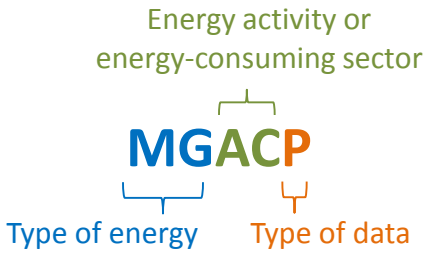
Appendix A. Mnemonic Series Names (MSN)

This appendix contains an alphabetical listing of the variable used in the consumption module of the State Energy Data System (SEDS). Provided for each variable are: a brief description; unit of measure; and the formulas used to create the variable. If a variable is not one calculated in SEDS but is entered into the system, it is described as an independent variable. Formulas for the state calculations have "ZZ" following the variable name, where "ZZ" represent the two-letter code of a state, and formulas for the United States have "US" following the variable name.

Variables in SEDS have five-letter names that generally consist of the following components:



Characters 1 through 4 are explained in the description of each variable.

Character 5 is one of the following:

B	=	Data in British thermal units (Btu)
K	=	Factor for converting data from physical units to Btu
M	=	Data in alternative physical units
P	=	Data in standardized physical units
S	=	Share or ratio expressed as a fraction
V	=	Value, such as value of shipments

Associated with or attached to the variable names are two-letter U.S. Postal Service codes for the 50 states and the District of Columbia (represented by "ZZ" following the variable names) and the United States ("US"). In this system, the United States means the 50 states and the District of Columbia.

Table A1. Consumption Variables

MSN	Description	Unit	Formula
ABICB	Aviation gasoline blending components total consumed by the industrial sector.	Billion Btu	ABICBZZ = ABTCBZZ ABICBUS = ABTCBUS
ABICP	Aviation gasoline blending components total consumed by the industrial sector.	Thousand barrels	ABICPZZ = ABTCPZZ ABICPUS = ABTCPUS
ABTCB	Aviation gasoline blending components total consumed.	Billion Btu	ABTCBZZ = ABTCPZZ * 5.048 ABTCBUS = ΣABTCBZZ
ABTCP	Aviation gasoline blending components total consumed.	Thousand barrels	ABTCPZZ = (COCAPZZ / COCAPUS) * ABTCPUS ABTCPUS is independent.
AICAP	Aluminum ingot production capacity.	Short tons	AICAPZZ is independent. AICAPUS = ΣAICAPZZ
ARICB	Asphalt and road oil consumed by the industrial sector.	Billion Btu	ARICBZZ = ARICPZZ * 6.636 ARICBUS = ΣARICBZZ
ARICP	Asphalt and road oil consumed by the industrial sector.	Thousand barrels	ARICPZZ = ASICPZZ + RDICPZZ ARICPUS = ΣARICPZZ
ARTCB	Asphalt and road oil total consumed.	Billion Btu	ARTCBZZ = ARICBZZ ARTCBUS = ARICBUS
ARTCP	Asphalt and road oil total consumed.	Thousand barrels	ARTCPZZ = ASTCPZZ + RDTCPZZ ARTCPUS = ΣARTCPZZ
ARTXB	Asphalt and road oil total end-use consumption.	Billion Btu	ARTXBZZ = ARICBZZ ARTXBUS = ARICBUS
ARTXP	Asphalt and road oil total end-use consumption. sectors.	Thousand barrels	ARTXPZZ = ARICPZZ ARTXPUS = ARICPUS
ASICP	Asphalt consumed by the industrial sector.	Thousand barrels	Before 2009: ASICPZZ = (ASINPZZ / ASINPUS) * ASTCPUS ASICPUS = ΣASICPZZ From 2009 forward: ASICPZZ = (ASPRPZZ / ASPRPUS) * ASTCPUS ASICPUS = ΣASICPZZ
ASINP	Asphalt sold to the industrial sector.	Short tons	ASINPZZ is independent. ASINPUS = ΣASINPZZ
ASPRP	Asphalt (hot-mix and warm-mix) production excluding reclaimed asphalt pavement.	Short tons	ASPRPZZ is independent. ASPRPUS = ΣASPRPZZ

Table A1. Consumption Variables (cont.)

MSN	Description	Unit	Formula
ASTCP	Asphalt total consumed.	Thousand barrels	ASTCPZZ = ASICPZZ ASTCPUS is independent.
AVACB	Aviation gasoline consumed by the transportation sector.	Billion Btu	AVACBZZ = AVACPZZ * 5.048 AVACBUS = ΣAVACBZZ
AVACP	Aviation gasoline consumed by the transportation sector.	Thousand barrels	AVACPZZ = (AVTTPZZ / AVTTPUS) * AVTCPUS AVACPUS = ΣAVACPZZ
AVMIP	Aviation gasoline issued to the military.	Thousand barrels	AVMIPZZ is independent. AVMIPUS = ΣAVMIPZZ
AVNMM	Aviation gasoline sold to nonmilitary users.	Thousand gallons	AVNMMZZ is independent. AVNMMUS = ΣAVNMMZZ
AVNMP	Aviation gasoline sold to nonmilitary users.	Thousand barrels	AVNMPZZ = AVNMMZZ / 42 AVNMPUS = ΣAVNMPZZ
AVTCB	Aviation gasoline total consumed.	Billion Btu	AVTCBZZ = AVACBZZ AVTCBUS = ΣAVTCBZZ
AVTCP	Aviation gasoline total consumed.	Thousand barrels	AVTCPZZ = AVACPZZ AVTCPUS is independent.
AVTTP	Aviation gasoline total sales to the transportation sector.	Thousand barrels	AVTTPZZ = AVNMPZZ + AVMIPZZ AVTTPUS = ΣAVTTPZZ
AVTXB	Aviation gasoline total end-use consumption.	Billion Btu	AVTXBZZ = AVACBZZ AVTXBUS = ΣAVTXBZZ
AVTXP	Aviation gasoline total end-use consumption.	Thousand barrels	AVTXPZZ = AVACPZZ AVTXPUS = ΣAVTXPZZ
BMTCB	Biomass total consumed.	Billion Btu	BMTCB = WWTCB + EMTCB + EMLCB
CCEXBUS	Coal coke exported from the United States.	Billion Btu	CCEXBUS = CCEXPUS * 24.80
CCEXPUS	Coal coke exported from the United States.	Thousand short tons	CCEXPUS is independent.
CCIMBUS	Coal coke imported into the United States.	Billion Btu	CCIMBUS = CCIMPUS * 24.80
CCIMPUS	Coal coke imported into the United States.	Thousand short tons	CCIMPUS is independent.
CCNIBUS	Coal coke net imports into the United States.	Billion Btu	CCNIBUS = CCIMBUS - CCEXBUS
CCNIPUS	Coal coke net imports into the United States.	Thousand short tons	CCNIPUS = CCIMPUS - CCEXPUS

Table A1. Consumption Variables (cont.)

MSN	Description	Unit	Formula
CGVAV	Value of shipments (value added prior to 2001) for the corrugated and solid fiber box manufacturing industry.	Million dollars	CGVAVZZ is independent. CGVAVUS = ΣCGVAVZZ
CLACB	Coal consumed by the transportation sector.	Billion Btu	CLACBZZ = CLACPZZ * CLACKZZ CLACBUS = ΣCLACBZZ
CLACK	Factor for converting coal consumed by the transportation sector from physical units to Btu.	Million Btu per short ton	CLACKZZ is independent. CLACKUS = CLACBUS / CLACPUS
CLACP	Coal consumed by the transportation sector.	Thousand short tons	CLACPZZ = (CLICPZZ / CLICPUS) * CLACPUS CLACPUS is independent.
CLCCB	Coal consumed by the commercial sector.	Billion Btu	CLCCBZZ = CLCCPZZ * CLHCKZZ CLCCBUS = ΣCLCCBZZ
CLCCP	Coal consumed by the commercial sector.	Thousand short tons	CLCCPZZ = CLHCPZZ - CLRCPZZ CLCCPUS = ΣCLCCPZZ
CLEIB	Coal consumed by the electric power sector.	Billion Btu	CLEIBZZ = CLEIPZZ * CLEIKZZ CLEIBUS = ΣCLEIBZZ
CLEIK	Factor for converting coal consumed by the electric power sector from physical units to Btu.	Million Btu per short ton	CLEIKZZ is independent. CLEIKUS = CLEIBUS / CLEIPUS
CLEIP	Coal consumed by the electric power sector.	Thousand short tons	CLEIPZZ is independent. CLEIPUS = ΣCLEIPZZ
CLHCB	Coal consumed by the residential and commercial sectors.	Billion Btu	CLHCBZZ = CLCCBZZ + CLRCBZZ CLHCBUS = ΣCLHCBZZ
CLHCK	The factor for converting coal consumed by the residential and commercial sectors from physical units to Btu.	Million Btu per short ton	CLHCKZZ is independent. CLHCKUS = CLHCBUS / CLHCPUS
CLHCP	Coal consumed by the residential and commercial sectors (commercial sector from 2008 forward).	Thousand short tons	CLHCPZZ = (CLHDPZZ / CLHDPUS) * CLHCPUS CLHCPUS is independent.
CLHDP	Coal distributed to the residential and commercial sectors (commercial sector from 2008 forward).	Thousand short tons	CLHDPZZ is independent. CLHDPUS = ΣCLHDPZZ
CLICB	Coal consumed by the industrial sector.	Billion Btu	CLICBZZ = CLKCBZZ + CLOCBZZ CLICBUS = ΣCLICBZZ
CLICP	Coal consumed by the industrial sector.	Thousand short tons	CLICPZZ = CLKCPZZ + CLOCPZZ CLICPUS = ΣCLICPZZ

Table A1. Consumption Variables (cont.)

MSN	Description	Unit	Formula
CLKCB	Coal consumed at coke plants (coking coal).	Billion Btu	CLKCBZZ = CLKCPZZ * CLKCKZZ CLKCBUS = ΣCLKCBZZ
CLKCK	The factor for converting coal consumed at coke plants from physical units to Btu.	Million Btu per short ton	CLKCKZZ is independent. CLKCKUS = CLKCBUS / CLKCPUS
CLKCP	Coal consumed by coke plants (coking coal).	Thousand short tons	CLKCPZZ = (CLKDPZZ / CLKDPUS) * CLKCPUS CLKCPUS is independent.
CLKDP	Coal distributed to coke plants (coking coal).	Thousand short tons	CLKDPZZ is independent. CLKDPUS = ΣCLKDPZZ
CLOCB	Coal consumed by other industrial users.	Billion Btu	CLOCBZZ = CLOCPZZ * CLOCKZZ CLOCBUS = ΣCLOCBZZ
CLOCK	The factor for converting coal consumed by other industrial users from physical units to Btu.	Million Btu per short ton	CLOCKZZ is independent. CLOCKUS = CLOCBUS / CLOCPUS
CLOCP	Coal consumed by other industrial users.	Thousand short tons	CLOCPZZ = (CLODPZZ / CLODPUS) * CLOCPUS CLOCPUS is independent.
CLODP	Coal distributed to other industrial users.	Thousand short tons	CLODPZZ is independent. CLODPUS = ΣCLODPZZ
CLRCB	Coal consumed by the residential sector.	Billion Btu	CLRCBZZ = CLRCPZZ * CLHCKZZ CLRCBUS = ΣCLRCBZZ
CLRCP	Coal consumed by the residential sector.	Thousand short tons	CLRCPZZ = CLHCPZZ * CLRCSUS CLRCPUS = ΣCLRCPZZ
CLRCSUS	The share of residential and commercial coal consumed by the residential sector.	Percent	CLRCSUS is independent.
CLTCB	Coal total consumed.	Billion Btu	CLTCBZZ = CLRCBZZ + CLCCBZZ + CLICBZZ + CLACBZZ + CLEIBZZ CLTCBUS = ΣCLTCBZZ
CLTCP	Coal total consumed.	Thousand short tons	CLTCPZZ = CLRCPZZ + CLCCPZZ + CLICPZZ + CLACPZZ + CLEIPZZ CLTCPUS = ΣCLTCPZZ
CLTXB	Coal total end-use consumption.	Billion Btu	CLTXBZZ = CLACBZZ + CLCCBZZ + CLICBZZ + CLRCBZZ CLTXBUS = ΣCLTXBZZ
CLTXP	Coal total end-use consumption.	Thousand barrels	CLTXPZZ = CLACPZZ + CLCCPZZ + CLICPZZ + CLRCPZZ CLTXPUS = ΣCLTXPZZ

Table A1. Consumption Variables (cont.)

