
Glossary

Aquifer Storage Field: A sub-surface facility for storing natural gas consisting of water-bearing sands topped by an impermeable cap rock.

Balancing Item: Represents differences between the sum of the components of natural gas supply and the sum of the components of natural gas disposition. These differences may be due to quantities lost or to the effects of data-reporting problems. Reporting problems include differences due to the net result of conversions of flow data metered at varying temperature and pressure bases and converted to a standard temperature and pressure base; the effect of variations in company accounting and billing practices; differences between billing cycle and calendar period time frames; and imbalances resulting from the merger of data-reporting systems that vary in scope, format, definitions, and type of respondents.

Biomass Gas: A medium Btu gas containing methane and carbon dioxide, resulting from the action of microorganisms on organic materials such as a landfill.

British Thermal Unit (Btu): The quantity of heat required to raise the temperature of 1 pound of water by 1 degree Fahrenheit at the temperature at which water has its greatest density (approximately 39 degrees Fahrenheit).

Btu Per Cubic Foot: The total heating value, expressed in Btu, produced by the combustion, at constant pressure, of the amount of the gas that would occupy a volume of 1 cubic foot at a temperature of 60 degrees F if saturated with water vapor and under a pressure equivalent to that of 30 inches of mercury at 32 degrees F and under standard gravitational force (980.665 cm. per sec. squared) with air of the same temperature and pressure as the gas, when the products of combustion are cooled to the initial temperature of gas and air when the water formed by combustion is condensed to the liquid state. (Sometimes called gross heating value or total heating value.)

Citygate: A point or measuring station at which a distributing gas utility receives gas from a natural gas pipeline company or transmission system.

Coalbed Methane Well Gas: Methane is generated during coal formation and is contained in the coal microstructure. Typical recovery entails pumping water out of the coal to allow the gas to escape. Methane is the principal component of natural gas. Coal bed methane can be added to natural gas pipelines without any special treatment.

Coke Oven Gas: The mixture of permanent gases produced by the carbonization of coal in a coke oven at temperatures in excess of 1,000 degrees Celsius.

Commercial Consumption: Gas used by nonmanufacturing establishments or agencies primarily engaged in the sale of goods or services. Included are such establishments as hotels, restaurants, wholesale and retail stores and other service enterprises; gas used by local, State, and Federal agencies engaged in nonmanufacturing activities.

Compressed Natural Gas (CNG): Natural gas which is comprised primarily of methane, compressed to a pressure at or above 2,400 pounds per square inch and stored in special high-pressure containers. It is used as a fuel for natural gas powered vehicles.

Consumption: Natural gas used as lease fuel, plant fuel, for use by pipeline and distribution systems, and by end-users (including residential, commercial, industrial, electric power, and vehicle fuel).

Customer Choice: The right of customers to purchase energy from a supplier other than their traditional supplier or from more than one seller in the retail market.

Delivered: The physical transfer of natural, synthetic, and/or supplemental gas from facilities operated by the responding company to facilities operated by others or to consumers.

Depleted Storage Field: A sub-surface natural geological reservoir, usually a depleted oil or gas field, used for storing natural gas.

Dry Natural Gas: Natural gas which remains after: 1) the liquefiable hydrocarbon portion has been removed from the gas stream (i.e., gas after lease, field, and/or plant separation); and 2) any volumes of nonhydrocarbon gases have been removed where they occur in sufficient quantity to render the gas unmarketable. (Note: Dry natural gas is also known as consumer-grade natural gas. The parameters for measurement are cubic feet at 60 degrees Fahrenheit and 14.73 pounds per square inch absolute.)

Dry Natural Gas Production: The process of producing consumer-grade natural gas. Natural gas withdrawn from reservoirs is reduced by volumes used at the production (lease) site and by processing losses. Volumes used at the production site include (1) the volume returned to reservoirs in cycling, repressuring of oil reservoirs, and conservation operations; and (2) gas vented and flared. Processing losses include (1) nonhydrocarbon gases (e.g., water vapor, carbon dioxide, helium, hydrogen sulfide, and nitrogen) removed from the gas stream; and (2) gas converted to liquid form, such as lease condensate and plant liquids. Volumes of dry gas withdrawn from gas storage reservoirs are not considered part of production. Dry natural gas production equals marketed production less natural gas plant liquids production.

Electric Power Consumption: Gas used as fuel in the electric power sector.

Electric Power Sector: An energy-consuming sector that consists of electricity only and combined heat and power (CHP) plants whose primary business is to sell electricity, or electricity and heat, to the public – i.e., North American Industry Classification System 22 plants.

Electric Utility: A corporation, person, agency, authority, or other legal entity or instrumentality aligned with distribution facilities for delivery of electric energy for use primarily by the public. Included are investor-owned electric utilities, municipal and State utilities, Federal electric utilities, and rural electric cooperatives. A few entities that are tariff based and corporately aligned with companies that own distribution facilities are also included. (Note: Due to the issuance of FERC Order 888 that required traditional electric utilities to functionally unbundled their generation, transmission, and distribution operations, “electric utility” currently has inconsistent interpretations from State to State.)

