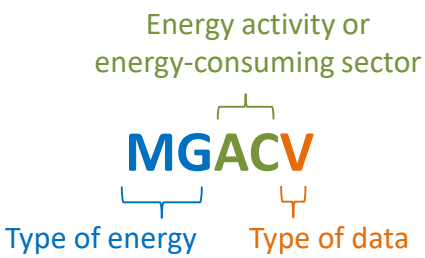
Appendix A. Mnemonic Series Names (MSN)

This appendix contains alphabetical listings of the State Energy Data System (SEDS) energy price and expenditure variables, called MSNs. Table A1 presents the price and expenditure variables and Table A2 presents the consumption adjustment variables as described in Section 7, "Consumption Adjustments for Calculating Expenditures."

For each variable, SEDS provides: a brief description; unit of measure; and the formulas used to create the variable. Variables that are entered directly from other sources, but not calculated by SEDS, are independent variables. Formulas for the state calculations have "ZZ" following the variable name, where "ZZ" represents the two-letter state code. The formulas for the United States have "US" following the variable name. If the formula for the states and the United States are the same, only one formula is shown.

The SEDS MSN variables have five-character names that generally consist of the following components:



See Section 1 of the SEDS Technical Notes for explanation of the five-character MSN code descriptions.

In general, state-level price estimates are independent variables in dollars per million Btu. Estimates of state-level expenditures are equal to the product of the appropriate SEDS consumption estimates by the corresponding prices, in million dollars. The SEDS price and expenditure estimates are in current U.S. dollars and are not adjusted for inflation. For the expenditure calculations, the SEDS consumption data are adjusted for process fuel, intermediate products, and fuels with no direct cost (see discussion in Section 7). Expenditures for the United States are the sum of the 50 states and the District of Columbia. Prices for the United States are the sum of the states' expenditures divided by the sum of the states' consumption or adjusted consumption, converted to dollars per million Btu.

If the consumption variables in a formula are taken directly from the SEDS consumption module (i.e., not adjusted), they are listed in Appendix A of the Consumption Technical Notes (http://www.eia.gov/state/seds/sep_use/notes/use_a.pdf) and are not reproduced in this appendix. Generally, if the third and fourth letters of the consumption variables are the same as the corresponding price and expenditure variables, they are from the consumption module. Examples are: TC (total consumption in all energy-consuming sectors), TX (total consumption in all end-use sectors), RC (residential consumption), CC (commercial consumption), IC (industrial consumption), AC (transportation consumption), and EI (electric power sector consumption).

Table A1. Price and Expenditure Variables

MSN	Description	Unit	Formula
ARICD	Asphalt and road oil price in the industrial sector.	Dollars per million Btu	ARICDZZ is independent. ARICDUS = ARICVUS / ARICBUS * 1000
ARICV	Asphalt and road oil expenditures in the industrial sector.	Million dollars	ARICVZZ = ARICBZZ * ARICDZZ / 1000 ARICVUS = ΣARICVZZ
ARTCD	Asphalt and road oil average price, all sectors.	Dollars per million Btu	ARTCD = ARICD
ARTCV	Asphalt and road oil total expenditures.	Million dollars	ARTCV = ARICV
ARTXD	Asphalt and road oil average price, all end-use sectors.	Dollars per million Btu	ARTXD = ARTXV / ARTXB * 1000
ARTXV	Asphalt and road oil total end-use expenditures.	Million dollars	ARTXV = ARICV
AVACD	Aviation gasoline price in the transportation sector.	Dollars per million Btu	AVACDZZ is independent. AVACDUS = AVACVUS / AVACBUS * 1000
AVACV	Aviation gasoline expenditures in the transportation sector.	Million dollars	AVACVZZ = AVACBZZ * AVACDZZ / 1000 AVACVUS = ΣAVACVZZ
AVTCD	Aviation gasoline average price, all sectors.	Dollars per million Btu	AVTCD = AVACD
AVTCV	Aviation gasoline total expenditures.	Million dollars	AVTCV = AVACV
AVTXD	Aviation gasoline average price, all end-use sectors.	Dollars per million Btu	AVTXD = AVTXV / AVTXB * 1000
AVTXV	Aviation gasoline total end-use expenditures.	Million dollars	AVTXV = AVACV
CCEXD	Coal coke exports average price, United States.	Dollars per million Btu	CCEXDUS is independent.
CCEXV	Coal coke exports expenditures, United States.	Million dollars	CCEXVUS = CCEXBUS * CCEXDUS / 1000
CCIMD	Coal coke imports average price, United States.	Dollars per million Btu	CCIMDUS is independent.
CCIMV	Coal coke imports expenditures, United States.	Million dollars	CCIMVUS = CCIMBUS * CCIMDUS / 1000
CCNIV	Coal coke net imports expenditures, United States.	Million dollars	CCNIVUS = CCIMVUS - CCEXVUS
CLACD	Coal price in the transportation sector.	Dollars per million Btu	CLACDZZ is independent. CLACDUS = CLACVUS / CLACBUS * 1000
CLACV	Coal expenditures in the transportation sector.	Million dollars	CLACVZZ = CLACBZZ * CLACDZZ / 1000 CLACVUS = ΣCLACVZZ

Table A1. Price and Expenditure Variables (cont.)

MSN	Description	Unit	Formula
CLCCD	Coal price in the commercial sector.	Dollars per million Btu	CLCCDZZ is independent. CLCCDUS = CLCCVUS / CLCCBUS * 1000
CLCCV	Coal expenditures in the commercial sector.	Million dollars	CLCCVZZ = CLCCBZZ * CLCCDZZ / 1000 CLCCVUS = ΣCLCCVZZ
CLEID	Coal price in the electric power sector.	Dollars per million Btu	CLEIDZZ is independent. CLEIDUS = CLEIVUS / CLEIBUS * 1000
CLEIV	Coal expenditures in the electric power sector.	Million dollars	CLEIVZZ = CLEIBZZ * CLEIDZZ / 1000 CLEIVUS = ΣCLEIVZZ
CLICD	Coal price in the industrial sector.	Dollars per million Btu	CLICD = CLICV / CLISB * 1000
CLICV	Coal expenditures in the industrial sector.	Million dollars	CLICVZZ = CLKCVZZ + CLOCVZZ CLICVUS = ΣCLICVZZ
CLKCD	Coal price at coke plants.	Dollars per million Btu	CLKCDZZ is independent. CLKCDUS = CLKCVUS / CLKCBUS * 1000
CLKCV	Coal expenditures at coke plants.	Million dollars	CLKCVZZ = CLKCBZZ * CLKCDZZ / 1000 CLKCVUS = ΣCLKCVZZ
CLOCD	Coal price in the industrial sector other than coke plants.	Dollars per million Btu	CLOCDZZ is independent. CLOCDUS = CLOCVUS / CLOSBUS * 1000
CLOCV	Coal expenditures in the industrial sector other than coke plants.	Million dollars	CLOCVZZ = CLOSBZZ * CLOCDZZ / 1000 CLOCVUS = ΣCLOCVZZ
CLRCD	Coal price in the residential sector.	Dollars per million Btu	CLRCDZZ is independent. CLRCDUS = CLRCVUS / CLRCBUS * 1000
CLRCV	Coal expenditures in the residential sector.	Million dollars	CLRCVZZ = CLRCBZZ * CLRCDZZ / 1000 CLRCVUS = ΣCLRCVZZ
CLTCD	Coal average price, all sectors.	Dollars per million Btu	CLTCD = CLTCV / CLSCB * 1000
CLTCV	Coal total expenditures.	Million dollars	CLTCV = CLKCV + CLXCV
CLTXD	Coal average price, all end-use sectors.	Dollars per million Btu	CLTXD = (CLTXV / (CLSCB - CLEIB)) * 1000
CLTXV	Coal total end-use expenditures.	Million dollars	CLTXVZZ = CLACVZZ + CLCCVZZ + CLICVZZ + CLRCVZZ CLTXVUS = ΣCLTXVZZ
CLXCD	Coal average price for all sectors excluding coke plants and refineries.	Dollars per million Btu	CLXCD = CLXCV / CLXCB * 1000

Table A1. Price and Expenditure Variables (cont.)