MSN	Description	Unit	Formula
COCAP	Atmospheric crude oil distillation operable capacity (operating capacity before 2013) at refineries.	Barrels per calendar day	COCAPZZ is independent. COCAPUS = ΣCOCAPZZ
COICB	Crude oil consumed by the industrial sector.	Billion Btu	COICBZZ = COTCBZZ COICBUS = COTCBUS
COICP	Crude oil consumed by the industrial sector.	Thousand barrels	COICPZZ = COTCPZZ COICPUS = COTCPUS
COTCB	Crude oil consumed in petroleum industry operations.	Billion Btu	COTCBZZ = COTCPZZ * 5.800 COTCBUS = ΣCOTCBZZ
COTCP	Crude oil consumed in petroleum industry operations.	Thousand barrels	COTCPZZ is independent. COTCPUS = ΣCOTCPZZ
CTCAP	Catalytic cracking charge capacity of petroleum refineries.	1960 through 1979: Barrels per calendar day; From 1980 forward: Barrels per stream day	CTCAPZZ is independent. CTCAPUS = ΣCTCAPZZ
DFACB	Distillate fuel oil consumed by the transportation sector.	Billion Btu	DFACBZZ = DFACPZZ * DFTCKUS DFACBUS = ΣDFACBZZ
DFACP	Distillate fuel oil consumed by the transportation sector.	Thousand barrels	DFACPZZ = (DFTRPZZ / DFNDPZZ) * DFNCPZZ DFACPUS = ΣDFACPZZ
DFBKP	Distillate fuel oil sales for vessel bunkering use, excluding that sold to the military.	Thousand barrels	DFBKPZZ is independent. DFBKPUS= ΣDFBKPZZ
DFCCB	Distillate fuel oil consumed by the commercial sector.	Billion Btu	DFCCBZZ = DFCCPZZ * DFTCKUS DFCCBUS = ΣDFCCBZZ
DFCCP	Distillate fuel oil consumed by the commercial sector.	Thousand barrels	DFCCPZZ = (DFCMPZZ / DFNDPZZ) * DFNCPZZ DFCCPUS = ΣDFCCPZZ
DFCMP	Distillate fuel oil sales to the commercial sector.	Thousand barrels	DFCMPZZ is independent.
DFEIB	Distillate fuel oil consumed by the electric power sector.	Billion Btu	DFEIBZZ = DFEIPZZ * DFTCKUS DFEIBUS = ΣDFEIBZZ
DFEIP	Distillate fuel oil (excluding kerosene-type jet fuel) consumed by the electric power sector.	Thousand barrels	DFEIPZZ = DKEIPZZ - JKEUPZZ DFEIPUS = ΣDFEIPZZ
DFIBP	Distillate fuel oil sales for industrial space heating and other industrial use, including farm use.	Thousand barrels	DFIBPZZ is independent. DFIBPUS = ΣDFIBPZZ

Table A1. Consumption Variables (cont.)

MSN	Description	Unit	Formula
DFICB	Distillate fuel oil consumed by the industrial sector.	Billion Btu	DFICBZZ = DFICPZZ * DFTCKUS DFICBUS = ΣDFICBZZ
DFICP	Distillate fuel oil consumed by the industrial sector.	Thousand barrels	DFICPZZ = (DFINPZZ / DFNDPZZ) * DFNCPZZ DFICPUS = ΣDFICPZZ
DFINP	Distillate fuel oil sales to the industrial sector.	Thousand barrels	DFINPZZ = DFIBPZZ + DFOCPZZ + DFOFPZZ + DFOTPZZ DFINPUS = ΣDFINPZZ
DFMIP	Distillate fuel oil sales to the military, regardless of use.	Thousand barrels	DFMIPZZ is independent. DFMIPUS = ΣDFMIPZZ
DFNCP	Distillate fuel oil consumption by all sectors other than the electric power sector.	Thousand barrels	DFNCPZZ = (DFNDPZZ / DFNDPUS) * DFNCPUS DFNCPUS = DFTCPUS - DFEIPUS
DFNDP	Distillate fuel oil sales to all sectors other than the electric power sector.	Thousand barrels	DFNDPZZ = DFRSPZZ + DFCMPZZ + DFINPZZ + DFTRPZZ DFNDPUS = ΣDFNDPZZ
DFOCP	Distillate fuel oil sales for use by oil companies.	Thousand barrels	DFOCPZZ is independent. DFOCPUS =ΣDFOCPZZ
DFOFP	Distillate fuel oil sales as diesel fuel for off-highway use.	Thousand barrels	DFOFPZZ is independent. DFOFPUS = ΣDFOFPZZ
DFONP	Distillate fuel oil sales as diesel fuel for on-highway use.	Thousand barrels	DFONPZZ is independent. DFONPUS = ΣDFONPZZ
DFOTP	Distillate fuel oil sales for all other uses not identified in other sales categories.	Thousand barrels	DFOTPZZ is independent. DFOTPUS = ΣDFOTPZZ
DFRCB	Distillate fuel oil consumed by the residential sector.	Billion Btu	DFRCBZZ = DFRCPZZ * DFTCKUS DFRCBUS = ΣDFRCBZZ
DFRCP	Distillate fuel oil consumed by the residential sector.	Thousand barrels	DFRCPZZ = (DFRSPZZ / DFNDPZZ) * DFNCPZZ DFRCPUS = ΣDFRCPZZ
DFRRP	Distillate fuel oil sales for use by railroads.	Thousand barrels	DFRRPZZ is independent. DFRRPUS = ΣDFRRPZZ
DFRSP	Distillate fuel oil sales to the residential sector.	Thousand barrels	DFRSPZZ is independent. DFRSPUS = ΣDFRSPZZ
DFTCB	Distillate fuel oil total consumed.	Billion Btu	DFTCBZZ = DFRCBZZ + DFCCBZZ + DFICBZZ + DFACBZZ + DFEIBZZ DFTCBUS = ΣDFTCBZZ

Table A1. Consumption Variables (cont.)

MSN	Description	Unit	Formula
DFTCP	Distillate fuel oil total consumed.	Thousand barrels	DFTCPZZ = DFNCPZZ + DFEIPZZ DFTCPUS is independent.
DFTCKUS	Factor for converting distillate fuel from physical units to Btu.	Million Btu per barrel	DFTCKUS is independent.
DFTRP	Distillate fuel oil sales to the transportation sector.	Thousand barrels	DFTRPZZ = DFBKPZZ + DFMIPZZ + DFRRPZZ + DFONPZZ DFTRPUS = ΣDFTRPZZ
DFTXB	Distillate fuel oil total end-use consumption.	Billion Btu	DFTXBZZ = DFACBZZ + DFCCBZZ + DFICBZZ + DFRCBZZ DFTXBUS = ΣDFTXBZZ
DFTXP	Distillate fuel oil total end-use consumption.	Thousand barrels	DFTXPZZ = DFACPZZ + DFCCPZZ + DFICPZZ + DFRCPZZ DFTXPUS = ΣDFTXPZZ
DKEIB	Distillate fuel oil and kerosene-type jet fuel consumed by the electric power sector.	Billion Btu	DKEIBZZ = DFEIBZZ + JKEUBZZ DKEIBUS = ΣDKEIBZZ
DKEIP	Distillate fuel oil and kerosene-type jet fuel consumed by the electric power sector.	Thousand barrels	DKEIPZZ is independent. DKEIPUS = ΣDKEIPZZ
ELEXB	Electricity exported from the United States.	Billion Btu	ELEXBZZ = ELEXPZZ * 3.412 ELEXBUS = ΣELEXBZZ
ELEXP	Electricity exported from the United States.	Million kilowatthours	ELEXPZZ is independent. ELEXPUS = ΣELEXPZZ
ELIMB	Electricity imported into the United States.	Billion Btu	ELIMBZZ = ELIMPZZ * 3.412 ELIMBUS = ΣELIMBZZ
ELIMP	Electricity imported into the United States.	Million kilowatthours	ELIMPZZ is independent. ELIMPUS = ΣELIMPZZ
ELISB	Net interstate flow of electricity. (Negative indicates flow out of state; positive indicates flow into state.)	Billion Btu	Before 1990: ELISBZZ = (ESTCBZZ + LOTCBZZ) - TEEIBZZ ELISBUS = 0 From 1990 forward: If ELISPZZ < 0, ELISBZZ = -(TEEIBZZ * (-ELISPZZ / (-ELISPZZ + ESTCPZZ))) If ELISPZZ >= 0, ELISBZZ = ELISPZZ * (average heat content of energy for all outflow electricity) ELISBUS = 0
ELISP	Net interstate flow of electricity. (Negative indicates flow out of state; positive indicates flow into state.)	Million kilowatthours	ELISPZZ is independent. ELISPUS = 0

Table A1. Consumption Variables (cont.)

MSN	Description	Unit	Formula
ELLSS48	The ratio of electrical system energy losses to electricity sold in the contiguous 48 states and the District of Columbia.	Fraction	ELLSS48 = LOTCB48 / ESTCB48
ELNIB	Net imports of electricity into the United States.	Billion Btu	ELNIBZZ = ELIMBZZ - ELEXBZZ ELNIBUS = ΣELNIBZZ
ELNIP	Net imports of electricity into the United States.	Million kilowatthours	ELNIPZZ = ELIMPZZ - ELEXPZZ ELNIPUS = ΣELNIPZZ
EMACB	Fuel ethanol excluding denaturant consumed by the transportation sector.	Billion Btu	EMACBZZ = (MGACPZZ / MGTCPZZ) * EMTCBZZ EMACBUS = ΣEMACBZZ
EMCCB	Fuel ethanol excluding denaturant consumed by the commercial sector.	Billion Btu	EMCCBZZ = (MGCCPZZ / MGTCPZZ) * EMTCBZZ EMCCBUS = ΣEMCCBZZ
EMICB	Fuel ethanol excluding denaturant consumed by the industrial sector.	Billion Btu	EMICBZZ = (MGICPZZ / MGTCPZZ) * EMTCBZZ EMICBUS = ΣEMICBZZ
EMLCB	Energy losses and co-products from the production of fuel ethanol.	Billion Btu	EMLCBZZ = (EMPRBZZ / EMPRBUS) * EMLCBUS EMLCBUS is independent.
EMPRB	Fuel ethanol production excluding denaturant.	Billion Btu	EMPRBZZ is independent. EMPRBUS is independent.
EMTCB	Fuel ethanol excluding denaturant total consumed.	Billion Btu	EMTCBZZ = (EMTCBUS / ENTCBUS) * ENTCBZZ EMTCBUS is independent.
ENACB	Fuel ethanol including denaturant consumed by the transportation sector.	Billion Btu	ENACBZZ = (MGACPZZ / MGTCPZZ) * ENTCBZZ ENACBUS = ΣENACBZZ
ENACP	Fuel ethanol including denaturant consumed by the transportation sector.	Thousand barrels	ENACPZZ = (MGACPZZ / MGTCPZZ) * ENTCPZZ ENACPUS = ΣENACPZZ
ENCCB	Fuel ethanol including denaturant consumed by the commercial sector.	Billion Btu	ENCCBZZ = (MGCCPZZ / MGTCPZZ) *ENTCBZZ ENCCBUS = ΣENCCBZZ
ENCCP	Fuel ethanol including denaturant consumed by the commercial sector.	Thousand barrels	ENCCPZZ = (MGCCPZZ / MGTCPZZ) * ENTCPZZ ENCCPUS = ΣENCCPZZ
ENICB	Fuel ethanol including denaturant consumed by the industrial sector.	Billion Btu	ENICBZZ = (MGICPZZ / MGTCPZZ) * ENTCBZZ ENICBUS = ΣENICBZZ
ENICP	Fuel ethanol including denaturant consumed by the industrial sector.	Thousand barrels	ENICPZZ = (MGICPZZ / MGTCPZZ) * ENTCPZZ ENICPUS = ΣENICPZZ

Table A1. Consumption Variables (cont.)

MSN	Description	Unit	Formula
ENTCB	Fuel ethanol including denaturant total consumed.	Billion Btu	ENTCBZZ = (ENTCPZZ / ENTCPUS) * ENTCBUS ENTCBUS is independent.
ENTCK	Fuel ethanol total consumed conversion factor.	Million Btu per barrel	ENTCKUS = ENTCBUS / ENTCPUS
ENTCP	Fuel ethanol total consumed.	Thousand gallons	ENTCPZZ = (ENTRPZZ / ENTRPUS) * ENTCPUS ENTCPUS is independent.
ENTRP	Fuel ethanol blended into motor gasoline.	Thousand gallons	ENTRPZZ is independent. ENTRPUS = ΣENTRPZZ
ESACB	Electricity consumed by (i.e., sold to) the transportation sector.	Billion Btu	ESACBZZ = ESACPZZ * 3.412 ESACBUS = ΣESACBZZ
ESACP	Electricity consumed by (i.e., sold to) the transportation sector.	Million kilowatthours	ESACPZZ is independent. ESACPUS = ΣESACPZZ
ESCCB	Electricity consumed by (i.e., sold to) the commercial sector.	Billion Btu	ESCCBZZ = ESCCPZZ * 3.412 ESCCBUS = ΣESCCBZZ
ESCCP	Electricity consumed by (i.e., sold to) the commercial sector.	Million kilowatthours	ESCCPZZ = ESCMPZZ + ESOTPZZ - ESTRPZZ ESCCPUS = ΣESCCPZZ
ESCMP	Electricity sold to a portion of the commercial sector.	Million kilowatthours	ESCMPZZ is independent. ESCMPUS = ΣESCMPZZ
ESICB	Electricity consumed by (i.e., sold to) the industrial sector.	Billion Btu	ESICBZZ = ESICPZZ * 3.412 ESICBUS = ΣESICBZZ
ESICP	Electricity consumed by (i.e., sold to) the industrial sector.	Million kilowatthours	ESICPZZ is independent. ESICPUS = ΣESICPZZ
ESOTP	Electricity sold to the “Other” sector (i.e., public street and highway lighting, sales to other public authorities, railroads and railways, and interdepartmental sales).	Million kilowatthours	ESOTPZZ is independent. ESOTPUS = ΣESOTPZZ
ESRCB	Electricity consumed by (i.e., sold to) the residential sector.	Billion Btu	ESRCBZZ = ESRCPZZ * 3.412 ESRCBUS = ΣESRCBZZ
ESRCP	Electricity consumed by (i.e., sold to) the residential sector.	Million kilowatthours	ESRCPZZ is independent. ESRCPUS = ΣESRCPZZ
ESTCB	Electricity total consumed (i.e., sold).	Billion Btu	ESTCBZZ = ESTCPZZ * 3.412 ESTCBUS = ΣESTCBZZ ESTCB48 = ESTCBUS - (ESTCBAK + ESTCBHI)

Table A1. Consumption Variables (cont.)

