must be submitted to and approved by the appropriate DoD Component energy office. Corrections to these data elements may be made by resubmitting the record. When submitting corrections, all data elements on that record must be filled in, including data elements that previously were correct. However, only the record containing the error must be resubmitted.

A. MEB 2 - INVENTORY AND CONSUMPTION RECORD

The MEB 2 record shall be reported in the following format: (The MEB 2 record must be completed for every DUERS product stored or consumed; in some cases, this may involve reporting only inventory with no consumption in that report period).

| <u>Record Column</u> | <u>Data Field</u>  |
|----------------------|--|
| 1-3                  | MEB  |
| 4                    | Blank  |
| 5                    | 2  |
| 6                    | Blank  |
| 7-8                  | Enter the last two digits of the calendar year<br>of the reporting period.   |
| 9-10                 | Enter the two-digit number indicating the<br>month<br>of the reporting period; for example, March<br>would be entered as 03. (When a correction is<br>being made, always use the month and year of<br>the reporting period to be corrected.) |

11 Blank  
12-17 Enter the appropriate consuming DoD Activity Address Code (DoDAAC), such as FP2300, N00151, W26FAA.

18 Blank  
19-21 Enter the approved three character product code as shown in Chapter 5.

22 Blank  
23-30 Report DoD-owned inventory for each applicable product at the end of each report month. Inventory is reported in the same units as consumption for products ANC, COL, COK, PPG, and WUD only. Enter 8 zeroes for all other products.

31 Blank  
32-39 Report the measured or certified BTU content for the product only if it differs from the standard BTU value shown for the product in Chapter 5. Report an 8 digit whole number, without commas in this field; for example, the BTU content for ANC could be reported as 25000000 and for SHW as 00001100. Enter 8 zeroes in this data field if the standard BTU value will be used. (A BTU value must be reported for product code FSX.)

40 Blank  
41-48 Report the activity's total quantity of energy product consumed during the month covered by the report. This includes tenants and remote bases, as appropriate. It also includes any industrial process energy consumption. Exclude family housing and mobility substitution energy consumption since they are reported under their own separate DoDAACs. Military Services shall ensure that the same energy is not reported under two different DoDAACs. Consumption is reported in units as described in Chapter 5; for example, ELC is reported in megawatt hours and COL is reported in short tons.

49 Blank  
50-57 Available for DoD Component defined use.  
58 Blank  
59-66 Report cost in whole dollars for the total consumption reported in columns 41-48. Costs are of the energy consumed only, and do not include activity utility plant and/or system operation and maintenance. For fuel oils, use actual local commercial cost.

67-80 Blank



The following data lines are examples of correctly completed MEB 2 records: (There is only one space between data elements, and leading zeroes are used to fill unused record columns of data elements. If a particular data element does not apply, zeroes are used to fill that element.)

Table 4-1  
MEB-2 RECORD

|       |      |        |     |          |          |          |          |          |
|-------|------|--------|-----|----------|----------|----------|----------|----------|
| MEB 2 | 8601 | WC1J4Q | COL | 00055786 | 15600000 | 00012782 | 00000000 | 00525596 |
| MEB 2 | 8602 | B62863 | ELC | 00000000 | 00000000 | 00000591 | 00000000 | 0002155  |
| MEB 2 | 8605 | W33NYN | WUD | 00000000 | 09000000 | 00004630 | 00000000 | 00043290 |
| MEB 2 | 8603 | X62PN4 | ELC | 00000000 | 00000000 | 00001860 | 00000000 | 00155855 |

|      |        |         |           |         |             |               |      |  |
|------|--------|---------|-----------|---------|-------------|---------------|------|--|
|      |        |         |           |         |             |               |      |  |
| DATE |        |         |           |         |             |               |      |  |
|      | DoDAAC |         |           |         |             |               |      |  |
|      |        | PRODUCT |           |         |             |               |      |  |
|      |        | CODE    |           |         |             |               |      |  |
|      |        |         | INVENTORY |         |             |               |      |  |
|      |        |         |           | BTU     |             |               |      |  |
|      |        |         |           | CONTENT |             |               |      |  |
|      |        |         |           |         | CONSUMPTION |               |      |  |
|      |        |         |           |         |             | DoD COMPONENT |      |  |
|      |        |         |           |         |             | USE           |      |  |
|      |        |         |           |         |             |               | COST |  |

B. MEB 3 - INDUSTRIAL PROCESS ENERGY RECORD

The MEB 3 record shall be reported in the following format: (MEB 3 records should only be submitted by those activities that consume industrial process energy.)

