Form EIA-871A

Form Approval
OMB No.: 1905-0145
Expires: 11/30/2002

U.S. Department of Energy

Commercial Buildings Energy Consumption Survey for 1999

BUILDING QUESTIONNAIRE

TABLE OF CONTENTS

About This Questionnaire 3

Section A. Building Size and Age
- Square Footage 5
- Floors 8
- Year Constructed 9

Section B. Principal Building Activity
- Building Activity or Activities 10
- Specific Building Activity 13
- Building Capacities 20
- Multibuilding Complex Information 22

Section C. Occupancy and Operating Hours
- Government Ownership 25
- Number of Occupants 25
- Building Ownership 27
- Vacant Space 27
- Hours in Use 27
- Employees 29

Section D. Energy Sources, End Uses, and Equipment
- Energy End Uses 32
- Energy Sources 33
- Heating Sources 35
- Heating Equipment 37
- Cooling Sources 40
- Cooling Equipment 41
- Heating/Cooling System Conservation Features 44
- Water Heating Sources 46
- Water Heating Equipment 46
- Cooking Sources 47
- Manufacturing Sources 48
- Electricity Generation Sources 49
- Electricity/Natural Gas Purchasing 54
- Bottled Gas/LPG/Propane Usage 55
- Wood Usage 55

Section E. Miscellaneous Equipment
- Specialized Space Use 57
- Medical Equipment 57
- Refrigeration 58
- Computers 60
- Office Equipment 61
- Lighting 63
- Lighting Conservation Features 66
- Windows 66

Section F. Electricity Usage 68

Section G. Natural Gas Usage 76

Section H. Fuel Oil Usage 85

Section I. District Steam Usage 93

Section J. District Hot Water Usage 102

ABOUT THIS QUESTIONNAIRE

Background

The 1999 Commercial Buildings Energy Consumption Survey (CBECS) was administered as a computer-assisted telephone interview (CATI) that was programmed using Blaise software. Past CBECS interviews have been administered in-person, and relied heavily on the use of "hand cards," which listed response categories for certain questions to make it easier for the respondent to choose an answer. Since these proved to be valuable, an attempt was made in 1999 to mail each respondent a "Question Reference Guide" and a set of worksheets. The "Question Reference Guide" was similar to the "hand cards" and the worksheets contained questions for which some research might be necessary, such as the square footage of the building, types of equipment, and energy consumption. Before entering the main questionnaire, the respondent was asked which of these materials they had completed, and questions in the main questionnaire were then worded accordingly, based on which materials were completed.

How to Use This Document

If there is no arrow on a response choice and no routing instructions immediately following the question, go to the next question.

Boxes contain routing information or re-coding information that was done automatically by the Blaise program and was transparent to the interviewer. When you come to a box, follow the instructions for routing. **Do not skip over boxes!**

Boxes with double-line borders are termination boxes. The interview is complete when one of these is reached.

Questions in a dashed-line box are questions that are grouped together (unfolding questions or follow-up percentage questions, for example).

{Words in brackets} are text that was automatically substituted in the question by Blaise. Brackets did not appear on the screen. The substitution text may be either an answer from a previous question (such as the square footage figure) or data from an external file (such as 1995 data) or alternate phrasing for a question. In this latter case, more than one phrase appears in brackets, separated by "/". Blaise automatically chose the most appropriate phrase for the question in these cases. Because of the limitations of this paper document, the conditions for each of these fills are not given.

Words in italics are text that may or may not have appeared for the question. The Blaise program displayed this text when appropriate (for example, text referencing the worksheets and/or "Question Reference Guide" would only appear when the respondent had those materials in front of them).

SAS VARIABLES appear as white on black. For questions for which there could be only one answer (mutually exclusive categories), these appear next to the question number and the codes for the answer categories are shown in the body of the question.

Verification Questions and "Check All That Apply" questions are shown as black on grey. Verification questions are questions that were just used as a check and were not used in the final database. "Check All That Apply" questions contain the SAS variables within the body of the question, and in these cases, each SAS variable has response categories of "Yes" or "No."

In the routing instructions, if square brackets follow a box number (➔ BOX 21 [01]), this is the line number to go to in the box. In many cases, this shows which category a variable was automatically coded into by Blaise.

DK stands for either "Don't Know" or "Refused." If there are no specific routing instructions given for DK, the path was the same as if an answer was given.

Instructions that say, for example, "Enter a numeric value between 1 and 999" were not seen on the screen. This instruction appears in this document just to indicate what the acceptable ranges were.

Other Screen Conventions

TEXT IN UPPERCASE was not intended to be read aloud to the respondent.

[WORDS IN SQUARE BRACKETS] are interviewer notes or optional text that appeared on the question screen.

There was a header on each question screen which included the building name, address, and description. When [READ FROM ABOVE] appears within a question, the interviewers were instructed to insert enough information from this header to clearly identify the building.

On screens that the instruction [** PROBE **] appeared, interviewers were instructed to probe for an answer if the respondent was unsure or did not know the answer. If this instruction did <u>not</u> appear on the screen, it was important that they <u>not</u> probe, because in these cases there were follow-up questions designed to guide the respondent to an approximate answer.

SECTION A. BUILDING SIZE AND AGE

A-1. **SQFT7**

Please refer to Worksheet 1, that's the green worksheet, for some of the next questions.

What is the gross or total square footage of all the space in this building, both finished and unfinished, including: basements, indoor parking levels, hallways, lobbies, stairways, and elevator shafts? *This number is found in Box 1.*

[** VERIFY NUMBER DIGIT BY DIGIT **]

[IF ASKED: Total square footage = Length of building multiplied by width of building.]

Enter a numeric value between 1 and 999999999: _____

1-999999999 ➔ BOX 1
DK and have "Question Reference Guide" ➔ A-2
DK and don't have "Question Reference Guide" ➔ A-3

BOX 1
Is the square footage greater than 1,000?
Yes ➔ BOX 2
No ➔ BOX 5

A-2. **SQFTC7**

I understand that it may be difficult to give an exact figure for square footage. However, the size of your building is very important in helping understand the building's use of energy.

Please turn to Reference 1 in the bright orange Question Reference Guide, which has ten categories ranging from "one thousand square feet or less" to "over one million square feet". Which category best describes the total gross square footage in this building? There are tips provided to help you estimate your building's size.

[IF RESPONDENT GIVES THE CATEGORY CODE, VERIFY THE RESPONSE BY READING THE FULL ANSWER.]

01 ..... 1,000 SQ FT OR LESS ➔ BOX 5
02 ..... 1,001 TO 5,000 SQ FT
03 ..... 5,001 TO 10,000 SQ FT
04 ..... 10,001 TO 25,000 SQ FT
05 ..... 25,001 TO 50,000 SQ FT
06 ..... 50,001 TO 100,000 SQ FT ➔ BOX 3
07 ..... 100,001 TO 200,000 SQ FT
08 ..... 200,001 TO 500,000 SQ FT
09 ..... 500,001 TO 1 MILLION SQ FT
10 ..... OVER 1 MILLION SQ FT

DK ➔ A-17

A-3. SQFT257 **"UNFOLDING SQUARE FOOTAGE CATEGORY"**

I understand that it may be difficult to give an exact figure for square footage. However, the size of your building is very important in helping understand the building's use of energy.

Thinking of a book or music superstore, which is about twenty-five thousand square feet, would you say that your building is smaller than, about the same as, or larger than twenty-five thousand square feet?

1 ..... SMALLER ➔ A-4
2 ..... SAME SIZE ➔ BOX 2 [04]
3 ..... LARGER ➔ A-7

A-4. SQFT107

Thinking of a large family restaurant, which is about ten thousand square feet, would you say that your building is smaller than, about the same as, or larger than ten thousand square feet?

1 .....SMALLER ➔ A-5
2 .....SAME SIZE ➔ BOX 2 [03]
3 .....LARGER ➔ BOX 2 [04]

A-5. SQFT57

Thinking of a fast food restaurant, which is about five thousand square feet, would you say that your building is smaller than, about the same as, or larger than five thousand square feet?

1 .....SMALLER ➔ A-6
2 .....SAME SIZE ➔ BOX 2 [02]
3 .....LARGER ➔ BOX 2 [03]

A-6. SQFTONE7

Thinking of a building twice the size of a two car garage, which is about one thousand square feet, would you say that your building is smaller than, about the same as, or larger than one thousand square feet?

1 .....SMALLER ➔ BOX 5
2 .....SAME SIZE ➔ BOX 5
3 .....LARGER ➔ BOX 2 [02]

DK TO ANY ONE OF THESE UNFOLDING QUESTIONS ➔ A-17

A-7. SQFT507

Thinking of a supermarket, which is about fifty thousand square feet, would you say that your building is smaller than, about the same as, or larger than fifty thousand square feet?

1 .....SMALLER ➔ BOX 2 [05]
2 .....SAME SIZE ➔ BOX 2 [05]
3 .....LARGER ➔ A-8

A-8. SQFT1007

Thinking of a large discount department store, which is about one hundred thousand square feet, would you say that your building is smaller than, about the same as, or larger than one hundred thousand square feet?

1 .....SMALLER ➔ BOX 2 [06]
2 .....SAME SIZE ➔ BOX 2 [06]
3 .....LARGER ➔ A-9

A-9. SQFT2007

Thinking of a three level department store, which is about two hundred thousand square feet, would you say that your building is smaller than, about the same as, or larger than two hundred thousand square feet?

1 .....SMALLER ➔ BOX 2 [07]
2 .....SAME SIZE ➔ BOX 2 [07]
3 .....LARGER ➔ A-10

A-10. SQFT5007

Thinking of a professional basketball arena, which is about five hundred thousand square feet, would you say that your building is smaller than, about the same as, or larger than five hundred thousand square feet?

1 .....SMALLER ➔ BOX 2 [08]
2 .....SAME SIZE ➔ BOX 2 [08]
3 .....LARGER ➔ A-11

A-11. SQFTMIL7

Thinking of a skyscraper, which is about one million square feet, would you say that your building is smaller than, about the same as, or larger than one million square feet?

1 .....SMALLER ➔ BOX 2 [09]
2 .....SAME SIZE ➔ BOX 2 [09]
3 .....LARGER ➔ BOX 2 [10]

BOX 2

SQFTC7

Auto-code square footage category. If the previous question was part of the "unfolding" category, the numeric code that was given in brackets is the auto-coded square footage category.

01 ..... 1,000 SQ FT OR LESS
02 ..... 1,001 TO 5,000 SQ FT
03 ..... 5,001 TO 10,000 SQ FT
04 ..... 10,001 TO 25,000 SQ FT
05 ..... 25,001 TO 50,000 SQ FT
06 ..... 50,001 TO 100,000 SQ FT
07 ..... 100,001 TO 200,000 SQ FT
08 ..... 200,001 TO 500,000 SQ FT
09 ..... 500,001 TO 1 MILLION SQ FT
10 ..... OVER 1 MILLION SQ FT

→ BOX 4

BOX 3

Is the building from the longitudinal sample and was the square footage category reported in1995?

Yes → BOX 4
No → A-17

BOX 4

Is the building in a larger or smaller square footage category than in 1995, or is it in the same category?

Larger → A-12
Smaller → A-14
Same → A-17

A-12. **ONLYBLD7**

It was recorded in 1995 that the square footage was smaller than this. Does this square footage include <u>only</u> the building [READ FROM ABOVE]?

1 ..... YES → A-13
2 ..... NO → A-16

DK → A-13

A-13. **ANYADD7**

Have there been any additions to this building since 1995?

1 ..... YES → A-17
2 ..... NO → A-17

A-14. **ALLBLD7**

It was recorded in 1995 that the square footage was larger than this. Does this square footage include the entire building [READ FROM ABOVE]?

1 ..... YES ➔ A-15
2 ..... NO ➔ A-16

DK ➔ A-15

A-15. **ANYDEM7**

Was part of this building demolished since 1995?

1 ..... YES ➔ A-17
2 ..... NO ➔ A-17

A-16. **SQFTREV7**

For this study, we are focusing on the building [READ FROM ABOVE]. What is the square footage for this building?

[** VERIFY NUMBER DIGIT BY DIGIT **]

Enter a numeric value between 1 and 999999999: _____

1000 or less ➔ BOX 5
Over 1000 ➔ A-17

DK ➔ A-17

BOX 5

Since this study is of buildings that are more than one thousand square feet, this interview is complete. Thank you for your time and help.

[CLICK ON FORMS, EXIT]

A-17. **NFLOOR7**

How many floors are in the tallest section of the building, including basements, parking levels, or any other floors below ground level? *This number is found in Box 2 [on Worksheet 1].*

[** PROBE **]

Enter a numeric value between 1 and 999: ____

A-18. **YRCON7**

What year was this building constructed? If there have been major additions, give the year the largest portion was completed. *This is found in Box 3 [on Worksheet 1].*

Enter a numeric value between 1600 and 2000: ____

1600-1998 ➔ SECTION B
1999 ➔ A-20
2000 ➔ BOX 6

DK ➔ A-19

A-19. **YRCONC7**

Which of the following ranges best describes when this building was constructed...

01 ..... Before 1920,
02 ..... 1920 to 1945,
03 ..... 1946 to 1959,
04 ..... the 60's,
05 ..... the 70's,
06 ..... the 80's,
07 ..... 1990 to 1995, or
08 ..... 1996 to 1999?
➔ SECTION B
09 ..... [IF VOLUNTEERED] 2000 ➔ BOX 6

DK ➔ SECTION B

BOX 6

Since this study is of buildings that were open for occupancy before January 2000, this interview is complete. Thank you for your time and help.

[CLICK ON FORMS, EXIT]

A-20. **MONCON7**

In what month of 1999 was the building first ready for occupancy?

01 ..... JANUARY
01 ..... FEBRUARY
01 ..... MARCH
02 ..... APRIL
02 ..... MAY
02 ..... JUNE
03 ..... JULY
03 ..... AUGUST
03 ..... SEPTEMBER
04 ..... OCTOBER
04 ..... NOVEMBER
04 ..... DECEMBER

SECTION B. BUILDING ACTIVITY

BOX 7

Is the building from the longitudinal sample and was the building 75 percent or more of a single activity except for "Other" in 1995?

Yes ➔ B-1
No ➔ B-2

B-1. **PBA95YN7**

It was recorded in 1995 that this building was {1995 activity}. Is it still true that 75 percent or more of the floorspace in the building is used for this purpose?

[** PROBE **]

1 ..... YES ➔ BOX 8
2 ..... NO ➔ B-2

DK ➔ B-33

BOX 8

Assign activity as the one from 1995, then follow path as shown here.

Office/Professional	➔ B-8
Warehouse	➔ B-19
Food Sales or Service	➔ B-9
Retail	➔ B-10
Education	➔ B-11
Religious Worship	➔ BOX 13 [12]
Public Assembly	➔ B-12
Health Care	➔ B-13
Service	➔ B-14
Lodging	➔ B-15
Public Order and Safety	➔ B-16
Residential	➔ B-17
Industrial/Manufacturing	➔ B-18
Agricultural	➔ B-21
Vacant	➔ B-22

B-2. **ONEACT7**

The next questions are about how this building is used. Does one single activity account for 75 percent or more of the floorspace in the building [READ FROM ABOVE]?

[** PROBE **]

1 ..... YES ➔ B-3
2 ..... NO ➔ B-4

DK ➔ B-33

B-3. **ACT7**

Please turn to Reference 2 [in the bright orange Question Reference Guide]. Which one of the activities listed accounts for 75 percent or more of the floorspace?

[** PROBE **]

11 ..... Office or professional, ➔ B-8
12 ..... Warehouse, ➔ B-19
13 ..... Food sales or service, ➔ B-9
14 ..... Retail, ➔ B-10
15 ..... Education, ➔ B-11
16 ..... Religious worship, ➔ BOX 13 [12]
17 ..... Public assembly, ➔ B-12
18 ..... Health care, ➔ B-13
19 ..... Service, ➔ B-14
20 ..... Lodging, ➔ B-15
21 ..... Public order and safety, ➔ B-16
22 ..... Residential, ➔ B-17
23 ..... Industrial or manufacturing, ➔ B-18
24 ..... Agricultural, ➔ B-21
25 ..... Vacant, ➔ B-22
26 ..... Or some other activity? ➔ B-24

DK ➔ B-33

B-4. **ACT17** **ACT27** **ACT37**

Please turn to Reference 2 [in the bright orange Question Reference Guide]. Which activities occupy the most space in this building? Choose up to three...

[** PROBE **]

11 ..... Office or professional,
12 ..... Warehouse,
13 ..... Food sales or service,
14 ..... Retail,
15 ..... Education,
16 ..... Religious worship,
17 ..... Public assembly,
18 ..... Health care,
19 ..... Service,
20 ..... Lodging,
21 ..... Public order and safety,
22 ..... Residential,
23 ..... Industrial or manufacturing,
24 ..... Agricultural,
25 ..... Vacant,
26 ..... Or some other activity?

➔ B-5

DK ➔ B-33

B-5. **ACT1PCT7**

About what percentage of the total space is {first activity given}?

Enter a numeric value between 0 and 100: ___

B-6. **ACT2PCT7**

About what percentage of the total space is {second activity given}?

Enter a numeric value between 0 and 100: ___

Three activities given ➔ B-7
Only two activities given ➔ BOX 9

B-7. **ACT3PCT7**

About what percentage of the total space is {third activity given}?

Enter a numeric value between 0 and 100: ___

BOX 9

Determine whether there is an activity with a maximum percent. If so, define that as the activity. If there are two or three equal maximum percentages (or if they are all DK), assign the activity as the most energy intensive one (based on intensities from the 1995 CBECS, in this order from most to least intensive: health care, food sales or service, other, lodging, service, public assembly, public order and safety, office, education, retail, warehouse, religious worship, vacant, industrial/ manufacturing, agricultural, residential). Then follow the path as shown here:

Office/Professional	➔ B-8
Food Sales or Service	➔ B-9
Retail	➔ B-10
Education	➔ B-11
Public Assembly	➔ B-12
Health Care	➔ B-13
Service	➔ B-14
Lodging	➔ B-15
Public Order and Safety	➔ B-16
Residential	➔ B-17
Industrial/Manufacturing	➔ B-18
Warehouse	➔ B-19
Agricultural	➔ B-21
Vacant	➔ B-22
Other	➔ B-24
Religious Worship	➔ BOX 13 [12]

B-8. **OFFCSP7**

For the purposes of this survey, I will include your building in the general category of office.

More specifically, what type of office building is this? Is it...

[** PROBE **]

1 ..... a bank or other financial institution, ➔ BOX 13 [02]
2 ..... a doctor's or dentist's office, ➔ BOX 13 [02]
3 ..... a government office, ➔ BOX 13 [02]
4 ..... a veterinarian's office, ➔ BOX 13 [08]
5 ..... an administrative or professional office building, ➔ BOX 13 [02]
6 ..... a research and development building, ➔ BOX 13 [02]
7 ..... or some other type of office? ➔ B-25

DK ➔ B-33

B-9. **FOODSP7**

For the purposes of this survey, I will include your building in the general category of food sales or service.

More specifically, what type of food sales or service building is this? Is it...

[** PROBE **]

1 ..... a restaurant, bar, fast food chain, or cafeteria, ➔ BOX 13 [15]
2 ..... a grocery store or food market, ➔ BOX 13 [06]
3 ..... a gas station with a convenience store, ➔ BOX 13 [06]
4 ..... a convenience store, ➔ BOX 13 [06]
5 ..... an alcoholic beverage store, ➔ BOX 13 [25]
6 ..... or some other type of food sales or service building? ➔ B-25

DK ➔ B-33

B-10. **RETLSP7**

For the purposes of this survey, I will include your building in the general category of retail.

More specifically, what type of retail building is this? Is it...

[** PROBE **]

01	..... an enclosed mall,	➔ BOX 13 [24]
02	..... a strip shopping center,	➔ BOX 13 [23]
03	..... a car dealership or showroom,	➔ BOX 13 [25]
04	..... an alcoholic beverage store,	➔ BOX 13 [25]
05	..... a store that rents items such as videos, equipment, or vehicles,	➔ BOX 13 [25]
06	..... a gas station with a convenience store,	➔ BOX 13 [06]
07	..... a convenience store,	➔ BOX 13 [06]
08	..... a gas station,	➔ BOX 13 [26]
09	..... a grocery store or food market,	➔ BOX 13 [06]
10	..... a photo processing shop,	➔ BOX 13 [26]
11	..... a copy center,	➔ BOX 13 [26]
12	..... a post office or postal center,	➔ BOX 13 [26]
13	..... a free-standing store such as a department, furniture, clothing, hardware, drugstore, or bookstore,	➔ BOX 13 [25]
14	..... or some other type of retail building?	➔ B-25

DK ➔ B-33

B-11. **EDUCSP7**

For the purposes of this survey, I will include your building in the general category of education.

More specifically, what type of education building is this? Is it...

[** PROBE **]

1	..... a preschool or daycare,	➔ BOX 13 [14]
2	..... an elementary, middle school, or high school,	➔ BOX 13 [14]
3	..... a college or university,	➔ BOX 13 [14]
4	..... a laboratory,	➔ BOX 13 [04]
5	..... a library or museum,	➔ BOX 13 [13]
6	..... or some other type of education building?	➔ B-25

DK ➔ B-33

B-12. **ASSMSP7**

For the purposes of this survey, I will include your building in the general category of public assembly.

More specifically, what type of public assembly building is this? Is it...

