Section 1. Documentation Guide

This section describes the data identification codes in the State Energy Data System (SEDS). Sections 2 through 6 provide information for each of the major energy sources: coal, natural gas, petroleum, renewable energy, and electricity. Section 7 describes adjustments for consumption of industrial process fuel and intermediate products and other uncosted energy sources that are removed in the calculation of expenditures.

Appendix A is an alphabetical listing of the variable names and formulas used in the price and expenditure module. Appendix B presents the current-dollar gross domestic product (GDP) by state used to calculate energy expenditures as percent of GDP. Appendix C provides metric and other physical conversion factors for measures used in energy analyses. Appendix D summarizes the changes in SEDS content made since the last complete release of data.

There are about 1,000 variables in SEDS. All of the variables are identified by five-character mnemonic series names, or MSN. In the following example, MGACV is the identifying code for motor gasoline expenditures in the transportation sector in million dollars.

The energy sources and products used in the price and expenditure module in SEDS, represented by the first two letters of the variable name, are

- AR = asphalt and road oil
- AV = aviation gasoline
- CC = coal coke
- CL = coal
- DF = distillate fuel oil
- DK = distillate fuel oil, including kerosene-type jet fuel
- EL = electricity
- EM = fuel ethanol, excluding denaturant
- ES = electricity sales
- FN = petrochemical feedstocks, naphtha less than 401°F
- FO = petrochemical feedstocks, other oils equal to or greater than 401°F
- FS = petrochemical feedstocks, still gas
- HL = hydrocarbon gas liquids
- JF = jet fuel
- KS = kerosene
- LU = lubricants
- MG = motor gasoline
- MS = miscellaneous petroleum products
- NG = natural gas, including supplemental gaseous fuels
- NU = nuclear electric power
- OH = other hydrocarbon gas liquids
- OP = other petroleum products
- PI = asphalt and road oil, aviation gasoline, kerosene, lubricants, petroleum coke, and other petroleum products
- PA = all petroleum products
- PC = petroleum coke
- PE = primary energy
- PQ = propane
- RF = residual fuel oil
- SN = special naphtha
- TE = total energy
- WD = wood
- WW = wood and waste
- WX = waxes

It is assumed that there are no direct fuel costs for hydroelectric (HY), geothermal (GE), solar thermal and photovoltaic (SO), and wind (WY) energy. There are no price and expenditure MSNs for these energy sources.

The energy-consuming sectors, identified by characters three and four of the variable name, are

- AC = transportation sector
- CC = commercial sector
EG = electric power sector (generation)
EI = electric power sector (consumption)
IC = industrial sector
RC = residential sector
TC = total consumption of all energy-consuming sectors
TX = total end-use consumption

Per capita expenditure is represented by “TP” in the third and fourth positions of the variable name.

Energy activities, mostly used in intermediate calculations, are also identified by characters three and four of the variable name. Examples are

EX = exports
IM = imports
IS = industrial consumption, costed
OC = industrial consumption, excluding coke plants.

The fifth character of the variable name in SEDS identifies the type of data by using one of the following letters:

B = consumption in British thermal units (Btu)
D = price in dollars per million Btu
K = factor for converting data from physical units to Btu
P = data in standardized physical units
S = share or ratio expressed as a fraction
V = expenditure in million dollars

There are a few variables that do not follow the convention:

TPOPP = resident population
GDPRV = current-dollar gross domestic product (GDP)
TEGDS = total energy expenditures as percent of current-dollar GDP

Associated with each variable name is the geographic identification. Geographic areas used in SEDS are the 50 states and the District of Columbia (represented by the U.S. Postal Service state abbreviations) and the United States as a whole. Throughout this report, the term “state” includes District of Columbia.

The geographic area codes used in SEDS are shown in Table TN1.1.

### Table TN1.1. Geographic area codes used in the State Energy Data System

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