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:



If the consumption variables in a formula are taken directly from the SEDS consumption module (and not adjusted for expenditure calculations), they are listed in Appendix A of the consumption technical notes (https://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 energy-consumption), CC (commercial consumption), IC (industrial consumption), AC (transportation consumption), and EI (electric power sector consumption).



See Section 1 of the SEDS technical notes for explanation of the fivecharacter 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

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
BMCAS	Biomass generating units capacity factor.	Percent	BMCASZZ is independent. BMCASUS is independent.
BTCAS	Battery storage generating units usage factor.	Percent	BTCASZZ is independent. BTCASUS is independent.
BTGBP	Battery storage units net summer capacity in all sectors.	Thousand kilowatts	BTGBPZZ is independent. BTGBPUS is independent.
BTVHN	Battery electric vehicle (BEV) light-duty stocks.	Thousands of registered vehicles	BTVHNZZ is independent. BTVHNUS is independent.
CCEXDUS	Coal coke exports average price, United States.	Dollars per million Btu	CCEXDUS is independent.
CCEXVUS	Coal coke exports expenditures, United States.	Million dollars	CCEXVUS = CCEXBUS * CCEXDUS / 1000
CCIMDUS	Coal coke imports average price, United States.	Dollars per million Btu	CCIMDUS is independent.

MSN	Description	Unit	Formula
CCIMVUS	Coal coke imports expenditures, United States.	Million dollars	CCIMVUS = CCIMBUS * CCIMDUS / 1000
CCNIVUS	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
CLCAS	Coal generating units capacity factor.	Percent	CLCASZZ is independent. CLCASUS is independent.
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 = $\Sigma$ CLEIVZZ
CLGBP	Coal generating units net summer capacity in all sectors.	Thousand kilowatts	CLGBPZZ is independent. CLGBPUS is independent.
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 = $\Sigma$ CLICVZZ
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

A P

P E N

D I X

MSN	Description	Unit	Formula
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
CLXCV	Coal expenditures for all sectors excluding coke plants and refineries.	Million dollars	CLXCVZZ = CLACVZZ + CLCCVZZ + CLEIVZZ + CLOCVZZ + CLRCVZZ CLXCVUS = ΣCLXCVZZ
CYCAS	Natural gas combined cycle generating units capacity factor.	Percent	CYCASZZ is independent. CYCASUS is independent.
DFACD	Distillate fuel oil price in the transportation sector.	Dollars per million Btu	DFACDZZ is independent. DFACDUS = DFACVUS / DFASBUS * 1000
DFACV	Distillate fuel oil expenditures in the transportation sector.	Million dollars	DFACVZZ = DFASBZZ * DFACDZZ / 1000 DFACVUS = ΣDFACVZZ
DFCCD	Distillate fuel oil price in the commercial sector.	Dollars per million Btu	DFCCDZZ is independent. DFCCDUS = DFCCVUS / DFCSBUS * 1000
DFCCV	Distillate fuel oil expenditures in the commercial sector.	Million dollars	DFCCVZZ = DFCSBZZ * 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

MSN	Description	Unit	Formula
DFRCD	Distillate fuel oil price in the residential sector.	Dollars per million Btu	DFRCDZZ is independent. DFRCDUS = DFRCVUS / DFRSBUS * 1000
DFRCV	Distillate fuel oil expenditures in the residential sector.	Million dollars	DFRCVZZ = DFRSBZZ * 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
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
ELGBP	Total (all fuels) electric generating units net summer capacity in all sectors.	Thousand kilowatts	ELGBPZZ is independent. ELGBPUS is independent.
ELIMD	Electricity imports average price.	Dollars per million Btu	ELIMD is independent.
ELIMV	Electricity imports expenditures.	Million dollars	ELIMVZZ = ELIMBZZ * ELIMDZZ / 1000 ELIMVUS = ΣELIMVZZ
ELVHN	Total electric vehicle (EV) light-duty stocks.	Thousands of registered vehicles	ELVHNZZ = BTVHNZZ + PHVHNZZ
ELVHS	Electric vehicle (EV) share of total light-duty vehicles.	Percent	ELVHSZZ = ELVHNZZ / LDVHNZZ * 100