[** PROBE **]

01 .. a theater, cinema, sports arena, casino, or night club, ➔ BOX 13 [13]
02 .. a gymnasium, health club, bowling alley, or other recreational sports facility, ➔ BOX 13 [13]
03 .. a social meeting center, meeting hall, or convention center, ➔ BOX 13 [13]
04 .. a library or museum, ➔ BOX 13 [13]
05 .. a transportation terminal, ➔ BOX 13 [13]
06 .. a funeral home, ➔ BOX 13 [13]
07 .. a restaurant, bar, fast food chain, or cafeteria, ➔ BOX 13 [15]
08 .. a broadcasting studio, ➔ BOX 13 [13]
09 .. or some other type of public assembly building? ➔ B-25

DK ➔ B-33

B-13. **HLTHSP7**

For the purposes of this survey, I will include your building in the general category of health care.

More specifically, what type of health care building is this? Is it...

[** PROBE **]

01 ..... a hospital or other inpatient health care building, ➔ BOX 13 [16]
02 ..... a doctor's or dentist's office, ➔ BOX 13 [02]
03 ..... a clinic or other outpatient health care building, ➔ BOX 13 [08]
04 ..... a nursing home, assisted living center, or other residential care building, ➔ BOX 13 [17]
05 ..... a mental health institution, ➔ BOX 13 [16]
06 ..... an inpatient rehabilitation center, ➔ BOX 13 [16]
07 ..... an outpatient rehabilitation center, ➔ BOX 13 [08]
08 ..... a veterinarian's office, ➔ BOX 13 [08]
09 ..... a laboratory, ➔ BOX 13 [04]
10 ..... or some other type of health care building? ➔ B-25

DK ➔ B-33

B-14. **SERVSP7**

For the purposes of this survey, I will include your building in the general category of service.

More specifically, what type of service building is this? Is it...

[** PROBE **]

01	..... an auto service or auto repair shop,	➔ BOX 13 [26]
02	..... a bank or other financial institution,	➔ BOX 13 [02]
03	..... a beauty parlor or barber shop,	➔ BOX 13 [26]
04	..... a car wash,	➔ BOX 13 [26]
05	..... a copy center,	➔ BOX 13 [26]
06	..... a dry cleaner or laundromat,	➔ BOX 13 [26]
07	..... a gas station with a convenience store,	➔ BOX 13 [06]
08	..... a gas station,	➔ BOX 13 [26]
09	..... a kennel,	➔ BOX 13 [26]
10	..... a photo processing shop,	➔ BOX 13 [26]
11	..... a post office or postal center,	➔ BOX 13 [26]
12	..... a store that rents items such as videos, equipment, or vehicles,	➔ BOX 13 [25]
13	..... a repair shop,	➔ BOX 13 [26]
14	..... a gymnasium, health club, bowling alley, or other recreational sports facility,	➔ BOX 13 [13]
15	..... a restaurant, bar, fast food chain, or cafeteria,	➔ BOX 13 [15]
16	..... an indoor parking garage	➔ BOX 11
17	..... or some other type of service building?	➔ B-25

DK ➔ B-33

B-15. **LODGSP7**

For the purposes of this survey, I will include your building in the general category of lodging.

More specifically, what type of lodging building is this? Is it...

[** PROBE **]

01	..... a hotel,	➔ BOX 13 [18]
02	..... a motel, inn, or resort	➔ BOX 13 [18]
03	..... a retirement home,	➔ BOX 13 [18]
04	..... a shelter, orphanage, or children's home,	➔ BOX 13 [18]
05	..... a convent or monastery,	➔ BOX 13 [18]
06	..... a dormitory, fraternity, or sorority,	➔ BOX 13 [18]
07	..... a nursing home, assisted living center, or other residential care building,	➔ BOX 13 [17]
08	..... a half-way house,	➔ BOX 13 [18]
09	..... a prison,	➔ BOX 13 [07]
10	..... or some other type of lodging?	➔ B-25

DK ➔ B-33

B-16. **ORDRSP7**

For the purposes of this survey, I will include your building in the general category of public order and safety.

More specifically, what type of public order and safety building is this? Is it...

[** PROBE **]

1 ..... a jail, reformatory, or penitentiary, ➔ BOX 13 [07]
2 ..... a courthouse or probation office, ➔ BOX 13 [07]
3 ..... a fire or police station, ➔ BOX 13 [07]
4 ..... a half-way house, ➔ BOX 13 [18]
5 ..... or some other type of public order and safety building? ➔ B-25

DK ➔ B-33

B-17. **RESDSP7**

For the purposes of this survey, I will include your building in the general category of residential.

More specifically, what type of residential building is this? Is it...

[** PROBE **]

01 ..... a hotel, ➔ BOX 13 [18]
02 ..... a motel, inn, or resort ➔ BOX 13 [18]
03 ..... a retirement home, ➔ BOX 13 [18]
04 ..... a shelter, orphanage, or children's home ➔ BOX 13 [18]
05 ..... a convent or monastery, ➔ BOX 13 [18]
06 ..... a dormitory, fraternity, or sorority, ➔ BOX 13 [18]
07 ..... a nursing home, assisted living center, or other residential care building, ➔ BOX 13 [17]
08 ..... a half-way house, ➔ BOX 13 [18]
09 ..... or some other type of residential building? ➔ BOX 10

DK ➔ BOX 10

B-18. **WARECHK7**

Is this building used primarily as a warehouse or distribution center?

[** PROBE **]

1 ..... YES ➔ B-19
2 ..... NO ➔ B-20

DK ➔ B-20

B-19. **WARESP7**

For the purposes of this survey, I will include your building in the general category of warehouse.

Is this a refrigerated or non-refrigerated warehouse?

[** PROBE **]

1 ..... REFRIGERATED WAREHOUSE ➔ BOX 13 [11]
2 ..... NON-REFRIGERATED WAREHOUSE ➔ BOX 13 [05]

DK ➔ B-33

B-20. **INDRET7**

Is any of the space in this building used for retail sales of the products that are made here?

[** PROBE **]

1 ..... YES ➔ BOX 13 [91]
2 ..... NO ➔ BOX 10

DK ➔ BOX 10

B-21. **AGRRET7**

Is any of the space in this building used for retail sales of the products that are grown here?

[** PROBE **]

1 ..... YES ➔ BOX 13 [91]
2 ..... NO ➔ BOX 10

DK ➔ BOX 10

B-22. **VACUSE7**

Was the vacant space used for or intended to be used for either agricultural, industrial, manufacturing, or residential purposes or as a parking garage?

1 ..... YES ➔ BOX 12
2 ..... NO ➔ B-23

DK ➔ B-23

B-23. **ALLVAC7**

Is this building <u>completely</u> vacant?

1 ..... YES ⎫ ➔ BOX 13 [01]
2 ..... NO ⎭

B-24. **OTHRSP7**

For the purposes of this survey, I will include your building in the general category of other types of buildings.

More specifically, what type of other building is this? Is it...

[** PROBE **]

01	an airplane hangar,	➔ BOX 13 [91]
02	a crematorium,	➔ BOX 13 [91]
03	a funeral home,	➔ BOX 13 [13]
04	a laboratory,	➔ BOX 13 [04]
05	an indoor parking garage,	➔ BOX 11
06	a transportation terminal,	➔ BOX 13 [13]
07	a veterinarian's office,	➔ BOX 13 [08]
08	a broadcasting studio,	➔ BOX 13 [13]
09	a gymnasium, health club, bowling alley, or other recreational sports facility,	➔ BOX 13 [13]
10	a theater, cinema, sports arena, casino, or night club,	➔ BOX 13 [13]
11	an agricultural building with some retail space,	➔ BOX 13 [91]
12	a manufacturing or industrial building with some retail space,	➔ BOX 13 [91]
13	or some other type of building?	➔ B-25
14	FIFTY PERCENT COMMERCIAL	➔ BOX 13 [91]

DK ➔ B-33

B-25. **Open-Ended Question**

Please describe this other type of activity.

OPEN ANSWER BOX: _____

IF PREVIOUS QUESTION WAS:	**GO TO:**
B-8 (OFFCSP7)	**➔ BOX 13 [02]**
-10 (RETLSP7)	**➔ BOX 13 [25]**
B-11 (EDUCSP7)	**➔ BOX 13 [14]**
B-12 (ASSMSP7)	**➔ BOX 13 [13]**
B-13 (HLTHSP7)	**➔ BOX 13 [08]**
B-14 (SERVSP7)	**➔ BOX 13 [26]**
B-15 (LODGSP7)	**➔ BOX 13 [18]**

BOX 10

Since this survey is of commercial buildings only, this interview is complete. Thank you very much for your time and help.

[CLICK ON FORMS, EXIT]

BOX 11

Since this survey does not cover parking garages, this interview is complete. Thank you very much for your time and help.

[CLICK ON FORMS, EXIT]

BOX 12

Since this survey does not include these types of buildings [agricultural, industrial, manufacturing, or parking garages] this interview is complete. Thank you very much for your time and help.

[CLICK ON FORMS, EXIT]

BOX 13

PBA7

Go to the numeric code that was given in brackets in the preceding question. This is the Principal Building Activity by CBECS definition. Then go to the next question as specified.

01	Vacant	➔ B-33
02	Office/Professional	➔ B-33
04	Laboratory	➔ B-33
05	Warehouse (nonrefrig.)	➔ B-33
06	Food sales	➔ B-33
07	Public order and safety	➔ B-33
08	Health care (outpatient)	➔ B-33
11	Warehouse (refrig.)	➔ B-33
12	Religious worship	➔ B-26
13	Public assembly	➔ B-27
14	Education	➔ B-28
15	Food service	➔ B-29
16	Health care (inpatient)	➔ B-30
17	Skilled nursing	➔ B-31
18	Lodging	➔ B-32
23	Strip shopping mall	➔ B-33
24	Enclosed mall	➔ B-33
25	Retail (excl. mall)	➔ B-33
26	Service	➔ B-33
91	Other	➔ B-33

B-26. **RWSEAT7**

What is the total seating capacity of the religious worship areas of the building?

[** PROBE **]

Enter a numeric value between 0 and 99999: _____ ➔ B-33

B-27. **PBSEAT7**

What is the fixed seating capacity of public assembly areas of the building?

[** PROBE **]

Enter a numeric value between 0 and 99999: _____ ➔ B-33

B-28. **EDSEAT7**

How many students can be seated in all of the classrooms in the building at one time?

[** PROBE **]

Enter a numeric value between 0 and 99999: _____ ➔ B-33

B-29. **FDSEAT7**

What is the total seating capacity of the food service areas of the building?

[** PROBE **]

Enter a numeric value between 0 and 99999: _____ ➔ B-33

B-30. **HCBED7**

What is the inpatient licensed bed capacity of the building?

[** PROBE **]

Enter a numeric value between 0 and 99999: _____ ➔ B-33

B-31. **NRSBED7**

What is the skilled or residential care licensed bed capacity of the building?

[** PROBE **]

Enter a numeric value between 0 and 99999: _____ ➔ B-33

B-32. **LODGRM7**

How many guest rooms or occupant rooms are there in the building?

[** PROBE **]

Enter a numeric value between 0 and 99999: _____ ➔ B-33

B-33. **FACIL7**

Is the building part of a multibuilding campus or complex?

[IF ASKED: A campus or complex is a group of two or more buildings on the same site that is owned or operated by a single organization or individual. It may also be referred to as a multibuilding facility.]

1 ..... YES ➔ B-34
2 ..... NO ➔ SECTION C

DK ➔ SECTION C

B-34. **FEDFAC7**

Is this campus or complex owned by the Federal government?

1 ..... YES
2 ..... NO

B-35. **FACACT7**

What is the primary business or function of this group of buildings as a whole? Is it ...

01 ..... A college, university, or junior college,
02 ..... A primary or secondary school [GRADES K-12],
03 ..... Some other type of school,
04 ..... An office complex,
05 ..... A retail complex,
06 ..... A religious campus or complex,
07 ..... A hospital or other health care complex,
08 ..... A post office,
09 ..... Some other type of government complex,
10 ..... An industrial complex,
11 ..... A transportation complex such as a terminal, depot, or airport,
12 ..... Or some other type of campus or complex?

Anything other than "An industrial complex" ➔ B-38
"An industrial complex" ➔ B-36

DK ➔ B-38

B-36. **MANIND7**

Is it manufacturing industrial?

1 ..... YES ➔ B-37
2 ..... NO ➔ B-38

DK ➔ B-38

B-37. **MANFAC7**

Does this building have the same owner and operator as the manufacturing campus or complex?

1 ..... YES ➔ BOX 14
2 ..... NO ➔ B-38

BOX 14

Since this survey does not include buildings on manufacturing facilities, this interview is complete. Thank you very much for your time and help.

[CLICK ON FORMS, EXIT]

B-38. **PLANT7**

Does this campus or complex have a central physical plant that produces district hot water, district steam, district chilled water, or electricity?

1 ..... YES ➔ B-39
2 ..... NO ➔ SECTION C

DK ➔ SECTION C

B-39. **FACDST7**

Does the central physical plant produce...

District steam?

1 ..... YES
2 ..... NO

B-40. **FACDHW7**

[Does the central physical plant produce...]

District hot water?

1 ..... YES
2 ..... NO

B-41. **FACDCW7**

[Does the central physical plant produce...]

District chilled water?

1 ..... YES
2 ..... NO

B-42. **FACELC7**

[Does the central physical plant produce...]

Electricity?

1 ..... YES
2 ..... NO

B-43. **BLDPLT7**

Is the central physical plant for this campus or complex located in the building [READ FROM ABOVE]?

1 ..... YES
2 ..... NO

SECTION C. OCCUPANCY AND OPERATING HOURS

C-1. **GOVOWN7**

For the rest of this survey, I will be asking you only about the building [READ FROM ABOVE], not the entire campus or complex.

Is this building owned by a government agency?

1 ..... YES ➔ C-2
2 ..... NO ➔ BOX 15

DK ➔ BOX 15

C-2. **GOVTYP7**

Is it owned by...

1 ..... the Federal government,
2 ..... a State government,
3 ..... or a local government?

BOX 15

Is the building completely vacant?

Yes ➔ SECTION D
No ➔ C-3

C-3. **NOCC7**

How many businesses or organizations are there in the building [READ FROM ABOVE]? *This number is found in Box 4 [on Worksheet 1].*

Enter a numeric value between 0 and 9999: _____

Zero ➔ C-4
1-9999 ➔ BOX 16
DK ➔ C-6

C-4. **Verification Question**

I do not have this building recorded as being completely vacant. At this time, is any space occupied by a company, business, school, organization, non-profit company, religious organization, government agency or establishment?

1 ..... YES ➔ C-5
2 ..... NO ➔ SECTION D

C-5. **NOCC7**

How many businesses or organizations are there?

Enter a numeric value between 1 and 9999: _____

1-9999 ➔ BOX 16
DK ➔ C-6

C-6. **OCC207** **"UNFOLDING NUMBER OF OCCUPANTS CATEGORY"**

Would you estimate that there are less than 20 businesses or organizations, about 20, or more than 20 businesses or organizations?

1 ..... LESS ➔ C-7
2 ..... ABOUT THAT MANY ➔ BOX 16 [05]
3 ..... MORE ➔ C-9

C-7. **OCC107**

Would you say that there are less than 10, about 10, or more than 10 businesses or organizations?

1 ..... LESS ➔ C-8
2 ..... ABOUT THAT MANY ➔ BOX 16 [04]
3 ..... MORE ➔ BOX 16 [05]

C-8. **OCC57**

Would you say that there are less than 5, about 5, or more than 5 businesses or organizations?

1 ..... LESS ➔ BOX 16 [03]
2 ..... ABOUT THAT MANY ➔ BOX 16 [03]
3 ..... MORE ➔ BOX 16 [04]

C-9. **OCC507**

Would you say that there are less than 50, about 50, or more than 50 businesses or organizations?

1 ..... LESS ➔ BOX 16 [06]
2 ..... ABOUT THAT MANY ➔ BOX 16 [06]
3 ..... MORE ➔ C-10

C-10. **OCC1007**

Would you say that there are less than 100, about 100, or more than 100 businesses or organizations?

1 ..... LESS ➔ BOX 16 [07]
2 ..... ABOUT THAT MANY ➔ BOX 16 [07]
3 ..... MORE ➔ BOX 16 [08]

DK TO ANY ONE OF THESE UNFOLDING QUESTIONS ➔ C-11

BOX 16

NOCCAT7

Auto-code number of occupants category. If the previous question was part of the "unfolding" category, the numeric code that was given in brackets is the auto-coded number of occupants category.

01 ..... Zero
02 ..... One
03 ..... 2 to 5
04 ..... 6 to 10
05 ..... 11 to 20
06 ..... 21 to 50
07 ..... 51 to 100
08 ..... More than 100

➔ C-11

C-11. **OWNOCC7**

Does {this business or organization / one of these businesses or organizations} own the building?

1 ..... YES ➔ C-13
2 ..... NO ➔ C-12

DK ➔ C-13

C-12. **OWNREP7**

Does the owner of this building employ anyone who works on-site in the building?

[IF ASKED: This might include: a building engineer, building manager, property management company or an energy service company that maintains office space in the building.]

1 ..... YES
2 ..... NO

C-13. **MONUSE7**

Thinking of calendar year 1999, for how many months was this building in use?

Enter a numeric value between 0 and 12: __

0 ➔ SECTION D
1-3 ➔ C-15
4-12 ➔ C-14

DK ➔ C-15

C-14. **PORVAC7**

Was any space in the building vacant or unoccupied for at least 3 consecutive months during 1999?

1 ..... YES
2 ..... NO

C-15. **OPEN247**

Now I have some questions about the hours that this building is normally open.

"Normally open" means the hours when the usual building activities occur. Do not consider the building to be open if only maintenance, housekeeping, or security personnel are present.

Is this building normally open 24 hours a day, seven days a week?

1 .....YES ➔ BOX 18 [7]
2 ..... NO ➔ C-16

DK ➔ C-16

C-16. OPNMF7

Thinking of Monday through Friday, is this building...

1 ..... Open all five days,
2 ..... Open some of these days,
3 ..... Or is it not open at all Monday through Friday?

C-17. OPNWE7

Is this building normally open at all on the weekend?

[IF ONLY OPEN ONE DAY OF THE WEEKEND, SELECT "YES."]

1 ..... YES
2 ..... NO

BOX 17
Is the building not open at all Monday through Friday or on the weekend?
Yes ➔ C-18
No ➔ C-19

C-18. Verification Question

I would just like to confirm that this building does not have any normal operating hours?

1 ..... TRUE, NO OPERATING HOURS ➔ BOX 18 [1]
2 ..... FALSE, THERE ARE OPERATING HOURS ➔ C-19

DK ➔ C-19

C-19. WKHRS7

How many total hours per week is the building normally open? *This number is found in Box 5 [on Worksheet 1].*

[IF ASKED: "Normally open" means the hours when the usual building activities occur.]

Enter a numeric value between 0 and 168: ___

0-168 ➔ BOX 18
DK ➔ C-20

C-20. **HRS607** **"UNFOLDING OPERATING HOURS CATEGORY"**

The number of hours that a building is open is very important in helping us understand energy use in buildings. Would you estimate that this building is open less than 60 hours per week, about 60, or more than 60 hours per week?

1 ..... LESS ➔ C-21
2 ..... ABOUT THAT MANY ➔ BOX 18 [4]
3 ..... MORE ➔ C-23

C-21. **HRS487**

Is this building open less than 48, about 48, or more than 48 hours per week?

1 ..... LESS ➔ C-22
2 ..... ABOUT THAT LONG ➔ BOX 18 [3]
3 ..... MORE ➔ BOX 18 [4]

C-22. **HRS407**

Is this building open less than 40, about 40, or more than 40 hours per week?

1 ..... LESS ➔ BOX 18 [2]
2 ..... ABOUT THAT LONG ➔ BOX 18 [3]
3 ..... MORE ➔ BOX 18 [3]

C-23. **HRS847**

Is this building open less than 84, about 84, or more than 84 hours per week?

1 ..... LESS ➔ BOX 18 [5]
2 ..... ABOUT THAT LONG ➔ BOX 18 [5]
3 ..... MORE ➔ C-24

C-24. **HRS1677**

Is this building open continuously?

1 ..... YES ➔ BOX 18 [7]
2 ..... NO ➔ BOX 18 [6]

DK TO ANY ONE OF THESE UNFOLDING QUESTIONS ➔ C-25

BOX 18

WKHRSC7

Auto-code number of operating hours category. If the previous question was part of the "unfolding" category, the numeric code that was given in brackets is the auto-coded number of operating hours category.

1 ..... Zero
2 ..... 1 to 39
3 ..... 40 to 48
4 ..... 49 to 60
5 ..... 61 to 84
6 ..... 85 to 167
7 ..... Always open

➔ C-25

C-25. **NWKER7**

How many employees work <u>in the building</u> during its main shift, that is, when most employees are in the building. *This number is found in Box 6 [on Worksheet 1].*

Enter a numeric value between 0 and 99999: _____

0-99999 ➔ SECTION D
DK ➔ C-26

C-26. EMP1007 **"UNFOLDING NUMBER OF EMPLOYEES CATEGORY"**

Would you estimate that there are less than 100 employees, about 100, or more than 100 employees?

1 ..... LESS ➔ C-27
2 ..... ABOUT THAT MANY ➔ BOX 19 [07]
3 ..... MORE ➔ C-32

C-27. EMP507

Would you say that there are less than 50, about 50, or more than 50 employees?

1 ..... LESS ➔ C-28
2 ..... ABOUT THAT MANY ➔ BOX 19 [06]
3 ..... MORE ➔ BOX 19 [06]

C-28. EMP207

Would you say that there are less than 20, about 20, or more than 20 employees?

1 ..... LESS ➔ C-29
2 ..... ABOUT THAT MANY ➔ BOX 19 [05]
3 ..... MORE ➔ BOX 19 [05]

C-29. EMP107

Would you say that there are less than 10, about 10, or more than 10 employees?

