



argusmedia.com

## ***ARGUS NATURAL GAS AMERICAS***

### **Contents:**

Methodological principles	2
Index method and verification	2
Relationship to industry	2
Code of conduct and compliance	2
Markets covered	2
Day-ahead and weekend gas	2
The Argus natural gas bid week index	3
Bid week assessments	3
Monthly average of daily indexes	3
Providing data to Argus	4
Outliers, corrections and duplicates	4
Forward curve differentials to Henry Hub	4
Natural gas fractionation spreads	4
Trading locations	5

***LAST UPDATED: MARCH 2018***

The most up-to-date Argus Natural Gas Americas methodology is available on [www.argusmedia.com](http://www.argusmedia.com)

## Methodological principles

Argus Media operates a price reporting service that is recognized throughout the world for its impartial, reliable and accurate coverage of key energy commodity markets. *Argus* prices are used extensively in indexes for crude oil and products, as well as other markets such as coal and emissions.

## Index method and verification

The Argus Natural Gas Americas (Argus NGA) report covers major traded wholesale natural gas markets and publishes indexes based on reported trades in the following regions of North America: Appalachia, Northeast, Louisiana/Southeast, East Texas, South Texas, Midcontinent, Upper Midwest, Rockies/Northwest, Canada and Southwest.

Argus Natural Gas Americas natural gas prices are based on data submitted to Argus voluntarily by the risk-management divisions or non-commercial departments of market participants. As part of the data series for its indexes, Argus will publish the total trade volume, number of transactions, high price, low price, mid-range (defined below) and volume weighted price.

Argus reserves the right to exclude trades from the absolute range of trade should a transaction fall well outside the channel of trade. Trades that deviate by more than three standard deviations from the mean of trades reported for index pricing points will be reviewed by Argus editors for possible exclusion. Data providers may be asked to verify the trade to ensure it was not reported in error.

All data submitted will be treated confidentially and used only to establish the index. The Argus natural gas indexes and the implementation of Argus' price reporting methodologies will be audited at least annually by the company's compliance officer. Argus publishes prices that report and reflect prevailing levels for open-market arms length transactions (please see the [Argus Global Compliance Policy](#) for a detailed definition of arms length).

Argus will not use subjective judgments to calculate its daily natural gas indexes in the US. Argus currently only incorporates data reported directly to it by market participants. Argus indexes do not include information obtained separately from exchanges.

## Relationship to industry

Our methodology has been developed in consultation with the industry to provide a valued service. Argus seeks to report the market in the way it is traded. We do not believe it is our role to change the way that industry participants seek to trade or hedge. Our goal is to develop indexes that are reliable and consistent enough to be used as price benchmarks in spot trade and term contracts. Argus editors and managers understand the needs of our clients for robust price reporting and are willing to discuss our methodology at any time.

## Code of conduct and compliance

Argus operates according to the best practices in the publishing field, including editorial integrity, independence and thorough compliance procedures throughout the firm. We want to be the preferred provider by industry participants that are held to equally high standards.

Argus has a code of conduct that applies to all staff. This strict ethics policy can be found on our website at [www.argusmedia.com](http://www.argusmedia.com). Included in this policy are restrictions against staff trading in any energy commodity, from trading in any energy related stocks, and guidelines for accepting gifts. Argus also has strict policies regarding central archiving of email and instant messenger communication, maintenance and archiving of notes, and archiving of spreadsheets and trade lists used in the price index formation process.

Any questions about Argus indexes and methodology should be addressed to Joseph Graham on 713 429 6330 ([joseph.graham@argusmedia.com](mailto:joseph.graham@argusmedia.com)) or David Givens on 202-349-2891 ([david.givens@argusmedia.com](mailto:david.givens@argusmedia.com)).

## Markets covered

Argus Natural Gas Americas publishes index data series for Day-ahead and Month-ahead (bid week) supply in North America. A list of trading locations for which indexes are published can be found on our website.

## Day-ahead and weekend gas

Day-ahead indexes are for gas flow in the next working day after the day of publication or for subsequent weekends and other public holidays or non-trading days in the same month. The day of publication is the transaction date. On Fridays or the day before a public holiday or a day when gas is not traded, the day-ahead index will include gas trades for delivery through the next working day, including Saturday, Sunday and any holiday.

A day-ahead index will never span different months. So in the event the last day of the month falls on a Friday, the day before a holiday or a non-trading day, the balance of the month will be traded the second to last trading day of the current month, and the first days of the subsequent month will be traded on the last trading day of the current month.

The day-ahead index data series includes a volume weighted average based on trade data received, as well as the high and low trade prices, the number of trades and the total volume at each index location. When no data is received for an index location, it will be left blank.

## Flow-date series

A separate flow-date series is available to subscribers in a related data file and shows the volume-weighted average only, dated ac-

ording to flow-date instead of transaction date. This will be a 365-day series, so data will be filled forward from the previous working day for each day of the weekend, public holiday or non-trading day. For Westcoast station 2 and Northwest Sumas, a Canadian holiday that is a working day in the US will use data from the previous Canadian working day for the flow-date and day-ahead series, unless liquidity is greater than five trades or 25,000mmBtu, in which case it will be considered a normal trading day.

### Calculation method

Data received from the back offices, risk management and non-commercial divisions of market participants is collated using software developed by Argus to map each company's own nomenclature for the hubs and index locations to a standard naming convention.

Using this data, the volume-weighted index price is calculated by dividing the sum of the product of the total price and volume at each index location by the total volume. In the following, where P represents price and V is volume,

$$\text{Index price} = \frac{\text{Sum}(P \times V)}{\text{Sum}(V)}$$

The volume weighted price will be rounded to the nearest half cent.

Trades reported in Canadian dollars will be converted to US \$/mmBtu.

### Cash basis

For each day-ahead and bid week volume weighted price, the difference to the Argus Henry Hub volume weighted price will be shown.

### Bid week delta

For each day-ahead volume weighted price, the difference to the corresponding bid week index published on the first working day of the current month will be shown. Where a day-ahead index has no corresponding bid week index or where there was no day-ahead trade N/A will be indicated.

### Regional averages

The regional averages are an arithmetic average of each index in the 10 regions covered in the report. Argus regional averages include groupings of index locations that have a geographic commonality, either as a supply source or market zone. Regional averages that include composite hubs will not be calculated based on both the composite hub and the individual hubs or zones which comprise the composite.

### Low/high and mid-range

The low and high represent the lowest and highest trades of the day, after outliers have been discarded (see below).

The Argus mid-range is a determination of the trading range of the day centered on the volume-weighted average. The mid-range spans 50pc of the width of the high and low trade of the day. If not enough transactions are reported at varying prices, the mid-range is set with the high two cents higher than the volume-weighted index price, and the low two cents lower than the volume-weighted index price.