MSN	Description	Unit	Formula
CLXCV	Coal expenditures for all sectors excluding coke plants and refineries.	Million dollars	CLXCVZZ = CLACVZZ + CLCCVZZ + CLEIVZZ + CLOCVZZ + CLRCVZZ CLXCVUS = ΣCLXCVZZ
DFACD	Distillate fuel oil price in the transportation sector.	Dollars per million Btu	DFACDZZ is independent. DFACDUS = DFACVUS / DFACBUS * 1000
DFACV	Distillate fuel oil expenditures in the transportation sector.	Million dollars	DFACVZZ = DFACBZZ * DFACDZZ / 1000 DFACVUS = ΣDFACVZZ
DFCCD	Distillate fuel oil price in the commercial sector.	Dollars per million Btu	DFCCDZZ is independent. DFCCDUS = DFCCVUS / DFCCBUS * 1000
DFCCV	Distillate fuel oil expenditures in the commercial sector.	Million dollars	DFCCVZZ = DFCCBZZ * DFCCDZZ / 1000 DFCCVUS = ΣDFCCVZZ
DFEID	Distillate fuel oil price in the electric power sector.	Dollars per million Btu	DFEIDZZ is independent. DFEIDUS = DFEIVUS / DFEIBUS * 1000
DFEIV	Distillate fuel oil expenditures in the electric power sector.	Million dollars	DFEIVZZ = DFEIBZZ * DFEIDZZ / 1000 DFEIVUS = ΣDFEIVZZ
DFICD	Distillate fuel oil price in the industrial sector.	Dollars per million Btu	DFICDZZ is independent. DFICDUS = DFICVUS / DFISBUS * 1000
DFICV	Distillate fuel oil expenditures in the industrial sector.	Million dollars	DFICVZZ = DFISBZZ * DFICDZZ / 1000 DFICVUS = ΣDFICVZZ
DFRCD	Distillate fuel oil price in the residential sector.	Dollars per million Btu	DFRCDZZ is independent. DFRCDUS = DFRCVZZ / DFRCBZZ * 1000
DFRCV	Distillate fuel oil expenditures in the residential sector.	Million dollars	DFRCVZZ = DFRCBZZ * DFRCDZZ / 1000 DFRCVUS = ΣDFRCVZZ
DFTCD	Distillate fuel oil average price, all sectors.	Dollars per million Btu	DFTCD = DFTCV / DFSCB * 1000
DFTCV	Distillate fuel oil total expenditures.	Million dollars	DFTCVZZ = DFACVZZ + DFCCVZZ + DFEIVZZ + DFICVZZ + DFRCVZZ DFTCVUS = ΣDFTCVZZ
DFTXD	Distillate fuel oil average price, all end-use sectors.	Dollars per million Btu	DFTXD = (DFTXV / (DFSCB - DFEIB)) * 1000
DFTXV	Distillate fuel oil total end-use expenditures.	Million dollars	DFTXVZZ = DFACVZZ + DFCCVZZ + DFICVZZ + DFRCVZZ DFTXVUS = ΣDFTXVZZ

Table A1. Price and Expenditure Variables (cont.)

MSN	Description	Unit	Formula
DKEID	Distillate fuel oil (including kerosene-type jet fuel before 2001) average price in the electric power sector.	Dollars per million Btu	DKEID = DKEIV / DKEIB * 1000
DKEIV	Distillate fuel oil (including kerosene-type jet fuel before 2001) expenditures in the electric power sector.	Million dollars	DKEIVZZ = DFEIVZZ + JFEUVZZ DKEIVUS = ΣDKEIVZZ
ELEXD	Electricity exports average price.	Dollars per million Btu	ELEXD is independent.
ELEXV	Electricity exports expenditures.	Million dollars	ELEXVZZ = ELEXBZZ * ELEXDZZ / 1000 ELEXVUS = ΣELEXVZZ
ELIMD	Electricity imports average price.	Dollars per million Btu	ELIMD is independent.
ELIMV	Electricity imports expenditures.	Million dollars	ELIMVZZ = ELIMBZZ * ELIMDZZ / 1000 ELIMVUS = ΣELIMVZZ
EMACV	Fuel ethanol, excluding denaturant, expenditures in the transportation sector (compiled for inclusion in total expenditures by end-use sector before 1993).	Million dollars	EMACVZZ = EMACBZZ * MGACDZZ / 1000 EMACVUS = ΣEMACVZZ
EMCCV	Fuel ethanol, excluding denaturant, expenditures in the commercial sector (compiled for inclusion in total expenditures by end-use sector before 1993).	Million dollars	EMCCVZZ = EMCCBZZ * MGCCDZZ / 1000 EMCCVUS = ΣEMCCVZZ
EMICV	Fuel ethanol, excluding denaturant, expenditures in the industrial sector (compiled for inclusion in total expenditures by end-use sector before 1993).	Million dollars	EMICVZZ = EMICBZZ * MGACDZZ / 1000 EMICVUS = ΣEMICVZZ
EMTCV	Fuel ethanol, excluding denaturant, total expenditures (compiled for inclusion in total expenditures before 1993).	Million dollars	EMTCVZZ = EMACVZZ + EMCCVZZ + EMICVZZ EMTCVUS = ΣEMTCVZZ
ESACD	Electricity price in the transportation sector.	Dollars per million Btu	ESACDZZ is independent. ESACDUS = ESACVUS / ESACBUS * 1000
ESACV	Electricity expenditures in the transportation sector.	Million dollars	ESACVZZ = ESACBZZ * ESACDZZ / 1000 ESACVUS = ΣESACVZZ
ESCCD	Electricity price in the commercial sector.	Dollars per million Btu	ESCCDZZ is independent. ESCCDUS = ESCCVUS / ESCCBUS * 1000

Table A1. Price and Expenditure Variables (cont.)

MSN	Description	Unit	Formula
ESCCV	Electricity expenditures in the commercial sector.	Million dollars	ESCCVZZ = ESCCBZZ * ESCCDZZ / 1000 ESCCVUS = ΣESCCVZZ
ESICD	Electricity price in the industrial sector.	Dollars per million Btu	ESICDZZ is independent. ESICDUS = ESICVUS / ESISBUS * 1000
ESICV	Electricity expenditures in the industrial sector.	Million dollars	ESICVZZ = ESISBZZ * ESICDZZ / 1000 ESICVUS = ΣESICVZZ
ESRCD	Electricity price in the residential sector.	Dollars per million Btu	ESRCDZZ is independent. ESRCDUS = ESRCVUS / ESRCBUS * 1000
ESRCV	Electricity expenditures in the residential sector.	Million dollars	ESRCVZZ = ESRCBZZ * ESRCDZZ / 1000 ESRCVUS = ΣESRCVZZ
ESTCD	Electricity average price, all sectors.	Dollars per million Btu	ESTCD = ESTCV / ESSCB * 1000
ESTCV	Electricity total expenditures.	Million dollars	ESTCVZZ = ESACVZZ + ESCCVZZ + ESICVZZ + ESRCVZZ ESTCVUS = ΣESTCVZZ
ESTXD	Electricity average price, all end-use sectors.	Dollars per million Btu	ESTXD = ESTXV / ESSCB * 1000
ESTXV	Electricity total end-use expenditures.	Million dollars	ESTXVZZ = ESACVZZ + ESCCVZZ + ESICVZZ + ESRCVZZ ESTXVUS = ΣESTXVZZ
FNICD	Petrochemical feedstocks, naphtha less than 401° F, price in the industrial sector.	Dollars per million Btu	FNICDZZ is independent. FNICDUS = FNICVUS / FNICBUS * 1000
FNICV	Petrochemical feedstocks, naphtha less than 401° F, expenditures in the industrial sector.	Million dollars	FNICVZZ = FNICBZZ * FNICDZZ / 1000 FNICVUS = ΣFNICVZZ
FOICD	Petrochemical feedstocks, other oils equal to or greater than 401° F, price in the industrial sector.	Dollars per million Btu	FOICDZZ is independent. FOICDUS = FOICVUS / FOICBUS * 1000
FOICV	Petrochemical feedstocks, other oils equal to or greater than 401° F, expenditures in industrial sector.	Million dollars	FOICVZZ = FOICBZZ * FOICDZZ / 1000 FOICVUS = ΣFOICVZZ
FSICD	Petrochemical feedstocks, still gas, price in the industrial sector (through 1985).	Dollars per million Btu	FSICDZZ is independent. FSICDUS = FSICVUS / FSICBUS * 1000
FSICV	Petrochemical feedstocks, still gas, expenditures in the industrial sector (through 1985).	Million dollars	FSICVZZ = FSICBZZ * FSICDZZ / 1000 FSICVUS = ΣFSICVZZ

Table A1. Price and Expenditure Variables (cont.)

