

Methodology and specifications guide

M2MS - Gas methodology

Latest update: January 2020

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INTRODUCTION

Platts' methodologies are designed to produce forward curves that are representative of market value, and of the particular markets to which they relate. Methodology documents describe the specifications for various products reflected by Platts' Market Data, the processes and standards Platts adheres to in collecting data, and the methods by which Platts arrives at final values for publication. These guides are freely available on Platts' website for public review.

Platts discloses publicly the days of publication for its forward curves, and the times during each trading day in which Platts considers transactions in determining its forward curves. This schedule of publication is available on Platts' website, at the following link: <http://www.platts.com/holiday>.

The dates of publication and the curve production periods are subject to change in the event of outside circumstances that affect Platts' ability to adhere to its normal publication schedule. Such circumstances include network outages, power failures, acts of terrorism and other situations that result in an interruption in Platts' operations at one or more of its worldwide offices. In the event that any such circumstance occurs, Platts will endeavor, whenever feasible, to communicate publicly any changes to its publication schedule and curve production periods, with as much advance notice as possible.

All Platts methodologies reflect Platts' commitment to maintaining best practices.

Platts' methodologies have evolved to reflect changing market conditions through time, and will continue to evolve as markets change. A revision history, a cumulative summary of changes to this and future updates, is included at the end of the methodology.

How this methodology statement is organized

This description of methodology for forward curves is divided into seven major parts (I-VII) that parallel the entire process of producing the forward curves.

- Part I describes what goes into Platts forward curves, including details on what market data is used.
- Part II describes the security practices that Platts uses in handling and treating data.
- Part III is a detailed account of how Platts collects market data, and what Platts does with the data to formulate its forward curves.
- Part IV explains the process for verifying that published curves comply with Platts' standards.
- Part V lays out the verification and correction process for revising published curves and the criteria Platts uses to determine when it publishes a correction.
- Part VI explains how users of Platts forward curves can contact Platts for clarification of data that has been published, or to register a complaint. It also describes how to find out more about Platts' complaint policies.
- Part VII is a list of detailed specifications for the trading locations and products for which Platts publishes forward curves in this commodity.

PART I: DATA QUALITY AND DATA SUBMISSION

Platts aggregates multiple data sources to produce a single cross-checked series of curves using an open and validated methodology, offering clients a view of forward values that can be used for independent valuation, mark-to-market validation

processes, strategic decision support, or other portfolio risk management processes. The product also provides a valuable source of information for evaluating and verifying internally generated values for marking forward positions.

Platts maintains comprehensive historical data on spot and forward prices of individual locations. This dataset is used to define and statistically verify temporal and spatial relationships among the hubs. This data, along with ICE Market Data and CME Group Henry Hub settlement data, is a primary and critical input into the CRS (Commodity Risk Solutions) quantitative curve generation process and is an asset that is unique to Platts.

Platts and IntercontinentalExchange (ICE) reached an agreement in October 2007 to combine the data-gathering capabilities of each company with Platts' expertise and avowed methodology systems to enhance the rapidly growing forward curve product offerings in North American natural gas and electricity.

Under the agreement Platts incorporates ICE settlement and intra-day forward trading activity in the Natural Gas markets on the ICE platform, including daily End of Day and Cleared Settlement reports as key inputs into the Platts M2MS (quantitatively derived using settlement prices) curves. Platts benefits from this relationship by having the exclusive right to use ICE intra-day and end of day data for the purposes of forward curve derivation.

General principles applicable to all derivative or forward markets

- Forward curves are a reflection of ICE Market Data and are subject to careful review.
- Platts tracks values and interrelationships over the whole course of the day.
- Information is cross-checked to ensure data integrity.

- Illiquid markets may be estimated as spreads relative to active liquid markets.
- Platts gives highest priority to available market data but allows for the use of model data to fill out curves where market data provide no indications.
- Relevant market information is considered even in the development of prices for hubs where no ICE Market Data is available.

PART II: SECURITY AND CONFIDENTIALITY

Data is stored in a secure network, in accordance with Platts' policies and procedures.

PART III: CALCULATING FORWARD CURVES

The following section describes how Platts uses the transactional data it has collected in the manner described in Part 1, to formulate the forward curves.

1. Receive ICE pre-settlement data.
2. Reconcile ICE Henry Hub with CME Group Henry Hub.
3. Shape ICE pre-settlement data to increase granularity to monthly. The shaping methodology for each curve breaks the package into monthly granularity by combining information from historical forward prices, historical spot prices, and ICE forward prices. When the model is set up, shaping factors are calculated daily to better reflect market conditions. The time horizon used for generating shaping factors is selected to best represent the temporal dimension. Flexibility in the curve creation process is allowed for the use of ICE final settlement data in place of the ICE pre-settlement data to build curves when quality is impacted.

4. Incorporate ICE activity data. Curves are derived by considering available market information from ICE intraday and activity reports. When the information is available in seasonal packages, Platts applies the shaping methodology to generate monthly curves.
5. Extend the curves for Market locations using resulting GPCM (see description below) forecasts to provide guidance to trends.
6. Derive curves for Proxy locations. The curve is derived based on similarity in seasonal pricing patterns and overall price correlation. This approach necessarily relies on modeling to a greater degree than Market hubs. Platts performs three calculations to estimate these strips:
 - a. Proxy hubs are assigned to market hubs based on their similarity in seasonal pricing patterns and overall price correlation.
 - b. The price relationship between the pair of hubs is defined and is calculated from the historical data set.
 - c. The monthly values for the market hub are used to determine the prices for the proxy hub.
7. Quality assurance and review: In daily production, analysts closely monitor the curve shape to differentiate changes in the term structure from other market activity. We check for outliers, curve abnormalities, and unusual price movements. Curves are later verified with ICE Final Settlement data for consistency.
8. The curves are published and delivered to clients via FTP, Platts.com, channel partners, and/or email.

Shaping

For trading packages that include multiple months, Platts derives a shaping methodology for each month to break the

package into monthly granularity by combining information from historical forward prices, historical spot prices, and ICE forward prices.

When the model is set up, shaping factors are calculated daily to better reflect market conditions. The time horizon used for generating shaping factors is selected to best represent the temporal relationship of the forward price with enough data to guarantee the stability of the curve shapes. Monthly shaping will always average to ICE package values.

In daily production, analysts closely monitor the curve shape to differentiate changes in the term structure from other market activity.

GPCM and 20 year curves

Platts utilizes the Gas Pipeline Competition Model (GPCM), which is licensed from RBAC Inc., for the purposes of extending curves beyond available market data. For 20 year curves, the first 120 months is consistent with the 120 month M2MS curve of the last trading day of the month. The latter part of the curve is determined with the help of a GPCM forecasting model that attempts to replicate the economics of the natural gas industry, including the production, transportation, storage, marketing, distribution, and consumption sectors.