1 ..... LESS ➔ C-30
2 ..... ABOUT THAT MANY ➔ BOX 19 [04]
3 ..... MORE ➔ BOX 19 [04]

C-30. EMP57

Would you say that there are less than 5, about 5, or more than 5 employees?

1 ..... LESS ➔ C-31
2 ..... ABOUT THAT MANY ➔ BOX 19 [03]
3 ..... MORE ➔ BOX 19 [03]

C-31. EMP17

Are there any employees that work in this building?

1 .....YES ➔ BOX 19 [02]
2 .....NO ➔ BOX 19 [01]

C-32. EMP2507

Would you say that there are less than 250, about 250, or more than 250 employees?

1 ..... LESS ➔ BOX 19 [07]
2 ..... ABOUT THAT MANY ➔ BOX 19 [08]
3 ..... MORE ➔ C-33

C-33. EMP5007

Would you say that there are less than 500, about 500, or more than 500 employees?

1 ..... LESS ➔ BOX 19 [08]
2 ..... ABOUT THAT MANY ➔ BOX 19 [09]
3 ..... MORE ➔ C-34

C-34. EMP10007

Would you say that there are less than 1,000, about 1,000, or more than 1,000 employees?

1 ..... LESS ➔ BOX 19 [09]
2 ..... ABOUT THAT MANY ➔ BOX 19 [10]
3 ..... MORE ➔ C-35

C-35. EMP25007

Would you say that there are less than 2,500, about 2,500, or more than 2,500 employees?

1 ..... LESS ➔ BOX 19 [10]
2 ..... ABOUT THAT MANY ➔ BOX 19 [11]
3 ..... MORE ➔ C-36

C-36. EMP50007

Would you say that there are less than 5,000, about 5,000, or more than 5,000 employees?

1 ..... LESS ➔ BOX 19 [11]
2 ..... ABOUT THAT MANY ➔ BOX 19 [12]
3 ..... MORE ➔ BOX 19 [12]

DK TO ANY ONE OF THESE UNFOLDING QUESTIONS ➔ SECTION D

BOX 19

NWKERC7

Go to the numeric code given in brackets in the previous question. This is the auto-coded number of workers category.

01	None	➔ SECTION D
02	1 to 4	
03	5 to 9	
04	10 to 19	
05	20 to 49	
06	50 to 99	
07	100 to 249	
08	250 to 499	
09	500 to 999	
10	1,000 to 2,499	
11	2,500 to 4,999	
12	5,000 or More	

SECTION D. ENERGY SOURCES, END USES, AND EQUIPMENT

D-1. End Uses

The next questions are about the uses of energy and equipment in this building. Please refer to Worksheet 2, that's the blue one, for the next questions.

While you are looking at Box 7 [on Worksheet 2], I'm going to *quickly* read you a list of ways that energy may be used. For each one, please tell me if there was any energy used for this purpose in this building during calendar year 1999. Did this building use any energy for...

[CHECK ALL THAT APPLY.]

[** PROBE **]

HT17 ..... Heating the building?
COOL7 ..... Air conditioning
WATR7 .... Domestic hot water heating?
COOK7 .... Commercial or institutional cooking or food serving?
MANU7 .... Manufacturing?
..... [IF VOLUNTEERED] NONE OF THESE USES, BUT SOME ENERGY USED
..... [IF VOLUNTEERED] NO ENERGY USED IN 1999 ➔ D-2

➔ D-4

DK ➔ D-4

D-2. ANYENGY7

I just need to double check, is it correct that no energy was used in this building in 1999?

1 .....TRUE, NO ENERGY USED ➔ E-38
2 ..... FALSE, SOME ENERGY WAS USED IN 1999 ➔ D-3

D-3. Verification Question

If there was any energy used in this building, then it must have been used for some purpose. I need to re-read the question about how energy was used.

[ENTER "1" TO CONTINUE.] ➔ Go back to D-1

D-4. Energy Sources

While you are looking at Box 8 [on Worksheet 2], I'm going to *quickly* read you a list of energy sources. For each one, please tell me if it was used in this building for any purpose in 1999...

[INCLUDE FUEL OIL, DIESEL, OR KEROSENE IF IT WAS PURCHASED OR DELIVERED TO THE BUILDING IN 1999. IT IS NOT NECESSARY FOR IT TO HAVE BEEN USED.]

[DO NOT INCLUDE ANY FUELS USED IN VEHICLES OUTSIDE THE BUILDING.]

[CHECK ALL THAT APPLY.]

ELUSED7..... Electricity?
NGUSED7 ..... Natural gas?
FKUSED7 ..... Fuel oil, diesel, or kerosene? ➔ D-5
PRUSED7 ..... Bottled gas, also known as LPG or propane?
STUSED7 ..... District steam piped in from a separate building or utility?
HWUSED7 ..... District hot water piped in from a separate building or utility?
CWUSED7 ..... District chilled water piped in from a separate building or utility?
..... Wood, coal, or solar thermal panels? ➔ D-6
OTUSED7 ..... Some other source or sources? ➔ D-7

Neither "Fuel oil, diesel, or kerosene" nor "Wood, coal, or solar thermal panels" nor "Some other source or sources" selected ➔ D-10

DK ➔ D-10

D-5. Specify Fuel Oil, Diesel, or Kerosene

[ASK IF NOT VOLUNTEERED] You mentioned fuel oil, diesel, or kerosene. Which of these were used [in this building in 1999]?

[CHECK ALL THAT APPLY.]

FKTYPFO7 ..... FUEL OIL
FKTYPDS7 ..... DIESEL
FKTYPKR7 ..... KEROSENE

"Wood, coal, or solar thermal panels" selected in D-4 ➔ D-6
"Some other source or sources" selected in D-4 ➔ D-7
Neither of these selected in D-4 ➔ D-10

D-6. Specify Wood, Coal, or Solar

[ASK IF NOT VOLUNTEERED] You mentioned wood, coal, or solar thermal panels. Which of these were used [in this building in 1999]?

[CHECK ALL THAT APPLY.]

WOUSED7..... WOOD
COUSED7..... COAL
SOUSED7 ..... SOLAR THERMAL PANELS

"Some other source or sources" selected in D-4 ➔ D-7
"Some other source or sources" not selected in D-4 ➔ D-10

D-7. **OTUSDX17**

What was the first other energy source used [in this building in 1999]?

[ENTER THE FIRST ENERGY SOURCE USED.]:

_____

D-8. **OTUSDX27**

Were there any other energy sources used [in this building in 1999]?

[ENTER THE NEXT ENERGY SOURCE. IF NO OTHERS, PRESS ENTER.]:

_____ ➔ D-9

No other sources given ➔ D-10

D-9. **OTUSDX37**

Were there any other energy sources used [in this building in 1999]?

[IF THERE IS ANOTHER ENERGY SOURCE, ENTER HERE. IF NOT, PRESS ENTER.]:

_____

D-10. **ABLEGEN7**

Does this building have the capability to generate electricity, including for emergency backup?

1 ..... YES ➔ D-11
2 ..... NO ➔ BOX 20

DK ➔ BOX 20

D-11. **GENR7**

Was any energy actually <u>used</u> for generating electricity in this building during calendar year 1999?

1 ..... YES
2 ..... NO

BOX 20

Is the building heated <u>and</u> at least one energy source known?

Yes ➔ D-12
No ➔ BOX 27

D-12. Main Energy Source for Heating

What was the main energy source for heating? [Was it {list of sources used in the building}?]

[IF ASKED: The main energy source for heating is the energy source used to heat most of the square footage in this building most of the time.]

[IF ASKED: Do not include electricity if it is used only to run fan motors.]

[ONLY SOURCES ALREADY SELECTED ARE SHOWN HERE.]

ELHT17 ..... *ELECTRICITY*
NGHT17 ..... *NATURAL GAS*
FKHT17..... *FUEL OIL/DIESEL/KEROSENE*
PRHT17 ..... *BOTTLED GAS/LPG/PROPANE*
STHT17..... *DISTRICT STEAM*
HWHT17 ..... *DISTRICT HOT WATER* ➔ BOX 21
WOHT17 ..... *WOOD*
COHT17..... *COAL*
SOHT17..... *SOLAR*
OTHT17 ..... *{FIRST SOURCE SPECIFIED}*
OTHT17 ..... *{SECOND SOURCE SPECIFIED}*
OTHT17 ..... *{THIRD SOURCE SPECIFIED}*
..... SOME OTHER ENERGY SOURCE ➔ D-13

D-13. Main Energy Source for Heating (Add a Source That Was Not Already Given)

What was the other energy source used for main space heating?

ELHT17..... ELECTRICITY
NGHT17..... NATURAL GAS
FKHT17..... FUEL OIL/DIESEL/KEROSENE
PRHT17 ..... BOTTLED GAS
STHT17..... DISTRICT STEAM
HWHT17 ..... DISTRICT HOT WATER
WOHT17 ..... WOOD
COHT17..... COAL
SOHT17..... SOLAR
OTHT17 ..... SOME OTHER ENERGY SOURCE

BOX 21

Was there more than one energy source used in the building?

Yes ➔ D-14
No ➔ D-15

D-14. Secondary Energy Source for Heating

HT27

Which other energy sources, if any, were used for heating?
[... {list of sources used in building}?]

[ONLY SOURCES ALREADY SELECTED ARE SHOWN HERE. CHECK ALL THAT APPLY.]

[IF ASKED: Do not include electricity if it is used only to run fan motors.]

ELHT27 ..... *ELECTRICITY*
NGHT27 ..... *NATURAL GAS*
FKHT27 ..... *FUEL OIL/DIESEL/KEROSENE*
PRHT27 ..... *BOTTLED GAS/LPG/PROPANE*
STHT27 ..... *DISTRICT STEAM*
HWHT27 ..... *DISTRICT HOT WATER*
WOHT27 ..... *WOOD*
COHT27 ..... *COAL*
SOHT27 ..... *SOLAR*
OTHT27 ..... *{FIRST SOURCE SPECIFIED}*
OTHT27 ..... *{SECOND SOURCE SPECIFIED}*
OTHT27 ..... *{THIRD SOURCE SPECIFIED}*
..... SOME OTHER ENERGY SOURCE ➔ D-16
..... NO OTHER SOURCES FOR HEATING ➔ D-17

Any source(s) other than "SOME OTHER ENERGY SOURCE" ➔ D-17

D-15. Secondary Energy Source for Heating

HT27

Were there any other energy sources used for heating?

1 .... YES ➔ D-16
2 .... NO ➔ D-17

D-16. Secondary Energy Source for Heating (Add a Source That Was Not Already Given)

What was the other energy source used for secondary space heating?

ELHT27 ..... ELECTRICITY
NGHT27 ..... NATURAL GAS
FKHT27 ..... FUEL OIL/DIESEL/KEROSENE
PRHT27 ..... BOTTLED GAS
STHT27 ..... DISTRICT STEAM
HWHT27 ..... DISTRICT HOT WATER
WOHT27 ..... WOOD
COHT27 ..... COAL
SOHT27 ..... SOLAR
OTHT27 ..... SOME OTHER ENERGY SOURCE

D-17. **HEATP7**

What percentage of the {square footage} square feet in this building was heated to at least 50 degrees Fahrenheit in 1999, including basements and enclosed garages if they were heated to at least 50 degrees?

[IF HEATED SQUARE FOOTAGE IS KNOWN BUT NOT THE PERCENT, RECORD SQUARE FOOTAGE IN COMMENTS.]

[** PROBE **]

Enter a numeric value between 0 and 100: ___

Zero ➔ D-18
1-100 ➔ D-19

DK ➔ D-19

D-18. **HTLS507**

Was any of the building heated to less than 50 degrees Fahrenheit?

1 ..... YES ➔ D-19
2 ..... NO ➔ BOX 27

D-19. **Heating Equipment Types**

Please refer to Box 9 on Worksheet 2 and to Reference 3. Which types of heating equipment are used in this building? *Please listen to the entire list before making your selections.*

[RECORD IN COMMENTS ANY EXTRA INFORMATION ABOUT THE HEATING SYSTEM THAT IS VOLUNTEERED BY THE RESPONDENT.]

[*READ LIST AND* CHECK ALL THAT APPLY. THERE MUST BE AT LEAST ONE TYPE OF HEATING EQUIPMENT.]

PKGHT7..... Packaged heating units which are often mounted on the roof or on a slab beside the building?
HTPMPH7 ..... Heat pumps, other than packaged units?
FURNAC7 ..... Furnaces that heat air directly, without using steam or hot water?
SLFCON7 ..... Individual space heaters that are free standing or mounted in walls, ceilings, or windows?
STHW7 ..... District steam or hot water piped in from outside the building?
BOILER7 ..... Boilers inside the building that produce steam or hot water?
OTHTEQ7 ..... Some other heating equipment?
➔ BOX 22

DK ➔ BOX 26

BOX 22

Is there more than one type of heating equipment?

Yes ➔ D-20
No ➔ Auto-code **MAINHT7** as type given in D-19 ➔ BOX 24

D-20. Percent Heated by Each Heating Equipment

The next questions are about the percent of floorspace heated by the equipment you just mentioned. Please keep in mind:

One, we are talking only about the heated portion of the building and, two, more than one type of equipment can heat the same area, so these percents can add up to more than 100.

FOR EACH TYPE OF HEATING EQUIPMENT GIVEN IN D-19, GO TO CORRESPONDING QUESTION D-20a THROUGH D-20g

D-20a. PKGHP7

What percent of the heated area in this building is heated by the packaged heating?

[** PROBE **]

Enter a numeric value between 0 and 100: ___

D-20b. HTPHP7

What percent of the heated area in this building is heated by the heat pump?

[** PROBE **]

Enter a numeric value between 0 and 100: ___

D-20c. FURNP7

What percent of the heated area in this building is heated by the furnace?

[** PROBE **]

Enter a numeric value between 0 and 100: ___

D-20d. SLFCNP7

What percent of the heated area in this building is heated by the space heater?

[** PROBE **]

Enter a numeric value between 0 and 100: ___

D-20e. STHWP7

What percent of the heated area in this building is heated by the district steam or hot water?

[** PROBE **]

Enter a numeric value between 0 and 100: ___

D-20f. BOILP7

What percent of the heated area in this building is heated by the boiler?

[** PROBE **]

Enter a numeric value between 0 and 100: ___

D-20g. OTHTP7

What percent of the heated area in this building is heated by the other heating equipment?

[** PROBE **]

Enter a numeric value between 0 and 100: ___

PERCENTS GIVEN ➔ BOX 23
ALL PERCENTS DK ➔ D-21

BOX 23

Is there a single maximum percent?

Yes ➔ Auto-code **MAINHT7** as the type with the maximum percent ➔ BOX 24
No ➔ D-21

D-21. MAINHT7

Which do you consider to be your main heating equipment -- {list of equipments with equal percentages}?

[ONLY EQUIPMENTS WITH EQUAL PERCENTAGES ARE SHOWN HERE.]

01 ..... *PACKAGED HEATING*
02 ..... *HEAT PUMP*
03 ..... *FURNACE*
04 ..... *SPACE HEATER*
05 ..... *DISTRICT STEAM OR HOT WATER*
06 ..... *BOILER*
07 ..... *OTHER HEATING EQUIPMENT*

BOX 24

Was the building constructed since 1995?

Yes ➔ BOX 26
No ➔ BOX 25

BOX 25

Is the main heating equipment known <u>and</u> <u>not</u> district steam or hot water?

Yes ➔ D-22
No ➔ BOX 26

D-22. NWHTEQ7

Has the {main heating equipment} been replaced since 1995?

1 ..... YES
2 ..... NO

BOX 26
Is the building open 24 hours?
Yes ➔ BOX 27
No ➔ D-23

D-23. RDHTNF7

Is there a change in the temperature setting for heating when the building is not in full use?

1 ..... YES
2 ..... NO

BOX 27
Is the building cooled <u>and</u> at least one energy source known?
Yes ➔ D-24
No ➔ BOX 35

D-24. Energy Sources for Cooling

Which energy sources were used for air conditioning? […{list of sources used in building}?]

[ONLY SOURCES ALREADY SELECTED ARE SHOWN HERE. CHECK ALL THAT APPLY.]

ELCOOL7 ..... *ELECTRICITY*
NGCOOL7 ..... *NATURAL GAS*
FKCOOL7 ..... *FUEL OIL/DIESEL/KEROSENE*
PRCOOL7 ..... *BOTTLED GAS/LPG/PROPANE*
STCOOL7 ..... *DISTRICT STEAM*
HWCOOL7 ..... *DISTRICT HOT WATER*
CWCOOL7 ..... *DISTRICT CHILLED WATER*
OTCOOL7 ..... *{FIRST SOURCE SPECIFIED}*
OTCOOL7 ..... *{SECOND SOURCE SPECIFIED}*
OTCOOL7 ..... *{THIRD SOURCE SPECIFIED}*
..... SOME OTHER ENERGY SOURCE ➔ D-25

Any source(s) other than "SOME OTHER ENERGY SOURCE" ➔ D-26

D-25. Energy Source for Cooling (Add a Source That Was Not Already Given)

What was the other energy source used for air conditioning?

ELCOOL7 ..... ELECTRICITY
NGCOOL7 ..... NATURAL GAS
FKCOOL7..... FUEL OIL/DIESEL/KEROSENE
PRCOOL7 ..... BOTTLED GAS
STCOOL7..... DISTRICT STEAM
HWCOOL7..... DISTRICT HOT WATER
CWCOOL7..... DISTRICT CHILLED WATER
OTCOOL7..... SOME OTHER ENERGY SOURCE

D-26. **COOLP7**

What percentage of the {square footage} square feet in this building was cooled by air conditioning equipment in 1999?

[IF COOLED SQUARE FOOTAGE IS KNOWN BUT NOT THE PERCENT, RECORD SQUARE FOOTAGE IN COMMENTS.]

[** PROBE **]

Enter a numeric value between 0 and 100: ___

Zero ➔ BOX 33
1-100 ➔ D-27

DK ➔ D-27

D-27. **Cooling Equipment Types**

Please refer to Box 10 on Worksheet 2 and to Reference 4. Which types of air conditioning equipment are used in this building? Please listen to the entire list before making your selections.

[*READ LIST AND* CHECK ALL THAT APPLY. THERE MUST BE AT LEAST ONE TYPE OF COOLING EQUIPMENT.]

[RECORD IN COMMENTS ANY EXTRA INFORMATION ABOUT THE COOLING SYSTEM THAT IS VOLUNTEERED BY THE RESPONDENT.]

PKGCL7..... Packaged air conditioning units which are often mounted on the roof or on a slab beside the building?
HTPMPC7..... Heat pumps for cooling?
RCAC7..... Residential type central air conditioners, other than heat pumps, that cool air directly and circulate it without using chilled water?
ACWNCL7..... Individual room air conditioners that are mounted in a window or wall?
CHWT7..... District chilled water piped in from outside the building?
CHILLR7..... Central chillers inside the building that chill water for air conditioning?
EVAPCL7..... "Swamp" coolers or evaporative coolers?
OTCLEQ7..... Some other cooling equipment?

➔ BOX D9

DK ➔ BOX 32

BOX 28

Is there more than one type of cooling equipment?

Yes ➔ D-28
No ➔ Auto-code **MAINCL7** as type given in D-27 ➔ BOX 30

D-28. Percent Cooled by Each Cooling Equipment

The next questions are about the percent of floorspace cooled by the equipment you just mentioned. Please keep in mind:

One, we are talking only about the cooled portion of the building and, two, more than one type of equipment can cool the same area, so these percents can add up to more than 100.

FOR EACH TYPE OF COOLING EQUIPMENT GIVEN IN D-27, GO TO CORRESPONDING QUESTION D-28a THROUGH D-28h

D-28a. PKGCP7

What percent of the cooled area in this building is cooled by the packaged cooling?

[** PROBE **]

Enter a numeric value between 0 and 100: ___

D-28b. HTPCP7

What percent of the cooled area in this building is cooled by the heat pump?

[** PROBE **]

Enter a numeric value between 0 and 100: ___

D-28c. RCACP7

What percent of the cooled area in this building is cooled by the central air conditioner?

[** PROBE **]

Enter a numeric value between 0 and 100: ___

D-28d. ACWNWP7

What percent of the cooled area in this building is cooled by the room air conditioner?

[** PROBE **]

Enter a numeric value between 0 and 100: ___

D-28e. CHWTP7

What percent of the cooled area in this building is cooled by the district chilled water?

[** PROBE **]

Enter a numeric value between 0 and 100: ___

D-28f. CHILP7

What percent of the cooled area in this building is cooled by the central chiller?

[** PROBE **]

Enter a numeric value between 0 and 100: ___

D-28g. EVAPP7

What percent of the cooled area in this building is cooled by the swamp cooler?

[** PROBE **]

Enter a numeric value between 0 and 100: ___

D-28h. OTCLP7

What percent of the cooled area in this building is cooled by the other cooling equipment?

[** PROBE **]

Enter a numeric value between 0 and 100: ___

PERCENTS GIVEN ➔ BOX 29
ALL PERCENTS DK ➔ D-29

BOX 29

Is there a single maximum percent?

Yes ➔ Auto-code **MAINCL7** as the type with the maximum percent ➔ BOX 30
No ➔ D-29

D-29. MAINCL7

Which do you consider to be your main cooling equipment -- {list of equipments with equal percentages}?

[ONLY EQUIPMENTS WITH EQUAL PERCENTAGES ARE SHOWN HERE.]

01 ..... *PACKAGED COOLING*
02 ..... *HEAT PUMP*
03 ..... *CENTRAL AIR CONDITIONER*
04 ..... *ROOM AIR CONDITIONER*
05 ..... *DISTRICT CHILLED WATER*
06 ..... *CHILLERS*
07 ..... *SWAMP COOLERS*
08 ..... *OTHER COOLING EQUIPMENT*

BOX 30

Was the building constructed since 1995?