MSN	Description	Unit	Formula
GDPRV	Current-dollar gross domestic product.	Million dollars	GDPRV is independent.
HLACD	Hydrocarbon gas liquids price in the transportation sector.	Dollars per million Btu	2010 forward: HLACDZZ = PQACDZZ HLACDUS = HLACVUS / HLACBUS * 1000 Before 2010: HLACDZZ is independent. HLACDUS = HLACVUS / HLACBUS * 1000
HLACV	Hydrocarbon gas liquids expenditures in the transportation sector.	Million dollars	HLACVZZ = HLACBZZ * HLACDZZ / 1000 HLACVUS = ΣHLACVZZ
HLCCD	Hydrocarbon gas liquids price in the commercial sector.	Dollars per million Btu	2010 forward: HLCCDZZ = PQCCDZZ HLCCDUS = HLCCVUS / HLCCBUS * 1000 Before 2010: HLCCDZZ is independent. HLCCDUS = HLCCVUS / HLCCBUS * 1000
HLCCV	Hydrocarbon gas liquids expenditures in the commercial sector.	Million dollars	HLCCVZZ = HLCCBZZ * HLCCDZZ / 1000 HLCCVUS = ΣHLCCVZZ
HLICD	Hydrocarbon gas liquids price in the industrial sector.	Dollars per million Btu	2010 forward: HLICD = HLICV / HLISB * 1000 Before 2010: HLICDZZ is independent. HLICDUS = HLICVUS / HLISBUS * 1000
HLICV	Hydrocarbon gas liquids expenditures in the industrial sector.	Million dollars	2010 forward: HLICVZZ = OHICVZZ + PQICVZZ HLICVUS = ΣHLICVZZ Before 2010: HLICVZZ = HLISBZZ * HLICDZZ HLICVUS = ΣHLICVZZ
HLRCD	Hydrocarbon gas liquids price in the residential sector.	Dollars per million Btu	2010 forward: HLRCDZZ = PQRCDZZ HLRCDUS = HLRCVUS / HLRCBUS * 1000 Before 2010: HLRCDZZ is independent. HLRCDUS = HLRCVUS / HLRCBUS * 1000
HLRCV	Hydrocarbon gas liquids expenditures in the residential sector.	Million dollars	HLRCVZZ = HLRCBZZ * HLRCDZZ / 1000 HLRCVUS = ΣHLRCVZZ

Table A1. Price and Expenditure Variables (cont.)

MSN	Description	Unit	Formula
HLTCD	Hydrocarbon gas liquids average price, all sectors.	Dollars per million Btu	HLTCD = HLTCV / HLSCB * 1000
HLTCV	Hydrocarbon gas liquids total expenditures.	Million dollars	HLTCVZZ = HLACVZZ + HLCCVZZ + HLICVZZ + HLRCVZZ HLTCVUS = ΣHLTCVZZ
HLTXD	Hydrocarbon gas liquids average price, all end-use sectors.	Dollars per million Btu	HLTXD = HLTXV / HLSCB * 1000
HLTXV	Hydrocarbon gas liquids total end-use expenditures.	Million dollars	HLTXVZZ = HLACVZZ + HLCCVZZ + HLICVZZ + HLRCVZZ HLTXVUS = ΣHLTXVZZ
JFACD	Jet fuel price in the transportation sector.	Dollars per million Btu	JFACDZZ is independent. JFACDUS = JFACVUS / JFACBUS * 1000
JFACV	Jet fuel expenditures in the transportation sector.	Million dollars	JFACVZZ = JFACBZZ * JFACDZZ / 1000 JFACVUS = ΣJFACVZZ
JFEUD	Jet fuel price in the electric power sector (1972–1982 only).	Dollars per million Btu	JFEUDZZ is independent.
JFEUV	Jet fuel expenditures in the electric power sector (1972–1982 only).	Million dollars	JFEUVZZ = JFEUBZZ * JFEUDZZ / 1000
JFTCD	Jet fuel average price, all sectors.	Dollars per million Btu	JFTCD = JFTCV / JFTCB * 1000
JFTCV	Jet fuel total expenditures.	Million dollars	JFTCVZZ = JFACVZZ + JFEUVZZ JFTCVUS = ΣJFTCVZZ
JFTXD	Jet fuel average price, all end-use sectors.	Dollars per million Btu	JFTXD = JFTXV / JFTXB * 1000
JFTXV	Jet fuel total end-use expenditures.	Million dollars	JFTXVZZ = JFACVZZ JFTXVUS = ΣJFTXVZZ
KSCCD	Kerosene price in the commercial sector.	Dollars per million Btu	KSCCDZZ is independent. KSCCDUS = KSCCVUS / KSCCBUS * 1000
KSCCV	Kerosene expenditures in the commercial sector.	Million dollars	KSCCVZZ = KSCCBZZ * KSCCDZZ / 1000 KSCCVUS = ΣKSCCVZZ
KSICD	Kerosene price in the industrial sector.	Dollars per million Btu	KSICDZZ = is independent. KSICDUS = KSICVUS / KSICBUS * 1000
KSICV	Kerosene expenditures in the industrial sector.	Million dollars	KSICVZZ = KSICBZZ * KSICDZZ / 1000 KSICVUS = ΣKSICVZZ

Table A1. Price and Expenditure Variables (cont.)

MSN	Description	Unit	Formula
KSRCD	Kerosene price in the residential sector.	Dollars per million Btu	KSRCDZZ = is independent. KSRCDUS = KSRCVUS / KSRCBUS * 1000
KSRCV	Kerosene expenditures in the residential sector.	Million dollars	KSRCVZZ = KSRCBZZ * KSRCDZZ / 1000 KSRCVUS = ΣKSRCVZZ
KSTCD	Kerosene average price, all sectors.	Dollars per million Btu	KSTCD = KSTCV / KSTCB * 1000
KSTCV	Kerosene total expenditures.	Million dollars	KSTCVZZ = KSCCVZZ + KSICVZZ + KSRCVZZ KSTCVUS = ΣKSTCVZZ
KSTXD	Kerosene average price, all end-use sectors.	Dollars per million Btu	KSTXD = KSTXV / KSTXB * 1000
KSTXV	Kerosene total end-use expenditures.	Million dollars	KSTXVZZ = KSCCVZZ + KSICVZZ + KSRCVZZ KSTXVUS = ΣKSTXVZZ
LUACD	Lubricants price in the transportation sector.	Dollars per million Btu	LUACDZZ is independent. LUACDUS = LUACVUS / LUACBUS * 1000
LUACV	Lubricants expenditures in the transportation sector.	Million dollars	LUACVZZ = LUACBZZ * LUACDZZ / 1000 LUACVUS = ΣLUACVZZ
LUICD	Lubricants price in the industrial sector.	Dollars per million Btu	LUICDZZ is independent. LUICDUS = LUICVUS / LUICBUS * 1000
LUICV	Lubricants expenditures in the industrial sector.	Million dollars	LUICVZZ = LUICBZZ * LUICDZZ / 1000 LUICVUS = ΣLUICVZZ
LUTCD	Lubricants average price, all sectors.	Dollars per million Btu	LUTCD = LUTCV / LUTCB * 1000
LUTCV	Lubricants total expenditures.	Million dollars	LUTCVZZ = LUACVZZ + LUICVZZ LUTCVUS = ΣLUTCVZZ
LUTXD	Lubricants average price, all end-use sectors.	Dollars per million Btu	LUTXD = LUTXV / LUTXB * 1000
LUTXV	Lubricants total end-use expenditures.	Million dollars	LUTXVZZ = LUACVZZ + LUICVZZ LUTXVUS = ΣLUTXVZZ
MGACD	Motor gasoline price in the transportation sector.	Dollars per million Btu	MGACDZZ is independent. MGACDUS = MGACVUS / MGACBUS * 1000
MGACV	Motor gasoline expenditures in the transportation sector.	Million dollars	MGACVZZ = MGACBZZ * MGACDZZ / 1000 MGACVUS = ΣMGACVZZ
MGCCD	Motor gasoline price in the commercial sector.	Dollars per million Btu	MGCCDZZ is independent. MGCCDUS = MGCCVUS / MGCCBUS * 1000
MGCCV	Motor gasoline expenditures in the commercial sector.	Million dollars	MGCCVZZ = MGCCBZZ * MGCCDZZ / 1000 MGCCVUS = ΣMGCCVZZ

Table A1. Price and Expenditure Variables (cont.)

MSN	Description	Unit	Formula
MGICD	Motor gasoline price in the industrial sector.	Dollars per million Btu	MGICDZZ is independent. MGICDUS = MGICVUS / MGICBUS * 1000
MGICV	Motor gasoline expenditures in the industrial sector.	Million dollars	MGICVZZ = MGICBZZ * MGICDZZ / 1000 MGICVUS = ΣMGICVZZ
MGTCD	Motor gasoline average price, all sectors.	Dollars per million Btu	MGTCD = MGTCV / MGTCB * 1000
MGTCV	Motor gasoline total expenditures.	Million dollars	MGTCVZZ = MGACVZZ + MGCCVZZ + MGICVZZ MGTCVUS = ΣMGTCVZZ
MGTPV	Motor gasoline expenditures per capita.	Million dollars	MGTPV = MGTCV / TPOPP * 1000
MGTXD	Motor gasoline average price, all end-use sectors.	Dollars per million Btu	MGTXD = MGTXV / MGTXB * 1000
MGTXV	Motor gasoline total end-use expenditures.	Million dollars	MGTXVZZ = MGACVZZ + MGCCVZZ + MGICVZZ MGTXVUS = ΣMGTXVZZ
MSICD	Miscellaneous petroleum products price in the industrial sector.	Dollars per million Btu	MSICDZZ is independent. MSICDUS = MSICVUS / MSICBUS * 1000
MSICV	Miscellaneous petroleum products expenditures in the industrial sector.	Million dollars	MSICVZZ = MSICBZZ * MSICDZZ / 1000 MSICVUS = ΣMSICVZZ
NGACD	Natural gas price in the transportation sector.	Dollars per million Btu	NGACDZZ is independent. NGACDUS = NGACVUS / NGASBUS * 1000
NGACV	Natural gas expenditures in the transportation sector.	Million dollars	NGACVZZ = NGASBZZ * NGACDZZ / 1000 NGACVUS = ΣNGACVZZ
NGCCD	Natural gas price in the commercial sector (including supplemental gaseous fuels).	Dollars per million Btu	NGCCDZZ is independent. NGCCDUS = NGCCVUS / NGCCBUS * 1000
NGCCV	Natural gas expenditures in the commercial sector (including supplemental gaseous fuels).	Million dollars	NGCCVZZ = NGCCBZZ * NGCCDZZ / 1000 NGCCVUS = ΣNGCCVZZ
NGEID	Natural gas price in the electric power sector (including supplemental gaseous fuels).	Dollars per million Btu	NGEIDZZ is independent. NGEIDUS = NGEIVUS / NGEIBUS * 1000
NGEIV	Natural gas expenditures in the electric power sector (including supplemental gaseous fuels).	Million dollars	NGEIVZZ = NGEIBZZ * NGEIDZZ / 1000 NGEIVUS = ΣNGEIVZZ
NGICD	Natural gas price in the industrial sector (including supplemental gaseous fuels).	Dollars per million Btu	NGICDZZ is independent. NGICDUS = NGICVZZ / NGISBZZ * 1000
NGICV	Natural gas expenditures in the industrial sector (including supplemental gaseous fuels).	Million dollars	NGICVZZ = NGISBZZ * NGICDZZ / 1000 NGICVUS = ΣNGICVZZ