MSN	Description	Unit	Formula
ESTCP	Electricity total consumed (i.e., sold).	Million kilowatthours	ESTCPZZ = ESRCPZZ + ESCCPZZ + ESICPZZ + ESACPZZ ESTCPUS = ΣESTCPZZ
ESTRP	Electricity consumed by transit systems.	Million kilowatthours	ESTRPZZ is independent. ESTRPUS = ΣESTRPZZ
ESTRSUS	The share of electricity sold to the "Other" sector (ESOTP) that is used for transportation.	Fraction	ESTRSUS = ESACPUS / ESOTPUS
ESTXB	Electricity total end-use consumption (i.e., sold).	Billion Btu	ESTXBZZ = ESACBZZ + ESCCBZZ + ESICBZZ + ESRCBZZ ESTXBUS = ΣESTXBZZ
ESTXP	Electricity total end-use consumption (i.e., sold).	Million kilowatthours	ESTXPZZ = ESACPZZ + ESCCPZZ + ESICPZZ + ESRCPZZ ESTXPUS = ΣESTXPZZ
FFETKUS	Fossil-fueled steam-electric power plant conversion factor.	Thousand Btu per kilowatthour	FFETKUS is independent.
FFTCB	Fossil fuels, total consumed.	Billion Btu	FFTCBZZ = CLTCBZZ + NNTCBZZ + PMTCBZZ FFTCBUS = CLTCBUS + CCNIBUS + NNTCBUS + PMTCBUS
FNCAS	State's share of U.S. capacity of steam crackers using naphtha as feedstocks.	Percent share	FNCASZZ is independent.
FNICB	Petrochemical feedstocks, naphtha less than 401° F, consumed by the industrial sector.	Billion Btu	FNICBZZ = FNTCBZZ FNICBUS = FNTCBUS
FNICP	Petrochemical feedstocks, naphtha less than 401° F, consumed by the industrial sector.	Thousand barrels	FNICPZZ = FNTCPZZ FNICPUS = FNTCPUS
FNTCB	Petrochemical feedstocks, naphtha less than 401° F, total consumed.	Billion Btu	FNTCBZZ = FNTCPZZ * 5.248 FNTCBUS = ΣFNTCBZZ
FNTCP	Petrochemical feedstocks, naphtha less than 401° F, total consumed.	Thousand barrels	FNTCPZZ = FNTCPUS * FNCASZZ FNTCPUS is independent.
FOCAS	State's share of U.S. capacity of steam crackers using other oils as feedstocks.	Percent share	FOCASZZ is independent.
FOICB	Petrochemical feedstocks, other oils equal to or greater than 401° F, consumed by the industrial sector.	Billion Btu	FOICBZZ = FOTCBZZ FOICBUS = FOTCBUS
FOICP	Petrochemical feedstocks, other oils equal to or greater than 401° F, consumed by the industrial sector.	Thousand barrels	FOICPZZ = FOTCPZZ FOICPUS = FOTCPUS

Table A1. Consumption Variables (cont.)

MSN	Description	Unit	Formula
FOTCB	Petrochemical feedstocks, other oils equal to or greater than 401° F, total consumed.	Billion Btu	FOTCBZZ = FOTCPZZ * 5.825 FOTCBUS = ΣFOTCBZZ
FOTCP	Petrochemical feedstocks, other oils equal to or greater than 401° F, total consumed.	Thousand barrels	FOTCPZZ = FOTCPUS * FOCASZZ FOTCPUS is independent.
FSICB	Petrochemical feedstocks, still gas, consumed by the industrial sector.	Billion Btu	FSICBZZ = FSTCBZZ FSICBUS = FSTCBUS
FSICP	Petrochemical feedstocks, still gas, consumed by the industrial sector.	Thousand barrels	FSICPZZ = FSTCPZZ FSICPUS = FSTCPUS
FSTCB	Petrochemical feedstocks, still gas, total consumed.	Billion Btu	FSTCBZZ = FSTCPZZ * 6.000 FSTCBUS = ΣFSTCBZZ
FSTCP	Petrochemical feedstocks, still gas, total consumed.	Thousand barrels	FSTCPZZ = (COCAPZZ / COCAPUS) * FSTCPUS FSTCPUS is independent.
GDPRX	Real gross domestic product.	Million chained (2009) dollars	GDPRXUS is independent. GDPRXZZ is independent.
GECCB	Geothermal energy consumed by the commercial sector.	Billion Btu	GECCBZZ is independent. GECCBUS = ΣGECCBZZ
GEEGB	Geothermal energy consumed for electricity generation by the electric power sector.	Billion Btu	GEEGBZZ = GEEGPZZ * FFETKUS GEEGBUS = ΣGEEGBZZ
GEEGP	Geothermal electricity net generation in the electric power sector.	Million kilowatthours	GEEGPZZ is independent. GEEGPUS = ΣGEEGPZZ
GEICB	Geothermal energy consumed by the industrial sector.	Billion Btu	GEICBZZ is independent. GEICBUS = ΣGEICBZZ
GERCB	Geothermal energy consumed by the residential sector.	Billion Btu	GERCBZZ is independent. GERCBUS = ΣGERCBZZ
GETCB	Geothermal energy, total consumed.	Billion Btu	GETCBZZ = GERCBZZ + GECCBZZ + GEICBZZ + GEEGBZZ GETCBUS = ΣGETCBZZ
GETXB	Geothermal energy, total end-use consumption.	Billion Btu	GETXBZZ = GECCBZZ + GEICBZZ + GERCBZZ GETXBUS = ΣGETXBZZ
HVC5P	Conventional hydroelectricity net generation at commercial CHP and electricity-only facilities.	Million kilowatthours	HVC5PZZ is independent. HVC5PUS = ΣHVC5PZZ
HVEGP	Conventional hydroelectricity net generation in the electric power sector.	Million kilowatthours	HVEGPZZ is independent. HVEGPUS = ΣHVEGPZZ

Table A1. Consumption Variables (cont.)

MSN	Description	Unit	Formula
HVI5P	Conventional hydroelectricity net generation at industrial CHP and electricity-only facilities.	Million kilowatthours	HVI5PZZ is independent. HVI5PUS = ΣHVI5PZZ
HYCCB	Hydropower consumed by the commercial sector.	Billion Btu	HYCCBZZ = HYCCPZZ * FFETKUS HYCCBUS = ΣHYCCBZZ
HYCCP	Hydroelectricity net generation in the commercial sector.	Million kilowatthours	HYCCPZZ = HVC5PZZ HYCCPUS = ΣHYCCPZZ
HYEGB	Hydropower consumed for electricity generation by the electric power sector.	Billion Btu	HYEGBZZ = HYEGPZZ * FFETKUS HYEGBUS = ΣHYEGBZZ
HYEGP	Hydroelectricity net generation in the electric power sector.	Million kilowatthours	HYEGPZZ = HVEGPZZ HYEGPUS = ΣHYEGPZZ
HYICB	Hydropower consumed by the industrial sector.	Billion Btu	HYICBZZ = HYICPZZ * FFETKUS HYICBUS = ΣHYICBZZ
HYICP	Hydroelectricity net generation in the industrial sector.	Million kilowatthours	HYICPZZ = HVI5PZZ HYICPUS = ΣHYICPZZ
HYTCB	Hydropower, total consumed.	Billion Btu	HYTCBZZ = HYCCBZZ + HYEGBZZ + HYICBZZ HYTCBUS = ΣHYTCBZZ
HYTCP	Hydroelectricity, total net generation.	Million kilowatthours	HYTCPZZ = HYCCPZZ + HYEGPZZ + HYICPZZ HYTCPUS = ΣHYTCPZZ
HYTXB	Hydropower energy, total end-use consumption.	Billion Btu	HYTXBZZ = HYCCBZZ + HYICBZZ HYTXBUS = ΣHYTXBZZ
HYTXP	Hydroelectricity net generation, total end-use generation.	Million kilowatthours	HYTXPZZ = HYCCPZZ + HYICPZZ HYTXPUS = ΣHYTXPZZ
JFACB	Jet fuel consumed by the transportation sector.	Billion Btu	JFACBZZ = JKACBZZ + JNACBZZ JFACBUS = ΣJFACBZZ
JFACP	Jet fuel consumed by the transportation sector.	Thousand barrels	JFACPZZ = JKACPZZ + JNACPZZ JFACPUS = ΣJFACPZZ
JFEUB	Jet fuel consumed by the electric power sector.	Billion Btu	JFEUBZZ = JKEUBZZ JFEUBUS = JKEUBUS
JFEUP	Jet fuel consumed by the electric power sector.	Thousand barrels	JFEUPZZ = JKEUPZZ JFEUPUS = JKEUPUS
JFTCB	Jet fuel total consumed.	Billion Btu	JFTCBZZ = JFACBZZ + JFEUBZZ JFTCBUS = ΣJFTCBZZ

Table A1. Consumption Variables (cont.)

MSN	Description	Unit	Formula
JFTCP	Jet fuel total consumed.	Thousand barrels	JFTCPZZ = JFACPZZ + JFEUPZZ JFTCPUS = ΣJFTCPZZ
JFTXB	Jet fuel total end-use consumption.	Billion Btu	JFTXBZZ = JFACBZZ JFTXBUS = ΣJFTXBZZ
JFTXP	Jet fuel total end-use consumption.	Thousand barrels	JFTXPZZ = JFACPZZ JFTXPUS = ΣJFTXPZZ
JKACB	Kerosene-type jet fuel consumed by the transportation sector.	Billion Btu	JKACBZZ = JKACPZZ * 5.670 JKACBUS = ΣJKACBZZ
JKACP	Kerosene-type jet fuel consumed by the transportation sector.	Thousand barrels	JKACPZZ = (JKTTPZZ / JKTTPUS) * JKACPUS JKACPUS = JKTCPUS - JKEUPUS
JKEUB	Kerosene-type jet fuel consumed by the electric power sector.	Billion Btu	JKEUBZZ = JKEUPZZ * 5.670 JKEUBUS = ΣJKEUBZZ
JKEUP	Kerosene-type jet fuel consumed by the electric power sector.	Thousand barrels	JKEUPZZ is independent. JKEUPUS = ΣJKEUPZZ
JKTCB	Kerosene-type jet fuel total consumed.	Billion Btu	JKTCBZZ = JKTCPZZ * 5.670 JKTCBUS = ΣJKTCBZZ
JKTCP	Kerosene-type jet fuel total consumed.	Thousand barrels	JKTCPZZ = JKACPZZ + JKEUPZZ JKTCPUS is independent.
JKTTP	Kerosene-type jet fuel total sold.	Thousand gallons	JKTTPZZ is independent. JKTTPUS = ΣJKTTPZZ
JNACB	Naphtha-type jet fuel consumed by the transportation sector.	Billion Btu	JNACBZZ = JNTCBZZ JNACBUS = JNTCBUS
JNACP	Naphtha-type jet fuel consumed by the transportation sector.	Thousand barrels	JNACPZZ = JNTCPZZ JNACPUS = JNTCPUS
JNMIP	Naphtha-type jet fuel issued to the military.	Thousand barrels	JNMIPZZ is independent. JNMIPUS = ΣJNMIPZZ
JNTCB	Naphtha-type jet fuel total consumed.	Billion Btu	JNTCBZZ = JNTCPZZ * 5.355 JNTCBUS = ΣJNTCBZZ
JNTCP	Naphtha-type jet fuel total consumed.	Thousand barrels	JNTCPZZ = (JNMIPZZ / JNMIPUS) * JNTCPUS JNTCPUS is independent.
KSCCB	Kerosene consumed by the commercial sector.	Billion Btu	KSCCBZZ = KSCCPZZ * 5.670 KSCCBUS = ΣKSCCBZZ

Table A1. Consumption Variables (cont.)

MSN	Description	Unit	Formula
KSCCP	Kerosene consumed by the commercial sector.	Thousand barrels	KSCCPZZ = (KSCMPZZ / KSTTPZZ) * KSTCPZZ KSCCPUS = ΣKSCCPZZ
KSCMP	Kerosene sold to the commercial sector.	Thousand barrels	KSCMPZZ is independent. KSCMPUS = ΣKSCMPZZ
KSICB	Kerosene consumed by the industrial sector.	Billion Btu	KSICBZZ = KSICPZZ * 5.670 KSICBUS = ΣKSICBZZ
KSICP	Kerosene consumed by the industrial sector.	Thousand barrels	KSICPZZ = (KSINPZZ / KSTTPZZ) * KSTCPZZ KSICPUS = ΣKSICPZZ
KSIHP	Kerosene sold for industrial heating.	Thousand barrels	KSIHPZZ is independent. KSIHPUS = ΣKSIHPZZ
KSINP	Kerosene sold to the industrial sector.	Thousand barrels	KSINPZZ = KSOTPZZ + KSIHPZZ KSINPUS = ΣKSINPZZ
KSOTP	Kerosene sold for all other uses, including farm use.	Thousand barrels	KSOTPZZ is independent. KSOTPUS = ΣKSOTPZZ
KSRCB	Kerosene consumed by the residential sector.	Billion Btu	KSRCBZZ = KSRCPZZ * 5.670 KSRCBUS = ΣKSRCBZZ
KSRCP	Kerosene consumed by the residential sector.	Thousand barrels	KSRCPZZ = (KSRSPZZ / KSTTPZZ) * KSTCPZZ KSRCPUS = ΣKSRCPZZ
KSRSP	Kerosene sold to the residential sector.	Thousand barrels	KSRSPZZ is independent. KSRSPUS = ΣKSRSPZZ
KSTCB	Kerosene total consumed.	Billion Btu	KSTCBZZ = KSRCBZZ + KSICBZZ + KSCCBZZ KSTCBUS = ΣKSTCBZZ
KSTCP	Kerosene total consumed.	Thousand barrels	KSTCPZZ = (KSTTPZZ / KSTTPUS) * KSTCPUS KSTCPUS is independent.
KSTTP	Kerosene total sold.	Thousand barrels	KSTTPZZ = KSRSPZZ + KSCMPZZ + KSINPZZ KSTTPUS = ΣKSTTPZZ
KSTXB	Kerosene total end-use consumption.	Billion Btu	KSTXBZZ = KSCCBZZ + KSICBZZ + KSRCBZZ KSTXBUS = ΣKSTXBZZ
KSTXP	Kerosene total end-use consumption.	Thousand barrels	KSTXPZZ = KSCCPZZ + KSICPZZ + KSRCPZZ KSTXPUS = ΣKSTXPZZ
LGACB	LPG consumed by the transportation sector.	Billion Btu	LGACBZZ = LGACPZZ * 3.836 LGACBUS = ΣLGACBZZ

Table A1. Consumption Variables (cont.)