Yes ➔ BOX 32
No ➔ BOX 31

BOX 31

Is the main cooling equipment known and not district chilled water and not the same as the heating equipment (packaged or heat pump could be the same)?

Yes ➔ D-30
No ➔ BOX 32

D-30. **NWCLEQ7**

Has the {main cooling equipment} been replaced since 1995?

1 ..... YES
2 ..... NO

BOX 32

Is the building open 24 hours?

Yes ➔ BOX 33
No ➔ D-31

D-31. **RDCLNF7**

Is there a change in the temperature setting for cooling when the building is not in full use?

1 ..... YES
2 ..... NO

BOX 33

Is there heating or cooling equipment other than just space heaters and/or window air conditioning units?

Yes ➔ D-32
No ➔ BOX 35

D-32. **VAV7**

Does this building have a variable air volume (VAV) system?

[This feature would have a check mark in Box 11 on Worksheet 2.]

1 ..... YES
2 ..... NO

BOX 34

Is there cooling equipment other than just window units?

Yes ➔ D-33
No ➔ D-34

D-33. **ECN7**

Does this building have any equipment that uses outside air for cooling, often called an "economizer cycle"?

[This feature would have a check mark in Box 11 on Worksheet 2.]

1 ..... YES
2 ..... NO

D-34. **MAINT7**

Is there any regularly scheduled maintenance and repair for the {heating and cooling / heating / cooling} system?

[This feature would have a check mark in Box 11 on Worksheet 2.]

1 ..... YES
2 ..... NO

D-35. **EMCS7**

Does this building have an energy management and control system (EMCS)?

[This feature would have a check mark in Box 11 on Worksheet 2.]

1 ..... YES
2 ..... NO

BOX 35

Is there water heating in the building <u>and</u> at least one energy source known?

Yes ➔ D-36
No ➔ BOX 36

D-36. Energy Sources for Water Heating

Which energy sources were used for water heating? […{list of sources used in building}?]

[ONLY SOURCES ALREADY SELECTED ARE SHOWN HERE. CHECK ALL THAT APPLY.]

ELWATR7 ..... *ELECTRICITY*
NGWATR7 ..... *NATURAL GAS*
FKWATR7 ..... *FUEL OIL/DIESEL/KEROSENE*
PRWATR7 ..... *BOTTLED GAS/LPG/PROPANE*
STWATR7 ..... *DISTRICT STEAM*
HWWATR7 ..... *DISTRICT HOT WATER*
WOWATR7 ..... *WOOD*
COWATR7 ..... *COAL*
SOWATR7 ..... *SOLAR*
OTWATR7 ..... *{FIRST SOURCE SPECIFIED}*
OTWATR7 ..... *{SECOND SOURCE SPECIFIED}*
OTWATR7 ..... *{THIRD SOURCE SPECIFIED}*
..... SOME OTHER ENERGY SOURCE ➔ D-37

Any source(s) other than "SOME OTHER ENERGY SOURCE" ➔ D-38

D-37. Energy Source for Water Heating (Add a Source That Was Not Already Given)

What was the other energy source used for water heating?

ELWATR7 ..... ELECTRICITY
NGWATR7 ..... NATURAL GAS
FKWATR7 ..... FUEL OIL/DIESEL/KEROSENE
PRWATR7 ..... BOTTLED GAS
STWATR7 ..... DISTRICT STEAM
HWWATR7 ..... DISTRICT HOT WATER
WOWATR7 ..... WOOD
COWATR7 ..... COAL
SOWATR7 ..... SOLAR
OTWATR7 ..... SOME OTHER ENERGY SOURCE

D-38. WTHTEQ7

Does this building have...

1 ..... One or more centralized water heaters,
2 ..... One or more "point-of-use water heaters",
3 ..... Or both of these types [of water heaters]?

BOX 36

Is there cooking in the building <u>and</u> at least one energy source known?

Yes ➔ D-39
No ➔ BOX 37

D-39. Energy Sources for Cooking

Which energy sources were used for cooking? […{list of sources used in building}?]

[ONLY SOURCES ALREADY SELECTED ARE SHOWN HERE. CHECK ALL THAT APPLY.]

ELCOOK7 ..... *ELECTRICITY*
NGCOOK7 ..... *NATURAL GAS*
FKCOOK7 ..... *FUEL OIL/DIESEL/KEROSENE*
PRCOOK7 ..... *BOTTLED GAS/LPG/PROPANE*
STCOOK7 ..... *DISTRICT STEAM*
HWCOOK7 ..... *DISTRICT HOT WATER*
WOCOOK7 ..... *WOOD*
COCOOK7 ..... *COAL*
SOCOOK7 ..... *SOLAR*
OTCOOK7 ..... *{FIRST SOURCE SPECIFIED}*
OTCOOK7 ..... *{SECOND SOURCE SPECIFIED}*
OTCOOK7 ..... *{THIRD SOURCE SPECIFIED}*
..... SOME OTHER ENERGY SOURCE ➔ D-40

Any source(s) other than "SOME OTHER ENERGY SOURCE" ➔ BOX 37

D-40. Energy Sources for Cooking (Add a Source That Was Not Already Given)

What was the other energy source used for cooking?

ELCOOK7 ..... ELECTRICITY
NGCOOK7 ..... NATURAL GAS
FKCOOK7 ..... FUEL OIL/DIESEL/KEROSENE
PRCOOK7 ..... BOTTLED GAS
STCOOK7 ..... DISTRICT STEAM
HWCOOK7 ..... DISTRICT HOT WATER
WOCOOK7 ..... WOOD
COCOOK7 ..... COAL
SOCOOK7 ..... SOLAR
OTCOOK7 ..... SOME OTHER ENERGY SOURCE

BOX 37

Is there manufacturing in the building <u>and</u> at least one energy source known?

Yes ➔ D-41
No ➔ BOX 38

D-41. Energy Sources for Manufacturing

Which energy sources were used for manufacturing? [... {list of sources used in building}?]

[ONLY SOURCES ALREADY SELECTED ARE SHOWN HERE. CHECK ALL THAT APPLY.]

ELMANU7 ..... *ELECTRICITY*
NGMANU7 ..... *NATURAL GAS*
FKMANU7 ..... *FUEL OIL/DIESEL/KEROSENE*
PRMANU7 ..... *BOTTLED GAS/LPG/PROPANE*
STMANU7 ..... *DISTRICT STEAM*
HWMANU7 ..... *DISTRICT HOT WATER*
WOMANU7 ..... *WOOD*
COMANU7 ..... *COAL*
SOMANU7 ..... *SOLAR*
OTMANU7 ..... *{FIRST SOURCE SPECIFIED}*
OTMANU7 ..... *{SECOND SOURCE SPECIFIED}*
OTMANU7 ..... *{THIRD SOURCE SPECIFIED}*
..... SOME OTHER ENERGY SOURCE ➔ D-42

Any source(s) other than "SOME OTHER ENERGY SOURCE" ➔ BOX 38

D-42. Energy Source for Manufacturing (Add a Source That Was Not Already Given)

What was the other energy source used for manufacturing?

ELMANU7 ..... ELECTRICITY
NGMANU7 ..... NATURAL GAS
FKMANU7 ..... FUEL OIL/DIESEL/KEROSENE
PRMANU7 ..... BOTTLED GAS
STMANU7 ..... DISTRICT STEAM
HWMANU7 ..... DISTRICT HOT WATER
WOMANU7 ..... WOOD
COMANU7 ..... COAL
SOMANU7 ..... SOLAR
OTMANU7 ..... SOME OTHER ENERGY SOURCE

BOX 38

Was there energy used for electricity generation and were the energy sources known?

Electricity generation and sources known ➔ BOX 39
Electricity generation but sources not known ➔ D-47
No electricity generation and sources known ➔ D-48
No electricity generation and sources not known ➔ SECTION E

BOX 39

Was natural gas, fuel oil, bottled gas, wood, coal, solar, or an "other" energy source used?

Yes ➔ D-43
No ➔ D-44

D-43. Energy Sources for Electricity Generation

Which energy sources were used for electricity generation? [… {list of sources used in building}?]

[ONLY SOURCES ALREADY SELECTED ARE SHOWN HERE. CHECK ALL THAT APPLY.]

NGGENR7 ..... *NATURAL GAS*
FKGENR7 ..... *FUEL OIL/ DIESEL/KEROSENE*
PRGENR7 ..... *BOTTLED GAS/ LPG/PROPANE*
WOGENR7 ..... *WOOD*
COGENR7 ..... *COAL*
SOGENR7 ..... *SOLAR*
OTGENR7 ..... *{FIRST SOURCE SPECIFIED}*
OTGENR7 ..... *{SECOND SOURCE SPECIFIED}*
OTGENR7 ..... *{THIRD SOURCE SPECIFIED}*
..... SOME OTHER ENERGY SOURCE ➔ D-45

Any source(s) other than "SOME OTHER ENERGY SOURCE" ➔ D-47

D-44. Energy Source for Electricity Generation

What energy source was used for electricity generation?

NGGENR7 ..... NATURAL GAS
FKGENR7 ..... FUEL OIL/ DIESEL/ KEROSENE
PRGENR7 ..... BOTTLED GAS
WOGENR7 ..... WOOD
COGENR7 ..... COAL
SOGENR7 ..... SOLAR
➔ D-47

..... SOME OTHER ENERGY SOURCE ➔ D-46

D-45. Energy Source for Electricity Generation (Add a Source That Was Not Already Given)

What was the other energy source used for electricity generation?

NGGENR7 ..... NATURAL GAS
FKGENR7 ..... FUEL OIL/DIESEL/ KEROSENE
PRGENR7 ..... BOTTLED GAS
WOGENR7 ..... WOOD
COGENR7 ..... COAL
SOGENR7 ..... SOLAR
OTGENR7 ..... SOME OTHER ENERGY SOURCE
➔D-47

D-46. Energy Source for Electricity Generation (Add a Source That Was Not Already Given)

What was the other energy source used for electricity generation?

_____ ➔ D-47

D-47. GENUSE7

During 1999, was the electricity generated in this building used...

1 ..... Primarily for emergency back-up,
2 ..... Only during periods of high electricity demand,
3 ..... Or whenever electricity was used?

BOX 40

Was at least one energy source known?

Yes ➔ D-48
No ➔ SECTION E

D-48. Verification Question

As a final check, were there any energy sources used in this building other than {list of sources used in building}?

1 ..... YES ➔ D-49
2 ..... NO ➔ BOX 41

D-49. Add Any Other Energy Sources Used in the Building

What other sources were used?

FOR EACH ENERGY SOURCE GIVEN HERE, GO TO CORRESPONDING QUESTION D-49a THROUGH D-49j

ELUSED7 ..... *ELECTRICITY*
NGUSED7 ..... *NATURAL GAS*
FKUSED7 ..... *FUEL OIL/DIESEL/KEROSENE*
PRUSED7 ..... *BOTTLED GAS/LPG/PROPANE*
STUSED7 ..... *DISTRICT STEAM*
HWUSED7 ..... *DISTRICT HOT WATER*
CWUSED7 ..... *DISTRICT CHILLED WATER*
WOUSED7 ..... *WOOD*
COUSED7 ..... *COAL*
SOUSED7 ..... *SOLAR*
OTUSED7 ..... OTHER

D-49a. Use for Electricity

What was the electricity used for?

ELHT17 or
ELHT27 ..... HEATING
ELCOOL7 ..... COOLING
ELWATR7 ..... WATER HEATING
ELCOOK7 ..... COOKING
ELMANU7 ..... MANUFACTURING
..... SOME OTHER USE
..... INCORRECTLY RECORDED--SOURCE NOT USED

D-49b. Use for Natural Gas

What was the natural gas used for?

NGHT17 or
NGHT27 ..... HEATING
NGCOOL7 ..... COOLING
NGWATR7 ..... WATER HEATING
NGCOOK7 ..... COOKING
NGMANU7 ..... MANUFACTURING
NGGENR7 ..... ELECTRICITY GENERATION
NGOTH7 ..... SOME OTHER USE
..... INCORRECTLY RECORDED--SOURCE NOT USED

D-49c. Use for Fuel Oil/Diesel/Kerosene

What was the fuel oil/diesel/kerosene used for?

FKHT17 or
FKHT27 ..... HEATING
FKCOOL7 ..... COOLING
FKWATR7 ..... WATER HEATING
FKCOOK7 ..... COOKING
FKMANU7 ..... MANUFACTURING
FKGENR7 ..... ELECTRICITY GENERATION
FKOTH7 ..... SOME OTHER USE
..... INCORRECTLY RECORDED--SOURCE NOT USED

D-49d. Use for Bottled Gas/LPG/Propane

What was the bottled gas used for?

PRHT17 or
PRHT27 ..... HEATING
PRCOOL7 ..... COOLING
PRWATR7 ..... WATER HEATING
PRCOOK7 ..... COOKING
PRMANU7 ..... MANUFACTURING
PRGENR7 ..... ELECTRICITY GENERATION
PROTH7 ..... SOME OTHER USE
..... INCORRECTLY RECORDED--SOURCE NOT USED

D-49e. Use for District Steam

What was the district steam used for?

STHT17 or
STHT27 ..... HEATING
STCOOL7 ..... COOLING
STWATR7 ..... WATER HEATING
STCOOK7 ..... COOKING
STMANU7 ..... MANUFACTURING
STOTH7 ..... SOME OTHER USE
..... INCORRECTLY RECORDED--SOURCE NOT USED

D-49f. Use for District Hot Water

What was the district hot water used for?

HWHT17 or
HWHT27 ..... HEATING
HWCOOL7 ..... COOLING
HWWATR7 ..... WATER HEATING
HWCOOK7 ..... COOKING
HWMANU7 ..... MANUFACTURING
HWOTH7 ..... SOME OTHER USE
..... INCORRECTLY RECORDED--SOURCE NOT USED

D-49g. Use for Wood

What was the wood used for?

WOHT17 or
WOHT27 ..... HEATING
WOWATR7 ..... WATER HEATING
WOCOOK7 ..... COOKING
WOMANU7 ..... MANUFACTURING
WOGENR7 ..... ELECTRICITY GENERATION
WOOTH7 ..... SOME OTHER USE
..... INCORRECTLY RECORDED--SOURCE NOT USED

D-49h. Use for Coal

What was the coal used for?

COHT17 or
COHT27 ..... HEATING
COWATR7 ..... WATER HEATING
COCOOK7 ..... COOKING
COMANU7 ..... MANUFACTURING
COGENR7 ..... ELECTRICITY GENERATION
COOTH7 ..... SOME OTHER USE
..... INCORRECTLY RECORDED--SOURCE NOT USED

D-49i. Use for Solar Thermal Panels

What was the solar energy used for?

SOHT17 or
SOHT27 ..... HEATING
SOWATR7 ..... WATER HEATING
SOCOOK7 ..... COOKING
SOMANU7 ..... MANUFACTURING
SOGENR7 ..... ELECTRICITY GENERATION
SOOTH7 ..... SOME OTHER USE
..... INCORRECTLY RECORDED--SOURCE NOT USED

D-49j. Use for Other Energy Source

What was the other source used for?

OTHT17 or
OTHT27 ..... HEATING
OTCOOL7 ..... COOLING
OTWATR7 ..... WATER HEATING
OTCOOK7 ..... COOKING
OTMANU7 ..... MANUFACTURING
OTGENR7 ..... ELECTRICITY GENERATION
OTOTH7 ..... SOME OTHER USE
..... INCORRECTLY RECORDED--SOURCE NOT USED

AFTER ANSWERING EACH APPLICABLE QUESTION (D-49a THROUGH D-49j) ➔ BOX 41

BOX 41

Are there any energy sources (other than electricity or chilled water) that were not assigned an end use?

Yes, natural gas	➔ D-50a
Yes, fuel oil/diesel/kerosene	➔ D-50b
Yes, bottled gas/LPG/propane	➔ D-50c
Yes, district steam	➔ D-50d
Yes, district hot water	➔ D-50e
Yes, wood	➔ D-50f
Yes, coal	➔ D-50g
Yes, solar	➔ D-50h
Yes, other	➔ D-50i
No	➔ BOX 42

D-50. Add End Uses for Sources That Were Given Without an End Use

FOR EACH ENERGY SOURCE GIVEN IN BOX 41, GO TO CORRESPONDING QUESTION D-50a THROUGH D-50i

D-50a. Use for Natural Gas

I have recorded that natural gas was used in this building but not how it was used. What was the natural gas used for?

NGHT17 or **NGHT27**	HEATING
NGCOOL7	COOLING
NGWATR7	WATER HEATING
NGCOOK7	COOKING
NGMANU7	MANUFACTURING
NGGENR7	ELECTRICITY GENERATION
NGOTH7	SOME OTHER USE
	INCORRECTLY RECORDED--SOURCE NOT USED

D-50b. Use for Fuel Oil/Diesel/Kerosene

I have recorded that {fuel oil/diesel/kerosene} was used in this building but not how it was used. What was it used for?

FKHT17 or **FKHT27**	HEATING
FKCOOL7	COOLING
FKWATR7	WATER HEATING
FKCOOK7	COOKING
FKMANU7	MANUFACTURING
FKGENR7	ELECTRICITY GENERATION
FKOTH7	SOME OTHER USE
	INCORRECTLY RECORDED--SOURCE NOT USED

D-50c. Use for Bottled Gas/LPG/Propane

I have recorded that bottled gas was used in this building but not how it was used. What was it used for?

PRHT17 or **PRHT27**	HEATING
PRCOOL7	COOLING
PRWATR7	WATER HEATING
PRCOOK7	COOKING
PRMANU7	MANUFACTURING
PRGENR7	ELECTRICITY GENERATION
PROTH7	SOME OTHER USE
	INCORRECTLY RECORDED--SOURCE NOT USED

D-50d. Use for District Steam

I have recorded that district steam was used in this building but not how it was used. What was it used for?

STHT17 or **STHT27**	HEATING
STCOOL7	COOLING
STWATR7	WATER HEATING
STCOOK7	COOKING
STMANU7	MANUFACTURING
STOTH7	SOME OTHER USE
	INCORRECTLY RECORDED--SOURCE NOT USED

D-50e. Use for District Hot Water

I have recorded that district hot water was used in this building but not how it was used. What was it used for?

HWHT17 or
HWHT27 ..... HEATING
HWCOOL7 ..... COOLING
HWWATR7 ..... WATER HEATING
HWCOOK7 ..... COOKING
HWMANU7 ..... MANUFACTURING
HWOTH7 ..... SOME OTHER USE
..... INCORRECTLY RECORDED--SOURCE NOT USED

D-50f. Use for Wood

I have recorded that wood was used in this building but not how it was used. What was the wood used for?

WOHT17 or
WOHT27 ..... HEATING
WOWATR7 ..... WATER HEATING
WOCOOK7 ..... COOKING
WOMANU7 ..... MANUFACTURING
WOGENR7 ..... ELECTRICITY GENERATION
WOOTH7 ..... SOME OTHER USE
..... INCORRECTLY RECORDED--SOURCE NOT USED

D-50g. Use for Coal

I have recorded that coal was used in this building but not how it was used. What was the coal used for?

COHT17 or
COHT27 ..... HEATING
COWATR7 ..... WATER HEATING
COCOOK7 ..... COOKING
COMANU7 ..... MANUFACTURING
COGENR7 ..... ELECTRICITY GENERATION
COOTH7 ..... SOME OTHER USE
..... INCORRECTLY RECORDED--SOURCE NOT USED

D-50h. Use for Solar Thermal Panels

I have recorded that solar panels were used in this building but not how they were used. What were they used for?

SOHT17 or
SOHT27 ..... HEATING
SOWATR7 ..... WATER HEATING
SOCOOK7 ..... COOKING
SOMANU7 ..... MANUFACTURING
SOGENR7 ..... ELECTRICITY GENERATION
SOOTH7 ..... SOME OTHER USE
..... INCORRECTLY RECORDED--SOURCE NOT USED

D-50i. Use for Other Energy Source

I have recorded that another energy source was used in this building but how it was used. What was the other energy source used for?

OTHT17 or
OTHT27 ..... HEATING
OTCOOL7 ..... COOLING
OTWATR7 ..... WATER HEATING
OTCOOK7 ..... COOKING
OTMANU7 ..... MANUFACTURING
OTGENR7 ..... ELECTRICITY GENERATION
OTOTH7 ..... SOME OTHER USE
..... INCORRECTLY RECORDED--SOURCE NOT USED

AFTER ANSWERING EACH APPLICABLE QUESTION (D-50a THROUGH D-50i) ➔ BOX 42

BOX 42

Was electricity used?

Yes ➔ D-69
No ➔ BOX 43

D-69. How Electricity Is Purchased

In some areas of the country, consumers may purchase their electricity from more than one supplier. Was the electricity in this building...

[IF ASKED: If electricity is bought from the city, that is considered to be the local utility.]

[READ LIST AND CHECK ALL THAT APPLY.]

ELLOCUT7 ..... Bought from the local utility?
ELNONLU7 ..... Contracted or bought from an independent power producer or non-local utility?
ELOTSRC7 ..... Bought from someone else, such as a broker?

More than one of these selected, including local utility ➔ D-70
Only one selected or local utility not chosen ➔ BOX 43

DK ➔ BOX 43

D-70. ELLUPCT7

About what percent of the electricity used in this building would you estimate was obtained from the local utility?

Enter a numeric value between 1 and 100: ___

BOX 43

Was natural gas used?

Yes ➔ D-71
No ➔ BOX 44

D-71. How Natural Gas Is Purchased

{In some areas of the country, consumers may purchase their natural gas from more than one supplier. / Consumers may also be able to purchase their natural gas from more than one supplier.} Was the natural gas in this building...