Exports: Natural gas deliveries out of the Continental United States (including Alaska) to foreign countries.

Flared: Gas disposed of by burning in flares usually at the production sites or at gas processing plants.

Gas Condensate Well: A gas well that produces from a gas reservoir containing considerable quantities of liquid hydrocarbons in the pentane and heavier range generally described as “condensate.”

Gas Well: A well completed for the production of natural gas from one or more gas zones or reservoirs. Such wells contain no completions for the production of crude oil. Gas wells are defined by EIA using a gas/oil ratio (GOR) of 6000 cf/bbl: Wells with a GOR greater than 6000 are labeled gas wells while a GOR of 6000 or less are labeled oil wells

Gross Withdrawals: Full well stream volume, including all natural gas plant liquid and nonhydrocarbon gases, but excluding lease condensate. Also includes amounts delivered as royalty payments or consumed in field operations.

Heating Season: Typically begins in October and runs through the end of March.

Heating Value: The average number of British thermal units per cubic foot of natural gas as determined from tests of fuel samples.

Imports: Natural gas received in the Continental United States (including Alaska) from a foreign country.

Industrial Consumption: Natural gas used for heat, power, or chemical feedstock by manufacturing establishments or those engaged in mining or other mineral extraction as well as consumers in agriculture, forestry, and fisheries. Also included in industrial consumption are generators that produce electricity and/or useful thermal output primarily to support the above-mentioned industrial activities.

Intransit Deliveries: Redeliveries to a foreign country of foreign gas received for transportation across U.S. Territory and deliveries of U.S. gas to a foreign country for transportation across its territory and redelivery to the United States.

Intransit Receipts: Receipts of foreign gas for transportation across U.S. territory and redelivery to a foreign country and redeliveries to the United States of U.S. gas transported across foreign territory.

Lease Fuel: Natural gas used in well, field, and/or lease operations (such as gas used in drilling operations, heaters, dehydrators, and field compressors) and as fuel in natural gas processing plants.

Liquefied Natural Gas (LNG): Natural gas (primarily methane) that has been liquefied by reducing its temperature to -260 degrees Fahrenheit at atmospheric pressure.

Local Distribution Company (LDC): A legal entity engaged primarily in the retail sale and/or delivery of natural gas through a distribution system that includes mainlines (that is, pipelines designed to carry large volumes of gas, usually located under roads or other major right-of-ways) and laterals (that is, pipelines of smaller diameter that connect the end user to the mainline). Since the restructuring of the gas industry, the sale of gas and/or delivery arrangements may be handled by other agents, such as producers, brokers, and marketers that are referred to as "non-LDC."

Manufactured Gas: A gas obtained by destructive distillation of coal, or by the thermal decomposition of oil, or by the reaction of steam passing through a bed of heated coal or coke. Examples are coal gases, coke oven gases, producer gas, blast furnace gas, blue (water) gas, carbureted water gas. Btu content varies widely.

Marine Terminal: Point of import or export for tankers carrying liquefied natural gas (LNG).

Marketed Production: Gross withdrawals less gas used for repressuring quantities vented and flared, and nonhydrocarbon gases removed in treating or processing operations. Includes all quantities of gas used in field and processing plant operations.

Natural Gas: A gaseous mixture of hydrocarbon compounds, the primary one being methane. Note: The Energy Information Administration measures wet natural gas and its two sources of production, associated/dissolved natural gas and nonassociated natural gas, and dry natural gas, which is produced from wet natural gas.

Natural Gas Marketer: A company that arranges purchases and sales of natural gas. Unlike pipeline companies or local distribution companies, a marketer does not own physical assets commonly used in the supply of natural gas, such as pipelines or storage fields. A marketer may be an affiliate of another company, such as a local distribution

company, natural gas pipeline, or producer, but it operates independently of other segments of the company. In States with residential choice programs, marketers serve as alternative suppliers to residential users of natural gas, which is delivered by a local distribution company.

Natural Gas Plant Liquids (NGPL) Production: The extraction of gas plant liquids constituents such as ethane, propane, normal butane, isobutane, and natural gasoline, sometimes referred to as extraction loss. Usually reported in barrels or gallons, but may be reported in cubic feet for purposes of comparison with dry natural gas volumes.

Nominal Dollars: A measure used to express nominal price.

Nominal Price: The price paid for a product or service at the time of the transaction. Nominal prices are those that have not been adjusted to remove the effect of changes in the purchasing power of the dollar; they reflect buying power in the year in which the transaction occurred.

Nonhydrocarbon Gases: Typical nonhydrocarbon gases that may be present in reservoir natural gas, such as carbon dioxide, helium, hydrogen sulfide, and nitrogen.

Nonutility Power Producers: A corporation, person, agency, authority, or other legal entity or instrumentality that owns or operates facilities for electric generation and is not an electric utility. Nonutility power producers include qualifying cogenerators, qualifying small power producers, and other nonutility generators (including independent power producers). Nonutility power producers are without a designated franchised service area and do not file forms listed in the Code of Federal Regulations, Title 18, Part 141.