MSN	Description	Unit	Formula
LGACP	LPG consumed by the transportation sector.	Thousand barrels	LGACPZZ = LGCBPZZ * LGTRSUS LGACPUS = ΣLGACPZZ
LGCBM	LPG sales for internal combustion engine use.	Thousand gallons	LGCBMZZ is independent. LGCBMUS = ΣLGCBMZZ
LGCBP	LPG consumed for internal combustion engine use.	Thousand barrels	LGCBPZZ = LGCBMZZ / 42 LGCBPUS = ΣLGCBPZZ
LGCCB	LPG consumed by the commercial sector.	Billion Btu	LGCCBZZ = LGCCPZZ * 3.836 LGCCBUS = ΣLGCCBZZ
LGCCP	LPG consumed by the commercial sector.	Thousand barrels	LGCCPZZ = LGHCPZZ * LGCCSZZ LGCCPUS = ΣLGCCPZZ
LGCCS	The share of residential and commercial LPG consumed by the commercial sector.	Percent	LGCCSZZ is independent.
LGHCM	LPG sold for residential and commercial use.	Thousand gallons	LGHCMZZ is independent. LGHCMUS = ΣLGHCMZZ
LGHCP	LPG consumed by the residential and commercial sectors.	Thousand barrels	LGHCPZZ = LGHCMZZ / 42 LGHCPUS = ΣLGHCPZZ
LGICB	LPG consumed by the industrial sector.	Billion Btu	LGICBZZ = (LGICPZZ / LGICPUS) * LGICBUS LGICBUS = LGTCBUS - (LGRCBUS + LGCCBUS + LGACBUS)
LGICK	Average conversion factor for industrial consumption of LPG.	Million Btu per barrel	LGICKUS = LGICBUS / LGICPUS
LGICP	LPG consumed by the industrial sector.	Thousand barrels	Before 2008: LGICPZZ = LGTCPZZ - (LGRCPZZ + LGCCPZZ + LGACPZZ) LGICPUS = ΣLGICPZZ From 2008 forward: LGICPZZ is Independent. LGICPUS = ΣLGICPZZ
LGRCB	LPG consumed by the residential sector.	Billion Btu	LGRCBZZ = LGRCPZZ * 3.836 LGRCBUS = ΣLGRCBZZ
LGRCP	LPG consumed by the residential sector.	Thousand barrels	LGRCPZZ = LGHCPZZ * LGRCSZZ LGRCPUS = ΣLGRCPZZ
LGRCS	The share of residential and commercial LPG consumed by the residential sector.	Percent	LGRCSZZ is independent.

Table A1. Consumption Variables (cont.)

MSN	Description	Unit	Formula
LGTCB	LPG total consumed.	Billion Btu	LGTCBZZ = LGRCBZZ + LGCCBZZ + LGICBZZ + LGACBZZ LGTCBUS is independent.
LGTCKUS	Factor for converting LPG from physical units to Btu.	Million Btu per barrel	LGTCKUS is independent.
LGTCP	LPG total consumed.	Thousand barrels	Before 2008: LGTCPZZ = (LGTTPZZ / LGTTPUS) * LGTCPUS LGTCPUS is independent. From 2008 forward: LGTCPZZ = LGACPZZ + LGCCPZZ + LGICPZZ + LGRCPZZ LGTCPUS is independent.
LGTRSUS	The transportation sector's share of LPG internal combustion engine sales.	Fraction	LGTRSUS is independent.
LGTTP	LPG total sold.	Thousand gallons	LGTTPZZ is independent. LGTTPUS = ΣLGTTPZZ
LGTXB	LPG total end-use consumption.	BillionBtu	LGTXBZZ = LGACBZZ + LGCCBZZ + LGICBZZ + LGRCBZZ LGTXBUS = ΣLGTXBZZ
LGTXP	LPG total end-use consumption.	Thousand barrels	LGTXPZZ = LGACPZZ + LGCCPZZ + LGICPZZ + LGRCPZZ LGTXPUS = ΣLGTXPZZ
LOACB	The transportation sector's share of electrical system energy losses.	Billion Btu	LOACBZZ = (ESACBZZ / ESTCBZZ) * LOTCBZZ LOACBUS = ΣLOACBZZ
LOCCB	The commercial sector's share of electrical system energy losses.	Billion Btu	LOCCBZZ = (ESCCBZZ / ESTCBZZ) * LOTCBZZ LOCCBUS = ΣLOCCBZZ
LOICB	The industrial sector's share of electrical system energy losses.	Billion Btu	LOICBZZ = (ESICBZZ / ESTCBZZ) * LOTCBZZ LOICBUS = ΣLOICBZZ
LORCB	The residential sector's share of electrical system energy losses.	Billion Btu	LORCBZZ = (ESRCBZZ / ESTCBZZ) * LOTCBZZ LORCBUS = ΣLORCBZZ

Table A1. Consumption Variables (cont.)

MSN	Description	Unit	Formula
LOTCB	Total electrical system energy losses.	Billion Btu	Before 1990: LOTCBZZ = ESTCBZZ * ELLSS48 Exceptions: LOTCBAK = TEEIBAK - ESTCBAK LOTCBHI = TEEIBHI - ESTCBHI LOTCBUS = TEEIBUS - ESTCBUS LOTCB48 = LOTCBUS - (LOTCBAK + LOTCBHI) From 1990 forward: LOTCBZZ = TEESBZZ - ESTCBZZ LOTCBUS = TEEIBUS - ESTCBUS
LOTXB	Total electrical system energy losses allocated to the end-use sectors.	Billion Btu	LOTXBZZ = LOACBZZ + LOCCBZZ + LOICBZZ + LORCBZZ LOTXBUS = ΣLOTXBZZ
LUACB	Lubricants consumed by the transportation sector.	Billion Btu	LUACBZZ = LUACPZZ * 6.065 LUACBUS = ΣLUACBZZ
LUACP	Lubricants consumed by the transportation sector.	Thousand barrels	LUACPZZ = (LUTRPZZ / LUTTPZZ) * LUTCPZZ LUACPUS = ΣLUACPZZ
LUICB	Lubricants consumed by the industrial sector.	Billion Btu	LUICBZZ = LUICPZZ * 6.065 LUICBUS = ΣLUICBZZ
LUICP	Lubricants consumed by the industrial sector.	Thousand barrels	LUICPZZ = (LUINPZZ / LUTTPZZ) * LUTCPZZ LUICPUS = ΣLUICPZZ
LUINP	Lubricants sold to the industrial sector.	Thousand barrels	LUINPZZ is independent. LUINPUS = ΣLUINPZZ
LUTCB	Lubricants total consumed.	Billion Btu	LUTCBZZ = LUICBZZ + LUACBZZ LUTCBUS = ΣLUTCBZZ
LUTCP	Lubricants total consumed.	Thousand barrels	LUTCPZZ = (LUTTPZZ / LUTTPUS) * LUTCPUS LUTCPUS is independent.
LUTRP	Lubricants sold to the transportation sector.	Thousand barrels	LUTRPZZ is independent. LUTRPUS = ΣLUTRPZZ
LUTTP	Lubricants total sold.	Thousand barrels	LUTTPZZ = LUINPZZ + LUTRPZZ LUTTPUS = ΣLUTTPZZ
LUTXB	Lubricants total end-use consumption.	Billion Btu	LUTXBZZ = LUACBZZ + LUICBZZ LUTXBUS = ΣLUTXBZZ
LUTXP	Lubricants total end-use consumption.	Thousand barrels	LUTXPZZ = LUACPZZ + LUICPZZ LUTXPUS = ΣLUTXPZZ

Table A1. Consumption Variables (cont.)

MSN	Description	Unit	Formula
MBICB	Motor gasoline blending components consumed by the industrial sector.	Billion Btu	MBICBZZ = MBTCBZZ MBICBUS = MBTCBUS
MBICP	Motor gasoline blending components consumed by the industrial sector.	Thousand barrels	MBICPZZ = MBTCPZZ MBICPUS = MBTCPUS
MBTCB	Motor gasoline blending components total consumed.	Billion Btu	MBTCBZZ = MBTCPZZ * MBTCKUS MBTCBUS = ΣMBTCBZZ
MBTCP	Motor gasoline blending components total consumed.	Thousand barrels	MBTCPZZ = (COCAPZZ / COCAPUS) * MBTCPUS MBTCPUS is independent.
MBTCKUS	Factor for converting motor gasoline blending components from physical units to Btu.	Million Btu per barrel	MBTCKUS is independent.
MGACB	Motor gasoline consumed by the transportation sector.	Billion Btu	MGACBZZ = MGACPZZ * MGTCKUS MGACBUS = ΣMGACBZZ
MGACP	Motor gasoline consumed by the transportation sector.	Thousand barrels	MGACPZZ = (MGTRPZZ / MGTTPZZ) *MGTCPZZ MGACPUS = ΣMGACPZZ
MGAGP	Motor gasoline sold for agricultural use.	Thousand gallons	MGAGPZZ is independent. MGAGPUS = ΣMGAGPZZ
MGBTP	Motor gasoline sold for boating use.	Thousand gallons	MGBTPZZ is independent. MGBTPUS = ΣMGBTPZZ
MGCCB	Motor gasoline consumed by the commercial sector.	Billion Btu	MGCCBZZ = MGCCPZZ * MGTCKUS MGCCBUS = ΣMGCCBZZ
MGCCP	Motor gasoline consumed by the commercial sector.	Thousand barrels	MGCCPZZ = (MGCMPZZ / MGTTPZZ) *MGTCPZZ MGCCPUS = ΣMGCCPZZ
MGCMP	Motor gasoline sold to the commercial sector.	Thousand gallons	MGCMPZZ = MGMSPZZ + MGPNPZZ + MGLGPZZ MGCMPUS = ΣMGCMPZZ
MGCUP	Motor gasoline sold for construction use.	Thousand gallons	MGCUPZZ is independent. MGCUPUS = ΣMGCUPZZ
MGICB	Motor gasoline consumed by the industrial sector.	Billion Btu	MGICBZZ = MGICPZZ * MGTCKUS MGICBUS = ΣMGICBZZ
MGICP	Motor gasoline consumed by the industrial sector.	Thousand barrels	MGICPZZ = (MGINPZZ / MGTTPZZ) * MGTCPZZ MGICPUS = ΣMGICPZZ
MGINP	Motor gasoline sold to the industrial sector.	Thousand gallons	MGINPZZ = MGAGPZZ + MGCUPZZ + MGIYPZZ MGINPUS = ΣMGINPZZ

Table A1. Consumption Variables (cont.)

MSN	Description	Unit	Formula
MGIYP	Motor gasoline sold for industrial and commercial use (Federal Highway Administration terminology).	Thousand gallons	MGIYPZZ is independent. MGIYPUS = ΣMGIYPZZ
MGLGP	Motor gasoline sold for lawn and garden use.	Thousand gallons	MGLGPZZ is independent. MGLGPUS = ΣMGLGPZZ
MGMFP	Motor gasoline sold for highway use.	Thousand gallons	MGMFPZZ is independent. MGMFPUS = ΣMGMFPZZ
MGMRP	Motor gasoline sold for marine use.	Thousand gallons	MGMRPZZ is independent. MGMRPUS = ΣMGMRPZZ
MGMSP	Motor gasoline sold for miscellaneous and unclassified uses.	Thousand gallons	MGMSPZZ is independent. MGMSPUS = ΣMGMSPZZ
MGPNP	Motor gasoline sold for public nonhighway use.	Thousand gallons	MGPNPZZ is independent. MGPNPUS = ΣMGPNPZZ
MGRVP	Motor gasoline sold for recreational vehicle use.	Thousand gallons	MGRVPZZ is independent. MGRVPUS = ΣMGRVPZZ
MGSFP	Special fuels sold (Federal Highway Administration terminology; primarily diesel fuel with small amounts of liquefied petroleum gases).	Thousand gallons	MGSFPZZ is independent. MGSFPUS = ΣMGSFPZZ
MGTCB	Motor gasoline total consumed.	Billion Btu	MGTCBZZ = MGCCBZZ + MGICBZZ + MGACBZZ MGTCBUS = ΣMGTCBZZ
MGTCP	Motor gasoline total consumed.	Thousand barrels	MGTCPZZ = (MGTTPZZ / MGTTPUS) * MGTCPUS MGTCPUS is independent.
MGTCKUS	Factor for converting motor gasoline from physical units to Btu.	Million Btu per barrel	MGTCKUS is independent.
MGTRP	Motor gasoline sold to the transportation sector.	Thousand gallons	MGTRPZZ = MGMFPZZ + MGBTPZZ + MGRVPZZ - MGSFPZZ MGTRPUS = ΣMGTRPZZ
MGTTP	Motor gasoline total sold.	Thousand gallons	MGTTPZZ = MGCMPZZ + MGINPZZ + MGTRPZZ MGTTPUS = ΣMGTTPZZ
MGTXB	Motor gasoline total end-use consumption.	Billion Btu	MGTXBZZ = MGACBZZ + MGCCBZZ + MGICBZZ MGTXBUS = ΣMGTXBZZ
MGTXP	Motor gasoline total end-use consumption.	Thousand barrels	MGTXPZZ = MGACPZZ + MGCCPZZ + MGICPZZ MGTXPUS = ΣMGTXPZZ

Table A1. Consumption Variables (cont.)