The mid-range is calculated as follows. The difference between the high and low trade is divided by four, producing a quarter of the low/high spread. The volume-weighted average is rounded to the nearest half-cent. A quarter of the low/high spread is subtracted from and added to the rounded volume-weighted average to produce the low and high of the mid-range.

## The Argus natural gas bid week index

Bid week indexes are based on trading conducted in the last five working days of each month. Transactions comprising bid week indexes are all fixed price trades and any physical basis trades received among market participant data that were conducted in bid week. Physical basis trades will be included for locations generally east of the Rocky Mountains if they are transacted on the first three days of bid week and use the Nymex month-ahead expiration price on the third day of bid week to set the price. These locations are listed in the "Rockies" and "West" sections of the publication and related data feed.

The Argus natural gas bid week index will be published on the first day of delivery, i.e. the first working day after bid week. If no transactions are received for a pricing point, an assessment may be made. In the event that there is insufficient information to form an assessment, no assessment will be made and the index left blank.

## Bid week assessments

In the event that insufficient volume is received at a data point to form an index for the monthly bid week markets, Argus may publish an assessment based upon other market information. Argus will assess the range within which natural gas could have traded, based on bids and offers through bid week, pricing movements at other hubs and index locations, using basis differentials and extensive polling of market participants. In addition to data on physical trades, Argus examines market fundamentals to determine assessments, but initially uses physical market trade data. Argus will clearly indicate where an assessment rather than an index has been published.

## Monthly average of daily indexes

A monthly average of the daily day-ahead indexes will be published on the first working day of the month for the previous month. The monthly average for a given month will be calculated using daily flow-date data gathered each day dated the first day of each month and ending with data from the last date of the month for which the monthly average is being calculated. The monthly average of the Henry Hub basis differential for each daily index location will be published with the outright monthly averages on the first day of each month for the previous month.

## Providing data to Argus

Argus requests that data providers submit data from the risk office or non-commercial department separate from the trading floor. Reporting companies should follow the procedures set out below.

- Each transaction should include location of trade, date, beginning and ending flow date, volume, price and whether it was a buy or sell transaction. While Argus understands that many contracts prohibit the disclosure of counterparty information, please indicate the name of the trading platform or broker used, if possible.
- Report all fixed-price transactions, including day-ahead, monthly bid week, balance of month and forward trades. Include all trades whether or not Argus publishes an index for each hub or index location. Send data to [gasdeals@argus-media.com](mailto:gasdeals@argus-media.com) and [gas@argus.myzen.co.uk](mailto:gas@argus.myzen.co.uk)
- Reported trades should refer to deliveries into the pipeline on a dry basis and should specify the receipt point.
- Day-ahead trades include all trades done for delivery through the following business day, before the Ferc nominations deadline. Day-ahead trade data should be sent to Argus by 4 p.m. Eastern Prevailing Time daily.
- Monthly bid week trades include all transactions done on the last five working days of a month for delivery the following month. Include any physical basis trades done on the first three days of bid week and settled with the price of Nymex month-ahead gas at the end of the third day. Bid week data should be sent by 6 p.m. Eastern Prevailing Time on the first four days of bid week and 2 p.m. Eastern Prevailing Time on the last day of bid week, or all five days of bid week data can be sent in one e-mail on the last day.
- Any balance of month transactions should be clearly marked as to their flow dates.
- Forward trades should indicate clearly if they are physical or financial.
- Provide the name and contact information for at least two representatives from the reporting office who can answer questions about the data submitted.
- Report complete data, advising Argus as soon as possible of any omissions or errors.

## Outliers, corrections and duplicates

Trades that deviate by more than three standard deviations from the mean of trades reported for index pricing points will be reviewed by Argus editors for possible exclusion. Under certain conditions, trades that deviate from the mean by more than two standard deviations may also be excluded based on skewness, kurtosis and volumetric information. Another exclusion criterion is whether an outlier is further away from the next trade than the range of all the other trades.

Argus will not accept additional trade data submitted after the cut-off times listed above. Only errors in the index resulting from mistakes in data that are part of the original data-set for the day that are later corrected will be accepted in a possible re-calculation of the index.

Argus will on occasion publish corrections to price indexes after the publication date. We will correct errors that arise from clerical mistakes, calculation error, or a misapplication of our stated methodology.

If transaction information is submitted in error, and the company submitting informs Argus of the error within one week of the original submission, Argus will make best efforts to correct the price data. After one week, Argus will review both the material effect that the correction will have on the price data and the amount of time that has elapsed from the date of the published price data before deciding whether to issue a correction. If correcting the error will not make a significant difference to the published figures, a correction will not be issued. In all cases, Argus should be made aware of any errors in data submitted.

A significant error is deemed to be one that has a price impact of greater than 2pc from the published index price that was reported within one week of the trade date for a liquid trading point. For errors reported later than one week or at less liquid trading points, a senior Argus official or editor will decide whether the error is significant based on other factors including: the absolute price change, whether the error affected the range of the day, how many counterparties are affected and the impact on volume. Errors reported more than one month after the transaction date will not be considered without evidence of significant inaccuracies in the Argus data series if the mistake is not rectified.

If the index changes by more than 2pc, all data that changes as a result of the correction including high/low, mid-range, volume and number of trades will be corrected and a notice published in the pdf report and sent to data subscribers.

## Double counting

Because few data contributors provide counterparty information, Argus indexes may include both sides of the same transaction. If the industry starts reporting more counterparty information, Argus will be in a better position to remove duplicate trades from indexes.

## Forward curve differentials to Henry Hub

See the [Argus North American Natural Gas Forward Curves methodology](#).

## Natural gas fractionation spreads

Fractionation spreads represent the difference between the value of natural gas and the value of natural gas liquids (NGLs) that will result from the fractionation process. Because the price of these commodities is specific for given locations, the spreads are created for the hubs of Mont Belvieu, Texas, and Conway, Kansas.

The daily Argus prices for ethane, propane, normal butane, iso-butane and natural gasoline are used for the Mont Belvieu spread. The prices for the ethane-propane mix, propane, normal butane, iso-butane and natural gasoline are used for the Conway spread.

For further information on Argus NGL prices, please see the [Argus NGL Americas methodology](#).

Gross heating value as described in the document *Table of Physical Properties for Hydrocarbons and other Compounds of Interest to the Natural Gas Industry* (published by the Gas Processors Association of America) is used to determine the value of each NGL. The price of the NGL is divided by the gross heating value to produce the value of the NGL in US\$/mmBtu.

The amount of energy lost in fractionating gas to its liquid components is called the shrink. To calculate this, a natural gas price is multiplied by the thermal conversion. For Conway, the gas price is the Argus NGPL Midcontinent daily index. If this index is not published for a given day, the index for Panhandle Oklahoma mainline will be used. For Mont Belvieu, the gas price is the Argus Houston Ship Channel. If this index is not published for a given day, the index for Katy Hub will be used.

A margin results in subtracting the shrink from the NGL price in mmBtus. That is the fractionation spread, or value of making a component NGL from natural gas. The spread is also converted to US¢/gallon.