The gas model makes use of supply and demand curves for major market and supply areas by month, over a 20-year forecast period, and also uses a detailed approximation of the physical characteristics of the North American pipeline grid to solve for the equilibrium volumes and prices.

Platts has developed a detailed data set for input to the model which includes distinct pipelines and unique pipeline zones, supply regions, demand points representing customers across each of the various gas consumption sectors, storage areas, and pipeline interconnects. The pipeline data also includes rates for firm and interruptible transportation and storage.

A discounting algorithm based on pipeline utilization simulates activities in the pipeline capacity release market. Data on storage facilities were summarized by pipeline and state and balanced to storage levels consistent with publicly available state and regional sources.

Demand curves are developed from historical data on price and demand. Separate regression analyses are performed for each end-use sector and state. Using log transformations of monthly gas consumption as the dependent variable, state-level econometric models are constructed.

Based on the model and current market fundamentals, Platts includes information inferred from near-term market data onto the farther end. The resulting product is a discrete and smooth curve that gives priority to market data when available but has a robust, consistent process for building prices when market data is not available.

PART IV: PLATTS STANDARDS

All Platts' employees must adhere to the S&P Global Code of Business Ethics (COBE), which has to be signed annually. The COBE reflects S&P Global's commitment to integrity, honesty and

acting in good faith in all its dealings.

In addition, Platts requires that all employees attest annually that they do not have any personal relationships or personal financial interests that may influence or be perceived to influence or interfere with their ability to perform their jobs in an objective, impartial and effective manner.

Platts has a Quality & Risk Management (QRM) function that is independent of the Commodity Risk Solutions (CRS) group. QRM is responsible for ensuring the quality and adherence to Platts' policies, standards, processes and procedures. The QRM team conduct regular assessments of CRS operations, including checks for adherence to published methodologies.

S&P Global's internal auditor, an independent group that reports directly to the parent company's board of directors, reviews the Platts risk assessment programs.

PART V: CORRECTIONS

Platts is committed to promptly correcting any material errors. When corrections are made, they are limited to corrections to data that was available when the forward price was calculated.

PART VI: REQUESTS FOR CLARIFICATIONS OF DATA AND COMPLAINTS

Platts strives to provide critical information of the highest standards, to facilitate greater transparency and efficiency in physical commodity markets.

Platts customers raise questions about its methodologies and the approach taken in the formation of forward curves. Platts strongly values these interactions and encourages dialogue concerning any questions a customer or market stakeholder may have.

However, Platts recognizes that occasionally customers may not be satisfied with responses received or the services provided by Platts and wish to escalate matters. Full information about how to contact Platts to request clarification around a forward price, or make a complaint, is available on the Platts website, at: <http://www.platts.com/ContactUs/Complaints>.

PART VII: DEFINITIONS OF THE NORTH AMERICAN LOCATIONS FOR WHICH PLATTS PUBLISHES FORWARD CURVES

The following M2MS-Gas Methodology and Specifications Guide contains the primary specifications and methodologies for Platts Natural Gas Forward Curves in North America. The various components of this guide are designed to give Platts subscribers as much information as possible about a wide range of methodology and specification issues.

This methodology is current at the time of publication. Platts may issue further updates and enhancements to this methodology and will communicate these to subscribers through its usual publications of record. Such updates will be included in the next version of the methodology. Platts managers will usually be ready to provide guidance when forward curve issues require clarification.

Platts' Commodity Risk Solutions (CRS) daily 10 year and semimonthly 20 year M2MS Natural Gas forward curves aim to bring greater price transparency to Natural Gas forward markets in North America and to provide an independent view of forward Natural Gas prices for multiple hubs in the US and Canada, including those where there is minimal or no trading activity of financially settled swap contracts on any given day. They provide a regionally comprehensive and industry-accepted standard for normalizing short-and long-term Natural Gas contract valuations.

Platts CRS daily 10 year and semimonthly 20 year M2MS Natural Gas implied volatility curves contain information about the uncertainty of the day-to-day returns on the forward prices, assessed in the M2MS Natural Gas forward curves.

Platts produces M2MS Natural Gas curves at multiple delivery points across North America. We classify our locations into two categories for the purpose of curve production. Location categories are listed in the regional tables below:

- **Market Hubs:** For liquid trading locations at which settlement data is available and verifiable.
- **Proxy Hubs:** For locations where there is little or no market data available. The CRS quantitative methodology uses fundamental analysis and statistical testing to establish a defensible proxy relationship between these hubs and one of the Market hubs defined above.

Platts M2MS Natural Gas offers the following curves for the North American Natural Gas market:

- 120-Month M2MS forward curves, delivered daily, provide market-based forward price with monthly granularity plus balance of the month for 100 locations, where balance of the month refers to the period beginning from the day after the spot flow date to the last trade date of the month.
- 240-Month M2MS curves, delivered semimonthly, provide 20-year monthly granularity forward curves plus balance of the month for 100 locations, derived by blending the current regional 120-month forward prices with 20 year annual price projections incorporating market fundamentals.
- The curves described above are available in five regional packages (Gulf Coast, MidContinent, Rockies and West, Northeast and Upper Midwest).
- A sixth package, M2MS National, contains 30 of the most liquid trading locations in the US and Canada.
- Subscribers to both M2MS Power and M2MS Gas packages also receive forward heat rate curves. These heat rate curves are not market curves; they are implied from the gas and power prices.
- Platts M2MS-Gas Forward Curves offer the following curves for the North American natural gas market, listed alphabetically by regional package.

How to read the symbol tables:

For the ten-year and twenty-year subscriptions, each location has a reference of the form:

ZZZxxy.

This can be decoded to all symbols for a location in this manner:

ZZZZ is the hub code for that location, and does not change for a particular location.

For Balance of Month (BOM)

For all other contracts:

xyy = B00 **x** = month, where **A** = Jan, **B** = Feb, ... **L** = Dec.

yy = year, without century. Note that for both the ten-year and twenty-year subscriptions, all years are included, i.e. the twenty-year includes the first ten years, but with slightly different hub codes.