| <u>Record Column</u> | <u>Data Field</u>  |
|----------------------|--|
| 1-3                  | MEB  |
| 4                    | Blank  |
| 5                    | 3  |
| 6                    | Blank  |
| 7-8                  | Enter the last two digits of the calendar year of the reporting period.  |
| 9-10                 | Enter the two-digit number indicating the month of the reporting period. |
| 11                   | Blank  |
| 12-17                | Enter the appropriate consuming DoD Activity Address Code (DoDAAC).      |
| 18                   | Blank  |

19-21 Enter the approved three-character product code as shown in Chapter 5.

22 Blank

23-30 Enter the quantity of energy reported in columns 41-48 of the MEB 2 record that is industrial process energy. Industrial process energy is defined as the facilities' energy utilized in the direct production, rehabilitation, or disposal of equipment or goods.

31 Blank

32-39 Enter quantity of the total energy reported on the MEB 2 record (columns 41-48) that was consumed in buildings. For ELC, NAG, FSX, FSD, FSR and FOR, this is metered consumption. For all other products, this may be estimated consumption. (Optional)

40-80 Blank

The following data lines are examples of correctly completed MEB 3 records:

Table 4-2  
MEB-3 RECORD

|       |         |         |           |          |          |
|-------|---------|---------|-----------|----------|----------|
| MEB 3 | 8603    | N60258  | NAG       | 00040180 | 00002148 |
| MEB 3 | 8601    | FP4800  | FSR       | 00000300 | 00000428 |
| DATE  |         |         |           |          |          |
|       | DoDAAC  |         |           |          |          |
|       | PRODUCT |         |           |          |          |
|       | CODE    |         |           |          |          |
|       |         | PROCESS |           |          |          |
|       |         | ENERGY  |           |          |          |
|       |         |         | BUILDINGS |          |          |

C. MEB 4 - WEATHER DATA RECORD

Weather data is received monthly from the USAF Environmental Technical Application Center, Asheville, NC and processed by USAF 7th Communication Group Personnel for all DoDAACs. The MEB 4 record should only be submitted if past experience has shown that the data reported centrally (from the weather service) differs 5 percent or more from the location of the reporting activity.

Record Column

Data Field

|       |   |
|-------|---|
| 1-3   | MEB   |
| 4     | Blank   |
| 5     | 4   |
| 6     | Blank   |
| 7-8   | Enter the last two digits of the calendar year of the reporting period.   |
| 9-10  | Enter the two-digit number indicating the month of the reporting period.  |
| 11    | Blank   |
| 12-17 | Enter the appropriate consuming DoD Activity Address Code (DoDAAC).   |
| 18-22 | Blank   |
| 23-26 | Enter the number of cooling degree days using a base of 65 degrees Fahrenheit. This is reported only if past experience has shown that the data reported centrally (from the weather service) differs 5 percent or more from the location of the reporting activity. Otherwise, this field should be zero filled. |
| 27    | Blank   |
| 28-31 | Enter the number of heating degree days using a base of 65 degrees Fahrenheit. This is reported only if past experience has shown that the data reported centrally differs 5 percent or more from the location of the reporting activity. Otherwise, this field should be zero filled.                            |
| 32-80 | Blank   |

The following data lines are examples of correctly completed MEB 4 records:

Table 4-3  
MEB-4 RECORD

|                   |          |          |
|-------------------|----------|----------|
| MEB 4 8604 FP4625 | 0032     | 0227     |
| MEB 4 8601 W42HOM | 0000     | 0516     |
|                   |          |          |
| DATE              |          |          |
|                   |          |          |
| DoDAAC            |          |          |
|                   |          |          |
| BLANK             |          |          |
| (5                |          |          |
| SPACES)           |          |          |
|                   | COOLING  |          |
|                   | DEG-DAYS |          |
|                   |          | HEATING  |
|                   |          | DEG-DAYS |
|                   |          | 4-5      |

D. MEB 5 - POPULATION RECORD

The MEB 5 record is reported annually as of September (month 09) to reflect the population of the activity at the end of the FY. This record has been included in the DUERS because population is a variable that affects installation energy consumption.