Offshore Reserves and Production: Unless otherwise indicated, reserves and production that are in either State or Federal domains, located seaward of the coastline.

Oil Well (Casinghead) Gas: Natural gas produced along with crude oil from oil wells. It contains either dissolved or associated gas or both. Oil wells are defined by EIA using a gas/oil ratio (GOR) of 6000 cf/bbl: Wells with a GOR of 6000 or less are labeled oil wells and wells with a GOR greater than 6000 are labeled gas wells.

Onsystem Sales: Sales to customers where the delivery point is a point on, or directly interconnected with, a transportation, storage and/or distribution system operated by the reporting company.

Outer Continental Shelf: Offshore Federal domain.

Pipeline: A continuous pipe conduit, complete with such equipment as valves, compressor stations, communications systems, and meters, for transporting natural and/or supplemental gas from one point to another, usually from a point in or beyond the producing field or processing plant to another pipeline or to points of utilization. Also refers to a company operating such facilities.

Pipeline Fuel: Gas consumed in the operation of pipelines, primarily in compressors.

Plant Fuel: Natural gas used as fuel in natural gas processing plants.

Propane-air: A mixture of propane and air resulting in a gaseous fuel suitable for pipeline distribution.

Receipts: Deliveries of fuel to an electric plant; purchases of fuel; all revenues received by an exporter for the reported quantity exported.

Refill Season: Typically begins in April and lasts through the end of September.

Refinery Gas: Noncondensate gas collected in petroleum refineries.

Repressuring: The injection of gas into oil or gas formations to effect greater ultimate recovery.

Residential Consumption: Gas used in private dwellings, including apartments, for heating, air-conditioning, cooking, water heating, and other household uses.

Salt Cavern Storage Field: A sub-surface storage facility that is a cavern hollowed out in either a salt “bed” or “dome” formation.

Shale Gas: Methane and other gases produced from wells that are open to shale or similar fine grained rocks. Shale gas is generated from organic matter present within the shale reservoir.

Storage Additions/Injections: Volumes of gas injected or otherwise added to underground natural gas reservoirs or liquefied natural gas storage.

Storage Withdrawals: Total volume of gas withdrawn from underground storage or from liquefied natural gas storage over a specified amount of time.

Supplemental Gaseous Fuels Supplies: Synthetic natural gas, propane-air, coke oven gas, refinery gas, biomass gas, air injected for Btu stabilization, and manufactured gas commingled and distributed with natural gas.

Synthetic Natural Gas (SNG): (Also referred to as substitute natural gas) A manufactured product, chemically similar in most respects to natural gas, resulting from the conversion or reforming of hydrocarbons that may easily be substituted for or interchanged with pipeline-quality natural gas.

Therm: One hundred thousand (100,000) Btu.

Total Storage Field Capacity: The maximum volume of base and working gas that can be stored in an underground storage facility in accordance with its design, which comprises the physical characteristics of the reservoir, installed equipment, and operating procedures particular to the site.

Transmission (of Natural Gas): Gas physically transferred and delivered from a source or sources of supply to one or more delivery points.

Transported Gas: Natural gas physically delivered to a building by a local utility, but not purchased from that utility. A separate transaction is made to purchase the volume of gas, and the utility is paid for the use of its pipeline to deliver the gas.

Unaccounted For (Natural Gas): Represents the difference between the sum of the components of natural gas supply and the sum of components of natural gas disposition, as reported by survey respondents. These differences may be due to quantities lost or to the effects of differences in company accounting systems in terms of scope and definition. A positive “unaccounted for” volume means that supply exceeds disposition by that amount. A negative “unaccounted for” volume means that supply is less than disposition. See also “Balancing Item.”

Underground Gas Storage: The use of sub-surface facilities for storing gas that has been transferred from its original location. The facilities are usually hollowed-out salt domes, natural geological reservoirs (depleted oil or gas fields) or water-bearing sands topped by an impermeable cap rock (aquifer).

Unit Value, Consumption: Total price per specified unit, including all taxes, at the point of consumption.

Vehicle Fuel Consumption: Natural gas (compressed or liquefied) used as vehicle fuel.

Vented Gas: Gas released into the air on the production site or at processing plants.

Wet Natural Gas: A mixture of hydrocarbon compounds and small quantities of various nonhydrocarbons existing in the gaseous phase or in solution with crude oil in porous rock formations at reservoir conditions. The principal hydrocarbons normally contained in the mixture are methane, ethane, propane, butane, and pentane. Typical nonhydrocarbon gases that may be present in reservoir natural gas are water vapor, carbon dioxide, hydrogen sulfide, nitrogen and trace amounts of helium. Under reservoir conditions, natural gas and its associated liquefiable portions occur either in a single gaseous phase in the reservoir or in solution with crude oil and are not distinguishable at the time as separate substances.

Working Gas Capacity: The presently developed maximum capacity of gas in the reservoir that is in addition to the base gas.