For example,

Henry Hub BOM = **NHHMB00**

ALGONQUIN Jul 18 = **NAGMG18**

M2MS-GAS NORTHEAST REGION SYMBOLS (BATE CODE: U)

Location	Location Category	10 Year Symbol	20 Year Symbol	Location	Location Category	10 Year Symbol	20 Year Symbol
ALGONQUIN	Market	NAGMxxy	NAGPxyy	TENN ZN4-200L	Proxy	NZ2Mxxy	NZ2Pxyy
COL GAS APPAL	Market	NCAMxxy	NCAPxyy	TENN ZN4-300L	Market	NZ4Mxxy	NZ4Pxyy
COLUMBIA GAS, APPAL (NON-IPP)	Proxy	NCNMxxy	NCNPxyy	TENN ZN6 DLVD	Market	NTZMxxy	NTZPxyy
DOMINION N PT	Proxy	NDNMxxy	NDNPxyy	TENNESSEE ZONE 4-313	Proxy	NZ3Mxxy	NZ3Pxyy
DOMINION S PT	Market	NDSMxxy	NDSPxyy	TRANSCO ZN5 DLV	Market	NZ5Mxxy	NZ5Pxyy
DRACUT MA	Proxy	NDRMxxy	NDRPxyy	TRANSCO ZN 5 SOUTH	Market	N5SMxxy	N5SPxyy
IROQUOIS RECPTS	Market	NIRMxxy	NIRPxyy	TRANSCO ZN6 NY	Market	NTNMxxy	NTNPxyy
IROQUOIS ZN2	Market	NIQMxxy	NIQPxyy	TRANSCO ZN6 XNY	Market	NT6Mxxy	NT6Pxyy
LEBANON HUB-OHIO	Proxy	NLBMxxy	NLBPxyy	TRANSCO ZN6 XNY NORTH	Proxy	N6NMxxy	N6NPxyy
TRANSCO LEIDY	Market	NLEMxxy	NLEPxyy	TX EASTERN M-2	Market	NM2Mxxy	NM2Pxyy
MILLENNIUM EAST RECPTS	Proxy	NMEMxxy	NMEPxyy	TX EASTERN M-3	Market	NTEMxxy	NTEPxyy
NIAGARA	Market	NGRMxxy	NGRPxyy	PNGTS	Proxy	NPNMxxy	NPNPxyy

Northeast**Algonquin City Gate**

Deliveries from Algonquin Gas Transmission to all distribution company city-gates in Connecticut, Massachusetts and Rhode Island.

Columbia Gas Appalachia

Deliveries in Columbia Gas Transmission's Interruptible Paper Pool (IPP pool) from any source on Columbia Gas. Deliveries in the IPP pool, which is also known as the "TCO Pool" can originate from any source delivered into Columbia Gas's system.

Columbia Gas Appalachia (non-IPP)

Deliveries outside of Columbia Gas Transmission's Interruptible Paper Pool (IPP pool) from any source on Columbia Gas.

Dominion North Point

Deliveries into Dominion Transmission starting at the Valley Gate

delivery point at the end of Dominion's South Point system, about 40 miles northeast of Pittsburgh in Armstrong County, Pa., and continuing north into New York and eastward across the state, crossing the Hudson River and terminating in Rensselaer County, near Albany, Troy and Schenectady, N.Y.

Dominion South Point

Deliveries into two Dominion Transmission main lines: One runs northeast from Warren County, Ohio, midway between Cincinnati and Dayton, and merges with the second line just northeast of Pittsburgh, Pa. The second line runs from Buchanan County, Va., on the Virginia/West Virginia border north to the end of the zone at Valley Gate in Armstrong County, Pa. Major stations in the South Point system include interconnections with ANR Pipeline (Lebanon station), Columbia Gas Transmission (Windbridge and Loudoun stations), Tennessee Gas Pipeline (Cornwell station), Transcontinental Gas Pipe Line (Nokesville station) and Texas Eastern Transmission (Lebanon, Oakford, Chambersburg, Perulack and Windridge stations). Storage pools in the South Point system include South Bend, Murrysville, Oakford, Gamble, Hayden, Webster, Colvin, North Summit, Bridgeport, Lost Creek, Kennedy, Fink and Rocket Newberne.

Dracut MA

Deliveries into Tennessee Gas Pipeline at the Dracut interconnect with Maritimes & Northeast Pipeline near Middlesex, Mass. This is the primary delivery point for offshore Nova Scotia gas into the Northeast market area. Dracut also includes gas entering from Portland Natural Gas Transmission System.

Iroquois Receipts

Deliveries into Iroquois Gas Transmission System at the US/Canadian border at the Waddington interconnect with TransCanada PipeLines.

Iroquois Zone 2

Deliveries from Iroquois Gas Transmission System starting at the Athens, N.Y., power plant downstream to the terminus of the pipeline at Hunts Point and South Commack.

Lebanon Hub Ohio

Deliveries to or from Texas Gas Transmission, ANR Pipeline, Texas Eastern Transmission, Panhandle Eastern Pipe Line, Columbia Gas Transmission, Dominion Gas Transmission and Rockies Express Pipeline at interconnects in the Lebanon, Ohio, area.

Millennium East Receipts

Receipts into Millennium Pipeline downstream of the Corning compressor station in Steuben County, N.Y., and upstream of the Ramapo interconnect with Algonquin Gas Transmission in Rockland County, N.Y. (This location does not include deliveries out of Millennium.) This point was added effective Oct. 1, 2012.

Niagara

Cross-border deliveries to and from TransCanada Pipe Lines and the Niagara spur and loop lines, a border-crossing point between eastern Canada and the northeastern United States, north of Niagara Falls, N.Y. Niagara Spur Loop line and Niagara Spur line interconnects are with Tennessee Gas Pipeline, National Fuel Gas Supply, Dominion Transmission and Texas Eastern Transmission.

PNGTS

Portland Natural Gas Transmission System (PNGTS) is a 295-mile interstate natural gas pipeline system that originates at the terminus of TC Energy's TQM pipeline at the Canadian border, shares facilities with the Maritimes and Northeast Pipeline from Westbrook, ME to Dracut, MA where it ultimately connects with the Tennessee Gas Pipeline System.

Tenn Zone 4-200 Leg

Deliveries into Tennessee Gas Pipeline at all points of receipt on the 200 line in the states of Pennsylvania and Ohio as well as transactions at Tennessee's station 219 pool. This location does

not include deliveries from Tennessee to other systems in zone 4. This point was added effective April 1, 2013.

Tenn Zone 4-300 Leg

Deliveries into Tennessee Gas Pipeline, zone 4-300 leg from, and including, station 315 in Tioga County, Pa., to, and including, station 321 in Susquehanna County, Pa. This point was added to the daily survey effective Jan. 17, 2012, and to the monthly survey effective with the bidweek for February 2012 delivery.

Tenn Zone 4-313

Tennessee Gas Pipeline's Zone 4 "300 Leg" west of the Wellsboro Compressor Station (#315) in Tioga County, PA up to but not including the Mercer (#219) Compressor Station in Mercer County, PA. Our index includes the small portion of Line 300 that extends Northeast from the Coudersport (Station #313) Compressor Station in Potter County, PA to the PA/NY border.