| <u>Record Column</u> | <u>Data Field</u>  |
|----------------------|--|
| 1-3                  | MEB  |
| 4                    | Blank  |
| 5                    | 5  |
| 6                    | Blank  |
| 7-8                  | Enter the last two digits of the calendar year of the reporting period.  |
| 9-10                 | Enter 09 to indicate the September date for this data element.   |
| 11                   | Blank  |
| 12-17                | Enter the appropriate consuming DoD Activity Address Code (DoDAAC).  |
| 18                   | Blank  |
| 19-25                | Enter the number of personnel served by the facilities energy reported for the activity. For DoDAACs assigned for family housing, this may be an estimate of the total number of family housing residents. |
| 26-80                | Blank  |

The following data lines are examples of correctly completed MEB 5 records:

Table 4-4  
MEB-5 RECORD

|       |      |        |            |
|-------|------|--------|------------|
| MEB 5 | 8609 | W45NQ7 | 0062262    |
| MEB 5 | 8609 | A68122 | 0000184    |
|       |      |        |            |
|       | DATE |        |            |
|       |      | DoDAAC |            |
|       |      |        | POPULATION |

E. MEB 6 - BUILDING AND SQUARE FOOTAGE RECORD

The MEB 6 record is reported annually as of September (month 09) to reflect the gross square footage for all buildings that consume energy. That is, these data elements relate to the FY just ended.

Record Column

Data Field

|       |  |
|-------|--|
| 1-3   | MEB  |
| 4     | Blank  |
| 5     | 6  |
| 6     | Blank  |
| 7-8   | Enter the last two digits of the calendar year of the reporting period.  |
| 9-10  | Enter 09 to indicate that the data was reported as of September.   |
| 11    | Blank  |
| 12-17 | Enter the appropriate consuming DoD Activity Address Code (DoDAAC).  |
| 18    | Blank  |
| 19-23 | Enter the total number of owned buildings whose energy is reported in the DUERS. Sterile buildings (buildings not in regular use, not consuming any energy, or awaiting demolition) or buildings maintained in "caretaker" condition throughout the year with only minimal security lighting should not be counted.      |
| 24    | Blank  |
| 25-30 | Enter the total square footage for all owned buildings, as reported in columns 19-23 of this record, and as found in the real property inventory of the activity or on design specifications. Report in thousands of square feet.  |
| 31    | Blank  |
| 32-35 | Enter the total number of energy consuming buildings rented or leased from any organization or party outside of the Department of Defense, if the energy use is paid for directly by the DoD Component.  |
| 36    | Blank  |
| 37-41 | Enter the total square footage for all leased buildings, as reported in columns 32-35, and as specified in the leasing agreement. Report in thousands of square feet.  |
| 42    | Blank  |
| 43-46 | Enter the total number of owned or leased buildings, as reported in columns 19-23 and 32-35, which are used primarily for industrial process energy. The DoD Components are responsible for the development of a definition of "process building" consistent with their individual energy use profile. This data element |

47  
48-52

should only be reported by those activities that consume industrial process energy.  
Blank  
Enter the total square footage of industrial process buildings, as reported in columns 43-46, and as found in the real property inventory on the design specifications, or in the leasing agreement. Report in thousands of square feet. This data element should only be reported by those activities that consume industrial process energy.  
Blank

53-80

The following data lines are examples of correctly completed MEB 6 records:

Table 4-5  
MEB-6 RECORD

|       |      |        |       |        |      |       |      |       |
|-------|------|--------|-------|--------|------|-------|------|-------|
| MEB 6 | 8609 | N65885 | 00078 | 002301 | 0000 | 00000 | 0078 | 02301 |
| MEB 6 | 8609 | W45NQ7 | 04533 | 015127 | 0000 | 00000 | 0000 | 00000 |
| MEB 6 | 8609 | A38950 | 00003 | 000143 | 0003 | 00129 | 0004 | 00125 |

DATE  
DoDAAC  
OWNED BLDGS  
OWNED SQ. FT. (x1000)  
LEASED BLDGS  
LEASED SQ. FT. (x1000)  
PROCESS BLDGS  
PROCESS SQ. FT. (x1000)

F. MEB 7 - Energy Certification Record

The MEB 7 record is reported annually as of September (month 09) to support the cost savings retention and reuse authority provided by 10 U.S.C. 2865 (reference (c)) and the Principal Deputy Assistant Secretary of Defense (Production and Logistics) Memorandum (reference (e)).