Table A1. Price and Expenditure Variables (cont.)

MSN	Description	Unit	Formula
NGRCD	Natural gas price in the residential sector (including supplemental gaseous fuels).	Dollars per million Btu	NGRCDZZ is independent. NGRCDUS = NGRCVZZ / NGRCBZZ * 1000
NGRCV	Natural gas expenditures in the residential sector (including supplemental gaseous fuels).	Million dollars	NGRCVZZ = NGRCBZZ * NGRCDZZ / 1000 NGRCVUS = ΣNGRCVZZ
NGTCD	Natural gas average price, all sectors (including supplemental gaseous fuels).	Dollars per million Btu	NGTCD = NGTCV / NGSCB * 1000
NGTCV	Natural gas total expenditures (including supplemental gaseous fuels).	Million dollars	NGTCVZZ = NGACVZZ + NGCCVZZ + NGEIVZZ + NGICVZZ + NGRCVZZ NGTCVUS = ΣNGTCVZZ
NGTXD	Natural gas average price, all end-use sectors (including supplemental gaseous fuels).	Dollars per million Btu	NGTXD = (NGTXV / (NGSCB - NGEIB)) * 1000
NGTXV	Natural gas total end-use expenditures (including supplemental gaseous fuels).	Million dollars	NGTXVZZ = NGACVZZ + NGCCVZZ + NGICVZZ + NGRCVZZ NGTXVUS = ΣNGTXVZZ
NUEGD	Nuclear fuel price in the electric power sector.	Dollars per million Btu	NUEGDZZ is independent. NUEGDUS = NUEGVUS / NUEGBUS * 1000
NUEGV	Nuclear fuel expenditures in the electric power sector.	Million dollars	NUEGVZZ = NUEGBZZ * NUEGDZZ / 1000 NUEGVUS = ΣNUEGVZZ
NUETD	Nuclear fuel average price, all sectors.	Dollars per million Btu	NUETD = NUETV / NUETB * 1000
NUETV	Nuclear fuel total expenditures.	Million dollars	NUETVZZ = NUEGVZZ NUETVUS = ΣNUETVZZ
OHICD	Other hydrocarbon gas liquids (other than propane) price in the industrial sector.	Dollars per million Btu	OHICDZZ is independent.
OHICV	Other hydrocarbon gas liquids (other than propane) expenditures in the industrial sector.	Million dollars	OHICVZZ = OHICBZZ * OHICDZZ / 1000 OHICVUS = ΣOHICVZZ
OPICD	Other petroleum products average price in the industrial sector.	Dollars per million Btu	OPICD = OPICV / OPISB * 1000
OPICV	Other petroleum products total expenditures in the industrial sector.	Million dollars	OPICVZZ = FNICVZZ + FOICVZZ + FSICVZZ + MSICVZZ + SNICVZZ + WXICVZZ OPICVUS = ΣOPICVZZ
OPTCD	Other petroleum products average price, all sectors.	Dollars per million Btu	OPTCD = OPTCV / OPSCB * 1000

Table A1. Price and Expenditure Variables (cont.)

MSN	Description	Unit	Formula
OPTCV	Other petroleum products total expenditures.	Million dollars	OPTCVZZ = OPICVZZ OPTCVUS = ΣOPTCVZZ
OPTXD	Other petroleum products average price, all end-use sectors.	Dollars per million Btu	OPTXD = OPTXV / OPSCB * 1000
OPTXV	Other petroleum products total end-use expenditures.	Million dollars	OPTXVZZ = OPICVZZ OPTXVUS = ΣOPTXVZZ
P1ICD	Asphalt and road oil, kerosene, lubricants, petroleum coke, and "other petroleum products" average price in the industrial sector.	Dollars per million Btu	P1ICD = P1ICV / P1ISB * 1000
P1ICV	Asphalt and road oil, kerosene, lubricants, petroleum coke, and "other petroleum products" expenditures in the industrial sector.	Million dollars	P1ICVZZ = ARICVZZ + KSICVZZ + LUICVZZ + OPICVZZ + PCICVZZ P1ICVUS = ΣP1ICVZZ
P1TCD	Asphalt and road oil, aviation gasoline, kerosene, lubricants, petroleum coke, and "other petroleum products" average price, all sectors.	Dollars per million Btu	P1TCD = P1TCV / P1SCB * 1000
P1TCV	Asphalt and road oil, aviation gasoline, kerosene, lubricants, petroleum coke, and "other petroleum products" total expenditures.	Million dollars	P1TCVZZ = ARTCVZZ + AVTCVZZ + KSTCVZZ + LUTCVZZ + OPTCVZZ + PCTCVZZ P1TCVUS = ΣP1TCVZZ
P1TXD	Asphalt and road oil, aviation gasoline, kerosene, lubricants, petroleum coke, and "other petroleum products" average price, all end-use sectors.	Dollars per million Btu	P1TXD = (P1TXV / (P1SCB - PCEIB)) * 1000
P1TXV	Asphalt and road oil, aviation gasoline, kerosene, lubricants, petroleum coke, and "other petroleum products" total end-use expenditures.	Million dollars	P1TXVZZ = P1TCVZZ - PCEIVZZ P1TXVUS = ΣP1TXVZZ
PAACD	All petroleum products average price in the transportation sector.	Dollars per million Btu	PAACD = PAACV / PAACB * 1000
PAACV	All petroleum products total expenditures in the transportation sector.	Million dollars	PAACVZZ = AVACVZZ + DFACVZZ + HLACVZZ + JFACVZZ + LUACVZZ + MGACVZZ + RFACVZZ PAACVUS = ΣPAACVZZ
PACCD	All petroleum products average price in the commercial sector.	Dollars per million Btu	PACCD = PACCV / PACCB * 1000

Table A1. Price and Expenditure Variables (cont.)

MSN	Description	Unit	Formula
PACCV	All petroleum products total expenditures in the commercial sector.	Million dollars	PACCVZZ = DFCCVZZ + HLCCVZZ + KSCCVZZ + MGCCVZZ + PCCCVZZ + RFCCVZZ PACCVUS = ΣPACCVZZ
PAEID	All petroleum products average price in the electric power sector.	Dollars per million Btu	PAEID = PAEIV / PAEIB * 1000
PAEIV	All petroleum products total expenditures in the electric power sector.	Million dollars	PAEIVZZ = DKEIVZZ + PCEIVZZ + RFEIVZZ PAEIVUS = ΣPAEIVZZ
PAICD	All petroleum products average price in the industrial sector.	Dollars per million Btu	PAICD = PAICV / PAISB * 1000
PAICV	All petroleum products total expenditures in the industrial sector.	Million dollars	PAICVZZ = ARICVZZ + DFICVZZ + HLICVZZ + KSICVZZ + LUICVZZ + MGICVZZ + OPICVZZ + PCICVZZ + RFICVZZ PAICVUS = ΣPAICVZZ
PARCD	All petroleum products average price in the residential sector.	Dollars per million Btu	PARCD = PARCV / PARCB * 1000
PARCV	All petroleum products total expenditures in the residential sector.	Million dollars	PARCVZZ = DFRCVZZ + HLRCVZZ + KSRCVZZ PARCVUS = ΣPARCVZZ
PATCD	All petroleum products average price, all sectors.	Dollars per million Btu	PATCD = PATCV / PASCB * 1000
PATCV	All petroleum products total expenditures.	Million dollars	PATCVZZ = ARTCVZZ + AVTCVZZ + DFTCVZZ + HLTCVZZ + JFTCVZZ + KSTCVZZ + LUTCVZZ + MGTCVZZ + OPTCVZZ + PCTCVZZ + RFTCVZZ PATCVUS = ΣPATCVZZ
PATXD	All petroleum products average price, all end-use sectors.	Dollars per million Btu	PATXD = (PATXV / (PASCB - PAEIB)) * 1000
PATXV	All petroleum products total end-use expenditures.	Million dollars	PATXVZZ = ARTXVZZ + AVTXVZZ + DFTXVZZ + HLTXVZZ + JFTXVZZ + KSTXVZZ + LUTXVZZ + MGTXVZZ + OPTXVZZ + PCTXVZZ + RFTXVZZ PATXVUS = ΣPATXVZZ
PCCCD	Petroleum coke price in the commercial sector.	Dollars per million Btu	PCCCDZZ is independent. PCCCDUS = PCCCVUS / PCCCBUS * 1000
PCCCV	Petroleum coke expenditures in the commercial sector.	Million dollars	PCCCVZZ = PCCCBZZ * PCCCDZZ / 1000 PCCCVUS = ΣPCCCVZZ

Table A1. Price and Expenditure Variables (cont.)