MSN	Description	Unit	Formula
MMTCB	Motor gasoline total consumed, excluding fuel ethanol.	Billion Btu	MMTCBZZ = MGTCBZZ - EMTCBZZ MMTCBUS = MGTCBUS - EMTCBUS
MSICB	Miscellaneous petroleum products consumed by the industrial sector.	Billion Btu	MSICBZZ = MSTCBZZ MSICBUS = MSTCBUS
MSICP	Miscellaneous petroleum products consumed by the industrial sector.	Thousand barrels	MSICPZZ = MSTCPZZ MSICPUS = MSTCPUS
MSTCB	Miscellaneous petroleum products total consumed.	Billion Btu	MSTCBZZ = MSTCPZZ * 5.796 MSTCBUS = ΣMSTCBZZ
MSTCP	Miscellaneous petroleum products total consumed.	Thousand barrels	MSTCPZZ = (OCVAVZZ / OCVAVUS) * MSTCPUS MSTCPUS is independent.
NAICB	Natural gasoline consumed by the industrial sector.	Billion Btu	NAICBZZ = NATCBZZ NAICBUS = NATCBUS
NAICP	Natural gasoline consumed by the industrial sector.	Thousand barrels	NAICPZZ = NATCPZZ NAICPUS = NATCPUS
NATCB	Natural gasoline total consumed.	Billion Btu	NATCBZZ = NATCPZZ * 4.620 NATCBUS = ΣNATCBZZ
NATCP	Natural gasoline total consumed.	Thousand barrels	NATCPZZ = NATCPUS * FNCASZZ NATCPUS is independent.
NGACB	Natural gas consumed by the transportation sector.	Billion Btu	NGACBZZ = NGACPZZ * NGTXKZZ NGACBUS = ΣNGACBZZ
NGACP	Natural gas consumed by the transportation sector.	Million cubic feet	NGACPZZ = NGPZPZZ + NGVHPZZ NGACPUS = ΣNGACPZZ
NGCCB	Natural gas delivered to the commercial sector, used as consumption (including supplemental gaseous fuels).	Billion Btu	NGCCBZZ = NGCCPZZ * NGTXKZZ NGCCBUS = ΣNGCCBZZ
NGCCP	Natural gas delivered to the commercial sector, used as consumption (including supplemental gaseous fuels).	Million cubic feet	NGCCPZZ is independent. NGCCPUS = ΣNGCCPZZ
NGEIB	Natural gas consumed by the electric power sector (including supplemental gaseous fuels).	Billion Btu	Before 2010: NGEIBZZ = NGEIPZZ * NGEIKZZ 2010 forward: NGEIBZZ is independent. NGEIBUS = ΣNGEIBZZ for all years.

Table A1. Consumption Variables (cont.)

MSN	Description	Unit	Formula
NGEIK	Factor for converting natural gas consumed by the electric power sector from physical units to Btu.	Thousand Btu per cubic foot	NGEIKZZ is independent. NGEIKUS = NGEIBUS / NGEIPUS
NGEIP	Natural gas consumed by the electric power sector (including supplemental gaseous fuels).	Million cubic feet	NGEIPZZ is independent. NGEIPUS = ΣNGEIPZZ
NGICB	Natural gas consumed by the industrial sector (including supplemental gaseous fuels).	Billion Btu	NGICBZZ = NGICPZZ * NGTXKZZ NGICBUS = ΣNGICBZZ
NGICP	Natural gas consumed by the industrial sector (including supplemental gaseous fuels).	Million cubic feet	NGICPZZ = NGINPZZ + NGLEPZZ + NGPLPZZ NGICPUS = ΣNGICPZZ
NGINP	A portion of the natural gas delivered to the industrial sector.	Million cubic feet	NGINPZZ is independent. NGINPUS = ΣNGINPZZ
NGLEP	Natural gas consumed as lease fuel.	Million cubic feet	NGLEPZZ is independent. NGLEPUS = ΣNGLEPZZ
NGLPB	Natural gas consumed as lease and plant fuel.	Billion Btu	NGLPBZZ = NGLPPZZ * NGTXKZZ NGLPBUS = ΣNGLPBZZ
NGLPP	Natural gas consumed as lease and plant fuel.	Million cubic feet	NGLPPZZ = NGLEPZZ + NGPLPZZ NGLPPUS = ΣNGLPPZZ
NGPLP	Natural gas consumed as plant fuel.	Million cubic feet	NGPLPZZ is independent. NGPLPUS = ΣNGPLPZZ
NGPZB	Natural gas consumed as pipeline fuel.	Billion Btu	NGPZBZZ = NGPZPZZ * NGTXKZZ NGPZBUS = ΣNGPZBZZ
NGPZP	Natural gas consumed as pipeline fuel.	Million cubic feet	NGPZPZZ is independent. NGPZPUS = ΣNGPZPZZ
NGRCB	Natural gas delivered to the residential sector, used as consumption (including supplemental gaseous fuels).	Billion Btu	NGRCBZZ = NGRCPZZ * NGTXKZZ NGRCBUS = ΣNGRCBZZ
NGRCP	Natural gas delivered to the residential sector, used as consumption (including supplemental gaseous fuels).	Million cubic feet	NGRCPZZ is independent. NGRCPUS = ΣNGRCPZZ
NGSFP	Supplemental gaseous fuels supplies.	Million cubic feet	NGSFPZZ is independent. NGSFPUS = ΣNGSFPZZ
NGTCB	Natural gas total consumed (including supplemental gaseous fuels).	Billion Btu	NGTCBZZ = NGTCPZZ * NGTCKZZ NGTCBUS = ΣNGTCBZZ

Table A1. Consumption Variables (cont.)

MSN	Description	Unit	Formula
NGTCK	Factor for converting natural gas total consumed from physical units to Btu.	Thousand Btu per cubic foot	NGTCKZZ is independent. NGTCKUS = NGTCBUS / NGTCPUS
NGTCP	Natural gas total consumed (including supplemental gaseous fuels).	Million cubic feet	NGTCPZZ = NGRCPZZ + NGCCPZZ + NGICPZZ + NGACPZZ + NGEIPZZ NGTCPUS = ΣNGTCPZZ
NGTXB	Natural gas total end-use consumption (including supplemental gaseous fuels).	Billion Btu	NGTXBZZ = NGACBZZ + NGCCBZZ + NGICBZZ + NGRCBZZ NGTXBUS = ΣNGTXBZZ
NGTXK	Factor for converting natural gas consumed by all sectors other than the electric utility sector from physical units to Btu.	Thousand Btu per cubic foot	NGTXKZZ = (NGTCBZZ - NGEIBZZ) / (NGTCPZZ - NGEIPZZ) NGTXKUS = (NGTCBUS - NGEIBUS) / (NGTCPUS - NGEIPUS)
NGTXP	Natural gas total end-use consumption (including supplemental gaseous fuels).	Million cubic feet	NGTXPZZ = NGACPZZ + NGCCPZZ + NGICPZZ + NGRCPZZ NGTXPUS = ΣNGTXPZZ
NGTZP	Natural gas consumed in sectors that have supplemental gaseous fuels commingled with natural gas.	Million cubic feet	NGTZPZZ = NGCCPZZ + NGRCPZZ + NGINPZZ + NGEIPZZ NGTZPUS = ΣNGTZPZZ
NGVHB	Natural gas consumed as vehicle fuel.	Billion Btu	NGVHBZZ = NGVHPZZ * NGTXKZZ NGVHBUS = ΣNGVHBZZ
NGVHP	Natural gas consumed as vehicle fuel.	Million cubic feet	NGVHPZZ is independent. NGVHPUS = ΣNGVHPZZ
NNACB	Natural gas consumed by the transportation sector.	Billion Btu	NNACBZZ = NGACBZZ NNACBUS = ΣNNACBZZ
NNCCB	Natural gas consumed by the commercial sector (excluding supplemental gaseous fuels).	Billion Btu	NNCCBZZ = NGCCBZZ - SFCCBZZ NNCCBUS = ΣNNCCBZZ
NNEIB	Natural gas consumed by the electric power sector (excluding supplemental gaseous fuels).	Billion Btu	NNEIBZZ = NGEIBZZ - SFEIBZZ NNEIBUS = ΣNNEIBZZ
NNICB	Natural gas consumed by the industrial sector (excluding supplemental gaseous fuels).	Billion Btu	NNICBZZ = NGICBZZ - SFINBZZ NNICBUS = ΣNNICBZZ
NNRCB	Natural gas consumed by the residential sector (excluding supplemental gaseous fuels).	Billion Btu	NNRCBZZ = NGRCBZZ - SFRCBZZ NNRCBUS = ΣNNRCBZZ
NNTCB	Natural gas total consumed (excluding supplemental gaseous fuels).	Billion Btu	NNTCBZZ = NGTCBZZ - SFTCBZZ NNTCBUS = ΣNNTCBZZ
NUEGB	Nuclear energy consumed for electricity generation by the electric power sector.	Billion Btu	NUEGBZZ = NUEGPZZ * NUETKUS NUEGBUS = ΣNUEGBZZ

Table A1. Consumption Variables (cont.)

MSN	Description	Unit	Formula
NUEGP	Nuclear electricity net generation in the electric power sector.	Million kilowatthours	NUEGPZZ is independent. NUEGPUS = ΣNUEGPZZ
NUETB	Nuclear energy consumed for electricity generation, total.	Billion Btu	NUETBZZ = NUEGBZZ NUETBUS = NUEGBUS
NUETKUS	Factor for converting electricity generated from nuclear power from physical units to Btu.	Thousand Btu per kilowatthour	NUETKUS is independent.
NUETP	Nuclear electricity, total net generation.	Million kilowatthours	NUETPZZ = NUEGPZZ NUETPUS = ΣNUETPZZ
OCVAV	Value of shipments (value added prior to 2001) for the industrial organic chemical manufacturing industry.	Million dollars	OCVAVZZ is independent. OCVAVUS = ΣOCVAVZZ
P1ICB	Asphalt and road oil, kerosene, lubricants, and "other petroleum products" consumed by the industrial sector.	Billion Btu	P1ICBZZ = ARICBZZ + KSICBZZ + LUICBZZ + POICBZZ P1ICBUS = ΣP1ICBZZ
P1ICP	Asphalt and road oil, kerosene, lubricants, and "other petroleum products" consumed by the industrial sector.	Thousand barrels	P1ICPZZ = ARICPZZ + KSICPZZ + LUICPZZ + POICPZZ P1ICPUS = ΣP1ICPZZ
P1TCB	Asphalt and road oil, aviation gasoline, kerosene, lubricants, and "other petroleum products" total consumed.	Billion Btu	P1TCBZZ = ARTCBZZ + AVTCBZZ + KSTCBZZ + LUTCBZZ + POTCBZZ P1TCBUS = ΣP1TCBZZ
P1TCP	Asphalt and road oil, aviation gasoline, kerosene, lubricants, and "other petroleum products" total consumed.	Thousand barrels	P1TCPZZ = ARTCPZZ + AVTCPZZ + KSTCPZZ + LUTCPZZ + POTCPZZ P1TCPUS = ΣP1TCPZZ
P1TXB	Asphalt and road oil, aviation gasoline, kerosene, lubricants, and "other petroleum products" total end-use consumption.	Billion Btu	P1TXBZZ = ARTXBZZ + AVTXBZZ + KSTXBZZ + LUTXBZZ + POTXBZZ P1TXBUS = ΣP1TXBZZ
P1TXP	Asphalt and road oil, aviation gasoline, kerosene, lubricants, and "other petroleum products" total end-use consumption.	Thousand barrels	P1TXPZZ = ARTXPZZ + AVTXPZZ + KSTXPZZ + LUTXPZZ + POTXPZZ P1TXPUS = ΣP1TXPZZ
PAACB	All petroleum products consumed by the transportation sector.	Billion Btu	PAACBZZ = AVACBZZ + DFACBZZ + JKACBZZ + JNACBZZ + LGACBZZ + LUACBZZ+ MGACBZZ + RFACBZZ PAACBUS = ΣPAACBZZ

Table A1. Consumption Variables (cont.)