To calculate a fractionation spread for a hypothetical barrel of NGLs, each NGL is weighted per its proportional composition of the barrel, and their values added together.

The proportions are:

Mont Belvieu	
Ethane non-LST	41.5%
Propane non-LST	28%
Normal butane non-LST	7%
Iso-butane non-LST	10%
Natural gasoline non-LST	13.5%

Conway	
Ethane-propane mix	41.5%
Propane	28%
Normal butane	7%
Iso-butane	10%
Natural gasoline	13.5%

These figures were updated on August 10, 2012 based on EIA 2011 natural gas plants field production figures\*. The previous values were: ethane (for Conway, ethane-propane mix) 36.5pc; propane, 31.8pc; normal butane, 11.2pc; iso-butane, 6.2pc and natural gasoline 14.3pc.

The combined shrink is calculated by adding together the amount of energy lost in fractionating the gas into each NGL. Subtracting the combined shrink from the combined value of NGLs in the barrel produces a per barrel fractionation spread. The spread per barrel is expressed in US\$/mmBtu and US¢/gallon.

\*[http://www.eia.gov/dnav/pet/pet\\_pnp\\_gp\\_dc\\_nus\\_mbbbl\\_m.htm](http://www.eia.gov/dnav/pet/pet_pnp_gp_dc_nus_mbbbl_m.htm)

## Trading locations

### Appalachia

#### Col Gas, Appalachia (daily and bid week)

Deliveries into Columbia Gas Transmission pipeline north of Leach, Ky. Included are TCO Interruptible Paper Pool and TCO Segmentation Pool. Although the pipeline's definition of the pool is west of the Lanham compressor station in Kanawha County, West Virginia, gas traded at this virtual point can be delivered as far north as western New York.

#### Dominion, North Point (daily and bid week)

The North Point on Dominion Transmission is an area designated as being north of the Valley Gate, Pennsylvania, junction in Armstrong County, Pennsylvania, proceeding north and east into New York state crossing the Hudson River and terminating in Rensselaer County, near Albany, Troy and Schenectady, New York.

#### Dominion, South Point (daily) and Dominion Appalachia (bid week)

The South Point index for daily business comprises deliveries south of the Valley Gate, Pennsylvania, junction on two Dominion pipelines originating in West Virginia and Ohio. Deliveries in the same location comprise the Appalachia index for bid week.

#### Leidy Hub (daily and bid week)

Transactions done near the Leidy storage facility in Clinton County, Pennsylvania, from and into Columbia Gas Transmission, Dominion Transmission, National Fuel Gas Supply, Texas Eastern Transmission and Transcontinental Gas Pipeline.

#### Leidy Line (daily and bid week)

Receipts downstream of the Leidy/Wharton storage facilities in Clinton and Potter counties in Pennsylvania to Station 505 in Hunterdon County, New Jersey. This index does not include transactions at Leidy at interconnects with Columbia Gas Transmission, Dominion Transmission, National Fuel Gas Supply, Texas Eastern Transmission and Transcontinental Gas Pipeline, which are included in the Leidy Hub index.

#### Millennium receipts (daily and bid week)

Receipts into Millennium Pipeline downstream of the Corning compressor station in Steuben County, New York, and upstream of the Ramapo interconnect in Rockland County, New York.

#### TGP station 313 (daily only)

Receipts within Tennessee Gas Pipeline's zone 4 300 line west of compressor station 315 in Tioga County, Pennsylvania, up to but not including the compressor station 219 in Mercer County, Pennsylvania. The index includes portion of Line 300 from station 313 in Potter County, Pennsylvania to the border with New York state.

#### TGP zone 4 Marcellus (daily and bid week)

Includes receipts in Pennsylvania on the 300 line between compressor stations 315 and 321.

**TGP zone 4 200 line (daily and bid week)**

Receipts into Tennessee Gas Pipeline's 200 line in Ohio and Pennsylvania, as well as transactions at TGP's Station 219 pool. This replaces a previous index at TGP zone 4 Ohio.

**TETCO M-2 receipts (daily and bid week)**

The index will comprise receipts in market zone 2 of Texas Eastern Transmission, specifically: on the 24-inch line, from the interconnection at the Illinois-Indiana border near Southern Indiana Electric & Gas to the terminus of the line east of Sarahsville, Ohio; and on the 30-inch line, from the Kentucky-Tennessee border to the terminus of the zone in western Pennsylvania. This index changed from an all-zone index to include receipts only on September 10, 2012. Previously it was called TETCO M-2.

**Northeast**

**Algonquin Citygates (daily and bid week)**

Deliveries from Algonquin Gas Transmission to citygates in Massachusetts, Connecticut and Rhode Island.

**Iroquois, Waddington (daily and bid week)**

Includes deliveries at the Waddington, New York, interconnect with the TransCanada mainline at the Canadian border into the Iroquois system.

**Iroquois zone 1 (daily only)**

Zone 1 includes deliveries south of the Waddington receipt point at the interconnect with the TransCanada mainline on the Canadian border up to and including the Wright compressor station in Delanson, New York. Receipts at Waddington are included in the Iroquois, Waddington index.

**Iroquois zone 2 (daily and bid week)**

Zone 2 on Iroquois Gas Transmission commences south of the Wright compressor station in Delanson, New York, and terminates at the Hunts Point area of Bronx County, New York.

**TGP zone 5 200 line delivered (daily only)**

Deliveries off of the 200 line of Tennessee gas pipeline in zone 5 in New York state downstream of compressor station 245 in Oneida County to the border with zone 6 in Massachusetts. Includes deliveries into storage, other pipelines, local distributors and to directly connected power plants.

**TGP zone 6 200 line (daily and bid week)**

Deliveries on the zone 6 200 Line on Tennessee Gas Pipeline in Connecticut, Massachusetts, New Hampshire and Rhode Island.

**TETCO M-3 (daily and bid week)**

Deliveries into zone M-3 on Texas Eastern Transmission, which commences at the Delmont compressor station in Westmoreland County, Pennsylvania, and terminates in New York City. Zone M-3 does not include transactions at the Leidy storage facility.

**Transco zone 5 delivered (daily and bid week)**

Deliveries from the pipeline in the area between the Georgia-South Carolina border, upstream of the suction side of station 140 located at Moore, South Carolina, and the Virginia-Maryland border, down-

stream of the discharge side of station 185 at Bull Run, Virginia. Includes stations 145, 150, 155, 160, 165, 170, 175, 180, 185. Deliveries from Dominion's Cove Point LNG terminal are not included.

**Transco zone 5 North (daily and bid week)**

Deliveries in zone 5 of the pipeline upstream of the suction side of station 165 and downstream of the discharge side of station 185 at Bull Run, Virginia. Deliveries from Dominion's Cove Point LNG terminal also are not included.