MSN	Description	Unit	Formula
PCEID	Petroleum coke price in the electric power sector.	Dollars per million Btu	PCEIDZZ is independent. PCEIDUS = PCEIVUS / PCEIBUS * 1000
PCEIV	Petroleum coke expenditures in the electric power sector.	Million dollars	PCEIVZZ = PCEIBZZ * PCEIDZZ / 1000 PCEIVUS = ΣPCEIVZZ
PCI3D	Price of petroleum coke consumed by the industrial CHP and electricity-only plants.	Dollars per million Btu	PCI3DZZ is independent. PCI3DUS = PCI3VUS / PCI3BUS * 1000
PCI3V	Expenditures of petroleum coke consumed by the industrial CHP and electricity-only plants.	Million dollars	PCI3VZZ = PCI3BZZ * PCI3DZZ / 1000 PCI3VUS = ΣPCI3VZZ
PCICD	Petroleum coke price in the industrial sector.	Dollars per million Btu	PCICD = PCICV / PCISB * 1000
PCICV	Petroleum coke expenditures in the industrial sector.	Million dollars	PCICVZZ = PCI3VZZ + PCOCVZZ PCICVUS = ΣPCICVZZ
PCOCD	Petroleum coke price in the industrial sector other than for refinery use and CHP.	Dollars per million Btu	PCOCDZZ is independent. PCOCDUS = PCOCVUS / PCOCBUS * 1000
PCOCV	Petroleum coke expenditures in the industrial sector other than for refinery use and CHP.	Million dollars	PCOCVZZ = PCOCBZZ * PCOCDZZ / 1000 PCOCVUS = ΣPCOCVZZ
PCTCD	Petroleum coke average price, all sectors.	Dollars per million Btu	PCTCD = PCTCV / PCSCB * 1000
PCTCV	Petroleum coke total expenditures.	Million dollars	PCTCVZZ = PCCCVZZ + PCEIVZZ + PCICVZZ PCTCVUS = ΣPCTCVZZ
PCTXD	Petroleum coke average price, all end-use sectors.	Dollars per million Btu	PCTXD = PCTXV / (PCSCB - PCEIB) * 1000
PCTXV	Petroleum coke total end-use expenditures.	Million dollars	PCTXVZZ = PCCCVZZ + PCICVZZ PCTXVUS = ΣPCTXVZZ
PEACD	Primary energy average price in the transportation sector.	Dollars per million Btu	PEACD = PEACV / PEASB * 1000
PEACV	Primary energy total expenditures in the transportation sector.	Million dollars	1993 forward: PEACVZZ = CLACVZZ + NGACVZZ + PAACVZZ PEACVUS = ΣPEACVZZ Before 1993: PEACVZZ = CLACVZZ + EMACVZZ + NGACVZZ + PAACVZZ PEACVUS = ΣPEACVZZ
PECCD	Primary energy average price in the commercial sector.	Dollars per million Btu	PECCD = PECCV / PECSB * 1000

Table A1. Price and Expenditure Variables (cont.)

MSN	Description	Unit	Formula
PECCV	Primary energy total expenditures in the commercial sector.	Million dollars	1993 forward: PECCVZZ = CLCCVZZ + NGCCVZZ + PACCVZZ + WWCCVZZ PECCVUS = ΣPECCVZZ Before 1993: PECCVZZ = CLCCVZZ + EMCCVZZ + NGCCVZZ + PACCVZZ + WWCCVZZ PECCVUS = ΣPECCVZZ
PEEID	Primary energy average price in the electric power sector.	Dollars per million Btu	PEEID = PEEIV / PEEIB * 1000
PEEIV	Primary energy total expenditures in the electric power sector.	Million dollars	PEEIVZZ = CLEIVZZ + ELIMVZZ + NGEIVZZ + NUEGVZZ + PAEIVZZ + WWEIVZZ PEEIVUS = ΣPEEIVZZ
PEICD	Primary energy average price in the industrial sector.	Dollars per million Btu	PEICD = PEICV / PEISB * 1000
PEICV	Primary energy total expenditures in the industrial sector.	Million dollars	1993 forward: PEICVZZ = CLICVZZ + NGICVZZ + PAICVZZ + WWICVZZ PEICVUS = ΣPEICVZZ + CCNIVUS Before 1993: PEICVZZ = CLICVZZ + EMICVZZ + NGICVZZ + PAICVZZ + WWICVZZ PEICVUS = ΣPEICVZZ + CCNIVUS
PERCV	Primary energy total expenditures in the residential sector.	Million dollars	PERCVZZ = CLRCVZZ + NGRCVZZ + PARCVZZ + WDRCVZZ PERCVUS = ΣPERCVZZ
PESSD	Primary energy average price, all end-use sectors.	Dollars per million Btu	PESSD = PESSV / PESSB * 1000
PESSV	Primary energy total end-use expenditures.	Million dollars	PESSVZZ = PEACVZZ + PECCVZZ + PEICVZZ + PERCVZZ PESSVUS = ΣPESSVZZ + CCNIVUS
PETCD	Primary energy average price, all sectors.	Dollars per million Btu	PETCD = PETCV / PESCB * 1000
PETCV	Primary energy total expenditures.	Million dollars	PETCVZZ = PEEIVZZ + PESSVZZ PETCVUS = ΣPETCVZZ + CCNIVUS

Table A1. Price and Expenditure Variables (cont.)

MSN	Description	Unit	Formula
PETXD	Primary energy average price, all end-use sectors.	Dollars per million Btu	PETXD = (PETXV / (PESCB - PEEIB)) * 1000
PETXV	Primary energy total end-use expenditures.	Million dollars	PETXVZZ = PEACVZZ + PECCVZZ + PEICVZZ + PERCVZZ PETXVUS = ΣPETXVZZ + CCIMVUS - CCEXVUS
PQACD	Propane price in the transportation sector.	Dollars per million Btu	PQACDZZ is independent. PQACDUS = PQACVUS / PQACBUS * 1000
PQACV	Propane expenditures in the transportation sector.	Million dollars	PQACVZZ = PQACBZZ * PQACDZZ / 1000 PQACVUS = ΣPQACVZZ
PQCCD	Propane price in the commercial sector.	Dollars per million Btu	PQCCDZZ is independent. PQCCDUS = PQCCVUS / PQCCBUS * 1000
PQCCV	Propane expenditures in the commercial sector.	Million dollars	PQCCVZZ = PQCCBZZ * PQCCDZZ / 1000 PQCCVUS = ΣPQCCVZZ
PQICD	Propane price in the industrial sector.	Dollars per million Btu	PQICDZZ is independent. PQICDUS = PQICVUS / PQISBUS * 1000
PQICV	Propane expenditures in the industrial sector.	Million dollars	PQICVZZ = PQISBZZ * PQICDZZ / 1000 PQICVUS = ΣPQICVZZ
PQRCD	Propane price in the residential sector.	Dollars per million Btu	PQRCDZZ is independent. PQRCDUS = PQRCVUS / PQRCBUS * 1000
PQRCV	Propane expenditures in the residential sector.	Million dollars	PQRCVZZ = PQRCBZZ * PQRCDZZ / 1000 PQRCVUS = ΣPQRCVZZ
PQTCD	Propane average price, all sectors.	Dollars per million Btu	PQTCD = PQTCV / PQSCB * 1000
PQTCV	Propane total expenditures.	Million dollars	PQTCVZZ = PQACVZZ + PQCCVZZ + PQICVZZ + PQRCVZZ PQTCVUS = ΣPQTCVZZ
PQTXD	Propane average price, all end-use sectors.	Dollars per million Btu	PQTXD = PQTXV / PQSCB * 1000
PQTXV	Propane total end-use expenditures.	Million dollars	PQTXVZZ = PQACVZZ + PQCCVZZ + PQICVZZ + PQRCVZZ PQTXVUS = ΣPQTXVZZ
RFACD	Residual fuel oil price in the transportation sector.	Dollars per million Btu	RFACDZZ is independent. RFACDUS = RFACVUS / RFACBUS * 1000
RFACV	Residual fuel oil expenditures in the transportation sector.	Million dollars	RFACVZZ = RFACBZZ * RFACDZZ / 1000 RFACVUS = ΣRFACVZZ

Table A1. Price and Expenditure Variables (cont.)