[READ LIST AND CHECK ALL THAT APPLY.]

NGLOCUT7 ..... Bought from the local utility?
NGOTSRC7 ..... Bought from someone else, such as a non-utility or a broker?

BOX 44

Was bottled gas, LPG, or propane used?

Yes ➔ D-72
No ➔ BOX 45

D-72. **PRAMTC7**

You mentioned that bottled gas is used in this building. Measured in either gallons or pounds, which range best describes the amount of bottled gas used in 1999...

1 ..... Less than 100,
2 ..... 100 to 499,
3 ..... 500 to 999,
4 ..... Or 1,000 or more?
➔ D-73

DK ➔ BOX 45

D-73. **PRAUNT7**

[ASK IF NOT VOLUNTEERED] Is that in gallons or pounds?

1 ..... GALLONS
2 ..... POUNDS

BOX 45
Was wood used?
Yes ➔ D-74
No ➔ SECTION E

D-74. **WOAMT7**

Which range best describes how much wood has been burned in this building in 1999...

1 ..... Less than 1 cord,
2 ..... 1 to 9 cords,
3 ..... 10 to 20 cords,
4 ..... Or more than 20 cords?

D-75. **WOSRC7**

Did you...

1 ..... Purchase all the wood, ➔ D-76
2 ..... Obtain it all free of charge, ➔ SECTION E
3 ..... Or was some purchased and some free? ➔ D-76

DK ➔ SECTION E

D-76. **WOEXP7**

Please give me an estimate of the total amount spent for the wood used in 1999?

[DO NOT ENTER CENTS.]

[** VERIFY NUMBER DIGIT BY DIGIT **]

Enter a numeric value between 1 and 99999: _____ ➔ SECTION E

DK ➔ D-77

D-77. **WO5007** **"UNFOLDING WOOD EXPENDITURES CATEGORY"**

Would you say that less than 500 dollars, about 500 dollars, or more than 500 dollars was spent on wood used in 1999?

1 ..... LESS ➔ D-78
2 ..... ABOUT THAT MANY ➔ BOX 46 [2]
3 ..... MORE ➔ D-79

D-78. **WO1007**

Would you estimate that less than 100 dollars, about 100, or more than 100 dollars was spent on wood [used in 1999]?

1 ..... LESS ➔ BOX 46 [1]
2 ..... ABOUT THAT MANY ➔ BOX 46 [1]
3 ..... MORE ➔ BOX 46 [2]

DK TO ANY ONE OF THESE UNFOLDING QUESTIONS ➔ SECTION E

D-79. **WO10007**

Would you say that less than 1,000 dollars, about 1,000 dollars, or more than 1,000 dollars was spent on wood [used in 1999]?

1 ..... LESS ➔ BOX 46 [3]
2 ..... ABOUT THAT MANY ➔ BOX 46 [3]
3 ..... MORE ➔ D-80

D-80. **WO20007**

Would you say that less than 2,000 dollars, about 2,000 dollars, or more than 2,000 dollars was spent on wood [used in 1999]?

1 ..... LESS ➔ BOX 46 [4]
2 ..... ABOUT THAT MANY ➔ BOX 46 [4]
3 ..... MORE ➔ BOX 46 [5]

BOX 46

WOEXPC7

Go to the numeric code given in brackets in the previous question. This is the auto-coded wood expenditures category.

1 ..... $1 to $100
2 ..... $101 to $500
3 ..... $501 to $1,000
4 ..... $1,001 to $2,000
5 ..... Over $2,000

➔ SECTION E

SECTION E. MISCELLANEOUS EQUIPMENT

BOX 47

Is there cooking in the building?

Yes ➔ E-1
No ➔ BOX 48

E-1. **FDRM7**

Now I have some questions about different types of equipment that may be used in this building [READ FROM ABOVE]. Is any space used...

...for institutional or commercial food preparation and serving, such as kitchens, cafeterias, steam tables, or warming areas?

1 ..... YES
2 ..... NO

BOX 48

Is there water heating in the building?

Yes ➔ E-2
No ➔ BOX 49

E-2. **HWTRM7**

[Is any space used...]

...for any activities requiring large amounts of hot water, such as a commercial dishwasher, laundry room, heated pool, steam room, whirlpool, or showers?

1 ..... YES
2 ..... NO

BOX 49

Is this building either a clinic or outpatient health care, inpatient or outpatient rehabilitation, or a doctor's or dentist's office?

Yes ➔ E-3
No ➔ BOX 51

E-3. **MEDEQP7**

Does this building have any equipment for medical diagnosis or treatment, such as X-ray, CAT scan, MRI, dialysis, or ultrasound machines?

1 ..... YES ➔ BOX 50
2 ..... NO ➔ BOX 51

BOX 50
Is this building a doctor's office?
Yes ➔ Change **PBA7** to "Outpatient Health Care" ➔ BOX 51 No ➔ BOX 51

BOX 51
Is electricity used or generated in the building?
Yes ➔ E-5 No ➔ E-4

E-4. Verification Question

I do not have electricity recorded as being used in this building. Is it true that there is not any electricity used in this building?

1 ..... TRUE, ELECTRICITY IS NOT USED ➔ E-38
2 ..... FALSE, ELECTRICITY IS USED ➔ E-5

E-5. RFGEQP7

Is there any commercial refrigeration or freezer equipment used in this building?

1 ..... YES ➔ E-6
2 ..... NO ➔ E-13

DK ➔ E-13

E-6. RFGWI7

Are there any walk-in refrigeration units?

1 ..... YES ➔ E-7
2 ..... NO ➔ E-8

DK ➔ E-8

E-7. RFGWIN7

How many [walk-in refrigeration units] are there?

[** PROBE **]

Enter a numeric value between 1 and 999: ____

E-8. **RFGOP7**

Are there any open refrigerated cases or cabinets?

1 ..... YES ➔ E-9
2 ..... NO ➔ E-10

DK ➔ E-10

E-9. **RFGOPN7**

How many [open refrigerated cases or cabinets] are there?

[** PROBE **]

Enter a numeric value between 1 and 999: ____

E-10. **RFGCL7**

Are there any closed refrigerated cases or cabinets, excluding residential type refrigerators?

1 ..... YES ➔ E-11
2 ..... NO ➔ BOX 52

DK ➔ BOX 52

E-11. **RFGCLN7**

How many [closed refrigerated cases or cabinets] are there?

[** PROBE **]

Enter a numeric value between 1 and 999: ____

BOX 52

Was at least one type of refrigeration answered "Yes"?

Yes ➔ E-13
No ➔ E-12

E-12. **RFGOTH7**

I have recorded that there is refrigeration in the building but not the type of refrigeration equipment. What type of refrigeration is found in the building?:

OPEN ANSWER BOX:_____

E-13. **PCTERM7**

Are there any computers used in this building? *This is found in Box 12 [on Worksheet 2].*

1 ..... YES ➔ E-14
2 ..... NO ➔ E-25

E-14. **PCNUM7**

About how many computers are used in this building?

[This is found in Box 12 on Worksheet 2.]

Enter a numeric value between 1 and 9999999: _____ ➔ E-25

DK ➔ E-15

E-15. **PC1007** **"UNFOLDING NUMBER OF COMPUTERS CATEGORY"**

Would you estimate that there are less than 100 computers, about 100, or more than 100 computers?

1 ..... LESS ➔ E-16
2 ..... ABOUT THAT MANY ➔ BOX 53 [06]
3 ..... MORE ➔ E-20

E-16. **PC507**

Would you say that there are less than 50, about 50, or more than 50 computers?

1 ..... LESS ➔ E-17
2 ..... ABOUT THAT MANY ➔ BOX 53 [05]
3 ..... MORE ➔ BOX 53 [05]

E-17. **PC207**

Would you say that there are less than 20, about 20, or more than 20 computers?

1 ..... LESS ➔ E-18
2 ..... ABOUT THAT MANY ➔ BOX 53 [04]
3 ..... MORE ➔ BOX 53 [04]

E-18. **PC107**

Would you say that there are less than 10, about 10, or more than 10 computers?

1 ..... LESS ➔ E-19
2 ..... ABOUT THAT MANY ➔ BOX 53 [03]
3 ..... MORE ➔ BOX 53 [03]

E-20. **PC2507**

Would you say that there are less than 250, about 250, or more than 250 computers?

1 ..... LESS ➔ BOX 53 [06]
2 ..... ABOUT THAT MANY ➔ BOX 53 [07]
3 ..... MORE ➔ E-21

E-21. **PC5007**

Would you say that there are less than 500, about 500, or more than 500 computers?

1 ..... LESS ➔ BOX 53 [07]
2 ..... ABOUT THAT MANY ➔ BOX 53 [08]
3 ..... MORE ➔ E-22

E-22. **PC10007**

Would you say that there are less than 1,000, about 1,000, or more than 1,000 computers?

1 ..... LESS ➔ BOX 53 [08]
2 ..... ABOUT THAT MANY ➔ BOX 53 [09]
3 ..... MORE ➔ E-23

E-19. **PC57**

Would you say that there are less than 5, about 5, or more than 5 computers?

1 ..... LESS ➔ BOX 53 [01]
2 ..... ABOUT THAT MANY ➔ BOX 53 [02]
3 ..... MORE ➔ BOX 53 [02]

DK TO ANY ONE OF THESE UNFOLDING QUESTIONS ➔ E-25

E-23. **PC25007**

Would you say that there are less than 2,500, about 2,500, or more than 2,500 computers?

1 ..... LESS ➔ BOX 53 [09]
2 ..... ABOUT THAT MANY ➔ BOX 53 [10]
3 ..... MORE ➔ E-24

E-24. **PC50007**

Would you say that there are less than 5,000, about 5,000, or more than 5,000 computers?

1 ..... LESS ➔ BOX 53 [10]
2 ..... ABOUT THAT MANY ➔ BOX 53 [11]
3 ..... MORE ➔ BOX 53 [11]

BOX 53

PCTRMC7

Go to the numeric code given in brackets in the previous question. This is the auto-coded number of computers category.

01 ..... 1 to 4
02 ..... 5 to 9
03 ..... 10 to 19
04 ..... 20 to 49
05 ..... 50 to 99
06 ..... 100 to 249
07 ..... 250 to 499
08 ..... 500 to 999
09 ..... 1,000 to 2,499
10 ..... 2,500 to 4,999
11 ..... 5,000 or More

➔ E-25

E-25. **Office Equipment Types**

Which of the following types of equipment are used in this building? *This is found in Box 12 [on Worksheet 2]*.

[READ LIST AND CHECK ALL THAT APPLY.]

FAX7 ..... FAX machines?
PRINTR7 ..... Laser printers?
REGSTR7 ..... Electronic cash registers?
COPIER7 ..... Photocopiers other than small desktop copiers?
..... NONE OF THESE ➔ BOX E-6

"Electronic cash registers" selected ➔ E-26
"Photocopiers" selected but "Electronic cash registers" not selected ➔ E-27
Neither "Photocopiers" nor "Electronic cash registers" selected ➔ BOX 54

E-26. **RGSTRN7**

About how many cash registers are used in this building?

[This is found in Box 12 on Worksheet 2.]

[** PROBE **]

Enter a numeric value between 1 and 9999: _____

"Photocopiers" also selected ➔ E-27
"Photocopiers" not selected ➔ BOX 54

E-27. **COPRN7**

About how many photocopiers are used in this building?

[This is found in Box 12 on Worksheet 2.]

[** PROBE **]

Enter a numeric value between 1 and 9999: _____

BOX 54

Are there 20 or more computers and is the building not open 24 hours a day?

Yes ➔ E-28
No ➔ BOX 55

E-28. **RDOFEQ7**

How often are the majority of {the computers and the office equipment just mentioned / the computers} turned off when the building is not normally open? Would you say that they are...

1 ..... Always turned off,
2 ..... Sometimes turned off,
3 ..... Or never turned off when the building is not normally open?
4 ..... [IF VOLUNTEERED] COMPUTERS ARE "POWERED DOWN"

BOX 55

Is the building normally open at least one hour per week?

Yes ➔ E-29
No ➔ E-31

E-29. **LTOHRP7**

The next questions are about the lighting inside the building.

What percentage of the {square footage} square feet in this building is lit when the building is normally open?

[IF ASKED: "Normally open" means the hours when the usual building activities occur.]

[IF LIT SQUARE FOOTAGE IS KNOWN BUT NOT THE PERCENT, RECORD SQUARE FOOTAGE IN COMMENTS.]

Enter a numeric value between 0 and 100: ___ ➔ BOX 56

DK ➔ E-30

E-30. **LOHRPC7**

What is your best estimate of the percent of the square feet in this building that is lit? Would you say it is...

1 ..... 1 to 25 percent,
2 ..... 26 to 50 percent,
3 ..... 51 to 75 percent,
4 ..... 76 to 100 percent,
5 ..... Or is it not lit at all when it is normally open?

BOX 56

Is the building open 24 hours a day?

Yes ➔ BOX 57
No ➔ E-31

E-31. **LTNHRP7**

What percentage of the {square footage} square feet is lit during off hours, that is, hours when the building is not normally open? Exclude the space lit by emergency lighting.

[IF LIT SQUARE FOOTAGE IS KNOWN BUT NOT THE PERCENT, RECORD SQUARE FOOTAGE IN COMMENTS.]

Enter a numeric value between 0 and 100: ___ ➔ BOX 57

DK ➔ E-32

E-32. **LNHRPC7**

What is your best estimate of the percent lit during off hours? Would you say it is...

1 ..... 1 to 25 percent,
2 ..... 26 to 50 percent,
3 ..... 51 to 75 percent,
4 ..... 76 to 100 percent,
5 ..... Or is it not lit at all during off hours?

BOX 57
Is the percent lit when open or closed greater than zero?
Yes ➔ E-33
No ➔ E-38

E-33. Light Bulb Types

Please look at Reference 5. Was any of the square footage in this building lit by...

[*READ LIST AND* CHECK ALL THAT APPLY. THERE MUST BE AT LEAST ONE TYPE OF LIGHTING.]

FLUOR7 ..... Fluorescent lighting other than compact fluorescent bulbs?
CFLR7 ..... Compact fluorescent bulbs?
BULB7 ..... Incandescent light bulbs, other than halogen bulbs?
HALO7 ..... Halogen bulbs?
HID7 ..... High intensity discharge (HID) lights such as high pressure sodium, metal halide or mercury vapor?
OTLT7 ..... Some other type of lighting? ➔ E-34

➔ BOX 58

E-34. OTLTX7

What type of bulb is the other type of lighting?: _____

BOX 58
Is there more than one type of lighting?
Yes ➔ E-35
No ➔ BOX 59

E-35. Percent Lighted by Each Type of Bulb

The next questions are about the percent of floorspace lit by the types of lighting you just mentioned. Please keep in mind:

One, we are talking about only the lighted portion of the building and, two, more than one type of bulb can light the same area, so these percents can add up to more than 100.

FOR EACH TYPE OF BULB GIVEN IN E-33, GO TO CORRESPONDING QUESTION E-35a THROUGH E-35f

E-35a. BULBP7

What percent of the lighted area in this building is lit by the fluorescent lighting?

[** PROBE **]

Enter a numeric value between 0 and 100: ___

E-35b. CFLRP7

What percent of the lighted area in this building is lit by the compact fluorescent bulbs?

[** PROBE **]

Enter a numeric value between 0 and 100: ___

E-35c. BULBP7

What percent of the lighted area in this building is lit by the incandescent bulbs?

[** PROBE **]

Enter a numeric value between 0 and 100: ___

E-35d. HALOP7

What percent of the lighted area in this building is lit by the halogen lighting?

[** PROBE **]

Enter a numeric value between 0 and 100: ___

E-35e. HIDP7

What percent of the lighted area in this building is lit by the high intensity discharge lights?

[** PROBE **]

Enter a numeric value between 0 and 100: ___

E-35f. OTLTP7

What percent of the lighted area in this building is lit by the other lighting type?

[** PROBE **]

Enter a numeric value between 0 and 100: ___

BOX 59

Are fluorescent bulbs used?

Yes ➔ E-36
No ➔ BOX 60

E-36. **SREF7**

The next three questions are about lighting conservation features. *These features would be checked off in Box 11 on Worksheet 2.* Does your lighting system have any...

Specular reflectors specifically designed to increase the amount of light from a fluorescent fixture?

[IF ASKED: A specular reflector consists of a reflective surface or panel attached to a fluorescent lamp to direct a greater fraction of the lamp's light to the room.]

1 ..... YES
2 ..... NO

BOX 60
Are fluorescent <u>or</u> HID bulbs used?
Yes ➔ E-37
No ➔ E-38

E-37. **HEB7**

The next two questions are about lighting conservation features. These features would be checked off in Box 11 on Worksheet 2. Does your building's interior lighting system have any...

Electronic ballasts?

[IF ASKED: A ballast is the transformer for fluorescent and HID lamps which provides the necessary current, voltage, and wave-form conditions to operate the lamp. Electronic ballasts operate lamps using electronic switching power supply circuits.]

1 ..... YES
2 ..... NO

E-38. **SKYLT7**

[Does your building have any...]

Skylights or atriums specifically designed for the purpose of providing light?

1 ..... YES
2 ..... NO

E-39. **WINTYP7**

Does this building have...

1 ..... Single paned windows,
2 ..... Multi-paned windows [double or triple paned], ➔ E-40
3 ..... Or a combination of both of these types of windows?
4 ..... [IF VOLUNTEERED] NO WINDOWS IN BUILDING ➔ SECTION F

E-40. **TRG7**

Do any of these windows have tinted or reflective glass?

1 ..... YES
2 ..... NO

SECTION F. ELECTRICITY USAGE

BOX 61

Was electricity used in the building?

Yes ➔ BOX F2
No ➔ SECTION G

BOX 62

Does the respondent have Worksheet #3?

Yes ➔ F-2
No ➔ F-1

F-1. **ELFIGS7**

The next questions are about electricity usage in this building for calendar year 1999. Would you be able to give me an approximate figure of how much electricity was used or how much was spent on it?

1 ..... YES ➔ F-2
2 ..... NO ➔ F-6

DK ➔ BOX 69

F-2. **ELCNS7**

The next questions are about the electricity usage, as found on Worksheet 3 [that's the yellow worksheet]. Please give me the {total / approximate} number of kilowatthours of electricity used in 1999. *This number is found in Box 13, Line A.*

[** VERIFY NUMBER DIGIT BY DIGIT **]

Enter a numeric value with a maximum of 14 positions: _____

F-3. **ELEXP7**

Please give me the {total / approximate} dollars spent on electricity in 1999. *This number is found in Box 13, Line B.*

[DO NOT ENTER CENTS.]

[** VERIFY NUMBER DIGIT BY DIGIT **]

Enter a numeric value between 0 and 999999999: _____

DK either consumption or expenditures and they don't have Worksheet 3 ➔ BOX 69
DK either consumption or expenditures and they have Worksheet 3 ➔ F-6
Consumption and/or expenditures given ➔ F-4

F-4. **ELSTDAT7**

What is the starting date for these electricity usage figures? *This is found in Box 13, Line C.*

[ENTER DATE AS MM-DD-YYYY. IF THE DAY IS NOT KNOWN, ENTER "15."] ..-..-....

F-5. **ELENDAT7**

What is the ending date? *This is also found in Box 13, Line C.*

[ENTER DATE AS MM-DD-YYYY. IF THE DAY IS NOT KNOWN, ENTER "15."] ..-..-.... ➔ F-18

F-6. **ELX5K7** **"UNFOLDING ELECTRICITY EXPENDITURES CATEGORY"**

I understand that it may be difficult to give exact figures. However, your consumption can be estimated if you know approximately how much you spent on electricity in 1999.

Would you estimate that the amount of dollars spent on electricity for this building in 1999 was less than 5,000 dollars, about 5,000, or more than 5,000 dollars?

1 ..... LESS ➔ F-7
2 ..... ABOUT THAT MUCH ➔ BOX 63 [3]
3 ..... MORE ➔ F-9

F-7. **ELX2K7**

Would you estimate that the amount of dollars spent on electricity [for this building in 1999] was less than 2,000 dollars, about 2,000, or more than 2,000 dollars?

1 ..... LESS ➔ F-8
2 ..... ABOUT THAT MUCH ➔ BOX 63 [2]
3 ..... MORE ➔ BOX 63 [3]

F-8. **ELX5007**

Would you estimate that the amount of dollars spent on electricity [for this building in 1999] was less than 500 dollars, about 500, or more than 500 dollars?

1 ..... LESS ➔ BOX 63 [1]
2 ..... ABOUT THAT MUCH ➔ BOX 63 [1]
3 ..... MORE ➔ BOX 63 [2]

DK TO ANY ONE OF THESE UNFOLDING QUESTIONS ➔ F-12

F-9. **ELX20K7**

Would you estimate that the amount of dollars spent on electricity [for this building in 1999] was less than 20,000 dollars, about 20,000, or more than 20,000 dollars?

1 ..... LESS ➔ BOX 63 [4]
2 ..... ABOUT THAT MUCH ➔ BOX 63 [4]
3 ..... MORE ➔ F-10

F-10. **ELX50K7**

Would you estimate that the amount of dollars spent on electricity [for this building in 1999] was less than 50,000 dollars, about 50,000, or more than 50,000 dollars?

1 ..... LESS ➔ BOX 63 [5]
2 ..... ABOUT THAT MUCH ➔ BOX 63 [5]
3 ..... MORE ➔ F-11

F-11. **ELX200K7**

Would you estimate that the amount of dollars spent on electricity [for this building in 1999] was less than 200,000 dollars, about 200,000, or more than 200,000 dollars?