Tenn Zone 6 Delivered

Deliveries from Tennessee Gas Pipeline on the 200 leg in Connecticut, Massachusetts, Rhode Island and New Hampshire.

Texas Eastern M-2 Receipts

Receipts into Texas Eastern Transmission on its 24- and 30-inch lines in the pipeline's Market Zone 2, which extends on the 24-inch line from the Illinois-Indiana state line to the suction side of Bern compressor station in Lewisville, Ohio, and on the 30-inch line from the Tennessee-Kentucky state line to the suction side of Delmont station in Westmoreland County, Pa., and to the discharge side of Station Site No. 22 in southwestern Pennsylvania. (This location does not include deliveries out of Texas Eastern, M-2.) This point was added effective Oct. 1, 2012.

Texas Eastern M-3

Texas Eastern Transmission deliveries from the Delmont compressor station in Westmoreland County, Pa., east to the Hanover and Linden stations in Morris County, N.J. Included are deals delivered from Texas Eastern anywhere in zone M-3, including at interconnects with New York City distributors' city-gates and at interconnects with Algonquin Gas Transmission at Lambertville in Hunterdon County, N.J., and at the Hanover station.

Transco Leidy Line Receipts

Deliveries to Transcontinental Gas Pipe Line's Leidy Line downstream of the Leidy/Wharton storage facilities in Clinton and Potter counties, Pennsylvania, to Transco's station 505 in Hunterdon County, N.J. This pricing location does not include transactions at the storage-related interconnects with Dominion Transmission, National Fuel Gas Supply, UGI Storage or Tennessee Gas Pipeline. This point was added effective April 1, 2013.

Transco Zone 5 Delivered

Deliveries from Transcontinental Gas Pipe Line on the 30-inch, 36-inch and 42-inch lines from the Georgia/South Carolina border to the Virginia/Maryland border. Deliveries into Transco at the Pleasant Valley receipt point near Fairfax, Va., from Dominion's Cove Point LNG terminal are not included.

Transco Zone 5 South

All locations between and including the beginning of Transco Zone 5 at the Georgia/South Carolina border and Station 165 in Virginia.

Transco Zone 6 non-NY

Deliveries from Transcontinental Gas Pipe Line from the start

of zone 6 at the Virginia/Maryland border to the Linden, N.J., compressor station and on the 24-inch pipeline to the Wharton, Pa., station. The non-New York point does not include deliveries to Public Service Electric and Gas in New Jersey, whose supply is taken downstream of Linden.

Transco Zone 6 non-NY North

Deliveries from Transcontinental Gas Pipe Line from Station 195 in York, Pennsylvania, to the Linden, New Jersey, compressor station and on the Leidy Line south of Clinton County, Pennsylvania. The non-New York North point does not include deliveries to Public Service Electric and Gas in New Jersey, whose supply is taken downstream of Linden.

Transco Zone 6 NY

Deliveries from Transcontinental Gas Pipe Line at the end of zone 6 into city-gates downstream of Linden, N.J., for New York City area distributors— Key Span Energy Delivery and Consolidated Edison Co. of New York —as well as Public Service Electric and Gas of New Jersey.

M2MS-GAS GULF COAST REGION SYMBOLS (BATE CODE: U)

Location	Location Category	10 Year Symbol	20 Year Symbol	Location	Location Category	10 Year Symbol	20 Year Symbol
AGUA DULCE HUB	Proxy	NADMxyy	NADPxyy	TENN ZN0	Proxy	NT0Mxyy	NT0Pxyy
ANR LA	Market	NALMxyy	NALPxyy	TETCO M1	Market	NTMMxyy	NTMPxyy
CARTHAGE	Proxy	NCTMxyy	NCTPxyy	TEXAS GAS ZN 1	Market	NG1Mxyy	NG1Pxyy
COL GULF LA	Market	NCLMxyy	NCLPxyy	TEXAS GAS ZN SL	Proxy	NGSMxyy	NGSPxyy
COL GULF MNLNE	Market	NCMMxyy	NCMPxyy	TGP-Z0 SOUTH	Market	NZ0Mxyy	NZ0Pxyy
FL GAS ZN1	Proxy	NF1Mxyy	NF1Pxyy	TRANSCO ZN1	Market	NT1Mxyy	NT1Pxyy
FL GAS ZN2	Proxy	NF2Mxyy	NF2Pxyy	TRANSCO ZN2	Proxy	NT2Mxyy	NT2Pxyy
FL GAS ZN3	Market	NF3Mxyy	NF3Pxyy	TRANSCO ZN3	Market	NTCMxyy	NTCPxyy
FLORIDA CG	Proxy	NFCMxyy	NFCPxyy	TRANSCO ZN4	Market	NT4Mxyy	NT4Pxyy
HENRY HUB	Market	NHFMxyy	NHFPxyy	TRUNKLINE E LA	Market	NTRMxyy	NTRPxyy
HOUSTON SHIPCHL	Market	NHSMxyy	NHSPxyy	TRUNKLINE W LA	Proxy	NWLMxyy	NADPxyy
KATY	Market	NKTMxyy	NKTPxyy	TRUNKLINE ZN 1A	Proxy	NTAMxyy	NTAPxyy
NGPL S TX	Market	NGTMxyy	NGTPxyy	TX EASTERN E LA	Market	NTLMxyy	NTLPxyy
NGPL TEXOK ZN	Market	NGOMxyy	NGOPxyy	TX EASTERN E TX	Proxy	NTTMxyy	NTTPxyy
SONAT LA	Market	NSLMxyy	NSLPxyy	TX EASTERN S TX	Market	NTSMxyy	NTSPxyy
TENN 100 LEG	Proxy	NEEMxyy	NEEPxyy	TX EASTERN W LA	Market	NTWMxyy	NTWPxyy
TENN 500 LEG	Market	NT5Mxyy	NT5Pxyy	TRES PALACIOS INJECTION	Proxy	NPIMxyy	NPIPxyy
TENN 800 LEG	Market	NT8Mxyy	NT8Pxyy	TRES PALACIOS WITHDRAWAL	Proxy	NPWMxyy	NPWPxyy

Gulf Coast Region**Aqua Dulce Hub**

Deliveries into Kinder Morgan Texas Pipelines, Houston Pipe Line, Gulf South Pipeline, Natural Gas Pipeline Co. of America, Transcontinental Gas Pipe Line, Tennessee Gas Pipeline, Trans Texas Gas and the former EPGT Texas pipeline at the Agua Dulce Hub in Nueces County, Texas, about 20miles west-southwest of Corpus Christi. Deliveries from the ExxonMobil King Ranch plant are included.