| <u>Record Column</u> | <u>Data Field</u>  |
|----------------------|--|
| 1-3                  | MEB  |
| 4                    | Blank  |
| 5                    | 7  |
| 6                    | Blank  |
| 7-8                  | Enter the last two digits of the calendar year of the reporting period.  |
| 9-10                 | Enter 09 to indicate that data was reported as of September.   |
| 11                   | Blank  |
| 12-17                | Enter the appropriate consuming DoD Activity Address Code (DoDAAC).  |
| 18                   | Blank  |
| 19-24                | Enter the total amount of energy cost savings, in thousands of dollars, resulting directly from energy conservation management actions, including the government's portion of energy performance contract savings, and rebates received through demand side management or energy conservation programs sponsored by utility companies. |
| 25                   | Blank  |
| 26-31                | Enter the Government's portion of energy cost savings in thousands of dollars resulting directly from "energy savings performance contracts," and rebates received through utility company sponsored demand side management or energy conservation programs.   |
| 32                   | Blank  |
| 33-38                | Enter the amount of energy cost savings, in thousands of dollars, identified in columns 19-24 above, earmarked for installation morale, welfare and recreation, facilities or services, improvements to existing military family housing, or other unspecified minor construction projects.  |
| 39                   | Blank  |
| 40-45                | Enter the amount of energy cost savings, in thousands of dollars, identified in columns 19-24 above, earmarked for transfer to higher  |

39  
40-45

Blank  
Enter the amount of energy cost savings, in thousands of dollars, identified in columns 19-24 above, earmarked for transfer to higher headquarters, or retained at the installation level (if approved by higher headquarters), for reinvestment into energy costs of other energy conservation projects.  
Blank

46-80

The following data lines are examples of correctly completed MEB 7 records:

Table 4-6  
MEB-7 RECORD

|       |        |  |   |  |   |        |
|-------|--------|--|---|--|---|--------|
| MEB 7 | 9309   | N65885                                 | 001000  | 001000   | 000000  | 000500 |
| MEB 7 | 9309   | W45NQ7                                 | 000500  | 000400   | 000250  | 000250 |
| MEB 7 | 9309   | A38950                                 | 000200  | 000100   | 000100  | 000100 |
| DATE  | DoDAAC | MEASURED<br>NET ENERGY<br>COST SAVINGS | ACTUAL<br>ENERGY<br>PERFORMANCE<br>CONTRACT SAVINGS | SAVINGS<br>RETAINED<br>FOR MWR/QOL<br>PROJECTS | SAVINGS<br>RETAINED<br>FOR ENERGY<br>CONSERVATION<br>REINVESTMENT |        |

G. MEB 8 - Industrial Process Productivity Record

The MEB-8 record is reported annually as of September (month 09) to reflect the output measure of the industrial process activity (see chapter 2 paragraph A.2.c.) through the end of the FY. Each DoD Component shall establish guidelines for measuring



Record Column

Data Field

|       |  |
|-------|--|
| 1-3   | MEB  |
| 4     | Blank  |
| 5     | 8  |
| 6     | Blank  |
| 7-8   | Enter the last two digits of the calendar year of the reporting period.  |
| 9-10  | Enter 09 to indicate that the data was reported as of September.   |
| 11    | Blank  |
| 12-17 | Enter the appropriate consuming DoD Activity Address Code (DoDAAC).  |
| 18    | Blank  |
| 19-25 | Enter the total number of gross square feet associated with this industrial process or other output measurements approved by your DoD Component. |
| 26-80 | Blank  |

The following data lines are examples of correctly completed MEB 8 records:

Table 4-7  
MEB-8 RECORD

|                           |
|---------------------------|
| MEB 8 9109 W45NQ7 0010769 |
| MEB 8 9109 A68122 1897890 |
|                           |
| DATE                      |
| DoDAAC                    |
| OUTPUT                    |
| MEASURE                   |