1 ..... LESS ➔ BOX 63 [6]
2 ..... ABOUT THAT MUCH ➔ BOX 63 [6]
3 ..... MORE ➔ BOX 63 [7]

BOX 63

ELEXPC7

1	$1 to $500	
2	$501 to $2,000	
3	$2,001 to $5,000	
4	$5,001 to $20,000	➔ F-18
5	$20,001 to $50,000	
6	$50,001 to $200,000	
7	Over $200,000	

F-12. ELC100K7 "UNFOLDING ELECTRICITY CONSUMPTION CATEGORY"

Would you estimate that the electricity usage in this building in 1999 was less than 100,000 kilowatthours, about 100,000, or more than 100,000 kilowatthours?

1 ..... LESS ➔ F-13
2 ..... ABOUT THAT MUCH ➔ BOX 64 [3]
3 ..... MORE ➔ F-15

F-13. ELC50K7

Would you estimate that the electricity usage [in this building in 1999] was less than 50,000 kilowatthours, about 50,000, or more than 50,000 kilowatthours?

1 ..... LESS ➔ F-14
2 ..... ABOUT THAT MUCH ➔ BOX 64 [2]
3 ..... MORE ➔ BOX 64 [3]

F-14. ELC20K7

Would you estimate that the electricity usage [in this building in 1999] was less than 20,000 kilowatthours, about 20,000, or more than 20,000 kilowatthours?

1 ..... LESS ➔ BOX 64 [1]
2 ..... ABOUT THAT MUCH ➔ BOX 64 [1]
3 ..... MORE ➔ BOX 64 [2]

DK TO ANY ONE OF THESE UNFOLDING QUESTIONS ➔ BOX 69

F-15. ELC200K7

Would you estimate that the electricity usage [in this building in 1999] was less than 200,000 kilowatthours, about 200,000, or more than 200,000 kilowatthours?

1 ..... LESS ➔ BOX 64 [4]
2 ..... ABOUT THAT MUCH ➔ BOX 64 [4]
3 ..... MORE ➔ F-16

F-16. ELC500K7

Would you estimate that the electricity usage [in this building in 1999] was less than 500,000 kilowatthours, about 500,000, or more than 500,000 kilowatthours?

1 ..... LESS ➔ BOX 64 [5]
2 ..... ABOUT THAT MUCH ➔ BOX 64 [5]
3 ..... MORE ➔ F-17

F-17. ELC2M7

Would you estimate that the electricity usage [in this building in 1999] was less than 2 million kilowatthours, about 2 million, or more than 2 million kilowatthours?

1 ..... LESS ➔ BOX 64 [6]
2 ..... ABOUT THAT MUCH ➔ BOX 64 [6]
3 ..... MORE ➔ BOX 64 [7]

BOX 64

ELCNSC7

1	1 to 20,000 kWh	
2	20,001 to 50,000 kWh	
3	50,001 to 100,000 kWh	
4	100,001 to 200,000 kWh	➔ F-18
5	200,001 to 500,000 kWh	
6	500,001 to 2,000,000 kWh	
7	Over 2,000,000	

F-18. **ELOTBD7**

Is any consumption from other buildings included {in these figures / in this estimate}?

1 ..... YES ➔ F-19
2 ..... NO ➔ F-20

DK ➔ F-20

F-19. **ELOTSF7**

What is the approximate square footage of the other buildings that are included {in these figures / in this estimate}?

[** PROBE **]

Enter a numeric value between 1 and 999999999: _____

F-20. **ELOTUS7**

{Do these figures / Does this estimate} include charges for any other major electricity usage outside the building, such as parking lot lights, exterior lights, signs or billboards, large pumps, or swimming pools?

1 ..... YES
2 ..... NO

BOX 65

Was any electricity purchased from a non-local utility or independent power producer?

Yes ➔ F-21
No ➔ BOX 66

F-21. **INCNONU7**

{Do these figures / Does this estimate} include all the electricity from the independent power producer, non-local utility, or broker?

1 ..... YES ➔ BOX 66
2 ..... NO ➔ F-22

DK ➔ BOX 66

F-22. **Open-Ended Question**

What was not included?

[DESCRIBE THE ADDITIONAL CHARGES IN THE BOX.]

OPEN ANSWER BOX: _____

BOX 66

Were either the exact consumption or expenditures given (or both)?

Yes ➔ BOX 67
No ➔ BOX 69

BOX 67

If there is a 1995 regression estimate, are either the consumption or expenditures outside of the specified range of the 1995 regression estimates (less than 1/13 of or more than 8 times the 1995 estimate)?

Yes (fail regression check) ➔ BOX 69
No (pass regression check) ➔ BOX 68
No 1995 regression estimate ➔ SECTION G

BOX 68

Were both the exact consumption and expenditures given?

Yes ➔ SECTION G
No ➔ BOX 69

BOX 69

Is this building from the 1995 sample and did the building have only one electricity supplier in that survey?

Yes ➔ F-23
No ➔ F-30

F-23. **EL95SPV7**

Does {1995 supplier name} still supply electricity to the building [READ FROM ABOVE]?

1 ..... YES ➔ F-24
2 ..... NO ➔ F-30

DK ➔ SECTION G

F-24. **EL951SP7**

Was {1995 supplier name} the only electricity supplier during 1999?

1 ..... YES
2 ..... NO

F-25. **ELNAC957**

How many different electricity accounts does this building have with {1995 supplier name}?

Enter a numeric value between 0 and 999: ____

0 accounts ➔ BOX 70
1-10 accounts ➔ F-26
More than 10 accounts ➔ BOX 71

DK➔ BOX 70

F-26. **Account Numbers for Accounts With Same Supplier as 1995**

FOR EACH ACCOUNT GIVEN IN F-25, ASK:

Please give me the {first / next} electricity account number for {1995 supplier name}.

[** VERIFY NUMBER DIGIT BY DIGIT **]
_____

AFTER EACH ACCOUNT FINISHED ➔ BOX 70

BOX 70

Were <u>any</u> consumption <u>or</u> expenditure figures given (exact <u>or</u> categories)?

Yes➔ BOX 71
No ➔ F-27

F-27. **ELOTB957**

{Does the bill or statement / Do the bills or statements} from {1995 supplier name} cover just this building or are other buildings covered as well?

1 ..... JUST THIS BUILDING ➔ F-29
2 ..... OTHER BUILDING(S) ➔ F-28

DK ➔ F-29

F-28. **ELOTS957**

What is the approximate square footage of the <u>other</u> buildings included on {the bill or statement / the bills or statements}?

[** PROBE **]

Enter a numeric value between 1 and 999999999: _____

F-29. **ELOTU957**

{Does the bill or statement / Do the bills or statements} include charges for any <u>other</u> major electricity usage outside the building, such as parking lot lights, exterior lights, signs or billboards, large pumps or swimming pools?

1 .....YES
2 ..... NO

BOX 71

Was the 1995 supplier the only supplier of electricity?

Yes ➔ SECTION G
No ➔ F-30

F-30. ELNUMSP7

In some parts of the country, customers can purchase energy from more than one supplier.

How many {different / other} companies supplied electricity to this building in 1999?

Enter a numeric value between 1 and 10: __

DK ➔ SECTION G

F-31. Electricity Suppliers (Other Than 1995 Supplier)

What is the name of the {first / next} supplier that provided electricity to this building in 1999?

[START TYPING THE NAME OF THE ELECTRIC SUPPLIER TO SEE THE LOOK-UP TABLE. IF THE SUPPLIER NAME DOES NOT APPEAR ON THE LIST, ENTER "OTHER".]:

_____

Supplier found in "look-up table" ➔ F-38
Supplier not found, "OTHER" entered ➔ F-32

F-32. Supplier Name

[ENTER THE NAME OF THE SUPPLIER.]:

_____

F-33. Supplier Street Address

What is the address for {name of supplier}, beginning with the street?:

_____

F-34. Supplier P.O. Box or Suite Number

Is there a post office box or suite number?

[IF NOT, PRESS ENTER.]: _____

F-35. Supplier City

What is the city?: _____

F-36. Supplier State

What is the state?

[ENTER THE TWO LETTER ABBREVIATION.]: __

F-37. Supplier Zip Code

And what is the zip code?: _____

F-38. ELNAC17 ELNAC27

How many different electricity accounts does this building have with {name of supplier}?

Enter a numeric value between 0 and 999: ____

0 accounts ➔ BOX 72
1-10 accounts ➔ F-39
More than 10 accounts ➔ Back to F-31 if more suppliers, or SECTION G if no others

DK ➔ BOX 72

F-39. Account Numbers for Suppliers Other Than 1995

FOR EACH ACCOUNT GIVEN IN F-38, ASK:

Please give me the {first / next} electricity account number for {name of supplier}.

[** VERIFY NUMBER DIGIT BY DIGIT **]

_____

AFTER EACH ACCOUNT FINISHED ➔ BOX 72

BOX 72

Was any electricity purchased from a non-local utility or independent power producer?

Yes ➔ F-40
No ➔ BOX 73

F-40. **ELNONU17** **ELNONU27**

You mentioned earlier that you purchase electricity from an independent power producer, non-local utility, or broker. Is {name of supplier} one of those companies?

1 ..... YES
2 ..... NO

BOX 73

Were <u>any</u> consumption <u>or</u> expenditure figures given (exact <u>or</u> category) ?

Yes ➔ Back to F-31 for next supplier, or SECTION G if no others
No ➔ F-41

F-41. **ELOTB17** **ELOTB27**

{Does the bill or statement / Do the bills or statements} from {name of supplier} cover just this building or are other buildings covered as well?

1 ..... JUST THIS BUILDING ➔ F-43
2 ..... OTHER BUILDING(S) ➔ F-42

DK ➔ F-43

F-42. **ELOTS17** **ELOTS27**

What is the approximate square footage of the <u>other</u> buildings included on the {the bill or statement / the bills or statements}?

[** PROBE **]

Enter a numeric value between 1 and 999999999: _____

F-43. **ELOTU17** **ELOTU27**

{Does the bill or statement / Do the bills or statements} include charges for any <u>other</u> major electricity usage outside the building, such as parking lot lights, exterior lights, signs or billboards, large pumps or swimming pools?

1 ..... YES
2 ..... NO

GO BACK TO F-31 IF MORE SUPPLIERS, OR TO SECTION G IF NO MORE SUPPLIERS

G-4. **NGCNS7**

Please give me the {total / approximate} amount of natural gas used in 1999. *This number is found in Box 14, Line A.*

[** VERIFY NUMBER DIGIT BY DIGIT **]

Enter a numeric value with a maximum of 14 positions: _____

G-5. **NGEXP7**

Please give me the {total / approximate} dollars spent on natural gas in 1999. *This number is found in Box 14, Line B.*

[DO NOT ENTER CENTS.]

[** VERIFY NUMBER DIGIT BY DIGIT **]

Enter a numeric value between 1 and 999999999: _____

DK either consumption or expenditures and they don't have Worksheet 3 ➔ BOX 82
DK either consumption or expenditures and they have Worksheet 3 ➔ G-8
Consumption and/or expenditures given ➔ G-6

G-6. **NGSTDAT7**

What is the starting date for these natural gas usage figures? *This is found in Box 14, Line C.*

[ENTER DATE AS MM-DD-YYYY. IF THE DAY IS NOT KNOWN, ENTER "15."] ..-..-....

G-7. **NGENDAT7**

What is the ending date? *This is also found in Box 14, Line C.*

[ENTER DATE AS MM-DD-YYYY. IF THE DAY IS NOT KNOWN, ENTER "15."] ..-..-.... ➔ G-20

G-8. **NGX5K7** **"UNFOLDING NATURAL GAS EXPENDITURES CATEGORY"**

I understand that it may be difficult to give exact figures. However, your consumption can be estimated if you know approximately how much you spent on natural gas in 1999.

Would you estimate that the amount of dollars spent on natural gas for this building in 1999 was less than 5,000 dollars, about 5,000, or more than 5,000 dollars?

1 ..... LESS ➔ G-9
2 ..... ABOUT THAT MUCH ➔ BOX 76 [3]
3 ..... MORE ➔ G-11

G-9. **NGX2K7**

Would you estimate that the amount of dollars spent on natural gas [for this building in 1999] was less than 2,000 dollars, about 2,000, or more than 2,000 dollars?

1 ..... LESS ➔ G-10
2 ..... ABOUT THAT MUCH ➔ BOX 76 [2]
3 ..... MORE ➔ BOX 76 [3]

G-10. **NGX5007**

Would you estimate that the amount of dollars spent on natural gas [for this building in 1999] was less than 500 dollars, about 500, or more than 500 dollars?

1 ..... LESS ➔ BOX 76 [1]
2 ..... ABOUT THAT MUCH ➔ BOX 76 [1]
3 ..... MORE ➔ BOX 76 [2]

DK TO ANY ONE OF THESE UNFOLDING QUESTIONS ➔ G-14

G-11. **NGX20K7**

Would you estimate that the amount of dollars spent on natural gas [for this building in 1999] was less than 20,000 dollars, about 20,000, or more than 20,000 dollars?

1 ..... LESS ➔ BOX 76 [4]
2 ..... ABOUT THAT MUCH ➔ BOX 76 [4]
3 ..... MORE ➔ G-12

G-12. **NGX50K7**

Would you estimate that the amount of dollars spent on natural gas [for this building in 1999] was less than 50,000 dollars, about 50,000, or more than 50,000 dollars?

1 ..... LESS ➔ BOX 76 [5]
2 ..... ABOUT THAT MUCH ➔ BOX 76 [5]
3 ..... MORE ➔ G-13

G-13. **NGX200K7**

Would you estimate that the amount of dollars spent on natural gas [for this building in 1999] was less than 200,000 dollars, about 200,000, or more than 200,000 dollars?

1 ..... LESS ➔ BOX 76 [6]
2 ..... ABOUT THAT MUCH ➔ BOX 76 [6]
3 ..... MORE ➔ BOX 76 [7]

BOX 76

NGEXPC7

1	$1 to $500	
2	$501 to $2,000	
3	$2,001 to $5,000	
4	$5,001 to $20,000	➔ G-20
5	$20,001 to $50,000	
6	$50,001 to $200,000	
7	Over $200,000	

G-14. NGC10K7 "UNFOLDING NATURAL GAS CONSUMPTION CATEGORY"

Would you estimate that the natural gas usage in this building in 1999 was less than 10,000 therms, about 10,000, or more than 10,000 therms?

[IF RESPONDENT HAS THIS ESTIMATE IN A UNIT OTHER THAN THERMS, RECORD THE UNIT IN COMMENTS.]

1 ..... LESS ➔ G-15
2 ..... ABOUT THAT MUCH ➔ BOX 77 [3]
3 ..... MORE ➔ G-17

G-15. NGC5K7

Would you estimate that the natural gas usage [in this building in 1999] was less than 5,000 therms, about 5,000, or more than 5,000 therms?

1 ..... LESS ➔ G-16
2 ..... ABOUT THAT MUCH ➔ BOX 77 [2]
3 ..... MORE ➔ BOX 77 [3]

G-16. NGC2K7

Would you estimate that the natural gas usage [in this building in 1999] was less than 2,000 therms, about 2,000, or more than 2,000 therms?

1 ..... LESS ➔ BOX 77 [1]
2 ..... ABOUT THAT MUCH ➔ BOX 77 [1]
3 ..... MORE ➔ BOX 77 [2]

DK TO ANY ONE OF THESE UNFOLDING QUESTIONS ➔ BOX 82

G-17. NGC20K7

Would you estimate that the natural gas usage [in this building in 1999] was less than 20,000 therms, about 20,000, or more than 20,000 therms?

1 ..... LESS ➔ BOX 77 [4]
2 ..... ABOUT THAT MUCH ➔ BOX 77 [4]
3 ..... MORE ➔ G-18

G-18 NGC50K7

Would you estimate that the natural gas usage [in this building in 1999] was less than 50,000 therms, about 50,000, or more than 50,000 therms?

1 ..... LESS ➔ BOX 77 [5]
2 ..... ABOUT THAT MUCH ➔ BOX 77 [5]
3 ..... MORE ➔ G-19

G-19. NGC1M7

Would you estimate that the natural gas usage [in this building in 1999] was less than one million therms, about one million, or more than one million therms?

1 ..... LESS ➔ BOX 77 [6]
2 ..... ABOUT THAT MUCH ➔ BOX 77 [6]
3 ..... MORE ➔ BOX 77 [7]

BOX 77

NGCNSC7

1	1 to 2,000 ccf	➔ G-20
2	2,001 to 5,000 ccf	
3	5,001 to 10,000 ccf	
4	10,001 to 20,000 ccf	
5	20,001 to 50,000 ccf	
6	50,001 to 1,000,000 ccf	
7	Over 1,000,000 ccf	

G-20. **NGOTBD7**

Is any consumption from other buildings included {in these figures / in this estimate}?

1 ..... YES ➔ G-21
2 ..... NO ➔ G-22

DK ➔ G-22

G-21. **NGOTSF7**

What is the approximate square footage of the other buildings that are included {in these figures / in this estimate}?

[** PROBE **]

Enter a numeric value between 1 and 999999999: _____

G-22. **NGOTUS7**

{Do these figures / Does this estimate} include charges for any other major natural gas usage outside the building, such as for kilns, gas space heaters, exterior or decorative lighting, compressed natural gas vehicles, or pumps not used in the building?

1 ..... YES
2 ..... NO

BOX 78

Was any natural gas purchased from a non-local utility?

Yes ➔ G-23
No ➔ BOX 79

G-23. **INCTRGS7**

{Do these figures / Does this estimate} include all the natural gas from the non-utility or broker?

1 ..... YES ➔ BOX 79
2 ..... NO ➔ G-24

DK ➔ BOX 79

G-24. **Open-Ended Question**

What was not included?

[DESCRIBE THE ADDITIONAL CHARGES IN THE BOX.]

OPEN ANSWER BOX: _____

BOX 79

Were either the exact consumption or expenditures given (or both)?

Yes ➔ BOX 80
No ➔ BOX 82

BOX 80

If there is a 1995 regression estimate, are either the consumption or expenditures outside of the specified range of the 1995 regression estimates (less than 1/13 of or more than 13 times the 1995 estimate)?

Yes (fail regression check) ➔ BOX 82
No (pass regression check) ➔ BOX 81
No 1995 regression estimate ➔ SECTION H

BOX 81

Were both the exact consumption and expenditures given?

Yes ➔ SECTION H
No ➔ BOX 82

BOX 82

Is this building from the 1995 sample and did the building have only one electricity supplier in that survey?

Yes ➔ G-25
No ➔ G-32

G-25. **NG95SPV7**

Does {1995 supplier name} still supply natural gas to the building [READ FROM ABOVE]?

1 ..... YES ➔ G-26
2 ..... NO ➔ G-32

DK ➔ SECTION H

G-26. **NG951SP7**

Was {1995 supplier name} the only natural gas supplier during 1999?

1 ..... YES
2 ..... NO

G-27. **NGNAC957**

How many different natural gas accounts does this building have with {1995 supplier name}?

Enter a numeric value between 0 and 999: ____

0 accounts ➔ BOX 83
1-10 accounts ➔ G-28
More than 10 accounts ➔ BOX 84

DK➔ BOX 83

G-28. **Account Numbers for Accounts With Same Supplier as 1995**

FOR EACH ACCOUNT GIVEN IN G-27, ASK:

Please give me the {first / next} natural gas account number for {1995 supplier name}.

[** VERIFY NUMBER DIGIT BY DIGIT **]
_____

AFTER EACH ACCOUNT FINISHED ➔ BOX 83

BOX 83

Were any consumption or expenditure figures given (exact or categories)?

Yes➔ BOX G-8
No ➔ G-29

G-29. **NGOTB957**

{Does the bill or statement / Do the bills or statements} from {1995 supplier name} cover just this building or are other buildings covered as well?

1 ..... JUST THIS BUILDING ➔ G-31
2 ..... OTHER BUILDING(S) ➔ G-30

DK ➔ G-31

G-30. **NGOTS957**

What is the approximate square footage of the other buildings included on {the bill or statement / the bills or statements}?

[** PROBE **]

Enter a numeric value between 1 and 999999999: _____

G-31. **NGOTU957**

{Does the bill or statement / Do the bills or statements} include charges for any other major natural gas usage outside the building, such as for kilns, gas space heaters, exterior or decorative lighting, compressed natural gas vehicles, or pumps not used in the building?

1 ..... YES
2 ..... NO

BOX 84

Was 1995 supplier the only supplier of natural gas?

Yes➔ SECTION H
No ➔ G-32

G-32. **NGNUMSP7**

In some parts of the country, customers can purchase energy from more than one supplier.

How many {different / other} companies supplied natural gas to this building in 1999?

Enter a numeric value between 1 and 10: __

DK ➔ SECTION F

G-33. **Natural Gas Suppliers (Other Than 1995 Supplier)**

What is the name of the {first / next} supplier that provided electricity to this building in 1999?

[START TYPING THE NAME OF THE NATURAL GAS SUPPLIER TO SEE THE LOOK-UP TABLE. IF THE SUPPLIER NAME DOES NOT APPEAR ON THE LIST, ENTER "OTHER".]:

_____

Supplier found in "Look-Up Table" ➔ G-40
Supplier not found, "OTHER" entered ➔ G-34

G-34. **Supplier Name**

[ENTER THE NAME OF THE SUPPLIER.]:

_____

G-35. **Supplier Street Address**

What is the address for {name of supplier}, beginning with the street?:

_____

G-36. **Supplier P.O. Box or Suite Number**

Is there a post office box or suite number?

[IF NOT, PRESS ENTER.]: _____

G-37. **Supplier City**

What is the city?: _____

G-38. **Supplier State**

What is the state?