P P E N D I X

MSN	Description	Unit	Formula
EMACV	Fuel ethanol, excluding denaturant, expenditures in the transportation sector (through 1992).	Million dollars	EMACVZZ = EMACBZZ * MGACDZZ / 1000 EMACVUS = ΣEMACVZZ
EMCCV	Fuel ethanol, excluding denaturant, expenditures in the commercial sector (through 1992).	Million dollars	EMCCVZZ = EMCCBZZ * MGCCDZZ / 1000 EMCCVUS = ΣEMCCVZZ
EMICV	Fuel ethanol, excluding denaturant, expenditures in the industrial sector (through 1992).	Million dollars	EMICVZZ = EMICBZZ * MGACDZZ / 1000 EMICVUS = $\Sigma$ EMICVZZ
EMTCV	Fuel ethanol, excluding denaturant, total expenditures (through 1992).	Million dollars	EMTCVZZ = EMACVZZ + EMCCVZZ + EMICVZZ EMTCVUS = $\Sigma$ EMTCVZZ
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
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 = $\Sigma$ ESICVZZ
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

MSN	Description	Unit	Formula
ESTXV	Electricity total end-use expenditures.	Million dollars	ESTXVZZ = ESACVZZ + ESCCVZZ + ESICVZZ + ESRCVZZ ESTXVUS = ΣESTXVZZ
FFGBP	Fossil fuel total generating units net summer capacity in all sectors.	Thousand kilowatts	FFGBPZZ is independent. FFGBPUS is independent.
EV0CN	Legacy charging ports for electric vehicles.	Number	EV0CNZZ is independent. EV0CNUS is independent.
EV1CN	Level 1 charging ports for electric vehicles.	Number	EV1CNZZ is independent. EV1CNUS is independent.
EV2CN	Level 2 charging ports for electric vehicles.	Number	EV2CNZZ is independent. EV2CNUS is independent.
EV2CR	Level 2 charging ports per location.	Number	EV2CRZZ is independent. EV2CRUS is independent.
EVCHN	Total charging ports for electric vehicles.	Number	EVCHNZZ is independent. EVCHNUS is independent.
EVCHP	Total electric vehicle charging locations.	Number	EVCHPZZ is independent. EVCHPUS is independent.
EVDCN	DC fast charging ports for electric vehicles.	Number	EVDCNZZ is independent. EVDCNUS is independent.
EVDCR	DC fast charging ports per location.	Number	EVDCRZZ is independent. EVDCRUS is independent.
EVNNP	Electric vehicle charging locations with both networked and non-networked ports.	Number	EVNNPZZ is independent. EVNNPUS is independent.
EVNOP	Electric vehicle charging locations with non- networked ports only.	Number	EVNOPZZ is independent. EVNOPUS is independent.
EVNTP	Electric vehicle charging locations with networked ports only.	Number	EVNTPZZ is independent. EVNTPUS is independent.
EVPPP	Electric vehicle charging locations with both public and private ports.	Number	EVPPPZZ is independent. EVPPPUS is independent.
EVPUP	Electric vehicle charging locations with public ports only.	Number	EVPUPZZ is independent. EVPUPUS is independent.
EVPVP	Electric vehicle charging locations with private ports only.	Number	EVPVPZZ is independent. EVPVPUS is independent.