MSN	Description	Unit	Formula
PAACKUS	Factor for converting all petroleum products consumed by the transportation sector from physical units to Btu.	Million Btu per barrel	PAACKUS = PAACBUS / PAACPUS
PAACP	All petroleum products consumed by the transportation sector.	Thousand barrels	PAACPZZ = AVACPZZ + DFACPZZ + JKACPZZ + JNACPZZ + LGACPZZ + LUACPZZ + MGACPZZ + RFACPZZ PAACPUS = ΣPAACPZZ
PACCB	All petroleum products consumed by the commercial sector.	Billion Btu	PACCBZZ = DFCCBZZ + KSCCBZZ + LGCCBZZ + MGCCBZZ + PCCCBZZ + RFCCBZZ PACCBUS = ΣPACCBZZ
PACCKUS	Factor for converting all petroleum products consumed by the commercial sector from physical units to Btu.	Million Btu per barrel	PACCKUS = PACCBUS / PACCPUS
PACCP	All petroleum products consumed by the commercial sector.	Thousand barrels	PACCPZZ = DFCCPZZ + KSCCPZZ + LGCCPZZ + MGCCPZZ + PCCCPZZ + RFCCPZZ PACCPUS = ΣPACCPZZ
PAEIB	All petroleum products consumed by the electric power sector.	Billion Btu	PAEIBZZ = DFEIBZZ + JKEUBZZ + PCEIBZZ + RFEIBZZ PAEIBUS = ΣPAEIBZZ
PAEIKUS	Factor for converting all petroleum products consumed by the electric power sector from physical units to Btu.	Million Btu per barrel	PAEIKUS = PAEIBUS / PAEIPUS
PAEIP	All petroleum products consumed by the electric power sector.	Thousand barrels	PAEIPZZ = DFEIPZZ + JKEUPZZ + PCEIPZZ + RFEIPZZ PAEIPUS = ΣPAEIPZZ
PAHCBUS	All petroleum products consumed by the residential and commercial sectors combined.	Billion Btu	PAHCBUS = PARCBUS + PACCBUS
PAHCKUS	Factor for converting all petroleum products consumed by the residential and commercial sectors combined from physical units to Btu.	Million Btu per barrel	PAHCKUS = PAHCBUS / PAHCPUS
PAHCPUS	All petroleum products consumed by the residential and commercial sectors combined.	Thousand barrels	PAHCPUS = PARCPUS + PACCPUS
PAICB	All petroleum products consumed by the industrial sector.	Billion Btu	PAICBZZ = ARICBZZ + DFICBZZ + KSICBZZ + LGICBZZ + LUICBZZ + MGICBZZ + RFICBZZ + POICBZZ PAICBUS = ΣPAICBZZ

Table A1. Consumption Variables (cont.)

MSN	Description	Unit	Formula
PAICKUS	Factor for converting all petroleum products consumed by the industrial sector from physical units to Btu.	Million Btu per barrel	PAICKUS = PAICBUS / PAICPUS
PAICP	All petroleum products consumed by the industrial sector.	Thousand barrels	PAICPZZ = ARICPZZ + DFICPZZ + KSICPZZ + LGICPZZ + LUICPZZ + MGICPZZ + RFICPZZ + POICPZZ PAICPUS = ΣPAICPZZ
PARCB	All petroleum products consumed by the residential sector.	Billion Btu	PARCBZZ = DFRCBZZ + KSRCBZZ + LGRCBZZ PARCBUS = ΣPARCBZZ
PARCKUS	Factor for converting all petroleum products consumed by the residential sector from physical units to Btu.	Million Btu per barrel	PARCKUS = PARCBUS / PARCPUS
PARCP	All petroleum products consumed by the residential sector.	Thousand barrels	PARCPZZ = DFRCPZZ + KSRCPZZ + LGRCPZZ PARCPUS = ΣPARCPZZ
PATCB	All petroleum products consumed by all setors.	Billion Btu	PATCBZZ = ARTCBZZ + AVTCBZZ + DFTCBZZ + JKTCBZZ + JNTCBZZ + KSTCBZZ + LGTCBZZ + LUTCBZZ + MGTCBZZ + RFTCBZZ + POTCBZZ PATCBUS = ΣPATCBZZ
PATCKUS	Factor for converting all petroleum products consumed by all sectors from physical units to Btu.	Million Btu per barrel	PATCKUS = PATCBUS / PATCPUS
PATCP	All petroleum products consumed by all sectors.	Thousand barrels	PATCPZZ = ARTCPZZ + AVTCPZZ + DFTCPZZ + JKTCPZZ + JNTCPZZ + KSTCPZZ + LGTCPZZ + LUTCPZZ + MGTCPZZ + RFTCPZZ + POTCPZZ PATCPUS = ΣPATCPZZ
PATXB	All petroleum products total end-use consumption.	Billion Btu	PATXBZZ = ARTXBZZ + AVTXBZZ + KSTXBZZ + LUTXBZZ + POTXBZZ + DFTXBZZ + JFTXBZZ + LGTXBZZ + MGTXBZZ + RFTXBZZ PATXBUS = ΣPATXBZZ
PATXP	All petroleum products total end-use consumption.	Thousand barrels	PATXPZZ = ARTXPZZ + AVTXPZZ + KSTXPZZ + LUTXPZZ + POTXPZZ + DFTXPZZ + JFTXPZZ + LGTXPZZ + MGTXPZZ + RFTXPZZ PATXPUS = ΣPATXPZZ
PCC3M	Petroleum coke consumed for combined heat and power in the commercial sector.	Thousand tons	PCC3MZZ is independent. PCC3MUS = ΣPCC3MZZ

Table A1. Consumption Variables (cont.)

MSN	Description	Unit	Formula
PCCCB	Petroleum coke consumed for combined heat and power in the commercial sector.	Billion Btu	PCCCBZZ = PCCCPZZ * PCMKKUS PCCCBUS = ΣPCCCBZZ
PCCCP	Petroleum coke consumed for combined heat and power in the commercial sector.	Thousand barrels	PCCCPZZ = PCC3MZZ * 5 PCCCPUS = ΣPCCCPZZ
PCCTKUS	Factor for converting petroleum coke, catalyst coke from physical units to Btu.	Million Btu per barrel	PCCTKUS is independent.
PCEIB	Petroleum coke consumed by the electric power sector.	Billion Btu	PCEIBZZ = PCEIPZZ * PCMKKUS PCEIBUS = ΣPCEIBZZ
PCEIM	Petroleum coke consumed by the electric power sector.	Thousand tons	PCEIMZZ is independent. PCEIMUS = ΣPCEIMZZ
PCEIP	Petroleum coke consumed by the electric power sector.	Thousand barrels	PCEIPZZ = PCEIMZZ * 5 PCEIPUS = ΣPCEIPZZ
PCI3B	Petroleum coke consumed for combined heat and power in the industrial sector.	Billion Btu	PCI3BZZ = PCI3PZZ * PCMKKUS PCI3BUS = ΣPCI3BZZ
PCI3M	Petroleum coke consumed for combined heat and power in the industrial sector.	Thousand tons	PCI3MZZ is independent. PCI3MUS = ΣPCI3MZZ
PCI3P	Petroleum coke consumed for combined heat and power in the industrial sector.	Thousand barrels	PCI3PZZ = PCI3MZZ * 5 PCI3PUS = ΣPCI3PZZ
PCICB	Petroleum coke consumed in the industrial sector.	Billion Btu	PCICBZZ = PCI3BZZ + PCRFBZZ + PCOCBZZ PCICBUS = ΣPCICBZZ
PCICP	Petroleum coke consumed in the industrial sector.	Thousand barrels	PCICPZZ = PCI3PZZ + PCRFPZZ + PCOCPZZ PCICPUS = PCTCPUS - PCEIPUS - PCCCPUS
PCMKKUS	Factor for converting petroleum coke, marketable coke from physical units to Btu.	Million Btu per barrel	PCMKKUS is independent.
PCOCB	Petroleum coke consumed in the industrial sector other than for refinery use and combined heat and power.	Billion Btu	PCOCBZZ = PCOCPZZ * PCMKKUS PCOCBUS = ΣPCOCBZZ
PCOCP	Petroleum coke consumed in the industrial sector other than for refinery use and combined heat and power.	Thousand barrels	PCOCPZZ = (AICAPZZ / AICAPUS) * PCOCPUS PCOCPUS = PCICPUS - PCI3PUS - PCRFPUS
PCRFB	Petroleum coke used at refineries.	Billion Btu	PCRFBZZ = PCRFPZZ * PCCTKUS PCRFBUS = ΣPCRFBZZ

Table A1. Consumption Variables (cont.)

MSN	Description	Unit	Formula
PCRFP	Petroleum coke used at refineries.	Thousand barrels	Before 1981: PCRFPZZ = (CTCAPZZ / CTCAPGZ) * PCRFPGZ 1981 through 2012: PCRFPZZ = (CTCAPZZ / CTCAPPZ) * PCRFPPZ From 2013 forward: PCRFPZZ is independent. PCRFPUS = ΣPCRFPZZ for all years.
PCTCB	Petroleum coke total consumed.	Billion Btu	PCTCBZZ = PCCCBZZ + PCICBZZ + PCEIBZZ PCTCBUS = ΣPCTCBZZ
PCTCP	Petroleum coke total consumed.	Thousandbarrels	PCTCPZZ = PCCCPZZ + PCICPZZ + PCEIPZZ PCTCPUS is independent.
PIVAV	Value of shipments (value added prior to 2001) for the paint and coating manufacturing industry.	Million dollars	PIVAVZZ is independent. PIVAVUS = ΣPIVAVZZ
PLICB	Plant condensate consumed by the industrial sector.	Billion Btu	PLICBZZ = PLTCBZZ PLICBUS = PLTCBUS
PLICP	Plant condensate consumed by the industrial sector.	Thousand barrels	PLICPZZ = PLTCPZZ PLICPUS = PLTCPUS
PLTCB	Plant condensate total consumed.	Billion Btu	PLTCBZZ = PLTCPZZ * 5.418 PLTCBUS = ΣPLTCBZZ
PLTCP	Plant condensate total consumed.	Thousand barrels	PLTCPZZ = PLTCPUS * FNCASZZ PLTCPUS is independent.
PMTCB	All petroleum products consumed by all sectors, excluding fuel ethanol blended into motor gasoline.	Billion Btu	PMTCBZZ = PATCBZZ - EMTCBZZ PMTCBUS = PATCBUS - EMTCBUS
POICB	Other petroleum products consumed by the industrial sector.	Billion Btu	POICBZZ = ABICBZZ + COICBZZ + FNICBZZ + FOICBZZ + FSICBZZ + MBICBZZ + MSICBZZ + NAICBZZ + PCICBZZ + PLICBZZ + PPICBZZ + SGICBZZ + SNICBZZ + UOICBZZ + USICBZZ + WXICBZZ POICBUS = ΣPOICBZZ
POICP	Other petroleum products consumed by the industrial sector.	Thousand barrels	POICPZZ = ABICPZZ + COICPZZ + FNICPZZ + FOICPZZ + FSICPZZ + MBICPZZ + MSICPZZ + NAICPZZ + PCICPZZ + PLICPZZ + PPICPZZ + SGICPZZ + SNICPZZ + UOICPZZ + USICPZZ + WICPZZ POICPUS = ΣPOICPZZ

Table A1. Consumption Variables (cont.)

MSN	Description	Unit	Formula
POTCB	Other petroleum products total consumed.	Billion Btu	POTCBZZ = ABTCBZZ + COTCBZZ + FNTCBZZ + FOTCBZZ + FSTCBZZ + MBTCBZZ + MSTCBZZ + NATCBZZ + PCTCBZZ + PLTCBZZ + PPTCBZZ + SGTCBZZ + SNTCBZZ + UOTCBZZ + USTCBZZ + WXTCBZZ POTCBUS = ΣPOTCBZZ
POTCP	Other petroleum products total consumed.	Thousand barrels	POTCPZZ = ABTCPZZ + COTCPZZ + FNTCPZZ + FOTCPZZ + FSTCPZZ + MBTCPZZ + MSTCPZZ + NATCPZZ + PCTCPZZ + PLTCPZZ + PPTCPZZ + SGTCPZZ + SNTCPZZ + UOTCPZZ + USTCPZZ + WXTCPZZ POTCPUS = ΣPOTCPZZ
POTXB	Other petroleum products total end-use consumption.	Billion Btu	POTXBZZ = POICBZZ + PCCCBZZ POTXBUS = ΣPOTXBZZ
POTXP	Other petroleum products total end-use consumption.	Thousand barrels	POTXPZZ = POICPZZ + PCCCPZZ POTXPUS = ΣPOTXPZZ
PPICB	Pentanes plus consumed by the industrial sector.	Billion Btu	PPICBZZ = PPTCBZZ PPICBUS = PPTCBUS
PPICP	Pentanes plus consumed by the industrial sector.	Thousand barrels	PPICPZZ = PPTCPZZ PPICPUS = PPTCPUS
PPTCB	Pentanes plus total consumed.	Billion Btu	PPTCBZZ = PPTCPZZ * 4.620 PPTCBUS = ΣPPTCBZZ
PPTCP	Pentanes plus total consumed.	Thousand barrels	PPTCPZZ = PPTCPUS * FNCASZZ PPTCPUS is independent.
RDICP	Road oil consumed by the industrial sector.	Thousand barrels	RDICPZZ = (RDINPZZ / RDINPUS) * RDTCPUS RDICPUS = ΣRDICPZZ
RDINP	Road oil sold to the industrial sector.	Short tons	RDINPZZ is independent. RDINPUS =ΣRDINPZZ
RDTCP	Road oil total consumed.	Thousand barrels	RDTCPZZ = RDICPZZ RDTCPUS is independent.
REACB	Renewable energy sources consumed by the transportation sector.	Billion Btu	REACBZZ = EMACBZZ REACBUS = EMACBUS
RECCB	Renewable energy sources consumed by the commercial sector.	Billion Btu	RECCBZZ = EMCCBZZ + GECCBZZ + HYCCBZZ + SOCCBZZ + WWCCBZZ + WYCCBZZ RECCBUS = EMCCBUS + GECCBUS + HYCCBUS + SOCCBUS + WWCCBUS + WYCCBUS

Table A1. Consumption Variables (cont.)