[ENTER THE TWO LETTER ABBREVIATION.]: __

G-39. **Supplier Zip Code**

And what is the zip code?: _____

G-40. **NGNAC17** **NGNAC27**

How many different natural gas accounts does this building have with {name of supplier}?

Enter a numeric value between 0 and 999: ____

0 accounts ➔ BOX 85
1-10 accounts ➔ G-41
More than 10 accounts ➔ Back to G-33 if more suppliers, or SECTION H if no others

DK ➔ BOX 85

G-41. **Account Numbers for Suppliers Other Than 1995**

FOR EACH ACCOUNT GIVEN IN F-38, ASK:

Please give me the {first / next} natural gas account number for {name of supplier}.

[** VERIFY NUMBER DIGIT BY DIGIT **]

_____

AFTER EACH ACCOUNT FINISHED ➔ BOX 85

BOX 85

Was any natural gas purchased from a non-local utility?

Yes ➔ G-42
No ➔ BOX 86

G-42. **NGTG17** **NGTG27**

You mentioned earlier that you purchase natural gas from a non-local utility or a broker. Is {name of supplier} one of those companies?

1 ..... YES
3 ..... NO

BOX 86

Were any consumption or expenditure figures given (exact or category) ?

Yes ➔ Back to G-33 for next supplier, or SECTION H if no others
No ➔ G-43

G-43. **NGOTB17** **NGOTB27**

{Does the bill or statement / Do the bills or statements} from {name of supplier} cover just this building or are other buildings covered as well?

1 ..... JUST THIS BUILDING ➔ G-45
2 ..... OTHER BUILDING(S) ➔ G-44

DK ➔ G-45

G-44. **NGOTS17** **NGOTS27**

What is the approximate square footage of the other buildings included on the {the bill or statement / the bills or statements}?

[** PROBE **]

Enter a numeric value between 1 and 999999999: _____

G-45. **NGOTU17** **NGOTU27**

{Does the bill or statement / Do the bills or statements} include charges for any other major natural gas usage outside the building, such as for kilns, gas space heaters, exterior or decorative lighting, compressed natural gas vehicles, or pumps not used in the building?

1 ..... YES
2 ..... NO

GO BACK TO G-33 IF MORE SUPPLIERS, OR TO SECTION H IF NO MORE SUPPLIERS

SECTION H. FUEL OIL / DIESEL / KEROSENE USAGE

BOX 87

Was fuel oil/diesel/kerosene used in the building?

Yes ➔ BOX H2
No ➔ SECTION I

BOX 88

Does the respondent have Worksheet #3?

Yes ➔ H-2
No ➔ H-1

H-1. **FKFIGS7**

The next questions are about {fuel oil / diesel / kerosene} usage in this building for calendar year 1999. Would you be able to give me an approximate figure of how much {fuel oil / diesel / kerosene} was used or how much was spent on it?

1 ..... YES ➔ H-2
2 ..... NO ➔ H-7

DK ➔ BOX 93

H-2. **FKCNS7**

The next questions are about the fuel oil, diesel, or kerosene usage, as found on Worksheet 3 [that's the yellow worksheet].

Please give me the {total / approximate} number of gallons of {fuel oil / diesel / kerosene} purchased in 1999. *This number is found in Box 15, Line A.*

[** VERIFY NUMBER DIGIT BY DIGIT **]

Enter a numeric value with a maximum of 14 positions: _____

H-3. **FKEXP7**

Please give me the {total / approximate} dollars spent on {fuel oil / diesel / kerosene} in 1999. *This number is found in Box 15, Line B.*

[DO NOT ENTER CENTS.]

[** VERIFY NUMBER DIGIT BY DIGIT **]

Enter a numeric value between 0 and 999999999: _____

DK either consumption or expenditures and they don't have Worksheet 3 ➔ BOX 93
DK either consumption or expenditures and they have Worksheet 3 ➔ H-7
Consumption and/or expenditures answered greater than zero ➔ H-4
Both consumption and expenditures zero or one zero and one DK ➔ H-6

H-4. **FKSTDAT7**

What is the first delivery date for these {fuel oil / diesel / kerosene} purchases? *This is found in Box 15, Line C.*

[ENTER DATE AS MM-DD-YYYY. IF THE DAY IS NOT KNOWN, ENTER "15."] ..-..-....

H-5. **FKENDAT7**

What is the last delivery date? *This is also found in Box 15, Line C.*

[ENTER DATE AS MM-DD-YYYY. IF THE DAY IS NOT KNOWN, ENTER "15."] ..-..-.... ➔ H-19

H-6. **FKPRE997**

Was any fuel oil purchased or delivered earlier than 1999?

1 YES
2 NO
➔ SECTION I

H-7. **FKX5K7** **"UNFOLDING FUEL OIL EXPENDITURES CATEGORY"**

I understand that it may be difficult to give exact figures. However, your consumption can be estimated if you know approximately how much you spent on {fuel oil / diesel / kerosene} in 1999.

Would you estimate that the amount of dollars spent on {fuel oil / diesel / kerosene} for this building in 1999 was less than 5,000 dollars, about 5,000, or more than 5,000 dollars?

1 ..... LESS ➔ H-8
2 ..... ABOUT THAT MUCH ➔ BOX 89 [3]
3 ..... MORE ➔ H-10

H-8. **FKX2K7**

Would you estimate that the amount of dollars spent on {fuel oil / diesel / kerosene} [for this building in 1999] was less than 2,000 dollars, about 2,000, or more than 2,000 dollars?

1 ..... LESS ➔ H-9
2 ..... ABOUT THAT MUCH ➔ BOX 89 [2]
3 ..... MORE ➔ BOX 89 [3]

H-9. **FKX5007**

Would you estimate that the amount of dollars spent on {fuel oil / diesel / kerosene} [for this building in 1999] was less than 500 dollars, about 500, or more than 500 dollars?

1 ..... LESS ➔ BOX 89 [1]
2 ..... ABOUT THAT MUCH ➔ BOX 89 [1]
3 ..... MORE ➔ BOX 89 [2]

DK TO ANY ONE OF THESE UNFOLDING QUESTIONS ➔ H-13

H-10. **FKX20K7**

Would you estimate that the amount of dollars spent on {fuel oil / diesel / kerosene} [for this building in 1999] was less than 20,000 dollars, about 20,000, or more than 20,000 dollars?

1 ..... LESS ➔ BOX 89 [4]
2 ..... ABOUT THAT MUCH ➔ BOX 89 [4]
3 ..... MORE ➔ H-11

H-11. **FKX50K7**

Would you estimate that the amount of dollars spent on {fuel oil / diesel / kerosene} [for this building in 1999] was less than 50,000 dollars, about 50,000, or more than 50,000 dollars?

1 ..... LESS ➔ BOX 89 [5]
2 ..... ABOUT THAT MUCH ➔ BOX 89 [5]
3 ..... MORE ➔ H-12

H-12. **FKX200K7**

Would you estimate that the amount of dollars spent on {fuel oil / diesel / kerosene} [for this building in 1999] was less than 200,000 dollars, about 200,000, or more than 200,000 dollars?

1 ..... LESS ➔ BOX 89 [6]
2 ..... ABOUT THAT MUCH ➔ BOX 89 [6]
3 ..... MORE ➔ BOX 89 [7]

BOX 89

FKEXPC7

1	$1 to $500	
2	$501 to $2,000	
3	$2,001 to $5,000	
4	$5,001 to $20,000	➔ H-19
5	$20,001 to $50,000	
6	$50,001 to $200,000	
7	Over $200,000	

H-13. **FKC2K7** **"UNFOLDING FUEL OIL CONSUMPTION CATEGORY"**

Would you estimate that the amount of {fuel oil / diesel / kerosene} purchased for this building in 1999 was less than 2,000 gallons, about 2,000, or more than 2,000 gallons?

1 ..... LESS ➔ H-14
2 ..... ABOUT THAT MUCH ➔ BOX 90 [3]
3 ..... MORE ➔ H-16

H-14. **FKC1K7**

Would you estimate that the amount of {fuel oil / diesel / kerosene} purchased [for this building in 1999] was less than 1,000 gallons, about 1,000, or more than 1,000 gallons?

1 ..... LESS ➔ H-15
2 ..... ABOUT THAT MUCH ➔ BOX 90 [2]
3 ..... MORE ➔ BOX 90 [3]

H-15. **FKC5007**

Would you estimate that the amount of {fuel oil / diesel / kerosene} purchased [for this building in 1999] was less than 500 gallons, about 500, or more than 500 gallons?

1 ..... LESS ➔ BOX 90 [1]
2 ..... ABOUT THAT MUCH ➔ BOX 90 [1]
3 ..... MORE ➔ BOX 90 [2]

DK TO ANY ONE OF THESE UNFOLDING QUESTIONS ➔ BOX 93

H-16. **FKC5K7**

Would you estimate that the amount of {fuel oil / diesel / kerosene} purchased [for this building in 1999] was less than 5,000 gallons, about 5,000, or more than 5,000 gallons?

1 ..... LESS ➔ BOX 90 [4]
2 ..... ABOUT THAT MUCH ➔ BOX 90 [4]
3 ..... MORE ➔ H-17

H-17. **FKC10K7**

Would you estimate that the amount of {fuel oil / diesel / kerosene} purchased [for this building in 1999] was less than 10,000 gallons, about 10,000, or more than 10,000 gallons?

1 ..... LESS ➔ BOX 90 [5]
2 ..... ABOUT THAT MUCH ➔ BOX 90 [5]
3 ..... MORE ➔ H-18

H-18. **FKC20K7**

Would you estimate that the amount of {fuel oil / diesel / kerosene} purchased [for this building in 1999] was less than 20,000 gallons, about 20,000, or more than 20,000 gallons?

1 ..... LESS ➔ BOX 90 [6]
2 ..... ABOUT THAT MUCH ➔ BOX 90 [6]
3 ..... MORE ➔ BOX 90 [7]

BOX 90

FKCNSC7

1	1 to 500 gallons	
2	501 to 1,000 gallons	
3	1,001 to 2,000 gallons	
4	2,001 to 5,000 gallons	➔ H-19
5	5,001 to 10,000 gallons	
6	10,001 to 20,000 gallons	
7	Over 20,000 gallons	

H-19. **FKOTBD7**

Is any consumption from other buildings included {in these figures / in this estimate}?

1 ..... YES ➔ H-20
2 ..... NO ➔ H-21

DK ➔ H-21

H-20. **FKOTSF7**

What is the approximate square footage of the other buildings that are included {in these figures / in this estimate}?

[** PROBE **]

Enter a numeric value between 1 and 999999999: _____

H-21. **FKOTUS7**

{Do these figures / Does this estimate} include charges for any other major {fuel oil / diesel / kerosene} usage outside the building, such as for kilns, weldings, pumps, or motors?

1 ..... YES
2 ..... NO

BOX 91

Were either the exact consumption or expenditures given (or both)?

Yes ➔ BOX 92
No ➔ BOX 93

BOX 92

If there is a 1995 regression estimate, are either the consumption or expenditures outside of the specified range of the 1995 regression estimates (less than 1/20 of or more than 10 times the 1995 estimate)?

Yes (fail regression check) ➔ BOX 93
No (pass regression check) ➔ SECTION I
No 1995 regression estimate ➔ SECTION I

BOX 93

Is this building from the 1995 sample and did the building have only one fuel oil supplier in that survey?

Yes ➔ H-22
No ➔ H-29

H-22. **FK95SPV7**

Does {1995 supplier name} still supply {fuel oil / diesel / kerosene} to the building [READ FROM ABOVE]?

1 ..... YES ➔ H-23
2 ..... NO ➔ H-29

DK ➔ SECTION I

H-23. **FK951SP7**

Was {1995 supplier name} the only {fuel oil / diesel / kerosene} supplier during 1999?

1 ..... YES
2 ..... NO

H-24. **FKNAC957**

How many different {fuel oil / diesel / kerosene} accounts does this building have with {1995 supplier name}?

Enter a numeric value between 0 and 999: ____

0 accounts ➔ BOX 94
1-10 accounts ➔ H-28
More than 10 accounts ➔ BOX 95

DK➔ BOX 94

H-25. **Account Numbers for Accounts With Same Supplier as 1995**

FOR EACH ACCOUNT GIVEN IN H-24, ASK:

Please give me the {first / next} {fuel oil / diesel / kerosene} account number for {1995 supplier name}.

[** VERIFY NUMBER DIGIT BY DIGIT **]
_____

AFTER EACH ACCOUNT FINISHED ➔ BOX 94

BOX 94

Were <u>any</u> consumption <u>or</u> expenditure figures given (exact <u>or</u> categories)?

Yes➔ BOX 95
No ➔ H-26

H-26. **FKOTB957**

{Does the bill or statement / Do the bills or statements} from {1995 supplier name} cover just this building or are other buildings covered as well?

1 ..... JUST THIS BUILDING ➔ H-28
2 ..... OTHER BUILDING(S) ➔ H-27

DK ➔ H-28

H-27. **FKOTS957**

What is the approximate square footage of the other buildings included on {the bill or statement / the bills or statements}?

[** PROBE **]

Enter a numeric value between 1 and 999999999: _____

H-28. **FKOTU957**

{Does the bill or statement / Do the bills or statements} include charges for any other major {fuel oil / diesel / kerosene} usage outside the building, such as for kilns, weldings, pumps, or motors?

1 ..... YES
2 ..... NO

BOX 95

Was 1995 supplier the only supplier of fuel oil?

Yes ➔ SECTION I
No ➔ H-29

H-29. **FKNUMSP7**

How many {different / other} companies supplied {fuel oil / diesel / kerosene} to this building in 1999?

Enter a numeric value between 1 and 10: __

DK ➔ SECTION I

H-30. **Fuel Oil Suppliers (Other Than 1995 Supplier)**

What is the name of the {first / next} supplier that provided {fuel oil / diesel / kerosene} to this building in 1999?

[START TYPING THE NAME OF THE SUPPLIER TO SEE THE LOOK-UP TABLE. IF THE SUPPLIER NAME DOES NOT APPEAR ON THE LIST, ENTER "OTHER".]:

_____

Supplier found in "Look-Up Table" ➔ H-37
Supplier not found, "OTHER" entered ➔ H-31

H-31. **Supplier Name**

[ENTER THE NAME OF THE SUPPLIER.]:

_____

H-32. **Supplier Street Address**

What is the address for {name of supplier}, beginning with the street?:

_____

H-33. **Supplier P.O. Box or Suite Number**

Is there a post office box or suite number?

[IF NOT, PRESS ENTER.]: _____

H-34. **Supplier City**

What is the city?: _____

H-35. Supplier State

What is the state?

[ENTER THE TWO LETTER ABBREVIATION.]: __

H-36. Supplier Zip Code

And what is the zip code?: _____

H-37. FKNAC17 FKNAC27

How many different {fuel oil / diesel / kerosene} accounts does this building have with {name of supplier}?

Enter a numeric value between 0 and 999: ____

0 accounts ➔ BOX 96
1-10 accounts ➔ H-38
More than 10 accounts ➔ Back to H-30 if more suppliers, or SECTION I if no others

DK ➔ BOX 96

H-38. Account Numbers for Suppliers Other Than 1995

FOR EACH ACCOUNT GIVEN IN H-37, ASK:

Please give me the {first / next} {fuel oil / diesel / kerosene} account number for {name of supplier}.

[** VERIFY NUMBER DIGIT BY DIGIT **]
_____

AFTER EACH ACCOUNT FINISHED ➔ BOX 96

BOX 96

Were <u>any</u> consumption <u>or</u> expenditure figures given (exact <u>or</u> categories)?

Yes ➔ Back to H-30 for next supplier, or SECTION I if no others
No ➔ H-39

H-39. FKOTB17

{Does the bill or statement / Do the bills or statements} from {name of supplier} cover just this building or are other buildings covered as well?

1 ..... JUST THIS BUILDING ➔ H-41
2 ..... OTHER BUILDING(S) ➔ H-40

DK ➔ H-41

H-40. FKOTS17

What is the approximate square footage of the <u>other</u> buildings included on the {the bill or statement / the bills or statements}?

[** PROBE **]

Enter a numeric value between 1 and 999999999: _____

H-41. FKOTU17

{Does the bill or statement / Do the bills or statements} include charges for any <u>other</u> major {fuel oil / diesel / kerosene} usage outside the building, such as for kilns, weldings, pumps, or motors?

1 ..... YES
2 ..... NO

GO BACK TO H-30 IF MORE SUPPLIERS, OR TO SECTION I IF NO OTHERS

SECTION I. DISTRICT STEAM

BOX 97

Was district steam used in the building?

Yes ➔ BOX I2
No ➔ SECTION J

BOX 98

Does the respondent have Worksheet #3?

Yes ➔ I-2
No ➔ I-1

I-1. **STFIGS7**

The next questions are about district steam usage in this building for calendar year 1999. Would you be able to give me an approximate figure of how much district steam was used or how much was spent on it?

1 ..... YES ➔ I-2
2 ..... NO ➔ I-8

DK ➔ BOX 103

I-2. **STUNIT7**

The next questions are about the district steam usage, as found on Worksheet 3 [that's the yellow worksheet].

Look at Box 16, Line A. In what units is your district steam measured? Is it in...

1 ..... Thousand pounds,
2 ..... Pounds, ➔ I-4
3 ..... Or million Btu?
4 ..... [IF VOLUNTEERED] SOME OTHER UNIT ➔ I-3

DK ➔ I-4

I-3. **STUNITX7**

What are the other units?: _____

I-4. **STCNS7**

Please give me the {total / approximate} amount of district steam used in 1999. *This number is also found in Box 16, Line A.*

[** VERIFY NUMBER DIGIT BY DIGIT **]

Enter a numeric value with a maximum of 14 positions: _____

I-5. **STEXP7**

Please give me the {total / approximate} dollars spent on district steam in 1999. *This number is found in Box 16, Line B.*

[** VERIFY NUMBER DIGIT BY DIGIT **]

Enter a numeric value between 0 and 999999999: _____

DK either consumption or expenditures and they don't have Worksheet 3 ➔ BOX 103
DK either consumption or expenditures and they have Worksheet 3 ➔ I-8
Consumption and/or expenditures answered ➔ I-6

I-6. **STSTDAT7**

What is the starting date for these district steam usage figures? *This is found in Box 16, Line C.*

[ENTER DATE AS MM-DD-YYYY. IF THE DAY IS NOT KNOWN, ENTER "15."] ..-..-....

I-7. **STENDAT7**

What is the ending date? *This is also found in Box 16, Line C.*

[ENTER DATE AS MM-DD-YYYY. IF THE DAY IS NOT KNOWN, ENTER "15."] ..-..-.... ➔ I-20

I-8. **STX5K7** **"UNFOLDING DISTRICT STEAM EXPENDITURES CATEGORY"**

I understand that it may be difficult to give exact figures. However, your consumption can be estimated if you know approximately how much you spent on district steam in 1999.

Would you estimate that the amount of dollars spent on district steam for this building in 1999 was less than 5,000 dollars, about 5,000, or more than 5,000 dollars?

1 ..... LESS ➔ I-9
2 ..... ABOUT THAT MUCH ➔ BOX 99 [3]
3 ..... MORE ➔ I-11

I-9. **STX2K7**

Would you estimate that the amount of dollars spent on district steam [for this building in 1999] was less than 2,000 dollars, about 2,000, or more than 2,000 dollars?

1 ..... LESS ➔ I-10
2 ..... ABOUT THAT MUCH ➔ BOX 99 [2]
3 ..... MORE ➔ BOX 99 [3]

I-10. **STX5007**

Would you estimate that the amount of dollars spent on district steam [for this building in 1999] was less than 500 dollars, about 500, or more than 500 dollars?

1 ..... LESS ➔ BOX 99 [1]
2 ..... ABOUT THAT MUCH ➔ BOX 99 [1]
3 ..... MORE ➔ BOX 99 [2]

DK TO ANY ONE OF THESE UNFOLDING QUESTIONS ➔ I-14

I-11. **STX20K7**

Would you estimate that the amount of dollars spent on district steam [for this building in 1999] was less than 20,000 dollars, about 20,000, or more than 20,000 dollars?

1 ..... LESS ➔ BOX 99 [4]
2 ..... ABOUT THAT MUCH ➔ BOX 99 [4]
3 ..... MORE ➔ I-12

I-12. **STX50K7**

Would you estimate that the amount of dollars spent on district steam [for this building in 1999] was less than 50,000 dollars, about 50,000, or more than 50,000 dollars?

1 ..... LESS ➔ BOX 99 [5]
2 ..... ABOUT THAT MUCH ➔ BOX 99 [5]
3 ..... MORE ➔ I-13

I-13. **STX200K7**

Would you estimate that the amount of dollars spent on district steam [for this building in 1999] was less than 200,000 dollars, about 200,000, or more than 200,000 dollars?

1 ..... LESS ➔ BOX 99 [6]
2 ..... ABOUT THAT MUCH ➔ BOX 99 [6]
3 ..... MORE ➔ BOX 99 [7]

BOX 99

STEXPC7

1	$1 to $500	
2	$501 to $2,000	
3	$2,001 to $5,000	
4	$5,001 to $20,000	➔ I-20
5	$20,001 to $50,000	
6	$50,001 to $200,000	
7	Over $200,000	

I-14. **STC5K7** **"UNFOLDING DISTRICT STEAM CONSUMPTION CATEGORY"**

Would you estimate that the district steam usage in this building in 1999 was less than 5,000 thousand pounds, about 5,000, or more than 5,000 thousand pounds?

[IF RESPONDENT HAS THIS ESTIMATE IN A UNIT OTHER THAN THOUSANDS POUNDS, RECORD THE UNIT IN COMMENTS.]