A P P

E N

D I X

APPENDIX

MSN	Description	Unit	Formula
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 = $\Sigma$ FNICVZZ
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 = $\Sigma$ FOICVZZ
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
GDPRV	Current-dollar gross domestic product (GDP).	Million dollars	GDPRVZZ is independent. GDPRVUS is independent.
GDPRX	Real gross domestic product (GDP).	Million chained (2017) dollars	GDPRXZZ is independent. GDPRXUS is independent.
GECAS	Geothermal generating units capacity factor.	Percent	GECASZZ is independent. GECASUS is independent.
GEGBP	Geothermal generating units net summer capacity in all sectors.	Thousand kilowatts	GEGBPZZ is independent. GEGBPUS is independent.
HLACD	Hydrocarbon gas liquids price in the transportation sector.	Dollars per million Btu	Before 2010: HLACDZZ is independent. HLACDUS = HLACVUS / HLACBUS * 1000 2010 forward: HLACDZZ = PQACDZZ HLACDUS = HLACVUS / HLACBUS * 1000
HLACV	Hydrocarbon gas liquids expenditures in the transportation sector.	Million dollars	HLACVZZ = HLACBZZ * HLACDZZ / 1000 HLACVUS = $\Sigma$ HLACVZZ

MSN	Description	Unit	Formula
HLCCD	Hydrocarbon gas liquids price in the commercial sector.	Dollars per million Btu	Before 2010: HLCCDZZ is independent. HLCCDUS = HLCCVUS / HLCCBUS * 1000 2010 forward: HLCCDZZ = PQCCDZZ 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	Before 2010: HLICDZZ is independent. HLICDUS = HLICVUS / HLISBUS * 1000 2010 forward: HLICD = HLICV / HLISB * 1000
HLICV	Hydrocarbon gas liquids expenditures in the industrial sector.	Million dollars	Before 2010: HLICVZZ = HLISBZZ * HLICDZZ HLICVUS = ΣHLICVZZ 2010 forward: HLICVZZ = OHICVZZ + PQICVZZ HLICVUS = ΣHLICVZZ
HLRCD	Hydrocarbon gas liquids price in the residential sector.	Dollars per million Btu	Before 2010: HLRCDZZ is independent. HLRCDUS = HLRCVUS / HLRCBUS * 1000 2010 forward: HLRCDZZ = PQRCDZZ HLRCDUS = HLRCVUS / HLRCBUS * 1000
HLRCV	Hydrocarbon gas liquids expenditures in the residential sector.	Million dollars	HLRCVZZ = HLRCBZZ * HLRCDZZ / 1000 HLRCVUS = ΣHLRCVZZ
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

A P P

E N

D I X

APPENDIX

MSN	Description	Unit	Formula
HLTXV	Hydrocarbon gas liquids total end-use expenditures.	Million dollars	HLTXVZZ = HLACVZZ + HLCCVZZ + HLICVZZ + HLRCVZZ HLTXVUS = ΣHLTXVZZ
HPCAS	Hydroelectric pumped storage generating units usage factor.	Percent	HPCASZZ is independent. HPCASUS is independent.
HPGBP	Hydroelectric pumped storage generating units net summer capacity in all sectors.	Thousand kilowatts	HPGBPZZ is independent. HPGBPUS is independent.
HVCAS	Conventional hydroelectric generating units capacity factor.	Percent	HVCASZZ is independent. HVCASUS is independent.
HVGBP	Conventional hydroelectric power generating units net summer capacity in all sectors.	Thousand kilowatts	HVGBPZZ is independent. HVGBPUS is independent.
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. JFEUDUS = JFEUVUS / JFEUBZZ * 1000
JFEUV	Jet fuel expenditures in the electric power sector (1972–1982 only).	Million dollars	JFEUVZZ = JFEUBZZ * JFEUDZZ / 1000 JFEUVUS = ΣJFEUVZZ
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 = $\Sigma$ JFTCVZZ
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	$JFTXVZZ = JFACVZZ$ $JFTXVUS = \Sigma JFTXVZZ$
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