MSN	Description	Unit	Formula
REEIB	Renewable energy sources consumed by the electric power sector.	Billion Btu	REEIBZZ = HYEGBZZ + GEEGBZZ + SOEGBZZ + WWEIBZZ + WYEGBZZ REEIBUS = HYEGBUS + GEEGBUS + SOEGBUS + WWEIBUS + WYEGBUS
REICB	Renewable energy sources consumed by the industrial sector.	Billion Btu	REICBZZ = EMICBZZ + EMLCBZZ + GEICBZZ + HYICBZZ + SOICBZZ + WWICBZZ + WYICBZZ REICBUS = EMICBUS + EMLCBUS + GEICBUS + HYICBUS + SOICBUS + WWICBUS + WYICBUS
RERCB	Renewable energy sources consumed by the residential sector.	Billion Btu	RERCBZZ = WDRCBZZ + GERCBZZ + SORCBZZ RERCBUS = WDRCBUS + GERCBUS + SORCBUS
RETCB	Renewable energy sources total consumed.	Billion Btu	RETCBZZ = EMLCBZZ + EMTCBZZ + GETCBZZ + HYTCBZZ + SOTCBZZ + WWTCBZZ + WYTCBZZ RETCBUS = EMLCBUS + EMTCBUS + GETCBUS + HYTCBUS + SOTCBUS + WWTCBUS + WYTCBUS
RFACB	Residual fuel oil consumed by the transportation sector.	Billion Btu	RFACBZZ = RFACPZZ * 6.287 RFACBUS = ΣRFACBZZ
RFACP	Residual fuel oil consumed by the transportation sector.	Thousand barrels	RFACPZZ = (RFTRPZZ / RFNDPZZ) * RFNCPZZ RFACPUS = ΣRFACPZZ
RFBKP	Residual fuel oil sold for vessel bunkering use, excluding deliveries to the military.	Thousand barrels	RFBKPZZ is independent. RFBKPUS = ΣRFBKPZZ
RFCCB	Residual fuel oil consumed by the commercial sector.	Billion Btu	RFCCBZZ = RFCCPZZ * 6.287 RFCCBUS = ΣRFCCBZZ
RFCCP	Residual fuel oil consumed by the commercial sector.	Thousand barrels	RFCCPZZ = (RFCMPZZ / RFNDPZZ) * RFNCPZZ RFCCPUS = ΣRFCCPZZ
RFCMP	Residual fuel oil sold to the commercial sector.	Thousand barrels	RFCMPZZ is independent. RFCMPUS = ΣRFCMPZZ
RFEIB	Residual fuel oil consumed by the electric power sector.	Billion Btu	RFEIBZZ = RFEIPZZ * 6.287 RFEIBUS = ΣRFEIBZZ
RFEIP	Residual fuel oil consumed by the electric power sector.	Thousand barrels	RFEIPZZ is independent. RFEIPUS = ΣRFEIPZZ
RFIBP	A portion of residual fuel oil sold for industrial use, including industrial space heating.	Thousand barrels	RFIBPZZ is independent. RFIBPUS = ΣRFIBPZZ

Table A1. Consumption Variables (cont.)

MSN	Description	Unit	Formula
RFICB	Residual fuel oil consumed by the industrial sector.	Billion Btu	RFICBZZ = RFICPZZ * 6.287 RFICBUS = ΣRFICBZZ
RFICP	Residual fuel oil consumed by the industrial sector.	Thousand barrels	RFICPZZ = (RFINPZZ / RFNDPZZ) * RFNCPZZ RFICPUS = ΣRFICPZZ
RFINP	Residual fuel oil sold to the industrial sector.	Thousand barrels	RFINPZZ = RFIBPZZ + RFOCPZZ + RFMSPZZ RFINPUS = ΣRFINPZZ
RFMIP	Residual fuel oil sold to the military, regardless of use.	Thousand barrels	RFMIPZZ is independent. RFMIPUS = ΣRFMIPZZ
RFMSP	Residual fuel oil sold for miscellaneous uses.	Thousand barrels	RFMSPZZ is independent. RFMSPUS = ΣRFMSPZZ
RFNCP	Residual fuel oil consumption by all sectors other than the electric power sector.	Thousand barrels	RFNCPZZ = (RFNDPZZ / RFNDPUS) * RFNCPUS RFNCPUS = RFTCPUS - RFEIPUS
RFNDP	Residual fuel oil sold to all sectors other than the electric power sector.	Thousand barrels	RFNDPZZ = RFCMPZZ + RFINPZZ + RFTRPZZ RFNDPUS = ΣRFNDPZZ
RFOCP	Residual fuel oil sold for use by oil companies.	Thousand barrels	RFOCPZZ is independent. RFOCPUS = ΣRFOCPZZ
RFRRP	Residual fuel oil sold for use by railroads.	Thousand barrels	RFRRPZZ is independent. RFRRPUS = ΣRFRRPZZ
RFTCB	Residual fuel oil total consumed.	Billion Btu	RFTCBZZ = RFCCBZZ + RFICBZZ + RFACBZZ + RFEIBZZ RFTCBUS = ΣRFTCBZZ
RFTCP	Residual fuel oil total consumed.	Thousand barrels	RFTCPZZ = RFNCPZZ + RFEIPZZ RFTCPUS is independent.
RFTRP	Residual fuel oil sold to the transportation sector.	Thousand barrels	RFTRPZZ = RFBKPZZ + RFMIPZZ + RFRRPZZ RFTRPUS = SRFTRPZZ
RFTXB	Residual fuel oil total end-use consumption.	Billion Btu	RFTXBZZ = RFACBZZ + RFCCBZZ + RFICBZZ RFTXBUS = ΣRFTXBZZ
RFTXP	Residual fuel oil total end-use consumption.	Thousand barrels	RFTXPZZ = RFACPZZ + RFCCPZZ + RFICPZZ RFTXPUS = ΣRFTXPZZ
SFCCB	Supplemental gaseous fuels consumed by the commercial sector.	Billion Btu	SFCCBZZ = SFCCPZZ * NGTXKZZ SFCCBUS = ΣSFCCBZZ
SFCCP	Supplemental gasesous fuels consumed by the commercial sector.	Million cubic feet	SFCCPZZ = NGSFPZZ * (NGCCPZZ / NGTZPZZ) SFCCPUS = ΣSFCCPZZ

Table A1. Consumption Variables (cont.)

MSN	Description	Unit	Formula
SFEIB	Supplemental gaseous fuels consumed by the electric power sector.	Billion Btu	SFEIBZZ = SFEIPZZ * NGEIKZZ SFEIBUS = ΣSFEIBZZ
SFEIP	Supplemental gaseous fuels consumed by the electric power sector.	Million cubic feet	SFEIPZZ = NGSFPZZ * (NGEIPZZ / NGTZPZZ) SFEIPUS = ΣSFEIPZZ
SFINB	Supplemental gaseous fuels consumed by the industrial sector.	Billion Btu	SFINBZZ = SFINPZZ * NGTXKZZ SFINBUS = ΣSFINBZZ
SFINP	Supplemental gaseous fuels consumed by the industrial sector.	Million cubic feet	SFINPZZ = NGSFPZZ * (NGINPZZ / NGTZPZZ) SFINPUS = ΣSFINPZZ
SFRCB	Supplemental gaseous fuels consumed by the residential sector.	Billion Btu	SFRCBZZ = SFRCPZZ * NGTXKZZ SFRCBUS = ΣSFRCBZZ
SFRCP	Supplemental gaseous fuels consumed by the residential sector.	Million cubic feet	SFRCPZZ = NGSFPZZ * (NGRCPZZ / NGTZPZZ) SFRCPUS = ΣSFRCPZZ
SFTCB	Supplemental gaseous fuels total consumed.	Billion Btu	SFTCBZZ = SFCCBZZ + SFINBZZ + SFRCBZZ + SFEIBZZ SFTCBUS = ΣSFTCBZZ
SFTCP	Supplemental gaseous fuels total consumed.	Million cubic feet	SFTCPZZ = SFCCPZZ + SFINPZZ + SFRCPZZ + SFEIPZZ SFTCPUS = ΣSFTCPZZ
SGICB	Still gas consumed by the industrial sector.	Billion Btu	SGICBZZ = SGTCBZZ SGICBUS = SGTCBUS
SGICP	Still gas consumed by the industrial sector.	Thousand barrels	SGICPZZ = SGTCPZZ SGICPUS = SGTCPUS
SGTCB	Still gas total consumed.	Billion Btu	SGTCBZZ = SGTCPZZ * 6.000 SGTCBUS = ΣSGTCBZZ
SGTCP	Still gas total consumed.	Thousand barrels	SGTCPZZ = (COCAPZZ / COCAPUS) * SGTCPUS SGTCPUS is independent.
SNICB	Special naphthas consumed by the industrial sector.	Billion Btu	SNICBZZ = SNTCBZZ SNICBUS = SNTCBUS
SNICP	Special naphthas consumed by the industrial sector.	Thousand barrels	SNICPZZ = SNTCPZZ SNICPUS = SNTCPUS
SNTCB	Special naphthas total consumed.	Billion Btu	SNTCBZZ = SNTCPZZ * 5.248 SNTCBUS = ΣSNTCBZZ
SNTCP	Special naphthas total consumed.	Thousand barrels	SNTCPZZ = (PIVAVZZ / PIVAVUS) * SNTCPUS SNTCPUS is independent.

Table A1. Consumption Variables (cont.)

MSN	Description	Unit	Formula
SOC5B	Solar energy consumed for electricity generation at utility-scale commercial CHP and electricity-only facilities.	Billion Btu	SOC5BZZ = SOC5PZZ * FFETKUS SOC5BUS = ΣSOC5BZZ
SOC5P	Solar thermal and photovoltaic electricity net generation at utility-scale commercial CHP and electricity-only facilities.	Million kilowatthours	SOC5PZZ is independent. SOC5PUS = ΣSOC5PZZ
SOC7B	Solar energy consumed for electricity generation at small-scale commercial facilities.	Billion Btu	SOC7BZZ = SOC7PZZ * FFETKUS SOC7BUS = ΣSOC7BZZ
SOC7P	Photovoltaic electricity generation at small-scale commercial facilities.	Million kilowatthours	SOC7PZZ is independent. SOC7PUS = ΣSOC7PZZ
SOCCB	Solar energy consumed by the commercial sector (except small amount of solar thermal energy consumed as heat included in SORCB).	Billion Btu	SOCCBZZ = SOC7BZZ + SOC5BZZ SOCCBUS = ΣSOCCBZZ
SOCCP	Solar thermal and photovoltaic electricity net generation in the commercial sector.	Million kilowatthours	SOCCPZZ = SOC7PZZ + SOC5PZZ SOCCPUS = ΣSOCCPZZ
SOEGB	Solar energy consumed for electricity generation by the electric power sector.	Billion Btu	SOEGBZZ = SOEGPZZ * FFETKUS SOEGBUS = ΣSOEGBZZ
SOEGP	Solar thermal and photovoltaic electricity net generation in the electric power sector.	Million kilowatthours	SOEGPZZ is independent. SOEGPUS = ΣSOEGPZZ
SOI5B	Solar energy consumed for electricity generation at utility-scale industrial CHP and electricity-only facilities.	Billion Btu	SOI5BZZ = SOI5PZZ * FFETKUS SOI5BUS = ΣSOI5BZZ
SOI5P	Solar thermal and photovoltaic electricity net generation at utility-scale industrial CHP and electricity-only facilities.	Million kilowatthours	SOI5PZZ is independent. SOI5PUS = ΣSOI5PZZ
SOI7B	Solar energy consumed for electricity generation at small-scale industrial facilities.	Billion Btu	SOI7BZZ = SOI7PZZ * FFETKUS SOI7BUS = ΣSOI7BZZ
SOI7P	Photovoltaic electricity generation at small-scale industrial facilities.	Million kilowatthours	SOI7PZZ is independent. SOI7PUS = ΣSOI7PZZ
SOICB	Solar energy consumed by the industrial sector (except small amount of solar thermal energy consumed as heat included in SORCB).	Billion Btu	SOICBZZ = SOI7BZZ + SOI5BZZ SOICBUS = ΣSOICBZZ

Table A1. Consumption Variables (cont.)

MSN	Description	Unit	Formula
SOICP	Solar thermal and photovoltaic electricity net generation in the industrial sector.	Million kilowatthours	SOICPZZ = SOI7PZZ + SOI5PZZ SOICPUS = ΣSOICPZZ
SOR7B	Solar energy consumed for electricity generation by small-scale applications in the residential sector.	Billion Btu	SOR7BZZ = SOR7PZZ * FFETKUS SOR7BUS = ΣSOR7BZZ
SOR7P	Photovoltaic electricity generation by small-scale applications in the residential sector.	Million kilowatthours	SOR7PZZ is independent. SOR7PUS = ΣSOR7PZZ
SORCB	Solar energy consumed by the residential sector (including small amount of solar thermal energy consumed as heat by the commercial and industrial sectors).	Billion Btu	SORCBZZ = SOT8BZZ + SOR7BZZ SORCBUS = ΣSORCBZZ
SOT8B	Solar thermal energy consumed as heat.	Billion Btu	SOT8BZZ = (SOTTPZZ / SOTTPUS) * SOT8BUS SOT8BUS is independent.
SOTCB	Solar energy, total consumed.	Billion Btu	SOTCBZZ = SORCBZZ + SOCCBZZ + SOICBZZ + SOEGBZZ SOTCBUS = ΣSOTCBZZ
SOTTP	Rolling 20-year accumulation of shipments of solar thermal energy collectors.	Square feet	SOTTPZZ is independent. SOTTPUS = ΣSOTTPZZ
SOTXB	Solar energy, total end-use consumption.	Billion Btu	SOTXBZZ = SORCBZZ + SOCCBZZ + SOICBZZ SOTXBUS = ΣSOTXBZZ
TEACB	Total energy consumed by the transportation sector.	Billion Btu	TEACBZZ = CLACBZZ + NGACBZZ + PAACBZZ + ESACBZZ + LOACBZZ TEACBUS = CLACBUS + NGACBUS + PAACBUS + ESACBUS + LOACBUS
TEAPB	The transportation sector's energy consumption per capita.	Million Btu	TEAPBZZ = TEACBZZ / TPOPPZZ TEAPBUS = TEACBUS / TPOPPUS
TECCB	Total energy consumed by the commercial sector.	Billion Btu	TECCBZZ = CLCCBZZ + NGCCBZZ + PACCBZZ + GECCBZZ + HYCCBZZ + SOCCBZZ + WWCCBZZ + WYCCBZZ + ESCCBZZ + LOCCBZZ - SFCCBZZ TECCBUS = CLCCBUS + NGCCBUS + PACCBUS + GECCBUS + HYCCBUS + SOCCBUS + WWCCBUS + WYCCBUS + ESCCBUS + LOCCBUS - SFCCBUS
TECPB	The commercial sector's energy consumption per capita.	Million Btu	TECPBZZ = TECCBZZ / TPOPPZZ TECPBUS = TECCBUS / TPOPPUS

Table A1. Consumption Variables (cont.)