MSN	Description	Unit	Formula
RFCCD	Residual fuel oil price in the commercial sector.	Dollars per million Btu	RFCCDZZ is independent. RFCCDUS = RFCCVUS / RFCCBUS * 1000
RFCCV	Residual fuel oil expenditures in the commercial sector.	Million dollars	RFCCVZZ = RFCCBZZ * RFCCDZZ / 1000 RFCCVUS = ΣRFCCVZZ
RFEID	Residual fuel oil price in the electric power sector.	Dollars per million Btu	RFEIDZZ is independent. RFEIDUS = RFEIVUS / RFEIBUS * 1000
RFEIV	Residual fuel oil expenditures in the electric power sector.	Million dollars	RFEIVZZ = RFEIBZZ * RFEIDZZ / 1000 RFEIVUS = ΣRFEIVZZ
RFICD	Residual fuel oil price in the industrial sector.	Dollars per million Btu	RFICDZZ is independent. RFICDUS = RFICVUS / RFISBUS * 1000
RFICV	Residual fuel oil expenditures in the industrial sector.	Million dollars	RFICVZZ = RFISBZZ * RFICDZZ / 1000 RFICVUS = ΣRFICVZZ
RFTCD	Residual fuel oil average price, all sectors.	Dollars per million Btu	RFTCD = RFTCV / RFSCB * 1000
RFTCV	Residual fuel oil total expenditures.	Million dollars	RFTCVZZ = RFACVZZ + RFCCVZZ + RFEIVZZ + RFICVZZ RFTCVUS = ΣRFTCVZZ
RFTXD	Residual fuel oil average price, all end-use sectors.	Dollars per million Btu	RFTXD = (RFTXV / (RFSCB - RFEIB)) * 1000
RFTXV	Residual fuel oil total end-use consumption.	Million dollars	RFTXVZZ = RFACVZZ + RFCCVZZ + RFICVZZ RFTXVUS = ΣRFTXVZZ
SNICD	Special naphthas price in the industrial sector.	Dollars per million Btu	SNICDZZ is independent. SNICDUS = SNICVUS / SNICBUS * 1000
SNICV	Special naphthas expenditures in the industrial sector.	Million dollars	SNICVZZ = SNICBZZ * SNICDZZ / 1000 SNICVUS = ΣSNICVZZ
TEACD	Total energy average price in the transportation.	Dollars per million Btu	TEACD = TEACV / TNASB * 1000
TEACV	Total energy expenditures in the transportation sector.	Million dollars	TEACVZZ = ESACVZZ + PEACVZZ TEACVUS = ΣTEACVZZ
TECCD	Total energy average price in the commercial sector.	Dollars per million Btu	TECCD = TECCV / TNCSB * 1000
TECCV	Total energy expenditures in the commercial sector.	Million dollars	TECCVZZ = ESCCVZZ + PECCVZZ TECCVUS = ΣTECCVZZ

Table A1. Price and Expenditure Variables (cont.)

MSN	Description	Unit	Formula
TEGDS	Energy expenditures as percent of current-dollar GDP.	Percent	TEGDS = TETCV / GDPRV * 100
TEICD	Total energy average price in the industrial sector.	Dollars per million Btu	TEICD = TEICV / TNISB * 1000
TEICV	Total energy expenditures in the industrial sector.	Million dollars	TEICVZZ = ESICVZZ + PEICVZZ TEICVUS = ΣTEICVZZ + CCNIVUS
TERCD	Total energy average price in the residential sector.	Dollars per million Btu	TERCD = TERCV / TNRSB * 1000
TERCV	Total energy expenditures in the residential sector.	Million dollars	TERCVZZ = ESRCVZZ + PERCVZZ TERCVUS = ΣTERCVZZ
TETCD	Total energy average price.	Dollars per million Btu	TETCD = TETCV / TNSCB * 1000
TETCV	Total energy total expenditures.	Million dollars	TETCV = ESTCV + PESSV
TETPV	Total energy expenditures per capita.	Dollars	TETPV = TETCV / TPOPP * 1000
TETXD	Total end-use energy average price.	Dollars per million Btu	TETXD = TETXV / TNSCB * 1000
TETXV	Total end-use energy expenditures.	Million dollars	TETXVZZ = TEACVZZ + TECCVZZ + TEICVZZ + TERCVZZ TETXVUS = ΣTETXVZZ
WDC3D	Wood price, commercial CHP and electricity-only plants, U.S. only.	Dollars per million Btu	WDC3DUS = WDC3VUS / WDCYBUS * 1000
WDC3V	Wood expenditures, commercial CHP and electricity-only plants.	Million dollars	WDC3VZZ = WDCYBZZ * WDEIDUS / 1000 WDC3VUS = ΣWDC3VZZ
WDC4D	Wood price, commercial sector other than CHP and electricity-only plants.	Dollars per million Btu	WDC4D is independent.
WDC4V	Wood expenditures, commercial sector other than CHP and electricity-only plants.	Million dollars	WDC4VZZ = WDCVBZZ * WDC4DZZ / 1000 WDC4VUS = ΣWDC4VZZ
WDEID	Wood price in the electric power sector, U.S. only.	Dollars per million Btu	WDEIDUS is independent.
WDI3D	Wood price, industrial CHP and electricity-only plants, U.S. only.	Dollars per million Btu	WDI3DUS = WDI3VUS / WDIYBUS * 1000
WDI3V	Wood expenditures, industrial CHP and electricity-only plants.	Million dollars	WDI3VZZ = WDIYBZZ * WDEIDUS / 1000 WDI3VUS = ΣWDI3VZZ

Table A1. Price and Expenditure Variables (cont.)

MSN	Description	Unit	Formula
WDRCD	Wood price in the residential sector.	Dollars per million Btu	WDRCDZZ is independent. WDRCDUS = WDRCVUS / WDRSBUS * 1000
WDRCV	Wood expenditures in the residential sector.	Million dollars	WDRCVZZ = WDRSBZZ * WDRCDZZ / 1000 WDRCVUS = ΣWDRCVZZ
WSC3D	Waste price, commercial CHP and electricity-only plants, U.S. only.	Dollars per million Btu	WSC3DUS = WSC3VUS / WSCYBUS * 1000
WSC3V	Waste expenditures, commercial CHP and electricity-only plants.	Million dollars	WSC3VZZ = WSCYBZZ * WSEIDUS /1000 WSC3VUS = ΣWSC3VZZ
WSEID	Waste price in the electric power sector, U.S. only.	Dollars per million Btu	WSEIDUS is independent.
WSI3D	Waste price, industrial CHP and electricity-only plants, U.S. only.	Dollars per million Btu	WSI3DUS = WSI3VUS / WSIYBUS * 1000
WSI3V	Waste expenditures, industrial CHP and electricity-only plants.	Million dollars	WSI3VZZ = WSIYBZZ * WSEIDUS /1000 WSI3VUS = ΣWSI3VZZ
WWCCD	Wood and waste price in the commercial sector.	Dollars per million Btu	WWCCD = WWCCV / WWCSB * 1000
WWCCV	Wood and waste expenditures in the commercial sector.	Million dollars	WWCCVZZ = WDC3VZZ + WDC4VZZ + WSC3VZZ WWCCVUS = ΣWWCCVZZ
WWEID	Wood and waste price in the electric power sector.	Dollars per million Btu	WWEIDZZ is independent. WWEIDUS = WWEIVUS / WWEIBUS * 1000
WWEIV	Wood and waste expenditures in the electric power sector.	Million dollars	WWEIVZZ = WWEIBZZ * WWEIDZZ / 1000 WWEIVUS = ΣWWEIVZZ
WWI4D	Wood and waste prices in the industrial sector other than CHP and electricity-only plants.	Dollars per million Btu	WWI4DZZ is independent. WWI4DUS = WWI4VUS / WWIVBUS
WWI4V	Wood and waste expenditures in the industrial sector other than CHP and electricity-only plants.	Million dollars	WWI4VZZ = WWIVBZZ * WWI4DZZ / 1000 WWI4VUS = ΣWWI4VZZ
WWICD	Wood and waste price in the industrial sector.	Dollars per million Btu	WWICD = WWICV / WWISB * 1000
WWICV	Wood and waste expenditures in the industrial sector.	Million dollars	WWICVZZ = WDI3VZZ + WSI3VZZ + WWI4VZZ WWICVUS = ΣWWICVZZ
WWSSV	Wood and waste total end-use expenditures.	Million dollars	WWSSVZZ = WDRCVZZ + WWCCVZZ + WWICVZZ WWSSVUS = ΣWWSSVZZ

Table A1. Price and Expenditure Variables (cont.)