MSN	Description	Unit	Formula
KSICV	Kerosene expenditures in the industrial sector.	Million dollars	KSICVZZ = KSICBZZ * KSICDZZ / 1000 KSICVUS = ΣKSICVZZ
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
LDVHN	Total (all fuels) vehicle light-duty stocks.	Thousands of registered vehicles	LDVHNZZ is independent. LDVHNUS is independent.
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 = $\Sigma$ LUTCVZZ
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

A P P

E N

D I X

A P P E N D I X

MSN	Description	Unit	Formula
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
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

MSN	Description	Unit	Formula
NGGBP	Natural gas generating units net summer capacity in all sectors.	Thousand kilowatts	NGGBPZZ is independent. NGGBPUS is independent.
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
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
NTCAS	Natural gas turbine generating units capacity factor.	Percent	NTCASZZ is independent. NTCASUS is independent.
NUCAS	Nuclear generating units capacity factor.	Percent	NUCASZZ is independent. NUCASUS is independent.
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
NUGBP	Nuclear generating units net summer capacity in all sectors.	Thousand kilowatts	NUGBPZZ is independent. NUGBPUS is independent.

A P P

E N

D I X

MSN	Description	Unit	Formula
NYCAS	Natural gas conventional steam generating units capacity factor.	Percent	NYCASZZ is independent. NYCASUS is independent.
OHICD	Other hydrocarbon gas liquids (other than propane) price in the industrial sector.	Dollars per million Btu	OHICDZZ is independent. OHICDUS = OHICVUS / OHICBZZ * 1000
OHICV	Other hydrocarbon gas liquids (other than propane) expenditures in the industrial sector.	Million dollars	OHICVZZ = OHICBZZ * OHICDZZ / 1000 OHICVUS = ΣOHICVZZ
OJGBP	Other gases generating units net summer capacity in all sectors.	Thousand kilowatts	OJGBPZZ is independent. OJGBPUS is independent.
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
OPTCV	Other petroleum products total expenditures.	Million dollars	$OPTCVZZ = OPICVZZ$ $OPTCVUS = \Sigma OPTCVZZ$
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
OTGBP	Other generating units net summer capacity in all sectors.	Thousand kilowatts	OTGBPZZ is independent. OTGBPUS is independent.
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

MSN	Description	Unit	Formula
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 / PAASB * 1000
PAACV	All petroleum products total expenditures in the transportation sector.	Million dollars	PAACVZZ = AVACVZZ + DFACVZZ + HLACVZZ + JFACVZZ + LUACVZZ + MGACVZZ + RFACVZZ PAACVUS = ΣPAACVZZ
PACAS	Petroleum generating units capacity factor.	Percent	PACASZZ is independent. PACASUS is independent.
PACCD	All petroleum products average price in the commercial sector.	Dollars per million Btu	PACCD = PACCV / PACCB * 1000
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
PAGBP	Petroleum generating units net summer capacity in all sectors.	Thousand kilowatts	PAGBPZZ is independent. PAGBPUS is independent.
PAICD	All petroleum products average price in the industrial sector.	Dollars per million Btu	PAICD = PAICV / PAISB * 1000

MSN	Description	Unit	Formula
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 = $\Sigma$ PCCCVZZ
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

A P P E

MSN	Description	Unit	Formula
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	Before 1993: PEACVZZ = CLACVZZ + EMACVZZ + NGACVZZ + PAACVZZ PEACVUS = $\Sigma$ PEACVZZ 1993 forward: PEACVZZ = CLACVZZ + NGACVZZ + PAACVZZ PEACVUS = $\Sigma$ PEACVZZ
PECCD	Primary energy average price in the commercial sector.	Dollars per million Btu	PECCD = PECCV / PECSB * 1000
PECCV	Primary energy total expenditures in the commercial sector.	Million dollars	Before 1993: PECCVZZ = CLCCVZZ + EMCCVZZ + NGCCVZZ + PACCVZZ + WWCCVZZ PECCVUS = $\Sigma$ PECCVZZ 1993 forward: PECCVZZ = CLCCVZZ + NGCCVZZ + PACCVZZ + WWCCVZZ PECCVUS = $\Sigma$ PECCVZZ
PEEIB	Primary energy consumed by the electric power sector.	Billion Btu	PEEIBZZ = CLEIBZZ + NGEIBZZ + NUEGBZZ + PAEIBZZ + WWEIBZZ + ELIMBZZ PEEIBUS = ΣPEEIBZZ