**Transco zone 5 South (daily and bid week)**

Deliveries in zone 5 of the pipeline in the area between the Georgia-South Carolina border, upstream of the suction side of station 140 located at Moore, South Carolina, and downstream of the discharge side of station 165 in Pittsylvania County, Virginia. The definition includes stations 145, 150, 155 and 160, and also the North Carolina lateral that extends eastbound from station 165 and includes station 167. Deliveries from Dominion's Cove Point LNG terminal also are not included.

**Transco zone 6 non NY (daily and bid week)**

Deliveries on Transcontinental Gas Pipe Line from the start of zone 6 at the Virginia-Maryland border to the Linden, New Jersey, compressor station. The index does not include deliveries to Public Service Electric & Gas in New Jersey.

**Transco zone 6 non NY north (daily and bid week)**

Deliveries from Transco north of Station 195 in York, Pennsylvania, and excludes deliveries at the Leidy Hub, on the Leidy Line and to citygates downstream of Linden, New Jersey. Transco zone 6 NY (daily and bid week) Includes all New Jersey and New York natural gas deliveries downstream of the Linden compressor station in Linden, New Jersey, to the New York citygate, including those to Public Service Electric & Gas, Keyspan Energy and Consolidated Edison Co. of New York.

**Transco zone 6 NY (daily and bid week)**

Includes all New Jersey and New York natural gas deliveries downstream of the Linden compressor station in Linden, New Jersey, to the New York citygate, including those to Public Service Electric & Gas, Keyspan Energy and Consolidated Edison Co. of New York.

**Louisiana/Southeast**

**ANR, Louisiana (daily and bid week)**

Deliveries into ANR Pipeline's southeastern zone on either of two laterals starting offshore Louisiana. The laterals are the offshore east lateral, which brings gas through the Patterson, Louisiana, compressor station, and the offshore west lateral, which starts with the High Island Offshore System and brings gas through the Grand Cheniere compressor station. The zone for the index terminates at the Eunice station in Louisiana.

**Columbia Gulf, La (daily and bid week)**

This posting comprises the two south Louisiana lateral lines of Columbia Gulf Transmission onshore south Louisiana. The East Lateral delivers gas at Rayne from Venice, Louisiana, the onshore receipt point for gas produced offshore. The West Lateral includes receipts

from points starting at Cameron, Louisiana, eastward to Rayne, and receipts of gas from offshore.

#### **Columbia Gulf Mainline (daily and bid week)**

Includes receipts on Columbia Gulf Transmission on the mainline in Louisiana and Mississippi. The Mainline System begins at the Rayne compressor station near Lafayette, Louisiana, and ends at Leach, Kentucky.

#### **Egan (daily only)**

Transactions at the Egan storage hub in Acadia Parish, Louisiana. The facility has interconnections with ANR Pipeline, Columbia Gulf Transmission, Florida Gas Transmission, Texas Gas Transmission, Tennessee Gas Pipeline, Trunkline Gas and Texas Eastern Transmission.

#### **Florida citygates (daily only)**

Deliveries to local distribution company systems in Florida. Included are deliveries off of Florida Gas Transmission into all citygates in the market area, from Santa Rosa County west of station 12 in the Florida Panhandle to the delivery points south of 22 in Dade County and elsewhere in the peninsula. Also included are delivery points on the Gulfstream Natural Gas system.

#### **Florida Gas, zone 2 (daily and bid week)**

Receipts into Florida Gas Transmission zone 2, downstream of compressor station 7 in Acadia Parish, Louisiana, to station 8. Also includes deliveries from the White Lake Lateral and from the Chacahoula Lateral.

#### **Florida Gas zone 3 (daily and bid week)**

Receipts into Florida Gas Transmission downstream of compressor station 8 in East Baton Rouge Parish to the zone boundary in Santa Rosa County, Florida, on the upstream side of compressor station 12. Includes receipts into FGT from various pipelines in Mobile Bay.

#### **Gulf South Expansion (daily and bid week)**

Receipts into Gulf South Pipeline in the part of its system beginning in northeast Texas north of Carthage and ending at the Rock Springs meter in eastern Alabama. The index includes receipts into the pipeline in pooling areas 16, 17, 18 and 19.

#### **Henry Hub (daily and bid week)**

The Henry Hub is located at Sabine Pipe Line's Henry Gas Processing Plant in Vermillion Parish, Louisiana. The hub interconnects the following pipelines: Acadian Gas Pipeline, Columbia Gulf Transmission, Dow Pipeline, Jefferson Island Storage Hub, Gulf South Pipeline, Natural Gas Pipe Line, Sea Robin Pipeline, Southern Natural Gas, Texas Gas Transmission, Transcontinental Gas Pipeline, Trunkline Gas and Sabine's mainline.

#### **Pine Prairie (daily only)**

The Pine Prairie index covers deliveries to and receipts from the Pine Prairie Energy Center, a salt cavern storage facility in Evangeline Parish, Louisiana.

#### **SESH receipts (daily only)**

Receipts into the Southeast Supply Header at the Perryville hub at

Delhi, Louisiana, from Enable Gas Transmission, Gulf South Pipeline, Columbia Gulf Transmission and Tiger Pipeline.

#### **SoNat La (daily and bid week)**

Receipts into Southern Natural Gas Company's zone 0 in Louisiana, which includes deliveries from three pipeline laterals in the state. The first eastern lateral begins at Plaquemines Parish in eastern Louisiana and extends northwest to an interconnect with the western pipeline lateral at Washington Parish near the Louisiana-Mississippi border. The second western Louisiana lateral runs from St. Mary Parish in southern Louisiana to Washington Parish, while the third lateral extends from the Texas-Louisiana border at Desoto Parish, including the Logansport compressor station, running northeast to the Mississippi border at East Carol Parish in northern Louisiana.

#### **TETCO E La (daily and bid week)**

Receipts from the Opelousas compressor station in east Louisiana, northward to points south of the Kosciusko compressor station in Mississippi. Deliveries into the 30-inch Venice line, which runs from the offshore Gulf of Mexico to the New Roads compressor station, just downstream of the Opelousas station in St. Landry Parish, Louisiana, are also included in this zone.

#### **TETCO M-1 30 (daily and bid week)**

Deliveries at the Kosciusko compressor station in Mississippi into the 30-inch line. The station is located approximately five miles southeast of Kosciusko in Attala County.

#### **TETCO W La (daily and bid week)**

Receipts into the pipe from the Vidor, Texas, compressor station up to, but not including, the Opelousas, Louisiana, station. The Cameron Line is included.

#### **TGP La 500 Leg (daily and bid week)**

Includes all points of receipt into the pipe's 500 Leg in zone 1 in southeast Louisiana which are south of station 534 in Purvis, Mississippi. Also included are all receipt points east of mainline valve 515 in Centerville, Louisiana, and receipt points east of Vermillion 245C on the Blue Water Header System in the Gulf of Mexico.