MSN	Description	Unit	Formula
WWTCD	Wood and waste average price, all sectors.	Dollars per million Btu	WWTCD = WWTCV / WWSCB * 1000
WWTCV	Wood and waste total expenditures.	Million dollars	WWTCVZZ = WWEIVZZ + WWSSVZZ WWTCVUS = ΣWWTCVZZ
WWTXD	Wood and waste average price, all end-use sectors.	Dollars per million Btu	WWTXD = WWTXV / WWSSB * 1000
WWTXV	Wood and waste total end-use expenditures.	Million dollars	WWTXVZZ = WDRCVZZ + WWCCVZZ + WWICVZZ WWTXVUS = ΣWWTXVZZ
WXICD	Waxes price in the industrial sector.	Dollars per million Btu	WXICDZZ is independent. WXICDUS = WXICVUS / WXICBUS * 1000
WXICV	Waxes expenditures in the industrial sector.	Million dollars	WXICVZZ = WXICBZZ * WXICDZZ / 1000 WXICVUS = ΣWXICVZZ

Table A2. Consumption Adjustment Variables

MSN	Description	Unit	Formula
BDLCB	Energy losses and co-products from the production of biodiesel.	Billion Btu	SEDS consumption variable
BFLCB	Energy losses and co-products from the production of biofuels.	Billion Btu	SEDS consumption variable
CLISB	Coal consumed by the industrial sector excluding refinery fuel.	Billion Btu	CLISB = CLKCB + CLOSB
CLOCB	Coal consumed by industrial users other than coke plants.	Billion Btu	SEDS consumption variable
CLOCK	Factor for converting coal consumed by industrial users other than coke plants from physical units to Btu.	Million Btu per short ton	SEDS consumption variable
CLOSB	Coal consumed by the industrial sector other than coke plants excluding refinery fuel.	Billion Btu	CLOSB = CLOCB - CLRFB
CLRFB	Coal consumed as refinery fuel.	Billion Btu	CLRFBZZ = CLRFPZZ * CLOCKZZ
CLRFP	Coal consumed as refinery fuel.	Thousand short tons	2013 forward: CLRFPZZ is independent. 1981 through 2012: CLRFPZZ = (CLOCPZZ / CLOCPPZ) * CLRFPPZ for states belonging to a specific PADD, PZ. Before 1981: CLRFPZZ is independent for selected states. CLRFPZZ = (CLOCPZZ / CLOCPGZ) * CLRFPGZ for states belonging to a specific state group, GZ.
CLSCB	Coal total consumption adjusted for process fuel.	Billion Btu	CLSCB = CLACB + CLCCB + CLEIB + CLISB + CLRCB
CLXCB	Coal consumed by all sectors excluding coke plants and refineries.	Billion Btu	CLXCB = CLACB + CLCCB + CLEIB + CLOSB + CLRCB
DFISB	Distillate fuel oil consumed by the industrial sector excluding refinery fuel.	Billion Btu	DFISB = DFICB - DFRFB
DFRFB	Distillate fuel oil consumed as refinery fuel.	Billion Btu	DFRFBZZ = DFRFPZZ * DFTCKUS

Table A2. Consumption Adjustment Variables (cont.)

MSN	Description	Unit	Formula
DFRFP	Distillate fuel oil consumed as refinery fuel.	Thousand barrels	2013 forward: DFRFPZZ is independent. 1981 through 2012: DFRFPZZ = (DFICPZZ / DFICPPZ) * DFRFPPZ for states belonging to a specific PADD, PZ. Before 1981: DFRFPZZ is independent for selected states. DFRFPZZ = (DFICPZZ / DFICPGZ) * DFRFPGZ for states belonging to a specific state group, GZ.
DFSCB	Distillate fuel oil total consumption adjusted for process fuel.	Billion Btu	DFSCB = DFACB + DFCCB + DFEIB + DFISB + DFRCB
EMLCB	Energy losses and co-products from the production of fuel ethanol.	Billion Btu	SEDS consumption variable
ESISB	Electricity consumed by the industrial sector excluding refinery use.	Billion Btu	ESISB = ESICB - ESRFB
ESRFB	Electricity consumed by refineries.	Billion Btu	ESRFBZZ = ESRFPZZ * 3.412
ESRFP	Electricity consumed by refineries.	Million kilowatthours	2013 forward: ESRFPZZ is independent. 1981 through 2012: ESRFPZZ = (ESICPZZ / ESICPPZ) * ESRFPPZ for states belonging to a specific PADD, PZ. Before 1981: ESRFPZZ is independent for selected states. ESRFPZZ = (ESICPZZ / ESICPGZ) * ESRFPGZ for states belonging to a specific state group, GZ.
ESSCB	Electricity total consumption adjusted for process fuel.	Billion Btu	ESSCB = ESACB + ESCCB + ESISB + ESRCB
HLISB	Hydrocarbon gas liquids consumed by the industrial sector adjusted for processed fuel.	Billion Btu	HLISB = HLICB - HLRFB
HLRFB	Hydrocarbon gas liquids consumed as refinery fuel and intermediate products.	Billion Btu	2010 forward: HLRFBZZ = PQRFBZZ Before 2010: HLRFBZZ is independent.

Table A2. Consumption Adjustment Variables (cont.)

MSN	Description	Unit	Formula
HLRFP	Hydrocarbon gas liquids consumed as refinery fuel and intermediate products.	Thousand barrels	2010 forward: HLRFPZZ = PQRFPZZ Before 2010: HLRFPZZ is independent.
HLSCB	Hydrocarbon gas liquids total consumption adjusted for processed fuel.	Billion Btu	HLSCB = HLACB + HLCCB + HLISB + HLRCB
NGASB	Natural gas consumed by the transportation sector adjusted for process fuel.	Billion Btu	NGASB = NGACB - NGPZB
NGISB	Natural gas consumed by the industrial sector excluding refinery fuel and lease and plant fuels (including supplemental gaseous fuels).	Billion Btu	NGISB = NGICB - NGRFB - NGLPB
NGLPB	Natural gas consumed as lease and plant fuel.	Billion Btu	SEDS consumption variable
NGPZB	Natural gas for pipeline and distribution use.	Billion Btu	SEDS consumption variable
NGRFB	Natural gas consumed as refinery fuel (including supplemental gaseous fuels).	Billion Btu	NGRFBZZ = NGRFPZZ * NGTXKZZ
NGRFP	Natural gas consumed as refinery fuel (including supplemental gaseous fuels).	Million cubic feet	2013 forward: NGRFPZZ is independent. 1981 through 2012: NGRFPZZ = (NGICPZZ / NGICPPZ) * NGRFPPZ for states belonging to a specific PADD, PZ. Before 1981: NGRFPZZ is independent for selected states. NGRFPZZ = (NGICPZZ / NGICPGZ) * NGRFPGZ for states belonging to a specific state group, GZ.
NGSCB	Natural gas total consumption adjusted for process fuel.	Billion Btu	NGSCB = NGASB + NGCCB + NGEIB + NGISB + NGRCB
NGTXK	Factor for converting natural gas consumed by all sectors other than electric power from physical units to Btu.	Thousand Btu per cubic foot	SEDS consumption variable
OHICB	Other hydrocarbon gas liquids (other than propane) consumed by the industrial sector.	Billion Btu	OHICB = HLICB - PQICB
OPISB	Other petroleum products consumed by the industrial sector excluding refinery fuel and intermediate products.	Billion Btu	OPISB = FNICB + FOICB + FSICB + MSICB + SNICB + WXICB

Table A2. Consumption Adjustment Variables (cont.)

MSN	Description	Unit	Formula
OPSCB	Other petroleum products total consumption adjusted for refinery fuel and intermediate products.	Billion Btu	OPSCB = OPISB
P1ISB	Asphalt and road oil, kerosene, lubricants, petroleum coke, and other petroleum products consumed by the industrial sector excluding refinery fuel and intermediate products.	Billion Btu	P1ISB = ARICB + KSICB + LUICB + OPISB + PCISB
P1SCB	Asphalt and road oil, kerosene, lubricants, petroleum coke, and other petroleum products total consumption adjusted for process fuel and intermediate products.	Billion Btu	P1SCB = ARTCB + AVTCB + KSTCB + LUTCB + OPSCB + PCSCB
P5RFB	Other petroleum products consumed as refinery fuel and intermediate products.	Billion Btu	P5RFB = ABICB + MBICB + SGICB + UOICB
PAISB	All petroleum products consumed by the industrial sector excluding process fuel and intermediate products.	Billion Btu	PAISB = ARICB + DFISB + HLISB + KSICB + LUICB + MGICB + OPISB + PCISB + RFISB
PASCB	All petroleum products total consumption adjusted for process fuel and intermediate products.	Billion Btu	PASCB = ARTCB + AVTCB + DFSCB + HLSCB + JFTCB + KSTCB + LUTCB + MGTCB + OPSCB + PCSCB + RFSCB
PCISB	Petroleum coke consumed by the industrial sector excluding refinery fuel.	Billion Btu	PCISB = PCICB - PCRFB
PCRFB	Petroleum coke consumed as refinery fuel.	Billion Btu	SEDS consumption variable
PCSCB	Petroleum coke total consumption adjusted for process fuel.	Billion Btu	PCSCB = PCCCB + PCEIB + PCISB
PEASB	Primary energy consumed by the transportation sector, adjusted for process fuel, intermediate products, and fuels with no direct cost.	Billion Btu	1993 forward: PEASB = CLACB + NGASB + PAACB Before 1993: PEASB = CLACB + EMACB + NGASB + PAACB
PECSB	Primary energy consumed by the commercial sector, adjusted for process fuel, intermediate products, and fuels with no direct cost.	Billion Btu	1993 forward: PECSB = CLCCB + NGCCB + PACCB + WWCSB Before 1993: PECSB = CLCCB + EMCCB + NGCCB + PACCB+ WWCSB

Table A2. Consumption Adjustment Variables (cont.)