A P

P E N

D I X

P P E N D I X

MSN	Description	Unit	Formula
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	Before 1993: PEICVZZ = CLICVZZ + EMICVZZ + NGICVZZ + PAICVZZ + WWICVZZ PEICVUS = $\Sigma$ PEICVZZ + CCNIVUS 1993 forward: PEICVZZ = CLICVZZ + NGICVZZ + PAICVZZ + WWICVZZ PEICVUS = $\Sigma$ PEICVZZ + CCNIVUS
PERCD	Primary energy average price in the residential sector.	Dollars per million Btu	PERCD = PERCV / PERSB * 1000
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 = $\Sigma$ PETCVZZ + CCNIVUS
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 + CCNIVUS

MSN	Description	Unit	Formula
PHVHN	Plug-in hybrid electric vehicle (PHEV) light- duty stocks.	Thousands of registered vehicles	PHVHNZZ is independent. PHVHNUS is independent.
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
REGBP	Renewable energy total generating units net summer capacity in all sectors.	Thousand kilowatts	REGBPZZ is independent. REGBPUS is independent.
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

A P

P E N

D I X

A P P E N D I X

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 expenditures.	Million dollars	RFTXVZZ = RFACVZZ + RFCCVZZ + RFICVZZ RFTXVUS = ΣRFTXVZZ
SHCAS	Solar thermal generating units capacity factor.	Percent	SHCASZZ is independent. SHCASUS is independent.
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
SOGBP	Solar generating units net summer capacity in all sectors.	Thousand kilowatts	SOGBPZZ is independent. SOGBPUS is independent.
SPCAS	Solar photovoltaic generating units capacity factor.	Percent	SPCASZZ is independent. SPCASUS is independent.
TEACD	Total energy average price in the transportation sector.	Dollars per million Btu	TEACD = TEACV / TNASB * 1000

MSN	Description	Unit	Formula
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
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 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	TETXV = TEACV + TECCV + TEICV + TERCV
TPOPP	Resident population including Armed Forces.	Thousand population	TPOPPZZ is independent. TPOPPUS is independent.
WDC3DUS	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

Α

P P E N D I X

MSN	Description	Unit	Formula
WDEIDUS	Wood price in the electric power sector, U.S. only.	Dollars per million Btu	WDEIDUS is independent.
WDGBP	Wood generating units net summer capacity in all sectors.	Thousand kilowatts	WDGBPZZ is independent. WDGBPUS is independent.
WDI3DUS	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 = $\Sigma$ WDI3VZZ
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
WSC3DUS	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
WSEIDUS	Waste price in the electric power sector, U.S. only.	Dollars per million Btu	WSEIDUS is independent.
WSGBP	Waste generating units net summer capacity in all sectors.	Thousand kilowatts	WSGBPZZ is independent. WSGBPUS is independent.
WSI3DUS	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

MSN	Description	Unit	Formula
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 = $\Sigma$ WWICVZZ
WWSSV	Wood and waste total end-use expenditures.	Million dollars	WWSSVZZ = WDRCVZZ + WWCCVZZ + WWICVZZ WWSSVUS = ΣWWSSVZZ
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 = $\Sigma$ WWTCVZZ
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
WYCAS	Wind generating units capacity factor.	Percent	WYCASZZ is independent. WYCASUS is independent.
WYGBP	Wind generating units net summer capacity in all sectors.	Thousand kilowatts	WYGBPZZ is independent. WYGBPUS is independent.
ZWCDP	Cooling degree days (CDD).	Cooling degree days	ZWCDPZZ is independent. ZWCDPUS is independent.
ZWHDP	Heating degree days (HDD).	Heating degree days	ZWHDPZZ is independent. ZWHDPUS is independent.