#### **TGP La 800 Leg (daily and bid week)**

Includes all points of receipt into the pipe's 800 leg in zone L south of compressor station 834 in Winnsboro, Louisiana, including all points of receipt on the west side of the mainline valve 515 in Centerville, Louisiana. Also included are all points of receipt west of Vermillion 245C on the southwest and west leg of the Blue Water Header System in the Gulf of Mexico as well as all points of receipt on the Kinder-Sabine Line No. 800-1, and all points of receipt on Linder-Natchitoches Line No. 510-1 south of Station 40 in Natchitoches, Louisiana.

#### **TGT zone 1 (daily and bid week)**

Deliveries into Texas Gas Transmission starting south of the Pineville compressor station in Rapides Parish, Louisiana, continuing northeast to the beginning of zone 2 in Crockett County, Tennessee. TGT zone 1 has interconnects with ANR, Enable Energy, Crosstex, Mississippi River Transmission, Regency Intrastate Gas, Reliance

Energy, Southern Natural Gas, Texas Eastern Transmission, Trunkline and Gulf South.

#### **Transco zone 3 (daily and bid week)**

This zone on Transcontinental Gas Pipeline includes receipts on all facilities located north of the compressor station No. 45 in Beauregard Parish, Louisiana, up to and including compressor station 65 at St. Helena Parish, Louisiana. Also included are deliveries into Transco's Central Louisiana Gathering System and the Southeast Louisiana Gathering System. The zone includes stations 50, 60, 62 and 63.

#### **Transco zone 4 (daily and bid week)**

This zone on Transcontinental Gas Pipeline includes receipts on facilities located north of compressor station 65 at St. Helena Parish, Louisiana, to the Georgia-South Carolina state boundary, excluding all of Transco's facilities located in zone 4A. The zone includes stations 70, 80, 90, 100, 105, 110, 115, 120, 125 and 130. The index also includes deliveries from BP's Destin pipeline. Zone 4A includes all of Transco's facilities located on the Mobile Bay Lateral north of compressor station 82 to an interconnection with Transco's mainline near Butler in Choctaw County, Alabama.

#### **Trunkline, E La (daily only)**

The pipe's East Louisiana zone includes receipts at Terrebonne Parish from offshore Gulf of Mexico gas production facilities. The zone extends north and west from the Patterson compressor station in St. Mary Parish to just east of the Kaplan compressor station in Vermillion Parish, the demarcation line between east and west Louisiana on Trunkline.

#### **Trunkline, W La (daily only)**

Deliveries at the Kaplan compressor station in Vermillion Parish are included in this zone. The pipe's West Louisiana zone includes receipts from an offshore Gulf Coast lateral that delivers supply to Kaplan, where it joins a second lateral. The pipeline in this zone proceeds to just south of the Longville compressor station in southwestern Louisiana.

#### **Trunkline, La (bid week only)**

The monthly Trunkline index incorporates both Trunkline East Louisiana and West Louisiana deliveries. This index comprises all receipts in the state upstream of the Longville compressor station.

#### **Trunkline Z1A (daily and bid week)**

Trunkline zone 1A extends from the Longville compressor station in Louisiana to the Dyersburg station in Tennessee. Transactions done at the zone 1A pool are also included.

### **East Texas**

#### **Carthage (daily and bid week)**

The Carthage hub in Panola County, Texas, owned and operated by DCP East Texas Holdings. The pipelines that can receive gas at the hub are Atmos Pipeline, Enable East, Energy Transfer Fuel, Enterprise Texas, Gulf South Pipeline, Lone Star Pipeline, Southern Natural Gas, Kinder Morgan Texas Pipelines, Mississippi River Transmission, Tennessee Gas Pipeline, Texas Eastern and Transmission Texas Gas Transmission.

#### **Florida Gas zone 1 (daily only)**

Receipts into zone 1 of Florida Gas Transmission, which starts in Refugio County, Texas and ends with in Eunice, Louisiana, at meter number 94449 in Acadia Parish.

#### **Houston Ship Channel (all) (daily and bid week)**

The Houston Ship Channel (all) index includes transactions for all deliveries on intrastate pipelines in the Houston Ship Channel, an area from the north end of the Galveston Bay to the channel's turning basin. The index also includes transactions at any virtual meter and paper pool and purchases by end-users at physical locations in the area.

#### **Katy Hub (daily and bid week)**

Enstor's Katy Storage Hub. Receipts and deliveries may be made from Tennessee Gas Pipeline, Oasis Pipeline, Transcontinental Gas Pipeline, Natural Gas Pipe Line, Dow Pipeline, KM Texas Pipeline, Houston Pipe Line, Duke Energy, KM Tejas Pipeline, Atmos Texas Pipeline, Gulf South Pipeline and the Houston Ship Channel. Deliveries can be made to Trunkline Gas.

#### **Moss Bluff (daily only)**

Transactions at the Moss Bluff storage hub in Liberty County, Texas. The facility has interconnections with Enterprise Texas, Houston Pipeline, Kinder Morgan Texas, Kinder Morgan Tejas, Natural Gas pipeline and Texas Eastern Transmission.

#### **NGPL Gulf Coast mainline (daily only)**

The mainline index is comprised by receipts into the entire Gulf Coast Mainline zone, which begins with Station 305 at the Texas-Arkansas border, and extends to Missouri-Illinois border just northeast of Station 309.

#### **NGPL, TexOk zone (daily and bid week)**

Includes deliveries into Natural Gas Pipe Line from the Texas-Louisiana border in Jefferson County, Texas, to Montgomery County, Texas. The zone also includes the line segment to Cass County, Texas, and to Carter County, Oklahoma. NGPL's Gulf Coast pooling point is included.

#### **TETCO ETX (daily and bid week)**

Receipts on Texas Eastern Transmission on the 24-inch line from the Huntsville compressor station in Texas to the Little Rock station in Arkansas, including the segment from Joaquin in Shelby County, Texas, to north central Louisiana.

#### **TGP zone 0 North (daily and bid week)**

Tennessee Gas Pipeline's 100 Leg in zone 0 North or pooling point 020826 begins at East Bernard, Texas at station 17 and extends north to the Natchitoches compressor station 40 in Louisiana. FERC approved the bifurcation of Tennessee's zone 0 pool into two zones on 16 July 2009 and it took effect 1 November 2009.

#### **Transco zone 2 (daily and bid week)**

This zone on Transcontinental Gas Pipeline includes receipts at all facilities located north of the pipeline's compressor station No. 30 in central Wharton County, Texas, up to and including compressor station No.45 in Beauregard Parish, Louisiana. Also included in this

zone are receipts into Transco's Southwest Louisiana Gathering System, North High Island System and Transco's facilities upstream or in the vicinity of the High Island Offshore System and the U-T Offshore System. The zone includes stations 35 and 40.