ANR LA

Deliveries into ANR Pipeline along the southeastern Louisiana lateral that starts offshore and runs to the Patterson, La., compressor station onshore and on to the Eunice, La., station,

where ANR's Southeast mainline begins. Also, deliveries into ANR along a second lateral that runs from the HIOS system downstream of West Cameron 167 offshore to the Grand Chenier, La., station onshore and on to the Eunice station, as well as deals done at the Eunice pool.

Carthage Hub

Deliveries into Enable East, Gulf South Pipeline, Lone Star Pipeline, Southern Natural Gas, Kinder Morgan Texas Pipelines, Tennessee Gas Pipeline, Texas Eastern Transmission and Texas Gas Transmission at the tailgate of the Carthage, Texas, processing plant in Panola County, Texas.

Columbia Gulf LA

Deliveries into Columbia Gulf Transmission on its onshore lateral

pipeline system stretching across South Louisiana, upstream of Rayne, La. Columbia Gulf's East Lateral extends from Rayne to Venice, La. The West Lateral runs from Rayne to west of Cameron, La. Excluded are deals done in the offshore rate zone, at Rayne or elsewhere in the mainline rate zone.

Columbia Gulf Mainline

Deliveries into Columbia Gulf Transmission anywhere along its mainline system zone in Louisiana and Mississippi. The mainline system extends northeast from Rayne, La., to Leach, Ky. This point was added to the monthly survey in August 2007.

Florida City Gate

Deliveries from Florida Gas Transmission into all city-gates in the Florida market area, which begins in Santa Rosa County just

west of station 12 in the extreme western Florida Panhandle and extends into southern Florida.

Florida Gas Zone 1

Deliveries into Florida Gas Transmission beginning at compressor station 2 in Nueces County in South Texas to station 7 in Acadia Parish, La

Florida Gas Zone 2

Deliveries into Florida Gas Transmission downstream of station 7 in Acadia Parish, La., to station 8 in East Baton Rouge Parish. Included is supply into the mainline from the White Lake Lateral and from the Chacahoula Lateral, both of which extend south from the mainline into production areas.

Florida Gas Zone 3

Deliveries into Florida Gas Transmission downstream of compressor station 8 to just upstream of station 12 in Santa Rosa County, Fla., the demarcation point with the market area. Platts' daily and monthly bidweek surveys for zone 3 include deliveries between stations 8 and 12, including Mobile Bay deals into Florida Gas.

Henry Hub

Deliveries into interstate and intrastate pipelines from the outlet of Henry Hub on Sabine Pipe Line in Vermilion Parish, La. Pipelines include Gulf South Pipeline, Southern Natural Gas, Natural Gas Pipeline Co. of America, Texas Gas Transmission, Sabine Pipe Line, Columbia Gulf Transmission, Transcontinental Gas Pipe Line, Trunkline Gas, Jefferson Island Pipeline and Acadian Gas.

Houston Ship Channel

Deliveries to end-users and pipelines that serve them in the Houston Ship Channel region, an industrial area extending from

the east side of Houston to Galveston Bay and northeastward to the Port Arthur/Beaumont area. Gas is delivered in this area by numerous pipelines, including Kinder Morgan Texas Pipeline, Kinder Morgan Tejas Pipeline, Houston Pipe Line, and the former EPGT and Channel pipelines.

Katy

Deliveries into Oasis Pipeline, Lone Star Pipeline, Houston Pipe Line and Kinder Morgan Texas Pipelines in the Katy, Texas, area, including deliveries and receipts into and out of Katy storage.

NGPL South TX

Deliveries into Natural Gas Pipeline Co. of America at the beginning of the mainline at the Thompsonville receipt point in Jim Hogg County, Texas, north to compressor station 302 in Montgomery County, Texas.

NGPL TX-OK

Deliveries to Natural Gas Pipeline Co. of America in all areas of the Texok zone excluding the portion in Texas and Oklahoma on the A/G Line. Applicable to the Texok zone are the deliveries to Natural from the Louisiana/Texas border westward to compressor station 302 in Montgomery County, Texas, and northward to the interconnect with the Gulf Coast Mainline receipt zone in Cass County, Texas. The "Texok Gulf Coast Pooling Point" is included in this posting, but the "Texok A/G Pooling Point" is not.

Southern Natural LA

Deliveries into Southern Natural Gas' mainlines anywhere in Louisiana, including an eastern spur starting in Plaquemines Parish and a western spur starting in St. Mary Parish in South Louisiana, and a line that starts at the Texas/Louisiana border in DeSoto Parish and runs to the Louisiana/Mississippi border in East Carroll Parish in northern Louisiana.

Tenn 100 Leg

Receipts into Tennessee's 100 leg in zone 1 on Tennessee Gas Pipeline.

Tenn 500 Leg

Deliveries into Tennessee Gas Pipeline's 500 leg in zone L in southeastern Louisiana, including deliveries into the 500 Leg from the offshore Blue Water Header system. The 500 Leg meets the boundary of Zone 1 at station 534 at Purvis, Mississippi.

Tenn 800 Leg

Deliveries into Tennessee Gas Pipeline's 800 leg in zone L in southeastern Louisiana, including deliveries from the offshore Blue Water Header system. The leg meets the boundary of the market area at station 834 at Winnsboro in central Louisiana.

Tenn Zone 0

Deliveries into Tennessee Gas Pipeline's 100 leg from the Mexico/Texas border to the Texas/Louisiana border.

Texas Eastern East LA

Deliveries into Texas Eastern Transmission on the 30-inch line from the Opelousas, La., compressor station to the Kosciusko, Miss., compressor station. Included are deliveries into the 30-inch pipeline from Texas Eastern's Venice Line at the New Roads, La., compressor station.

Texas Eastern East TX

Deliveries into Texas Eastern Transmission on the 24-inch line from the Huntsville, Texas, compressor station to the Little Rock station in Arkansas, including the segment from Joaquin to Sharon.

Texas Eastern M-1

Deliveries into Texas Eastern Transmission on the 30-inch line at the Kosciusko, Miss., compressor station, which is the demarcation point between Texas Eastern's production and market zones. Deliveries into the 24-inch mainline are not included.

Texas Eastern South TX

Deliveries into Texas Eastern Transmission on the 30-inch pipeline from the Mexico/Texas border to just upstream of the Vidor, Texas, compressor station; and deliveries into Texas Eastern on the 24-inch pipeline from the Hagist Ranch compressor station to just upstream of the Huntsville, Texas, station.

Texas Eastern West LA

Deliveries into Texas Eastern Transmission on the 30-inch line from the Vidor, La., compressor station to just upstream of the Opelousas, La., compressor station. Included are deliveries from Texas Eastern's offshore Cameron Line at the Gillis, La., compressor station.