A P

P E N

D I X

MSN	Description	Unit	Formula
B1AUB	Renewable diesel product supplied portion to the transportation sector.	Billion Btu	SEDS consumption variable
B1SUB	Renewable diesel product supplied.	Billion Btu	SEDS consumption variable
BDAUB	Biodiesel product supplied portion to the transportation sector.	Billion Btu	SEDS consumption variable
BDCUB	Biodiesel product supplied portion to the commercial sector.	Billion Btu	SEDS consumption variable
BDRUB	Biodiesel product supplied portion to the residential sector.	Billion Btu	SEDS consumption variable
BDLCB	Energy losses and co-products from the production of biodiesel.	Billion Btu	SEDS consumption variable
BDSUB	Biodiesel product supplied.	Billion Btu	SEDS consumption variable
BFLCB	Energy losses and co-products from the production of biofuels.	Billion Btu	SEDS consumption variable
BOSUBUS	Other biofuels product supplied for the United States.	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 CLRFBUS = ΣCLRFBZZ

MSN	Description	Unit	Formula
CLRFP	Coal consumed as refinery fuel.	Thousand short tons	Before 1981: CLRFPZZ is independent for selected states. CLRFPZZ = (CLOCPZZ / CLOCPGZ) * CLRFPGZ for states belonging to a specific state group, GZ. 1981 through 2012: CLRFPZZ = (CLOCPZZ / CLOCPPZ) * CLRFPPZ for states belonging to a specific PADD, PZ. 2013 forward: CLRFPZZ is independent.
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
DFASB	Distillate fuel oil consumed by the transportation sector including biofuels product supplied.	Billion Btu	Before 2021: DFASBZZ = DFACBZZ DFASBUS = ΣDFASBZZ 2021 forward: DFASBZZ = DFACBZZ + BDAUBZZ + B1AUBZZ DFASBUS = ΣDFASBZZ
DFCSB	Distillate fuel oil consumed by the commercial sector including biofuels product supplied.	Billion Btu	Before 2021: DFCSBZZ = DFCCBZZ DFCSBUS = $\Sigma$ DFCSBZZ 2021 forward: DFCSBZZ = DFCCBZZ + BDCUBZZ DFCSBUS = $\Sigma$ DFCSBZZ
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 DFRFBUS = ΣDFRFBZZ

MSN	Description	Unit	Formula
DFRFP	Distillate fuel oil consumed as refinery fuel.	Thousand barrels	Before 1981: DFRFPZZ is independent for selected states. DFRFPZZ = (DFICPZZ / DFICPGZ) * DFRFPGZ for states belonging to a specific state group, GZ. 1981 through 2012: DFRFPZZ = (DFICPZZ / DFICPPZ) * DFRFPPZ for states belonging to a specific PADD, PZ. 2013 forward: DFRFPZZ is independent.
DFRSB	Distillate fuel oil consumed by the residential sector including biofuels product supplied.	Billion Btu	Before 2021: DFRSBZZ = DFRCBZZ DFRSBUS = ΣDFRSBZZ 2021 forward: DFRSBZZ = DFRCBZZ + BDRUBZZ DFRSBUS = ΣDFRSBZZ
DFSCB	Distillate fuel oil total consumption adjusted for process fuel.	Billion Btu	DFSCBZZ = DFASBZZ + DFCSBZZ + DFEIBZZ + DFISBZZ + DFRSBZZ DFSCBUS = ΣDFSCBZZ
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 ESRFBUS = ΣESRFBZZ
ESRFP	Electricity consumed by refineries.	Million kilowatthours	Before 1981: ESRFPZZ is independent for selected states. ESRFPZZ = (ESICPZZ / ESICPGZ) * ESRFPGZ for states belonging to a specific state group, GZ. 1981 through 2012: ESRFPZZ = (ESICPZZ / ESICPPZ) * ESRFPPZ for states belonging to a specific PADD, PZ. 2013 forward: ESRFPZZ is independent.
ESSCB	Electricity total consumption adjusted for process fuel.	Billion Btu	ESSCB = ESACB + ESCCB + ESISB + ESRCB