### **Tres Palacios (daily only)**

This index is comprised by transactions at the Tres Palacios hub in Matagorda County, Texas. The hub interconnects with the following pipelines: Central Texas Gathering System, the Channel Industries-Houston pipe line joint venture facilities, Enterprise Texas pipeline, Florida Gas transmission, the Kinder Morgan Houston Central processing plant complex, Natural Gas pipe line, Tejas pipeline, Tennessee gas pipeline and Texas Eastern transmission.

## **South Texas**

### **NGPL, South Texas zone (daily and bid week)**

NGPL's South Texas zone includes all receipts into the pipeline starting in Jim Hogg County, Texas, and downstream to compressor station 302 in Montgomery County, Texas.

### **TETCO South Texas zone (daily and bid week)**

The South Texas zone comprises receipts in the following pipelines: the 30-inch line, which commences at the Mexico-Texas border and proceeds east to connections west of the Vidor, Texas, compressor station; and the 24-inch pipeline that runs from the Hagist Ranch compressor station to points south of the Huntsville compressor station.

### **TGP zone 0 South (daily and bid week)**

Tennessee Gas Pipeline's 100 leg in zone 0 South, or pooling point 005345, begins at Rio Bravo in McAllen County, Texas, and ends at the East Bernard compressor station (station 17) in Wharton County, Texas. The bifurcation of Tennessee's zone 0 pool into north and south zones took effect 1 November 2009.

### **Transco zone 1 (daily and bid week)**

This zone on Transcontinental Gas Pipeline includes receipts at or south of the pipeline's compressor station No. 30 in Wharton County, Texas. The zone also includes Transco's 24-inch mainline from Wharton to Hidalgo County, Texas, the 24-inch McMullen lateral that commences in McMullen County, Texas, and offshore Gulf of Mexico production from the Padre Island and Central Texas Gathering System Laterals. The zone includes stations 4, 5 and 20.

## **Midcontinent**

### **ANR, Oklahoma (daily and bid week)**

Receipts in ANR Pipeline's Southwest Area, which comprises spurs commencing at the Custer compressor station in Custer County, Oklahoma, and the Sherman plant at the Texas-Oklahoma border. These spurs meet at the Southwest mainline at the Greensburg, Kans., compressor station. The segment of pipe between Custer and Sherman is also included, as well as other sections of ANR south of Greensburg.

### **Enable East (daily and bid week)**

The Enable Gas Transmission system includes deliveries into six distinct Pooling Areas, four of which have distinctly different pricing characteristics. The majority of liquidity on the EGT system is

centered in the Neutral and North Pooling Areas, which are included in the Argus Enable East index. This index was renamed from CenterPoint in December 2013. The six Pooling Areas are the Flex or Neutral Pooling area, the North Pooling Area, the South Pooling Area, the Line CP Pooling Area, and the West 1 and West 2 Pooling Areas. The southern pool trades at a premium, and is not included in this index. All pools are described below for clarity.

### **Flex or Neutral Pooling Area (included)**

The Flex or Neutral Pooling Area is the area containing all receipt points on EGT's transmission mainlines, and lines connected at Pittsburg, Latimer, Haskell, and Pushmataha counties in Oklahoma.

### **North Pooling Area (included)**

The North Pooling Area includes all receipt points on EGT's transmission mainlines, and lines connected there, located at points east of the eastern terminus of the Neutral Pooling Area and north of Line AC.

### **South Pooling Area (not included)**

The South Pooling Area includes all receipt points on EGT's transmission mainlines, and lines located east of the eastern terminus of the Neutral Pooling Area and south of, and including, Line AC, with the exception of the area defined as the Line CP Pooling Area.

### **West Pooling Area #1 (not included)**

The West Pooling Area #1 includes all receipt points on EGT's transmission mainlines, and lines connected at points west of the Amber Junction compressor station.

### **The West Pooling Area #2 (not included)**

The West Pooling Area #2 represents an area containing all receipt points on EGT's transmission mainlines, and lines connected at points east of the Amber Junction compressor station and west of the western terminus of the Neutral Pooling area. Line CP represents deliveries into EGT's 42-inch diameter pipeline extending from Duke Energy's Carthage hub area in east Texas to EGT's Perryville Hub in northeast Louisiana.

### **NGPL, Amarillo (daily only)**

The Amarillo Pool on Natural Gas Pipe Line commences in Gage County, Neb., on the Amarillo mainline at compressor station 106 and terminates at station 109 in Keokuk County, Iowa.

### **NGPL, Midcontinent (daily and bid week)**

Includes receipts into the Natural Gas Pipe Line from compressor station 155 in Wise County, Texas, northwest to connections with NGPL's Amarillo System at station 112 in Moore County, Texas. The Midcontinent zone also includes the pipeline segment from Moore County to compressor station 106 in Gage, Neb. Also included are deliveries into the NGPL "Triangle" which is formed as the pipeline runs southeast from station 103 in southwestern Kansas, to connections with NGPL at station 156 in Kiowa County, Oklahoma.

### **Oneok, Oklahoma (daily and bid week)**

Includes deliveries into Oneok's single pricing pool for gas coming from several large gathering systems. This gas is gathered primar-

ily in the east-central part of Oklahoma in Pittsburg and Haskell counties and also from the west-central part of the state in Blaine, Canadian and Grady counties.

#### **Panhandle Oklahoma Mainline (daily and bid week)**

Includes transactions done into Panhandle Eastern Pipe Line's Field zone in Texas, Oklahoma, and Kansas, from two laterals located south of the Haven, Kansas compressor station. The first lateral runs in a northeast direction from the Texas and Oklahoma panhandles and southwest Kansas, including Sunray, Hansford, Liberal and Greensburg compressor stations, while the second lateral connects with Haven from points in central and western Oklahoma, including the Cashion, Seiling and Alva compressor stations. Deliveries to Haven, the beginning of Panhandle Eastern's Market zone, are not included.

#### **Southern Star (daily and bid week)**

The Southern Star index includes receipts into the system in Texas, Oklahoma and Kansas.

#### **TETCO M-1 24 (daily only)**

Receipts into TETCO M-1 24, which is the 24-inch line in market zone 1 of Texas Eastern Transmission. This segment line runs from Little Rock, Arkansas to the Illinois-Indiana state line, which is between compressor station 11 in Norris City, Illinois, and compressor station 12 in Princeton, Indiana. The bid week series was discontinued on 1 March 2012.

#### **Upper Midwest**

##### **Alliance, into interstates (daily only)**

Deliveries from the Alliance Pipeline into ANR Pipeline, Natural Gas Pipe Line, Midwestern Gas Transmission and Vector Pipelines at the Aux Sable station in Illinois.

##### **ANR ML7 (daily and bid week)**

Deliveries into ANR Pipeline's northern zone, called ML7, which commences at the Sandwich compressor station in Illinois and proceeds to Wisconsin, Michigan and Ohio. The northernmost point is the Crystal Falls station in Wisconsin. The ML7 zone comprises an area east to the Defiance station in Ohio and to the Orient storage field in Michigan.