MSN	Description	Unit	Formula
TEEIB	Total energy consumed by the electric power sector plus net imports of electricity into the United States.	Billion Btu	TEEIBZZ = CLEIBZZ + NGEIBZZ + PAEIBZZ + NUEGBZZ + GEEGBZZ + HYEGBZZ + SOEGBZZ + WWEIBZZ + WYEGBZZ + ELNIBZZ - SFEIBZZ TEEIBUS = ΣTEEIBZZ
TEESB	Total energy used to generate the electricity consumed in a state.	Billion Btu	TEESBZZ = TEEIBZZ + ELISBZZ TEESBUS = TEEIBUS
TEICB	Total energy consumed by the industrial sector.	Billion Btu	TEICBZZ = CLICBZZ + NGICBZZ + PAICBZZ + GEICBZZ + HYICBZZ + SOICBZZ + WWICBZZ + WYICBZZ + ESICBZZ + LOICBZZ + EMLCBZZ - SFINBZZ TEICBUS = CLICBUS + CCNIBUS + NGICBUS + PAICBUS + GEICBUS + HYICBUS + SOICBUS + WWICBUS + WYICBUS + ESICBUS + LOICBUS + EMLCBUS - SFINBUS
TEIPB	The industrial sector's energy consumption per capita.	Million Btu	TEIPBZZ = TEICBZZ / TPOPPZZ TEIPBUS = TEICBUS / TPOPPUS
TERCB	Total energy consumed by the residential sector.	Billion Btu	TERCBZZ = CLRCBZZ + NGRCBZZ + PARCBZZ + WDRCBZZ + GERCBZZ + SORCBZZ + ESRCBZZ + LORCBZZ - SFRCBZZ TERCBUS = CLRCBUS + NGRCBUS + PARCBUS + WDRCBUS + GERCBUS + SORCBUS + ESRCBUS + LORCBUS - SFRCBUS
TERPB	The residential sector's energy consumption per capita.	Million Btu	TERPBZZ = TERCBZZ / TPOPPZZ TERPBUS = TERCBUS / TPOPPUS
TETCB	Total energy consumed.	Billion Btu	TETCBZZ = FFTCBZZ + NUETBZZ + RETCBZZ + ELNIBZZ + ELISBZZ TETCBUS = FFTCBUS + NUETBUS + RETCBUS + ELNIBUS
TETGR	Total energy consumed per dollar of real gross domestic product.	Thousand Btu per chained (2009) dollars.	TETGRZZ = TETCBZZ / GDPRXZZ TETGRUS = TETCBUS / GDPRXUS
TETPB	Total energy consumption per capita.	Million Btu	TETPBZZ = TETCBZZ / TPOPPZZ TETPBUS = TETCBUS / TPOPPUS
TETXB	Total end-use energy consumption.	Billion Btu	TETXBZZ = TEACBZZ + TECCBZZ + TEICBZZ + TERCBZZ TETXBUS = ΣTETXBZZ
TNACB	Total net energy consumed by the transportation sector excluding the sector's share of electrical system energy losses.	Billion Btu	TNACBZZ = TEACBZZ - LOACBZZ TNACBUS = TEACBUS - LOACBUS

Table A1. Consumption Variables (cont.)

MSN	Description	Unit	Formula
TNCCB	Total net energy consumed by the commercial sector excluding the sector's share of electrical system energy losses.	Billion Btu	TNCCBZZ = TECCBZZ - LOCCBZZ TNCCBUS = TECCBUS - LOCCBUS
TNICB	Total net energy consumed by the industrial sector excluding the sector's share of electrical system energy losses.	Billion Btu	TNICBZZ = TEICBZZ - LOICBZZ TNICBUS = TEICBUS - LOICBUS
TNRCB	Total net energy consumed by the residential sector excluding the sector's share of electrical system energy losses.	Billion Btu	TNRCBZZ = TERCBZZ - LORCBZZ TNRCBUS = TERCBUS - LORCBUS
TNTXB	Total primary energy and electricity consumed by the end-use sectors.	Billion Btu	TNTXBZZ = TNACBZZ + TNCCBZZ + TNICBZZ + TNRCBZZ TNTXBUS = ΣTNTXBZZ
TPOPP	The resident population including the Armed Forces residing in each state.	Thousand	TPOPPZZ is independent. TPOPPUS is independent.
UOICB	Unfinished oils consumed by the industrial sector.	Billion Btu	UOICBZZ = UOTCBZZ UOICBUS = UOTCBUS
UOICP	Unfinished oils consumed by the industrial sector.	Thousand barrels	UOICPZZ = UOTCPZZ UOICPUS = UOTCPUS
UOTCB	Unfinished oils total consumed.	Billion Btu	UOTCBZZ = UOTCPZZ * 5.825 UOTCBUS = ΣUOTCBZZ
UOTCP	Unfinished oils total consumed.	Thousand barrels	UOTCPZZ = (COCAPZZ / COCAPUS) * UOTCPUS UOTCPUS is independent.
USICB	Unfractionated streams consumed by the industrial sector.	Billion Btu	USICBZZ = USTCBZZ USICBUS = USTCBUS
USICP	Unfractionated streams consumed by the industrial sector.	Thousand barrels	USICPZZ = USTCPZZ USICPUS = USTCPUS
USTCB	Unfractionated streams total consumed.	Billion Btu	USTCBZZ = USTCPZZ * 5.418 USTCBUS = ΣUSTCBZZ
USTCP	Unfractionated streams total consumed.	Thousand barrels	USTCPZZ = USTCPUS * FNCASZZ USTCPUS is independent.
WDC3B	Wood consumed by CHP and electricity-only facilities in the commercial sector.	Billion Btu	WDC3BZZ is independent. WDC3BUS = ΣWDC3BZZ
WDC4B	Wood energy consumed for other uses in the commercial sector.	Billion Btu	WDC4BZZ = (WDRCPZZ / WDRCPUS) * WDC4BUS WDC4BUS = WDCCBUS - WDC3BUS

Table A1. Consumption Variables (cont.)

MSN	Description	Unit	Formula
WDCCB	Wood energy consumed by the commercial sector, total.	Billion Btu	WDCCBZZ = WDC3BZZ + WDC4BZZ WDCCBUS is independent.
WDEIB	Wood consumed by the electric power sector.	Billion Btu	WDEIBZZ is independent. WDEIBUS = ΣWDEIBZZ
WDI3B	Wood consumed by CHP and electricity-only facilities in the industrial sector.	Billion Btu	WDI3BZZ is independent. WDI3BUS = ΣWDI3BZZ
WDI4B	Wood energy consumed for other uses in the industrial sector.	Billion Btu	WDI4BZZ is independent. WDI4BUS = ΣWDI4BZZ
WDICB	Wood energy consumed by the industrial sector, total.	Billion Btu	WDICBZZ = WDI3BZZ + WDI4BZZ WDICBUS = ΣWDICBZZ
WDRCB	Wood energy consumed by the residential sector.	Billion Btu	WDRCBZZ = WDRCPZZ * 20 WDRCBUS = ΣWDRCBZZ
WDRCP	Wood energy consumed by the residential sector.	Thousand cords	WDRCPZZ is independent. WDRCPUS = ΣWDRCPZZ
WDTCB	Wood energy, total consumed.	Billion Btu	WDTCBZZ = WDRCBZZ + WDCCBZZ + WDICBZZ + WDEIBZZ WDTCBUS = ΣWDTCBZZ
WSC3B	Waste consumed by CHP and electricity-only facilities in the commercial sector.	Billion Btu	WSC3BZZ is independent. WSC3BUS = ΣWSC3BZZ
WSCCB	Waste consumed in the commercial sector, total.	Billion Btu	WSCCBZZ = WSC3BZZ WSCCBUS = ΣWSCCBZZ
WSEIB	Waste consumed by the electric power sector.	Billion Btu	WSEIBZZ is independent. WSEIBUS = ΣWSEIBZZ
WSI3B	Waste consumed by CHP and electricity-only facilities in the industrial sector.	Billion Btu	WSI3BZZ is independent. WSI3BUS = ΣWSI3BZZ
WSI4B	Waste energy consumed for other uses in the industrial sector.	Billion Btu	WSI4BZZ is independent. WSI4BUS = ΣWSI4BZZ
WSICB	Waste energy consumed by the industrial sector, total.	Billion Btu	WSICBZZ = WSI3BZZ + WSI4BZZ WSICBUS = ΣWSICBZZ
WSTCB	Waste energy, total consumed.	Billion Btu	WSTCBZZ = WSCCBZZ + WSICBZZ + WSEIBZZ WSTCBUS = ΣWSTCBZZ
WWCCB	Wood and waste consumed in the commercial sector.	Billion Btu	WWCCBZZ = WDCCBZZ + WSCCBZZ WWCCBUS = ΣWWCCBZZ

Table A1. Consumption Variables (cont.)

MSN	Description	Unit	Formula
WWEIB	Wood and waste consumed by the electric power sector.	Billion Btu	WWEIBZZ = WDEIBZZ + WSEIBZZ WWEIBUS = ΣWWEIBZZ
WWI4B	Wood and waste consumed in manufacturing processes in the industrial sector.	Billion Btu	WWI4BZZ = WDI4BZZ + WSI4BZZ WWI4BUS = ΣWWI4BZZ
WWICB	Wood and waste consumed in the industrial sector, total.	Billion Btu	WWICBZZ = WDICBZZ + WSICBZZ WWICBUS = ΣWWICBZZ
WWTCB	Wood and waste total consumed.	Billion Btu	WWTCBZZ = WDTCBZZ + WSTCBZZ WWTCBUS =ΣWWTCBZZ
WWTXB	Wood and waste total end-use consumption.	Billion Btu	WWTXBZZ = WDRCBZZ + WDCCBZZ + WDICBZZ + WSCCBZZ + WSICBZZ WWTXBUS = ΣWWTXBZZ
WXICB	Waxes consumed by the industrial sector.	Billion Btu	WXICBZZ = WXTCBZZ WXICBUS = WXTCBUS
WXICP	Waxes consumed by the industrial sector.	Thousand barrels	WXICPZZ = WXTCPZZ WXICPUS = WXTCPUS
WXTCB	Waxes total consumed.	Billion Btu	WXTCBZZ = WXTCPZZ * 5.537 WXTCBUS = ΣWXTCBZZ
WXTCP	Waxes total consumed.	Thousand barrels	WXTCPZZ = (CGVAVZZ / CGVAVUS) * WXTCPUS WXTCPUS is independent.
WYC5B	Wind energy consumed at commercial CHP and electricity-only facilities.	Billion Btu	WYC5BZZ = WYC5PZZ * FFETKUS WYC5BUS = ΣWYC5BZZ
WYC5P	Wind electricity net generation at utility-scale commercial CHP and electricity-only facilities.	Million kilowatthours	WYC5PZZ is independent. WYC5PUS = ΣWYC5PZZ
WYCCB	Wind energy consumed by the commercial sector.	Billion Btu	WYCCBZZ = WYC5BZZ WYCCBUS = ΣWYCCBZZ
WYCCP	Wind electricity net generation in the commercial sector.	Million kilowatthours	WYCCPZZ = WYC5PZZ WYCCPUS = ΣWYCCPZZ
WYEGB	Wind energy consumed for electricity generation by the electric power sector.	Billion Btu	WYEGBZZ = WYEGPZZ * FFETKUS WYEGBUS = ΣWYEGBZZ
WYEGP	Wind electricity net generation in the electric power sector.	Million kilowatthours	WYEGPZZ is independent. WYEGPUS = ΣWYEGPZZ

Table A1. Consumption Variables (cont.)

MSN	Description	Unit	Formula
WYI5B	Wind energy consumed for electricity generation at industrial CHP and electricity-only facilities.	Billion Btu	WYI5BZZ = WYI5PZZ * FFETKUS WYI5BUS = ΣWYI5BZZ
WYI5P	Wind electricity net generation at utility-scale industrial CHP and electricity-only facilities.	Million kilowatthours	WYI5PZZ is independent. WYI5PUS = ΣWYI5PZZ
WYICB	Wind energy consumed by the industrial sector.	Billion Btu	WYICBZZ = WYI5BZZ WYICBUS = ΣWYICBZZ
WYICP	Wind electricity net generation in the industrial sector.	Million kilowatthours	WYICPZZ = WYI5PZZ WYICPUS = ΣWYICPZZ
WYTCB	Wind energy, total consumed.	Billion Btu	WYTCBZZ = WYCCBZZ + WYEGBZZ + WYICBZZ WYTCBUS = ΣWYTCBZZ
WYTCP	Wind electricity, total net generation.	Million kilowatthours	WYTCPZZ = WYCCPZZ + WYEGPZZ + WYICPZZ WYTCPUS = ΣWYTCPZZ
WYTXB	Wind energy, total end-use consumption.	Billion Btu	WYTXBZZ = WYCCBZZ + WYICBZZ WYTXBUS = ΣWYTXBZZ
WYTXP	Wind energy, total end-use net generation.	Million kilowatthours	WYTXPZZ = WYCCPZZ + WYICPZZ WYTXPUS = ΣWYTXPZZ