Texas Gas Zone SL

Deliveries into Texas Gas Transmission on two southeastern Louisiana laterals, including offshore segments. The southwest spur begins offshore at Grand Chenier and runs through Cameron Parish to the Eunice compressor station. The southeast spur begins offshore and runs through Terrebonne Parish to Eunice. Zone SL extends to the vicinity where Texas Gas crosses the Red River in Rapides Parish.

Texas Gas Zone 1

Deliveries into Texas Gas Transmission starting just south of the Pineville, La., compressor station in Rapides Parish north to

Crockett County, Tenn.

TGP-Z0 South

Tennessee Zone 0 South begins near the Texas/Mexico border in McAllen County, TX and ends at the East Bernard (Station 17) Compressor Station in Wharton County, TX. Tennessee Pipeline split what was previously Zone 0 into Zone 0 South and North effective November 1, 2009.

Transco Zone 1

Deliveries into Transcontinental Gas Pipe Line on two 24-inch lines running from South Texas to compressor station 30 in Wharton County, Texas, which is Transco's pooling point for gas gathered on the Gulf Central Texas Lateral and for onshore coastal South Texas production

Transco Zone 2

Deliveries into Transcontinental Gas Pipe Line on the 30-inch line downstream of station 30 in Wharton County, Texas, to compressor station 45 in Beauregard Parish, La., the only pooling point in the zone.

Transco Zone 3

Deliveries into Transcontinental Gas Pipe Line on the 30-inch, 36-inch and 42-inch lines downstream of compressor station 45 in Beauregard Parish, La., to station 65 on the Louisiana/Mississippi border in St. Helena Parish, La. Pooling points in the zone are at stations 50, 62 and 65.

Transco Zone 4

Deliveries into Transcontinental Gas Pipe Line on the 30-inch, 36-inch and 42-inch lines downstream of compressor station 65 at the Louisiana/Mississippi border in St. Helena Parish, La., to the Georgia/South Carolina border. Gas enters the Transco

mainline from the Mobile Bay Lateral at station 85 in Butler, Ala., the only zone 4 pooling point.

Trunkline East LA

Deliveries into Trunkline Gas on an offshore gathering system running from south of Terrebonne Parish west to the Kaplan station in Vermilion Parish, the boundary with the WLA zone.

Trunkline West LA

Deliveries into Trunkline Gas along two laterals starting at an offshore Louisiana lateral leading to the Kaplan, La., station in Vermilion Parish, northwest to the Longville compressor station. Included are deliveries at the Kaplan compressor station, which demarcates the WLA and ELA zones.

Trunkline Zone 1A

Deliveries to Trunkline Gas Co. in zone 1A from the discharge side of its Longville, LA, compressor station north to the suction side of its Dyersburg, TN, station, as well as transactions at Trunkline's zone 1A pool.

Tres Palacios Injection

Injection into the salt cavern gas storage and wheeling facility in Matagorda County, Texas. Tres Palacios connects to KM Houston Central, Enterprise TX, TGP, Transco, NGPL, CTGS, Tejas, FGT, Channel/HPL, TX Eastern, Gulf South.

Tres Palacios Withdrawal

Withdrawal from the salt cavern gas storage and wheeling facility in Matagorda County, Texas. Tres Palacios connects to KM Houston Central, Enterprise TX, TGP, Transco, NGPL, CTGS, Tejas, FGT, Channel/HPL, TX Eastern, Gulf South.

M2MS-GAS MID-CONTINENT REGION SYMBOLS (BATE CODE: U)

Location	Location Category	10 Year Symbol	20 Year Symbol	Location	Location Category	10 Year Symbol	20 Year Symbol
ANR OK	Market	NAOM _{xyy}	NAOP _{xyy}	ONEOK OK	Market	NONM _{xyy}	NONP _{xyy}
ENABLE GAS E	Market	NREM _{xyy}	NREP _{xyy}	PANHANDLE TX-OK	Market	NPTM _{xyy}	NPTP _{xyy}
ENABLE GAS W	Proxy	NRWM _{xyy}	NRWP _{xyy}	STH STAR TXOKKS	Market	NWTM _{xyy}	NWTP _{xyy}
NGPL MIDCONT	Market	NGMM _{xyy}	NGMP _{xyy}				

Mid-Continent**ANR OK**

Deliveries into ANR Pipeline at the start of the Southwest mainline at the Custer, Okla., compressor station, into the Texas Panhandle north to the Greensburg, Kan., station.

Enable Gas East

Deliveries into Enable Gas Transmission's flex/neutral and north pooling areas in northeastern Arkansas and southeastern Oklahoma. The north pooling area is separated from the south pooling area by a generally northwest-to-southeast line between Le Flore County, Okla., and Bolivar County, Miss. The flex (or neutral) pooling area in Oklahoma comprises all of Pushmataha, Latimer, Haskell and Pittsburg counties and the northeast section of Atoka County. In the past, the system was known as NorAm Gas Transmission, Arkla Energy Resources and Reliant Energy Gas Transmission. The name was most recently changed from CenterPoint Energy Gas Transmission to Enable Gas Transmission effective trade date Nov. 25, 2013.

Enable Gas West

Deliveries into Enable Gas Transmission's west pooling areas 1 and 2 from just east of the Chiles Dome storage facility west to the Texas Panhandle and north from the Custer, Oklahoma, compressor station to Cowley County, Kansas. The name was most recently changed from CenterPoint Energy Gas Transmission to Enable Gas Transmission effective trade date Nov. 25, 2013.

NGPL Midcon

Deliveries into Natural Gas Pipeline Co. of America starting at compressor station 155 in Wise County, Texas, west to the Amarillo mainline at station 112 in Moore County in the Texas Panhandle, and then north to the Trailblazer Pipeline interconnection in Gage County, Neb. Included are deliveries into NGPL at all Oklahoma points west of station 801, as well as those in North Texas north and east of station 170 and in Kansas south of station 103.

Oneok OK

Deliveries into Oneok Gas Transportation's mainline systems from several gathering systems, all of which are located in

Oklahoma. One of the two largest is near the east-central part of the state in Pittsburg and Haskell counties. The second, in the west-central part of the state, extends from Blaine and Canadian counties southeast to Grady County. Oneok operates a single price pool for all gas coming into the system. In the past, Oneok was known as ONG Transmission.

Panhandle TX-OK

Deliveries into Panhandle Eastern Pipe Line on two laterals running from the Texas and Oklahoma panhandles, southwestern Kansas and northwestern Oklahoma upstream of the Haven, Kan., compressor station. Deliveries to Panhandle at the Haven pooling point — the demarcation between Panhandle's field and market zones — are not included.