##### **Chicago Citygates (daily and bid week)**

Citygate deliveries to the Chicago, Illinois, metropolitan area of the following LDC systems: Peoples Gas Light and Coke, Nicor Gas, North Shore Gas and NIPSCO.

##### **Chicago Nicor (daily and bid week)**

Deliveries into Nicor Gas.

##### **Chicago Nipsco (daily and bid week)**

Deliveries into Northern Indiana Public Service Company.

##### **Chicago Peoples (daily and bid week)**

Deliveries into Peoples Gas Light & Coke.

#### **Consumers Citygates (daily and bid week)**

Deliveries to all citygate stations on the local distribution company network of Consumers Energy in Michigan.

#### **Emerson, Viking GL (daily and bid week)**

Transactions from TransCanada's mainline at Emerson, Manitoba into Great Lakes Gas Transmission and into Viking Gas Transmission.

#### **Joliet Hub (daily only)**

Receipts or deliveries at ANR's Joliet Hub in Will County, Illinois and the Channahon facility in Grundy County, Illinois. The hub has interconnects with Alliance, Guardian, Horizon, Kinder Morgan Illinois, Natural Gas Pipe Line, Northern Border, Midwestern, and Vector Pipelines, along with the Nicor, NIPSCO and Peoples Gas distribution systems.

#### **Lebanon (daily and bid week)**

Deliveries into or receipts from any of the following pipelines in the Lebanon, Ohio, area: Texas Gas Transmission, ANR Pipeline, Texas Eastern Transmission, Panhandle Eastern, Columbia Gas Transmission, Dominion Gas Transmission and Rockies Express Pipeline.

#### **Mich Con Citygates (daily and bid week)**

Deliveries to any of the 180 citygates of Michigan Consolidated Gas Co. in Michigan, including stations in Michigan's Upper Peninsula, Alpena area, Travis City area, Petoskey, Grand Rapids area, the Muskegan area, Luddington and in the South East, including the Wayne and Washtenaw areas. MichCon is an operating subsidiary of DTE Energy.

#### **NGPL Iowa-Illinois (daily)**

Receipts in in the Iowa-Illinois receipt zone of Natural Gas Pipe Line, from compressor station 108 in Keokuk County, Iowa, into all area served by the pipeline in Illinois. The index does not include transactions at the citygates of local distribution companies that comprise Chicago Citygates indexes.

#### **NBPL-Vector (daily only)**

Receipts from Northern Border Pipeline into Vector Pipeline at Joliet, Illinois.

#### **Northern Border Ventura Transfer (daily only)**

This index comprises gas traded on Northern Border Pipeline at Ventura, Iowa, that is not traded for delivery into Northern Natural Gas.

#### **NNG Demarc (daily and bid week)**

Demarcation on Northern Natural Gas is the pooling point for shippers on Northern Natural looking to aggregate natural gas receipts from the field area before further flow downstream to the market area. The point is at Clifton Station in Clay County, Kansas.

#### **NNG Ventura (daily and bid week)**

Deliveries at the Ventura pooling point on Northern Natural Gas in Hancock County, Iowa. Supply may be received either from the field zones of Northern Natural or at the interconnect from Northern Border Pipeline.

#### **REX Edgar-Midwestern (daily and bid week)**

Deliveries into Midwestern Gas Transmission from Rockies Express in Edgar County, Illinois.

#### **REX Moultrie-NGPL (daily and bid week)**

Deliveries into Natural Gas Pipe Line from Rockies Express in Moultrie County, Illinois.

#### **REX Putnam-Panhandle (daily only)**

Deliveries into Panhandle Eastern Pipe Line from Rockies Express in Putnam County, Indiana.

#### **REX Shelby-ANR (daily and bid week)**

Deliveries into ANR Pipeline into Rockies Express in Shelby County, Indiana.

#### **REX zone 3 (daily and bid week)**

Deliveries off of Rockies Express pipeline into other pipelines in zone 3, from Audrain County Missouri to its terminus in Monroe County, Ohio, at the Clarington hub.

### **Rockies/Northwest**

#### **Cheyenne (daily and bid week)**

Production in eastern Wyoming can be delivered into either Trailblazer Pipeline, Rockies Express Pipeline, Public Service Company of Colorado or Colorado Interstate Gas at the Cheyenne Hub in Colorado. The hub is operated by CIG.

#### **CIG Rocky Mountains (daily and bid week)**

Receipts into Colorado Interstate Gas' 20-inch, 22-inch and 24-inch mainlines in Wyoming and Colorado. Also included are a segment in Utah and a 16-inch lateral in Wyoming. Not included are deliveries or receipts into CIG's system at points south of Cheyenne, Wyoming, along the front range of Colorado and into Kansas, Oklahoma and Texas.

#### **GTN, Kingsgate (daily only)**

This interconnection is at the US-Canada border near Kingsgate, B.C., in Boundary County, Idaho. Deliveries are from Foothills Pipeline into Gas Transmission Northwest.

#### **Kern River receipts (daily and bid week)**

This point includes transactions done along the Kern River Gas Transmission pipeline in Wyoming but not including deliveries at the Opal tailgate, which trades at a premium to other receipt points. Kern River receipts includes: Anschultz Ranch, Carter Creek, CIG at Muddy Creek, Clear Creek, Goshen, Northwest Pipeline at Muddy Creek, Overland Trail, Overthrust, Painter, Questar Roberson Creek and Whitney Canyon.

#### **Northwest Wyoming (daily only)**

This point includes transactions on Northwest Pipeline in Wyoming only, from the Green River compressor station to the Kemmerer compressor station, including deals done at Opal.

#### **Northwest, s. of Green River (daily only)**

Receipts into Northwest Pipeline in a segment from the Green River, Wyoming, compressor station to the La Plata interconnection with El Paso Natural Gas in the San Juan Basin in La Plata County, Colo-

rado. Included are deliveries from Clay Basin storage, the Piceance Basin and the Ignacio processing plant.

#### **NWPL, Rocky Mountains (bid week only)**

Includes receipts into Northwest Pipeline mainline in the states of Wyoming, Utah and Colorado. The region includes transactions on the pipeline between the Kemmerer compressor station in Wyoming and the Moab compressor station in southern Utah. This index includes both the Rocky Mountains and the Wyoming pools as defined by Northwest Pipeline, and all deals done at Opal and Muddy Creek.

#### **Northwest Sumas (daily and bid week)**

The Canadian border region on Northwest Pipeline includes receipts into the pipeline from Westcoast Energy at the Huntingdon, B.C.-Sumas, Washington, connection at the US-Canadian border.

#### **Opal (daily and bid week)**

Any transactions done from the Opal tailgate to the Muddy Creek compressor station in Wyoming on Kern River Gas Transmission. Operator Williams allows gas traded at this point to be delivered into any connecting pipeline: Northwest Pipeline, Colorado Interstate Gas, Overthrust, Rockies Express or Questar Gas Pipeline. Trades done at Opal that are not for delivery into a specific pipeline are included in the Opal index. There is no transportation premium between Opal and Muddy Creek.