TABLE 4-8  
SUMMARY OF DUERS FORMATS

|       |             |              |                   |              |              |              |                              |              |
|-------|-------------|--------------|-------------------|--------------|--------------|--------------|------------------------------|--------------|
| MEB 2 | DATE        | DoDAAC       | PRODUCT INVENTORY | BTU          | CONSUMPTION  | DoD          | COST                         |              |
|       |             |              | CODE              | CONTENT      |              | COMPONENT    |                              |              |
| XXX X | XXXX        | XXXXXX       | XXX XXXXXXXXX     | XXXXXXXXXX   | XXXXXXXXXX   | XXXXXXXXXX   | XXXXXXXXXX                   |              |
|       | <u>7-10</u> | <u>12-17</u> | <u>19-21</u>      | <u>23-30</u> | <u>32-39</u> | <u>41-48</u> | <u>50-57</u><br><u>59-66</u> |              |
| MEB 3 | DATE        | DoDAAC       | PRODUCT           | INDUSTRIAL   | BUILDINGS    |              |                              |              |
|       |             |              | CODE              | PROCESS      |              |              |                              |              |
| XXX X | XXXX        | XXXXXX       | XXX               | XXXXXXXXXX   | XXXXXXXXXX   |              |                              |              |
|       | <u>7-10</u> | <u>12-17</u> | <u>19-21</u>      | <u>23-30</u> | <u>32-39</u> |              |                              |              |
| MEB 4 | DATE        | DoDAAC       | COOLING           | HEATING      |              |              |                              |              |
|       |             |              | DEGREE            | DEGREE       |              |              |                              |              |
|       |             |              | DAYS              | DAYS         |              |              |                              |              |
| XXX X | XXXX        | XXXXXX       | XXXX              | XXXX         |              |              |                              |              |
|       | <u>7-10</u> | <u>12-17</u> | <u>23-26</u>      | <u>28-31</u> |              |              |                              |              |
| MEB 5 | DATE        | DoDAAC       | POPULATION        |              |              |              |                              |              |
| XXX X | XXXX        | XXXXXX       | XXXXXX            |              |              |              |                              |              |
|       | <u>7-10</u> | <u>12-17</u> | <u>19-25</u>      |              |              |              |                              |              |
| MEB 6 | DATE        | DoDAAC       | NUMBER            | AREA OF      | NUMBER       | AREA OF      | NUMBER                       | AREA OF      |
|       |             |              | OF OWNED          | OWNED        | OF LEASED    | LEASED       | OF PROCESS                   | PROCESS      |
|       |             |              | BUILDINGS         | BUILD-       | BUILDINGS    | BUILDINGS    | BUILDINGS                    | BUILDINGS    |
|       |             |              |                   | INGS         |              |              |                              |              |
| XXX X | XXXX        | XXXXXX       | XXXXX             | XXXXXX       | XXXX         | XXXXX        | XXXX                         | XXXXX        |
|       | <u>7-10</u> | <u>12-17</u> | <u>19-23</u>      | <u>25-30</u> | <u>32-35</u> | <u>37-41</u> | <u>43-46</u>                 | <u>48-52</u> |
| MEB 7 | DATE        | DoDAAC       | MEASUR-           | ACTUAL       | SAVINGS      | SAVINGS      |                              |              |
|       |             |              | ED NET            | ENERGY       | RETAINED FOR | RETAINED     |                              |              |
|       |             |              | ENERGY            | PERFORMAN-   | MWR/QOL      | FOR ENERGY   |                              |              |
|       |             |              | COST              | CE           | PROJECTS     | CONSERVATION |                              |              |
|       |             |              | SAVINGS           | CONTRACT     |              | REINVESTMENT |                              |              |
|       |             |              |                   | SAVINGS      |              |              |                              |              |
| XXX X | XXXX        | XXXXXX       | XXXXXX            | XXXXXX       | XXXXXX       | XXXXXX       |                              |              |
|       | <u>7-10</u> | <u>12-17</u> | <u>19-24</u>      | <u>26-31</u> | <u>33-38</u> | <u>40-45</u> |                              |              |
| MEB 8 | DATE        | DoDAAC       | OUTPUT            |              |              |              |                              |              |
|       |             |              | MEASURE           |              |              |              |                              |              |
| XXX X | XXXX        | XXXXXX       | XXXXXX            |              |              |              |                              |              |
|       | <u>7-10</u> | <u>12-17</u> | <u>19-25</u>      |              |              |              |                              |              |

Chapter 5

PRODUCTS, PRODUCT CODES, AND BTU CONTENT VALUE FOR DUERS  
REPORTING

| <u>Product</u>               | <u>Product Code</u> | <u>BTU Content</u>                                 | <u>Reporting Requirements</u>   |
|------------------------------|---------------------|--|---|
| Electricity                  | ELC                 | 3,413,000<br>BTU/MWH                               | Report in megawatt hours (MWH) for all commercially purchased electricity |
| Natural gas                  | NAG                 | 1,031,000<br>BTU/KCF                               | Report in thousand cubic feet (KCF)                                       |
| Coal, anthracite             | ANC                 | 25,400,000<br>BTU/short ton                        | Report in short tons  |
| Coal, bituminous             | COL                 | 24,580,000<br>BTU/short ton                        | Report in short tons  |
| Coke                         | COK                 | 25,380,000<br>BTU/short ton                        | Report in short tons  |
| Purchased steam or hot water | SHW                 | MBTU content varies with temperature and pressure. | Report in MBTU  |
| Fuel oil, distillate         | FSD1                | 5,825,000<br>BTU/barrel                            | Report in barrels   |
| Fuel Oil, residual           | FSR2                | 6,287,000<br>BTU/barrel                            | Report in barrels   |
| Fuel Oil, Mixed              | FSX3                | 6,000,000  | Report in barrels   |