Southern Star TX-OK-KS

Deliveries into Southern Star Central Gas Pipeline's system from Hemphill County in the Texas Panhandle eastward, from Carter County in south central Oklahoma northward and from Grant County in southwestern Kansas eastward. In the past, the system was known as Williams Natural Gas and Williams Gas Pipelines Central.

M2MS-GAS UPPER MIDWEST REGION SYMBOLS (BATE CODE: U)

Location	Location Category	10 Year Symbol	20 Year Symbol	Location	Location Category	10 Year Symbol	20 Year Symbol
ANR ML 7	Proxy	NAMMxyy	NAMPxyy	EMERSON	Market	NVEMxyy	NVEPxyy
ALLIANCE INTERSTATES	Proxy	NAIMxyy	NAIPxyy	MICH CON CG	Market	NMGMxyy	NMGPxyy
CHICAGO CG	Market	NCGMxyy	NCGPxyy	NRTHRN NG DEMARC	Market	NNDMxyy	NNDPxyy
CONS ENERGY CG	Market	NCEMxyy	NCEPxyy	NRTHRN VENTURA	Market	NNVMxyy	NNVPxyy
DAWN ONTARIO	Market	NDOMxyy	NDOPxyy	REX ZONE 3 DELIVERED	Market	NR3Mxyy	NR3Pxyy

Upper Midwest**Alliance Interstates**

Deliveries from Alliance Pipeline into Vector Pipeline, Natural Gas Pipeline Co. of America, ANR Pipeline and Midwestern Gas Transmission at the tailgate of the Aux Sable plant in north-central Illinois at the terminus of Alliance. Deliveries into the Northern Indiana Public Service, Peoples Gas Light & Coke and Nicor Gas city-gates in the Chicago area are not included.

ANR ML 7

Deliveries into ANR Pipeline in its northern market zone starting at the Sandwich, Ill., compressor station at the terminus of the Southwest mainline north through Wisconsin to the Crystal Falls, Mich., interconnection with Great Lakes Gas Transmission. Also, deliveries into ANR east from Sandwich to the Defiance, Ohio, compressor station at the terminus of the Southeast mainline, and north from the Bridgman, Mich., station to the Orient, Mich., station.

Chicago City Gate

Deliveries into the Nicor Gas, Peoples Gas Light & Coke, North Shore Gas and Northern Indiana Public Service city-gates in the Chicago metropolitan area from Natural Gas Pipeline Co. of America, ANR Pipeline, Alliance Pipeline, Northern Border Pipeline and Midwestern Gas Transmission.

Cons Energy City Gate

Deliveries into all city-gates of Consumers Energy, which serves most of central Michigan and the areas around Saginaw Bay.

Dawn Ontario

Deliveries from Union Gas' Dawn Hub, a gathering point for 15 adjacent storage pools in Ontario near Port Huron, Mich., on the US/Canadian border. Included are deliveries into TransCanada Pipe Lines at Kirkwall, Ontario; deliveries into Great Lakes Gas Transmission at St. Clair, Mich.; deliveries into Consumers Energy at Bluewater, Mich.; deliveries into Panhandle Eastern Pipe Line at Ojibway, Mich.; and deliveries into Dawn storage. Deliveries from Union into TransCanada at Parkway, Ontario, are not included.

Emerson

Deliveries into Great Lakes Gas Transmission from TransCanada PipeLines at the Emerson 2 meter station at the US/Canadian border at Emerson, Manitoba, and deliveries into Viking Gas Transmission from TransCanada at the Emerson 1 station. This point was added to the monthly survey effective Aug. 1, 2011.

Mich Con City Gate

Deliveries into all city-gates of Michigan Consolidated Gas,

which serves the Detroit and Grand Rapids areas and much of north and northeast Michigan. The main MichCon city-gates are located at interconnects with ANR Pipeline at Willow Run and Wolkfork, Mich., Panhandle Eastern PipeLine at River Rouge, Great Lakes Gas Transmission at Belle River, Union Gas at St. Clair Pipeline and Consumers Energy at Northville. MichCon also receives in-state production at Kalkaska.

Northern Demarc

Deliveries into Northern Natural Gas at the demarcation point between its production (field) and market zones, at the Clifton station in Clay County, Kan.

Northern Ventura

Deliveries to Northern Natural Gas at Ventura in Hancock County, Iowa.

REX Zone 3 Delivered

Deliveries from Alliance Pipeline into Vector Pipeline, Natural Gas Pipeline Co. of America, ANR Pipeline and Midwestern Gas Transmission at the tailgate of the Aux Sable plant in north-central Illinois at the terminus of Alliance. Deliveries into the Northern Indiana Public Service, Peoples Gas Light & Coke and Nicor Gas city-gates in the Chicago area are not included.

M2MS-GAS ROCKIES AND WEST REGION SYMBOLS (BATE CODE: U)

Location	Location Category	10 Year Symbol	20 Year Symbol	Location	Location Category	10 Year Symbol	20 Year Symbol
CHEYENNE	Proxy	NCWMxyy	NCWPxyy	PG&E MALIN	Market	NMAMxyy	NMAPxyy
CIG ROCKY MTNS	Market	NCRMxyy	NCRPxyy	PG&E SOUTH	Proxy	NPSMxyy	NPSPxyy
EL PASO BONDAD	Proxy	NEBMxyy	NEBPxyy	QUESTAR ROCKIES	Proxy	NQSMxyy	NQSPxyy
EL PASO PERMIAN	Market	NEPMxyy	NEPPxyy	SOCAL EHRENBURG	Proxy	NSEMxyy	NSEPxyy
EL PASO SAN JUAN	Market	NESMxyy	NESPxyy	SOCAL GAS	Market	NSCMxyy	NSCPxyy
EMPRESS	Market	NEMMxyy	NEMPxyy	SOCAL GAS CITY-GATE	Market	NSGMxyy	NSGPxyy
GTN, KINGSGATE	Proxy	NKGMxyy	NKGPxyy	STANFIELD, ORE.	Proxy	NSFMxyy	NSFPxyy
KERN RIVER DLVD	Proxy	NKRMxyy	NKRPxyy	TC ALB AECO-C	Market	NNAMxyy	NNAPxyy
KERN RIVER OPAL	Proxy	NKOMxyy	NKOPxyy	TRANSWESTN PERM	Proxy	NTPMxyy	NTPPxyy
NW CAN BD SUMAS	Market	NSUMxyy	NSUPxyy	WAHA	Market	NWAMxyy	NWAPxyy
NW WY POOL/RKY	Market	NNRMxyy	NNRPxyy	WHITE RIVER	Proxy	NWRMxyy	NWRPxyy
PG&E CG	Market	NPGMxyy	NPGPxyy	WESTCOAST STN 2	Market	NW2Mxyy	NW2Pxyy

Rockies and West**Cheyenne**

Deliveries into Trailblazer Pipeline, Public Service Co. of Colorado and Colorado Interstate Gas in the vicinity of the Cheyenne Hub in northeast Colorado.