#### **PG&E Citygates (daily and bid week)**

Purchases or sales at the Pacific Gas & Electric citygates. Deliveries come from the Redwood, Silverado or Baja paths or with Mission Path onstream transportation.

#### **PG&E Malin, Oregon (daily and bid week)**

Deliveries into the Pacific Gas & Electric system at the Malin interconnection from either Gas Transmission Northwest or Tuscarora Pipeline. The index was expanded in August 2011 to include receipts at Onyx Hills from Ruby Pipeline into the PG&E Redwood Path.

#### **Questar (daily only)**

Deliveries into Questar Pipeline on its North and South systems, and the lateral connecting them. Exclude deliveries into the pipe at the Opal hub, which are captured in the Opal index.

#### **Stanfield (daily only)**

Deliveries from Gas Transmission Northwest into Northwest Pipeline at the Stanfield, Oregon, compressor station.

#### **White River Hub (daily and bid week)**

The White River Hub is a joint venture between Questar and Enterprise Products Partners. It runs from Enterprise's Meeker processing facility, which gathers gas from the Piceance Basin in northwest Colorado, south to interconnect with Rockies Express and TransColorado Gas Transmission and east to connect with Questar Pipeline at Greasewood, along with Northwest Pipeline, Colorado Interstate Gas and Wyoming Interstate Co.

## Canada

### Dawn, Ontario (daily and bid week)

Deliveries from the Union Gas Dawn Facility, a hub around several depleted reservoir storage pools in Ontario, into major interconnects including TransCanada, Vector, Enbridge, Great Lakes Gas Transmission, Consumers Energy, Panhandle Eastern and into Dawn storage. Deliveries at Parkway are not included.

### NIT/AECO (daily and bid week)

The AECO gas storage business in Alberta, Canada, is comprised of facilities at Suffield and Countess (owned by Niska Gas Storage). Although the AECO facilities are geographically dispersed across Alberta, the toll design of Nova Gas Transmission means that they function commercially as the same point. The index price is reported in Canadian dollars per gigajoule and \$/mmBtu using the Royal Bank of Canada Noon day rate with a conversion factor of 1mmBtu = 1.054615 gigajoules.

### NIT/AECO basis (bid week only)

This index includes deals done at AECO during bid week on a basis to the Nymex month-ahead value on the third day of bid week.

### Empress (daily and bid week)

The Empress index is constituted by tailgate gas from a variety of processing facilities in southeastern Alberta near the Saskatchewan border, on the eastern terminus of the Nova system, also known as TransCanada's Alberta system. Gas processed at Empress is shipped either on TransCanada's mainline or Foothills Pipeline. The index price is reported in Canadian dollars per gigajoule.

### Westcoast station 2 (daily and bid week)

Deliveries into Westcoast Energy at compressor station 2 in British Columbia. The price is reported in Canadian dollars per gigajoule and \$/mmBtu.

## Southwest

### El Paso Bondad (daily only)

Transactions at the Bondad compressor station in Colorado.

### El Paso, Permian Basin (daily and bid week)

Deliveries into El Paso Natural Gas from the Waha pool, the Keystone pool and the Plains pool.

### El Paso, San Juan Basin (daily and bid week)

Deliveries into El Paso Natural Gas in the San Juan Basin, including supply from the Blanco and Rio Vista processing plants in New Mexico, which are south of the Bondad compressor station.

### El Paso, South Mainline (daily only)

Deliveries on the south mainline of El Paso Natural Gas at points between the Cornudas station in west Texas to, but not including, Ehrenberg, Arizona.

### Kern River, delivered (daily only)

Deliveries from Kern River Gas Transmission upstream of the Southern California Gas system in the Las Vegas, Nevada, area. Deliveries at Wheeler Ridge, Kramer Junction and Daggett are not included.

### PG&E South (daily and bid week)

Deliveries into the PG&E system from El Paso Natural Gas and Transwestern Pipeline at Topock, California; from Kern River Gas Transmission at Daggett, California, and from the High Desert Lateral; from Southern California Gas at Kern River Station and from Questar Southern Trails Pipeline at Essex, California.

### SoCal Citygates (daily and bid week)

Deliveries from and to holders of Southern California Gas Company's citygate pool contracts, including in and out of storage.

### SoCal Gas Co (daily and bid week)

Deliveries into the Southern California Gas Company pipeline system at any of the following interconnects: Topock, California, Blythe, California, Ehrenberg, Arizona, Kramer Junction, California, Kern River Station, Needles, Arizona, and Wheeler Ridge. Also includes deliveries from PG&E from points including Kern River Station and Pisgah/Daggett.

### Transwestern Permian Basin (daily and bid week)

The Transwestern Permian Basin index comprises receipts into Transwestern Pipeline in the east Texas and Central zones. The West Texas zone is located southeast and southwest of the WT-1 compressor station in Lea County, New Mexico, and in many west Texas counties. The Central zone is bordered by station 8 in Lincoln County, New Mexico, to the northwest, station P-1 in Roosevelt County, New Mexico, to the east and station WT-1 in Eddy County, New Mexico, to the south.

### Transwestern San Juan Basin (daily and bid week)

The Transwestern San Juan Basin index comprises the pipeline's San Juan lateral, and includes receipts into Transwestern Pipeline into the Ignacio to Blanco zone in Colorado and the Blanco Hub zone in New Mexico, to Thoreau, New Mexico.

### Waha (daily and bid week)

The Waha area has four market centers with a total of 38 direct interconnections to a number of interstate and intrastate pipelines, which provide transportation to southwestern states, east Texas and the midcontinent area. The pipelines include El Paso Natural Gas Pipeline, Transwestern Pipeline, Natural Gas Pipe Line, Northern Natural Gas, Delhi Pipeline, Oasis Pipeline, EPGT Texas and Lonestar Pipeline. Hubs include the DCP Midstream Partners Midland Hub, the Atmos Energy pipeline system hub, Enstor's Waha hub, the Encina hub of Southern Union Gas and the EPGT hub of El Paso Texas Pipeline.

### Waha-Enterprise (daily)

Deliveries into the Texas intrastate system of Enterprise Products Partners at the Waha hub in Pecos County, Texas. The Enterprise system in the Permian basin is extensive and includes gathering lines and processing plants at other locations in Texas and New Mexico, but deliveries at these locations are not included.

### Waha-Oasis (daily and bid week)

Deliveries into the Oasis Pipeline pool in northern Pecos County, Texas from the following locations in the Waha area: the SUG Mi Vida processing plant, Natural Gas pipeline, Transwestern pipeline, EPN Gathering System, ET Fuel, Oneok Westex, El Paso Natural Gas, Regency, SUG Waha, Enterprise Texas pipeline and Northern Natural Gas.