P P E N D I X

MSN	Description	Unit	Formula
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	Before 2010: HLRFBZZ is independent. HLRFBUS = ΣHLRFBZZ 2010 forward: HLRFBZZ = PQRFBZZ HLRFBUS = ΣHLRFBZZ
HLRFP	Hydrocarbon gas liquids consumed as refinery fuel and intermediate products.	Thousand barrels	Before 2010: HLRFPZZ is independent. 2010 forward: HLRFPZZ = PQRFPZZ
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 NGRFBUS = ΣNGRFBZZ
NGRFP	Natural gas consumed as refinery fuel (including supplemental gaseous fuels).	Million cubic feet	Before 1981: NGRFPZZ is independent for selected states. NGRFPZZ = (NGICPZZ / NGICPGZ) * NGRFPGZ for states belonging to a specific state group, GZ. 1981 through 2012: NGRFPZZ = (NGICPZZ / NGICPPZ) * NGRFPPZ for states belonging to a specific PADD, PZ. 2013 forward: NGRFPZZ is independent.
NGSCB	Natural gas total consumption adjusted for process fuel.	Billion Btu	NGSCB = NGASB + NGCCB + NGEIB + NGISB + NGRCB

A P

P E N

D I X

MSN	Description	Unit	Formula
NGTXK	Factor for converting natural gas used by end- use sectors 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
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	P5RFBZZ = ABICBZZ + MBICBZZ + SGICBZZ + UOICBZZ P5RFBUS = ABICBUS + BOSUBUS + MBICBUS + SGICBUS + UOICBUS
PAASB	All petroleum products consumed by the transportation sector excluding other biofuels product supplied for the United States.	Billion Btu	PAASBZZ = PAACBZZ PAASBUS = PAACBUS - BOSUBUS
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

P P E N D I X

MSN	Description	Unit	Formula
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	Before 1993: PEASB = CLACB + EMACB + NGASB + PAACB 1993 forward: PEASB = CLACB + NGASB + PAASB
PECSB	Primary energy consumed by the commercial sector, adjusted for process fuel, intermediate products, and fuels with no direct cost.	Billion Btu	Before 1993: PECSB = CLCCB + EMCCB + NGCCB + PACCB+ WWCSB 1993 forward: PECSB = CLCCB + NGCCB + PACCB + WWCSB
PEISB	Primary energy consumed by the industrial sector, adjusted for process fuel, intermediate products, and fuels with no direct cost.	Billion Btu	Before 1993: PEISBZZ = CLISBZZ + EMICBZZ + NGISBZZ + PAISBZZ+ WWISBZZ PEISBUS = ΣPEISBZZ + CCNIBUS 1993 forward: PEISBZZ = CLISBZZ + 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 PQRFBUS = ΣPQRFBZZ
PQRFP	Propane consumed as refinery fuel.	Thousand barrels	PQRFPZZ is independent.
PQSCB	Propane total consumption adjusted for process fuel.	Billion Btu	PQSCB = PQTCB - PQRFB