1 FSD may include the following DMERS products: DFA, DFM, DFR, DFW, DF1, DF2, FS1, FS2, XSN, KSD, PS1, PS2, and PS3.

2 FSR may include the following DMERS products: FS4, FS5, FS6, FSL, and NSF.

3 FSX may include any DMERS product not included as FOR, FSD, or FSR.

| <u>Product</u>         | <u>Product Code</u> | <u>BTU Content</u>                                 | <u>Reporting Requirements</u>   |
|------------------------|---------------------|--|---|
| Fuel oil, mixed        | FSX3                | 6,000,000<br>BTU/barrel                            | Report in barrels   |
| Fuel oil,<br>reclaimed | FOR                 | 5,000,000<br>BTU/barrel                            | Report in barrels   |
| Propane/LPG/butane     | PPG                 | 95,500<br>BTU/Gallon                               | Report in gallons   |
| Photovoltaic           | PHO                 | 3,413 BTU/KWH                                      | Report in kilowatt hours (KWH) for self-generated photovoltaic. Do not report if it is reported as ELC. |
| Solar thermal          | SOL                 | 1,000,000<br>BTU/MBTU                              | Report in MBTU for self-generated solar thermal actually used.  |
| Wind power             | WND                 | 3,413 BTU/KWH                                      | Report in KWH for self-generated wind power. Do not report if it is reported as ELC.                    |
| Wood                   | WUD                 | 17,000,000<br>BTU/short ton                        | Report in short tons for wood pellets, chips, and logs.   |
| Geothermal (Heat)      | GEO                 | MBTU content varies with temperature and pressure. | Report in MBTU for self-generated geothermal.   |

| <u>Product</u>              | <u>Product Code</u> | <u>BTU Content</u>      | <u>Reporting Requirements</u>  |
|-----------------------------|---------------------|-------------------------|--|
| Geothermal<br>(Electricity) | GLC                 | 3,413 BTU/KWH           | Report in KWH for electricity self-generated from geothermal. Do not report if it is reported as GEO or ELC. |
| Refuse derived Fuel         | RDF                 | 6,000,000 BTU/short ton | Report in short tons.  |
| Hydroelectric               | HYD                 | 3,413 BTU/KWH           | Report in KWH for self-generated hydroelectric power. Do not report if it is reported as ELC.                |
| Water Potable               | PWT                 | NONE                    | Report in millions of gallons  |
| Water Recycled              | RWT                 | NONE                    | Report in millions of gallons  |

(The intent is to report these alternative energies usages if they are from DoD-financed plants or plants financed under a third party contract specifically for the provision of energy to a DoD facility. If the energy provided by a commercial utility company to the DoD facility in the form of electricity, steam, or high temperature water is incidentally from an alternative source, then it should be reported under ELC or SHW.)

## CHAPTER 6

### USE OF THE DUERS

The DUERS centralized data base is migrating to an updated Relational Data Base Management System. This system will provide remote, on-line access to authorized energy managers. The purpose of this Chapter is to provide information on the resources available to DoD energy managers on the use of the DUERS.

#### A. DUERS USER'S GUIDE

The DUERS User's Guide is a printed Manual available to assist users in accessing and retrieving information maintained in the DUERS data base. It contains helpful information on system operations, including how to initiate and terminate a terminal session, system query capabilities, and query preparation. Terminal hints, examples of queries, and how to get help are also included. User's guides can be obtained from:

7th Communications Group/GNE  
ATTN: UERS  
Room 3D1053  
The Pentagon  
Washington, DC 20330-6345

#### B. ACCESS AND PASSWORDS TO THE DUERS

Users must obtain passwords to gain access to the DUERS database through the 7th Communications Group. The DUERS is an unclassified system and can be used by Defense energy managers. To request a password, submit your full name, military rank or civilian grade, security clearance, full mailing address, and phone number (both Defense Switched Network (DSN) and commercial) to the 7th Communications Group at the above address. **DO NOT** forward your Social Security Number.