MSN	Description	Unit	Formula
PEISB	Primary energy consumed by the industrial sector, adjusted for process fuel, intermediate products, and fuels with no direct cost.	Billion Btu	1993 forward: PEISBZZ = CLISBZZ + NGISBZZ + PAISBZZ + WWISBZZ PEISBUS = ΣPEISBZZ + CCNIBUS Before 1993: PEISBZZ = CLISBZZ + EMICBZZ + NGISBZZ + PAISBZZ+ WWISBZZ PEISBUS = ΣPEISBZZ + CCNIBUS
PERSB	Primary energy consumed by the residential sector, adjusted for process fuel, intermediate products, and fuels with no direct cost.	Billion Btu	PERSB = CLRCB + NGRCB + PARCB + WDRSB
PESCB	Primary energy total consumption, adjusted for process fuel, intermediate products, and fuels with no direct cost.	Billion Btu	PESCB = PEEIB + PESSB
PESSB	Primary energy total end-use consumption, adjusted for process fuel, intermediate products, and fuels with no direct cost.	Billion Btu	PESSB = PEASB + PECSB + PEISB + PERSB
PQISB	Propane consumed by the industrial sector excluding refinery fuel.	Billion Btu	PQISB = PQICB - PQRFB
PQRFB	Propane consumed as refinery fuel.	Billion Btu	PQRFBZZ = PQRFPZZ * 3.841
PQRFP	Propane consumed as refinery fuel.	Thousand barrels	PQRFPZZ is independent.
RFISB	Residual fuel oil consumed by the industrial sector excluding refinery fuel.	Billion Btu	RFISB = RFICB - RFRFB
RFRFB	Residual fuel oil consumed as refinery fuel.	Billion Btu	RFRFBZZ = RFRFPZZ * 6.287 RFRFBUS = ΣRFRFBZZ
RFRFP	Residual fuel oil consumed as refinery fuel.	Thousand barrels	2013 forward: RFRFPZZ is independent. 1981 through 2012: RFRFPZZ = (RFICPZZ / RFICPPZ) * RFRFPPZ for states belonging to a specific PADD, PZ. Before 1981: RFRFPZZ is independent for selected states. RFRFPZZ = (RFICPZZ / RFICPGZ) * RFRFPGZ for states belonging to a specific state group, GZ.

Table A2. Consumption Adjustment Variables (cont.)

MSN	Description	Unit	Formula
RFSCB	Residential fuel oil total consumption excluding process fuel.	Billion Btu	RFSCB = RFACB + RFCCB + RFEIB + RFISB
SFINB	Supplemental gaseous fuels consumed by the industrial sector.	Billion Btu	SEDS consumption variable
TEPFB	Total energy used as process fuel and other consumption that has no direct fuel costs.	Billion Btu	TEPFB = BDLCB + COICB + EMLCB + GECCB + GEICB + GERCB + HYCCB + HYICB + LOTCB + NGLPB + NGPZB + SOCCB + SOICB + SORCB + TERFB + WDRXB + WWCXB + WWIXB + WYCCB + WYICB
TERFB	Total energy used as refinery fuel and intermediate products.	Billion Btu	TERFB = CLRFB + DFRFB + ESRFB + HLRFB + NGRFB + P5RFB + PCRFB + RFRFB
TNASB	Total end-use energy consumed by the transportation sector, adjusted for process fuel, intermediate products, and fuels with no direct cost.	Billion Btu	TNASB = ESACB + PEASB
TNCSB	Total end-use energy consumed by the commercial sector, adjusted for process fuel, intermediate products, and fuels with no direct cost.	Billion Btu	TNCSB = ESCCB + PECSB
TNISB	Total end-use energy consumed by the industrial sector, adjusted for process fuel, intermediate products, and fuels with no direct cost.	Billion Btu	TNISB = ESISB + PEISB
TNRSB	Total end-use energy consumed by the residential sector, adjusted for process fuel, intermediate products, and fuels with no direct cost.	Billion Btu	TNRSB = ESRCB + PERSB
TNSCB	Total end-use energy consumption, adjusted for process fuel, intermediate products, and fuels with no direct cost.	Billion Btu	TNSCB = ESSCB + PESSB
WDCUB	Wood consumed by the commercial sector other than CHP and electricity-only plants, at no cost.	Billion Btu	WDCUB = WDC4B - WDCVB

Table A2. Consumption Adjustment Variables (cont.)

MSN	Description	Unit	Formula
WDCVB	Wood consumed by the commercial sector other than CHP and electricity-only plants, costed.	Billion Btu	WDCVBZZ = WDC4BZZ * WDPHSZZ WDCVBUS = ΣWDCVBZZ
WDCYB	Wood consumed by commercial CHP and electricity-only plants, costed.	Billion Btu	WDCYBZZ = WDC3BZZ * WDEISUS WDCYBUS = ΣWDCYBZZ
WDCZB	Wood consumed by commercial CHP and electricity-only plants, at no cost.	Billion Btu	WDCZB = WDC3B - WDCYB
WDEIS	Purchased wood as a percentage of all wood consumed by the electric power sector, U.S. only.	Percent	WDEISUS is independent.
WDIYB	Wood consumed by industrial CHP and electricity-only plants, costed.	Billion Btu	WDIYBZZ = WDI3BZZ * WDEISUS WDIYBUS = ΣWDIYBZZ
WDIZB	Wood consumed by industrial CHP and electricity-only plants, at no cost.	Billion Btu	WDIZB = WDI3B - WDIYB
WDPHS	Purchased wood as a percentage of all wood consumed by the residential sector.	Percent	WDPHS is independent.
WDRSB	Wood consumed by the residential sector, costed.	Billion Btu	WDRSBZZ = WDRCBZZ * WDPHSZZ WDRSBUS = ΣWDRSBZZ
WDRXB	Wood consumed by the residential sector, at no cost.	Billion Btu	WDRXB = WDRCB - WDRSB
WSCYB	Waste consumed by commercial CHP and electricity-only plants, costed.	Billion Btu	WSCYBZZ = WSC3BZZ * WSEISUS WSCYBUS = ΣWSCYBZZ
WSCZB	Waste consumed by commercial CHP and electricity-only plants, at no cost.	Billion Btu	WSCZB = WSC3B - WSCYB
WSEIS	Purchased waste as a percentage of all waste consumed by the electric power sector, U.S. only.	Percent	WSEISUS is independent.
WSIYB	Waste consumed by industrial CHP and electricity-only plants, costed.	Billion Btu	WSIYBZZ = WSI3BZZ * WSEISUS WSIYBUS = ΣWSIYBZZ
WSIZB	Waste consumed by industrial CHP and electricity-only plants, at no cost.	Billion Btu	WSIZB = WSI3B - WSIYB
WWCSB	Wood and waste consumed by the commercial sector, costed.	Billion Btu	WWCSB = WDCVB + WDCYB + WSCYB

Table A2. Consumption Adjustment Variables (cont.)

MSN	Description	Unit	Formula
WWCXB	Wood and waste consumed by the commercial sector, at no cost.	Billion Btu	WWCXB = WDCUB + WDCZB + WSCZB
WWISB	Wood and waste consumed by the industrial sector, costed.	Billion Btu	WWISB = WDIYB + WSIYB + WWIVB
WWIUB	Wood and waste consumed by the industrial sector other than CHP and electricity-only plants, at no cost.	Billion Btu	WWIUB = WWI4B - WWIVB
WWIVB	Wood and waste consumed by the industrial sector other than CHP and electricity-only plants, costed.	Billion Btu	WWIVB is independent.
WWIXB	Wood and waste consumed by the industrial sector, at no cost.	Billion Btu	WWIXB = WDIZB + WSIZB + WWIUB
WWSCB	Wood and waste total consumption, adjusted for fuels with no direct cost.	Billion Btu	WWSCB = WWSSB + WWEIB
WWSSB	Wood and waste consumed by the end-use sectors, costed.	Billion Btu	WWSSB = WDRSB + WWCSB + WWISB