A P

P E N

D I X

MSN	Description	Unit	Formula
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	Before 1981: RFRFPZZ is independent for selected states. RFRFPZZ = (RFICPZZ / RFICPGZ) * RFRFPGZ for states belonging to a specific state group, GZ. 1981 through 2012: RFRFPZZ = (RFICPZZ / RFICPPZ) * RFRFPPZ for states belonging to a specific PADD, PZ. 2013 forward: RFRFPZZ is independent.
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	TEPFBZZ = BDLCBZZ + COICBZZ + EMLCBZZ + GECCBZZ + GEICBZZ + GERCBZZ + HYCCBZZ + HYICBZZ + LOTCBZZ + NGLPBZZ + NGPZBZZ + SOCCBZZ + SOICBZZ + SORCBZZ + TERFBZZ + WDRXBZZ + WWCXBZZ + WWIXBZZ + WYCCBZZ + WYICBZZ TEPFBUS = BDLCBUS + COICBUS + EMLCBUS + GECCBUS + GEICBUS + COICBUS + EMLCBUS + GECCBUS + GEICBUS + GERCBUS + HYCCBUS + HYICBUS + LOTCBUS + NGLPBUS + NGPZBUS + SOCCBUS + SOICBUS + SORCBUS + TERFBUS + WDRXBUS + WWCXBUS + WWIXBUS + WYCCBUS + WYICBUS
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

A P P E N D I X

MSN	Description	Unit	Formula
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
WDCVB	Wood consumed by the commercial sector other than CHP and electricity-only plants, costed.	Billion Btu	WDCVBZZ = WDC4BZZ * WDPHSZZ WDCVBUS = $\Sigma$ WDCVBZZ
WDCYB	Wood consumed by commercial CHP and electricity-only plants, costed.	Billion Btu	WDCYBZZ = WDC3BZZ * WDEISUS WDCYBUS = $\Sigma$ WDCYBZZ
WDCZB	Wood consumed by commercial CHP and electricity-only plants, at no cost.	Billion Btu	WDCZB = WDC3B - WDCYB
WDEISUS	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.

A P

A P P E N D I X

WDRSB Wood consumed by the residential sector, Billion Btu WDRSBZZ = WDRCBZZ * WDPHSZ   costed. WDRSBUS = ΣWDRSBZZ	2
WDRXBWood consumed by the residential sector, at no cost.Billion BtuWDRXB = WDRCB - WDRSB	
WSCYB Waste consumed by commercial CHP and electricity-only plants, costed. Billion Btu WSCYBZZ = WSC3BZZ * WSEISUS WSCYBUS = ΣWSCYBZZ	
WSCZBWaste consumed by commercial CHP and electricity-only plants, at no cost.Billion BtuWSCZB = WSC3B - WSCYB	
WSEISUS Purchased waste as a percentage of all waste Percent WSEISUS is independent. consumed by the electric power sector, U.S. only.	
WSIYBWaste consumed by industrial CHP and electricity-only plants, costed.Billion BtuWSIYBZZ = WSI3BZZ * WSEISUS WSIYBUS = ΣWSIYBZZ	
WSIZBWaste consumed by industrial CHP and electricity-only plants, at no cost.Billion BtuWSIZB = WSI3B - WSIYB	
WWCSB Wood and waste consumed by the commercial Billion Btu WWCSB = WDCVB + WDCYB + WS   sector, costed. Sector Sector Sector	CYB
WWCXB   Wood and waste consumed by the commercial   Billion Btu   WWCXB = WDCUB + WDCZB + WS     sector, at no cost.   Sector   Sector   Sector   Sector	ZB
WWISB Wood and waste consumed by the industrial Billion Btu WWISB = WDIYB + WSIYB + WWIVE   sector, costed. Sector Sector Sector	
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 Billion Btu WWIXB = WDIZB + WSIZB + WWIUE   sector, at no cost. Sector Sector Sector	
WWSCBWood and waste total consumption, adjustedBillion BtuWWSCB = WWSSB + WWEIBfor fuels with no direct cost.	
WWSSB Wood and waste consumed by the end-use sectors, costed. Billion Btu WWSSB = WDRSB + WWCSB + WW	ISB