1 ..... LESS ➔ I-15
2 ..... ABOUT THAT MUCH ➔ BOX 100 [3]
3 ..... MORE ➔ I-17

I-15. **STC2K7**

Would you estimate that the district steam usage [in this building in 1999] was less than 2,000 thousand pounds, about 2,000, or more than 2,000 thousand pounds?

1 ..... LESS ➔ I-16
2 ..... ABOUT THAT MUCH ➔ BOX 100 [2]
3 ..... MORE ➔ BOX 100 [3]

I-16. **STC1K7**

Would you estimate that the district steam usage [in this building in 1999] was less than 1,000 thousand pounds, about 1,000, or more than 1,000 thousand pounds?

1 ..... LESS ➔ BOX 100 [1]
2 ..... ABOUT THAT MUCH ➔ BOX 100 [1]
3 ..... MORE ➔ BOX 100 [2]

DK TO ANY ONE OF THESE UNFOLDING QUESTIONS ➔ BOX 103

I-17. **STC10K7**

Would you estimate that the district steam usage [in this building in 1999] was less than 10,000 thousand pounds, about 10,000, or more than 10,000 thousand pounds?

1 ..... LESS ➔ BOX 100 [4]
2 ..... ABOUT THAT MUCH ➔ BOX 100 [4]
3 ..... MORE ➔ I-18

I-18. **STC20K7**

Would you estimate that the district steam usage [in this building in 1999] was less than 20,000 thousand pounds, about 20,000, or more than 20,000 thousand pounds?

1 ..... LESS ➔ BOX 100 [5]
2 ..... ABOUT THAT MUCH ➔ BOX 100 [5]
3 ..... MORE ➔ I-19

I-19. **STC50K7**

Would you estimate that the district steam usage [in this building in 1999] was less than 50,000 thousand pounds, about 50,000, or more than 50,000 thousand pounds?

1 ..... LESS ➔ BOX 100 [6]
2 ..... ABOUT THAT MUCH ➔ BOX 100 [6]
3 ..... MORE ➔ BOX 100 [7]

BOX 100

STCNSC7

1	1 to 1,000 thousand pounds	
2	1,001 to 2,000 thousand pounds	
3	2,001 to 5,000 thousand pounds	
4	5,001 to 10,000 thousand pounds	➔ I-20
5	10,001 to 20,000 thousand pounds	
6	20,001 to 50,000 thousand pounds	
7	Over 50,000 thousand pounds	

I-20. **STOTBD7**

Is any consumption from other buildings included {in these figures / in this estimate}?

1 ..... YES ➔ I-21
2 ..... NO ➔ I-22

DK ➔ I-22

I-21. **STOTSF7**

What is the approximate square footage of the other buildings that are included {in these figures / in this estimate}?

[** PROBE **]

Enter a numeric value between 1 and 999999999: _____ ➔ BOX 101

I-22. **STLOOP7**

What is the total square footage of all the buildings on the district loop that serves this building?

[IF THE BUILDING PURCHASES DISTRICT STEAM FROM THE LOCAL UTILITY AND IS NOT ON A DISTRICT LOOP, ENTER "99"]

[** PROBE **]

Enter a numeric value between 1 and 999999999: _____

BOX 101

Were either the exact consumption or expenditures given (or both)?

Yes ➔ BOX 102
No ➔ BOX 103

BOX 102

Was consumption unknown and expenditures zero?

Yes ➔ BOX 103
No ➔ SECTION J

BOX 103

Is this building from the 1995 sample and did the building have only one district steam supplier in that survey?

Yes ➔ I-23
No ➔ I-29

I-23. **ST95SPV7**

Does {1995 supplier name} still supply district steam to the building [READ FROM ABOVE]?

1 ..... YES ➔ I-24
2 ..... NO ➔ I-29

DK ➔ SECTION J

I-24. **ST951SP7**

Was {1995 supplier name} the only district steam supplier during 1999?

1 ..... YES
2 ..... NO

I-25. **STNAC957**

How many different district steam accounts does this building have with {1995 supplier name}?

Enter a numeric value between 0 and 999: ____

0 accounts ➔ BOX 104
1-10 accounts ➔ I-26
More than 10 accounts ➔ BOX 106

DK➔ BOX 104

I-26. **Account Numbers for Accounts With Same Supplier as 1995**

FOR EACH ACCOUNT GIVEN IN I-25, ASK:

Please give me the {first / next} district steam account number for {1995 supplier name}.

[** VERIFY NUMBER DIGIT BY DIGIT **]
_____

AFTER EACH ACCOUNT FINISHED ➔ BOX 104

BOX 104

Were <u>any</u> consumption <u>or</u> expenditure figures given (exact <u>or</u> categories)?

Yes➔ BOX 106
No ➔ I-27

I-27. **STOTB957**

{Does the bill or statement / Do the bills or statements} from {1995 supplier name} cover just this building or are other buildings covered as well?

1 ..... JUST THIS BUILDING ➔ BOX 105
2 ..... OTHER BUILDING(S) ➔ I-28

DK ➔ BOX 105

I-28. **STOTS957**

What is the approximate square footage of the other buildings included on {the bill or statement / the bills or statements}?

[** PROBE **]

Enter a numeric value between 1 and 999999999: _____ ➔ BOX 106

BOX 105

Was 1995 supplier the only supplier of district steam?

Yes ➔ I-41
No ➔ I-29

BOX 106

Was 1995 supplier the only supplier of district steam?

Yes ➔ SECTION J
No ➔ I-29

I-29. **STNUMSP7**

How many {different / other} companies supplied district steam to this building in 1999?

Enter a numeric value between 1 and 10: __

DK ➔ SECTION J

I-30. **District Steam Suppliers (Other Than 1995 Supplier)**

What is the name of the {first / next} supplier that provided district steam to this building in 1999?

[START TYPING THE NAME OF THE DISTRICT STEAM SUPPLIER TO SEE THE LOOK-UP TABLE. IF THE SUPPLIER NAME DOES NOT APPEAR ON THE LIST, ENTER "OTHER".]:

_____

Supplier found in "Look-Up Table" ➔ I-37
Supplier not found, "OTHER" entered ➔ I-31

I-31. **Supplier Name**

[ENTER THE NAME OF THE SUPPLIER.]:

_____

I-32. **Supplier Street Address**

What is the address for {name of supplier}, beginning with the street?:

_____

I-33. **Supplier P.O. Box or Suite Number**

Is there a post office box or suite number?

[IF NOT, PRESS ENTER.]: _____

I-34. **Supplier City**

What is the city?: _____

I-35. Supplier State

What is the state?

[ENTER THE TWO LETTER ABBREVIATION.]: __

I-36. Supplier Zip Code

And what is the zip code?: _____

I-37. STNAC17

How many different district steam accounts does this building have with {name of supplier}?

Enter a numeric value between 0 and 999: ____

0 accounts ➔ BOX 107
1-10 accounts ➔ I-38
More than 10 accounts ➔ Back to I-30 if more suppliers, or SECTION J if no others

DK ➔ BOX 107

I-38. Account Numbers for Suppliers Other Than 1995

FOR EACH ACCOUNT GIVEN IN I-37, ASK:

Please give me the {first / next} district steam account number for {name of supplier}.

[** VERIFY NUMBER DIGIT BY DIGIT **]
_____

AFTER EACH ACCOUNT FINISHED ➔ BOX 107

BOX 107

Were <u>any</u> consumption <u>or</u> expenditure figures given (exact <u>or</u> categories)?

Yes ➔ Back to I-30 for next supplier, or SECTION J if no others
No ➔ I-39

I-39. STOTB17

{Does the bill or statement / Do the bills or statements} from {name of supplier} cover just this building or are other buildings covered as well?

1 ..... JUST THIS BUILDING ➔ BOX 108
2 ..... OTHER BUILDING(S) ➔ I-40

DK ➔ BOX 108

I-40. STOTS17

What is the approximate square footage of the <u>other</u> buildings included on the {the bill or statement / the bills or statements}?

[** PROBE **]

Enter a numeric value between 1 and 999999999: _____ ➔ BOX 109

BOX 108

Is this the last supplier?

Yes ➔ I-41
No ➔ Back to I-30 for next supplier

BOX 109

Is this the last supplier?

Yes ➔ SECTION J
No ➔ Back to I-30 for next supplier

I-41. **STLOOP2**

What is the total square footage of all the buildings on the district loop that serves this building?

[IF THE BUILDING PURCHASES DISTRICT STEAM FROM THE LOCAL UTILITY AND IS NOT ON A DISTRICT LOOP, ENTER "99"]

[** PROBE **]

Enter a numeric value between 1 and 999999999: _____

SECTION J. DISTRICT HOT WATER

BOX 110

Was district hot water used in the building?

Yes ➔ BOX J2
No ➔ INTERVIEW COMPLETE

BOX 111

Does the respondent have Worksheet #3?

Yes ➔ J-2
No ➔ J-1

J-1. **HWFIGS7**

The next questions are about district hot water usage in this building for calendar year 1999. Would you be able to give me an approximate figure of how much district hot water was used or how much was spent on it?

1 ..... YES ➔ J-2
2 ..... NO ➔ J-6

DK ➔ BOX 116

J-2. **HWCNS7**

The next questions are about the district hot water usage, as found on Worksheet 3 [that's the yellow worksheet].

Please give me the {total / approximate} amount, in million Btu, of district hot water used in 1999. *This number is found in Box 17, Line A.*

[** VERIFY NUMBER DIGIT BY DIGIT **]

Enter a numeric value with a maximum of 14 positions: _____

J-3. **HWEXP7**

Please give me the {total / approximate} dollars spent on district hot water in 1999. *This number is found in Box 17, Line B.*

[** VERIFY NUMBER DIGIT BY DIGIT **]

Enter a numeric value between 0 and 999999999: _____

DK either consumption or expenditures and they don't have Worksheet 3 ➔ BOX 116
DK either consumption or expenditures and they have Worksheet 3 ➔ J-6
Consumption and/or expenditures given ➔ J-4

J-4. **HWSTDAT7**

What is the starting date for these district hot water usage figures? *This is found in Box 17, Line C.*

[ENTER DATE AS MM-DD-YYYY. IF THE DAY IS NOT KNOWN, ENTER "15."] ..-..-....

J-5. **HWENDAT7**

What is the ending date? *This is also found in Box 17, Line C.*

[ENTER DATE AS MM-DD-YYYY. IF THE DAY IS NOT KNOWN, ENTER "15."] ..-..-.... ➔ J-18

J-6. **HWX5K7** **"UNFOLDING DISTRICT HOT WATER EXPENDITURES CATEGORY"**

I understand that it may be difficult to give exact figures. However, your consumption can be estimated if you know approximately how much you spent on district hot water in 1999.

Would you estimate that the amount of dollars spent on district hot water for this building in 1999 was less than 5,000 dollars, about 5,000, or more than 5,000 dollars?

1 ..... LESS ➔ J-7
2 ..... ABOUT THAT MUCH ➔ BOX 112 [3]
3 ..... MORE ➔ J-9

J-7. **HWX2K7**

Would you estimate that the amount of dollars spent on district hot water [for this building in 1999] was less than 2,000 dollars, about 2,000, or more than 2,000 dollars?

1 ..... LESS ➔ J-8
2 ..... ABOUT THAT MUCH ➔ BOX 112 [2]
3 ..... MORE ➔ BOX 112 [3]

J-8. **HWX5007**

Would you estimate that the amount of dollars spent on district hot water [for this building in 1999] was less than 500 dollars, about 500, or more than 500 dollars?

1 ..... LESS ➔ BOX 112 [1]
2 ..... ABOUT THAT MUCH ➔ BOX 112 [1]
3 ..... MORE ➔ BOX 112 [2]

DK TO ANY ONE OF THESE UNFOLDING QUESTIONS ➔ J-12

J-9. **HWX20K7**

Would you estimate that the amount of dollars spent on district hot water [for this building in 1999] was less than 20,000 dollars, about 20,000, or more than 20,000 dollars?

1 ..... LESS ➔ BOX 112 [4]
2 ..... ABOUT THAT MUCH ➔ BOX 112 [4]
3 ..... MORE ➔ J-10

J-10. **HWX50K7**

Would you estimate that the amount of dollars spent on district hot water [for this building in 1999] was less than 50,000 dollars, about 50,000, or more than 50,000 dollars?

1 ..... LESS ➔ BOX 112 [5]
2 ..... ABOUT THAT MUCH ➔ BOX 112 [5]
3 ..... MORE ➔ J-11

J-11. **HWX200K7**

Would you estimate that the amount of dollars spent on district hot water [for this building in 1999] was less than 200,000 dollars, about 200,000, or more than 200,000 dollars?

1 ..... LESS ➔ BOX 112 [6]
2 ..... ABOUT THAT MUCH ➔ BOX 112 [6]
3 ..... MORE ➔ BOX 112 [7]

BOX 112

HWEXPC7

1	$1 to $500	
2	$501 to $2,000	
3	$2,001 to $5,000	
4	$5,001 to $20,000	➔ J-18
5	$20,001 to $50,000	
6	$50,001 to $200,000	
7	Over $200,000	

J-12. HWC5K7 "UNFOLDING DISTRICT HOT WATER CONSUMPTION CATEGORY"

Would you estimate that the district hot water usage in this building in 1999 was less than 5,000 million Btu, about 5,000, or more than 5,000 million Btu?

1 ..... LESS ➔ J-13
2 ..... ABOUT THAT MUCH ➔ BOX 113 [3]
3 ..... MORE ➔ J-15

J-13. HWC2K7

Would you estimate that the district hot water usage [in this building in 1999] was less than 2,000 million Btu, about 2,000, or more than 2,000 million Btu?

1 ..... LESS ➔ J-14
2 ..... ABOUT THAT MUCH ➔ BOX 113 [2]
3 ..... MORE ➔ BOX 113 [3]

J-14. HWC1K7

Would you estimate that the district hot water usage [in this building in 1999] was less than 1,000 million Btu, about 1,000, or more than 1,000 million Btu?

1 ..... LESS ➔ BOX 113 [1]
2 ..... ABOUT THAT MUCH ➔ BOX 113 [1]
3 ..... MORE ➔ BOX 113 [2]

DK TO ANY ONE OF THESE UNFOLDING QUESTIONS ➔ BOX 116

J-15. HWC10K7

Would you estimate that the district hot water usage [in this building in 1999] was less than 10,000 million Btu, about 10,000, or more than 10,000 million Btu?

1 ..... LESS ➔ BOX 113 [4]
2 ..... ABOUT THAT MUCH ➔ BOX 113 [4]
3 ..... MORE ➔ J-16

J-16. HWC20K7

Would you estimate that the district hot water usage in this building [in this building in 1999] was less than 20,000 million Btu, about 20,000, or more than 20,000 million Btu?

1 ..... LESS ➔ BOX 113 [5]
2 ..... ABOUT THAT MUCH ➔ BOX 113 [5]
3 ..... MORE ➔ J-17

J-17. HWC50K7

Would you estimate that the district hot water usage [in this building in 1999] was less than 50,000 million Btu, about 50,000, or more than 50,000 million Btu?

1 ..... LESS ➔ BOX 113 [6]
2 ..... ABOUT THAT MUCH ➔ BOX 113 [6]
3 ..... MORE ➔ BOX 113 [7]

BOX 113

HWCNSC7

1	1 to 1,000 million Btu	
2	1,001 to 2,000 million Btu	
3	2,001 to 5,000 million Btu	
4	5,001 to 10,000 million Btu	➔ J-18
5	10,001 to 20,000 million Btu	
6	20,001 to 50,000 million Btu	
7	Over 50,000 million Btu	

J-18. **HWOTBD7**

Is any consumption from other buildings included {in these figures / in this estimate}?

1 ..... YES ➔ J-19
2 ..... NO ➔ J-20

DK ➔ J-20

J-19. **HWOTSF7**

What is the approximate square footage of the other buildings that are included {in these figures / in this estimate}?

[** PROBE **]

Enter a numeric value between 1 and 999999999: _____ ➔ BOX 114

J-20. **HWLOOP7**

What is the total square footage of all the buildings on the district loop that serves this building?

[IF THE BUILDING PURCHASES DISTRICT HOT WATER FROM THE LOCAL UTILITY AND IS NOT ON A DISTRICT LOOP, ENTER "99"]

[** PROBE **]

Enter a numeric value between 1 and 999999999: _____

BOX 114

Were either the exact consumption or expenditures given (or both)?

Yes ➔ BOX 115
No ➔ BOX 116

BOX 115

Was consumption unknown and expenditures zero?

Yes ➔ BOX 116
No ➔ INTERVIEW COMPLETE

BOX 116

Is this building from the 1995 sample and did the building have only one district hot water supplier in that survey?

Yes ➔ J-21
No ➔ J-27

J-21. **HW95SPV7**

Does {1995 supplier name} still supply district hot water to the building [READ FROM ABOVE]?

1 ..... YES ➔ J-22
2 ..... NO ➔ J-27

DK ➔ INTERVIEW COMPLETE

J-22. **HW951SP7**

Was {1995 supplier name} the only district hot water supplier during 1999?

1 ..... YES
2 ..... NO

J-23. **HWNAC957**

How many different district hot water accounts does this building have with {1995 supplier name}?

Enter a numeric value between 0 and 999: ____

0 accounts ➔ BOX 117
1-10 accounts ➔ J-24
More than 10 accounts ➔ BOX 119

DK➔ BOX 117

J-24. **Account Numbers for Accounts With Same Supplier as 1995**

FOR EACH ACCOUNT GIVEN IN J-23, ASK:

Please give me the {first / next} district hot water account number for {1995 supplier name}.

[** VERIFY NUMBER DIGIT BY DIGIT **]
_____

AFTER EACH ACCOUNT FINISHED ➔ BOX 117

BOX 117

Were any consumption or expenditure figures given (exact or categories)?

Yes ➔ BOX 119
No ➔ J-25

J-25. **HWOTB957**

{Does the bill or statement / Do the bills or statements} from {1995 supplier name} cover just this building or are other buildings covered as well?

1 ..... JUST THIS BUILDING ➔ BOX 118
2 ..... OTHER BUILDING(S) ➔ J-26

DK ➔ BOX 118

J-26. **HWOTS957**

What is the approximate square footage of the other buildings included on the {the bill or statement / the bills or statements}?

[** PROBE **]

Enter a numeric value between 1 and 999999999: _____ ➔ BOX 119

BOX 118

Was 1995 supplier the only supplier of district hot water?

Yes ➔ J-39
No ➔ J-27

BOX 119

Was 1995 supplier the only supplier of district hot water?

Yes ➔ INTERVIEW COMPLETE
No ➔ J-27

J-27. **HWNUMSP7**

How many {different / other} companies supplied district hot water to this building in 1999?

Enter a numeric value between 1 and 10: __

DK ➔ INTERVIEW COMPLETE

J-28. **District Hot Water Suppliers (Other Than 1995 Supplier)**

What is the name of the {first / next} supplier that provided district hot water to this building in 1999?

[START TYPING THE NAME OF THE DISTRICT HOT WATER SUPPLIER TO SEE THE LOOK-UP TABLE. IF THE SUPPLIER NAME DOES NOT APPEAR ON THE LIST, ENTER "OTHER".]:

_____

Supplier found in "Look-Up Table" ➔ J-35
Supplier not found, "OTHER" entered ➔ J-29

J-29. **Supplier Name**

[ENTER THE NAME OF THE SUPPLIER.]:

_____

J-30. **Supplier Street Address**

What is the address for {name of supplier}, beginning with the street?:

_____

J-31. **Supplier P.O. Box or Suite Number**

Is there a post office box or suite number?

[IF NOT, PRESS ENTER.]: _____

J-32. **Supplier City**

What is the city?: _____

J-33. Supplier State

What is the state?

[ENTER THE TWO LETTER ABBREVIATION.]: __

J-34. Supplier Zip Code

And what is the zip code?: _____

J-35. HWNAC17

How many different district hot water accounts does this building have with {name of supplier}?

Enter a numeric value between 0 and 999: ____

0 accounts ➔ BOX 120
1-10 accounts ➔ J-36
More than 10 accounts ➔ Back to J-28 if more suppliers, or INTERVIEW COMPLETE if no others

DK ➔ BOX 120

J-36. Account Numbers for Suppliers Other Than 1995

FOR EACH ACCOUNT GIVEN IN J-35, ASK:

Please give me the {first / next} district hot water account number for {name of supplier}.

[** VERIFY NUMBER DIGIT BY DIGIT **]
_____

AFTER EACH ACCOUNT FINISHED ➔ BOX 120

BOX 120

Were <u>any</u> consumption <u>or</u> expenditure figures given (exact <u>or</u> categories)?

Yes ➔ Back to J-28 for next supplier, or INTERVIEW COMPLETE if no others
No ➔ J-37

J-37. HWOTB17

{Does the bill or statement / Do the bills or statements} from {name of supplier} cover just this building or are other buildings covered as well?

1 ..... JUST THIS BUILDING ➔ BOX 121
2 ..... OTHER BUILDING(S) ➔ J-38

DK ➔ BOX 121

J-38. HWOTS17

What is the approximate square footage of the <u>other</u> buildings included on {the bill or statement / the bills or statements}?

[** PROBE **]

Enter a numeric value between 1 and 999999999: _____ ➔ BOX 122

BOX 121

Is this the last supplier?

Yes ➔ J-39
No ➔ Back to J-28 for next supplier

BOX 122

Is this the last supplier?

Yes ➔ INTERVIEW COMPLETE
No ➔ Back to J-28 for next supplier

J-39. **HWLOOP27**

What is the total square footage of all the buildings on the district loop that serves this building?

[IF THE BUILDING PURCHASES DISTRICT HOT WATER FROM THE LOCAL UTILITY AND IS NOT ON A DISTRICT LOOP, ENTER "99"]

[** PROBE **]

Enter a numeric value between 1 and 999999999: _____