CIG Rocky Mountains

Deliveries into Colorado Interstate Gas' 20-inch, 22-inch and 24-inch mainlines in Wyoming and Colorado. Also included are deliveries into the Parachute to Natural Buttes segment in Uintah County, Utah, and deliveries into CIG's 16-inch lateral running from the Rawlins station in Carbon County, Wyo., to the Elk Basin station in Park County, Wyo. Not included are deliveries into CIG's system at points south of Cheyenne, Wyo.

El Paso Bondad

Deliveries into El Paso Natural Gas at the Bondad compressor station in the San Juan Basin. Bondad is located in the northern part of the San Juan Basin in La Plata County, CO, south of the Ignacio plant on Northwest Pipeline and north of the Blanco plant on El Paso.

El Paso Permian

Deliveries into El Paso Natural Gas in the Permian Basin from three pools: the Waha plant south (Waha pool), the Keystone station south to Waha (Keystone pool) and the Plains station south to Keystone (Plains pool).

El Paso San Juan

Deliveries into El Paso Natural Gas south of the Bondad compressor station in the San Juan Basin, including gas from the Blanco, Chaco, Rio Vista, Milagro and Valverde plants in New Mexico.

Empress

Deliveries at the Empress/McNeill Border point on the Alberta/Saskatchewan border which connects TransCanada Alberta System (NOVA) to TransCanada Pipeline, Foothills Pipeline, and Transgas.

GTN Kingsgate

Deliveries into Gas Transmission Northwest from Foothills

Pipeline at the Kingsgate interconnection at the US/Canadian border in Boundary County, Idaho. The system was previously known as PG&E Gas Transmission, Northwest.

Kern River Delivered

Deliveries from Kern River Gas Transmission upstream of the Southern California Gas system in the Las Vegas, Nev., area; excluded are deliveries at Wheeler Ridge, Kramer Junction and Daggett. This point was added to the daily survey on June 6, 2006.

Kern River Opal

Deliveries into Kern River Gas Transmission at the Opal, Wyo., processing plant and Muddy Creek compressor station in southwestern Wyoming where Kern River interconnects with Northwest Pipeline, Questar Pipeline and Colorado Interstate Gas. Gas traded at the Opal plant that isn't nominated into a specific pipeline is included in the daily Kern River/Opal plant pricing point.

NW Can Border Sumas

Deliveries into Northwest Pipeline from Westcoast Energy at the Sumas, Wash./Huntington, British Columbia, interconnection at the US/Canadian border.

NW WY Pool Rockies

Deliveries into Northwest Pipeline from the Green River, Wyo., compressor station to the Kemmerer, Wyo., station. Included are deliveries at the Opal, Wyo., plant as well as at the Painter, Anschutz, Muddy Creek, Granger, Shute Creek and Whitney stations.

PG&E City Gate

Deliveries from Pacific Gas and Electric's intrastate transmission system to city-gates on PG&E's local distribution system in Northern California.

PG&E Malin

Deliveries into Pacific Gas and Electric's Lines 400 and 401 at the Oregon/California border at Malin, Ore. This location includes deliveries from Gas Transmission Northwest and Ruby Pipeline.

PG&E South

Deliveries into Pacific Gas and Electric in Southern California from El Paso Natural Gas and Transwestern Pipeline at Topock, Calif.; from Kern River Gas Transmission at Daggett, Calif., and the High Desert Lateral; from Southern California Gas at the Kern River station; and from Questar Southern Trails Pipeline at Essex, Calif.

Questar Rockies

Deliveries into Questar Pipeline on its North system, which runs from northwestern Colorado through southern Wyoming to Salt Lake City, and on its South system, which runs from western Colorado to Payson, Utah, east of the Fidar compressor station. A 20-inch line running parallel to the Utah/Colorado

border connects the two systems. This point was discontinued in the monthly survey effective May 1, 2014. It continues to be published in the daily survey.

SoCal Gas

Deliveries into Southern California Gas from El Paso Natural Gas at Topock, Calif., and Blythe, Calif. (Ehrenberg, Ariz.); from Transwestern Pipeline at Topock/Needles, Calif.; from Kern River Gas Transmission at Wheeler Ridge and Kramer Junction, Calif.; and from Questar Southern Trails Pipeline at Needles. The point also includes deliveries from Pacific Gas and Electric at several points, including Kern River station and Pisgah/Daggett; and in-state production.

SoCal Gas City Gate

Deliveries at Southern California Gas' city-gate pool. The SoCal Gas city-gate pool is a "virtual" trading location on SoCal Gas' system for deliveries to and from holders of the distributor's city-gate pool contracts. This point includes storage transactions delivered to and from the citygate pool. The SoCal, city-gate point was added effective Oct. 1, 2008.

SoCal Ehrenberg

Deliveries into Southern California Gas from El Paso Natural Gas at Blythe, California (Ehrenberg, Arizona).

Stanfield OR

Deliveries into Northwest Pipeline from Gas Transmission Northwest at the Stanfield compressor station in Umatilla County, Ore., on the Oregon/Washington border. This point was discontinued in the monthly survey effective Jan. 1, 2012. It continues to be published in the daily survey.

TC Alberta AECO-C

Deliveries on TransCanada's Alberta System at the AECO-C, NIT

Hub in southeastern Alberta. Posting is composed of physical basis deals in which the basis value is negotiated on one of the first three days of bidweek and the price is set by the final closing value of the near-month NYMEX futures contract plus or minus the negotiated basis. AECO-C is the principal storage facility and hub on TCPL Alberta; paying the rate for NIT service, or Nova Inventory Transfer, will cover transmission for delivery of gas to AECO-C and most other points. The price is reported in US dollars per MMBtu. This point was added effective Sept. 1, 2008.

Transwestern Permian

Deliveries into Transwestern Pipeline from the West Texas zone located southeast and southwest of the WT-1 compressor station in Lea County, N.M., and the Central zone bordered by station 8 in Lincoln County, N.M., to the northwest, station P-1 in Roosevelt County, N.M., to the east and station WT-1 in Eddy County, N.M., to the south.

Waha

Deliveries into interstate and intrastate pipelines at the outlet of the Waha header system and in the Waha vicinity in the Permian Basin in West Texas. Pipelines include El Paso Natural Gas, Transwestern Pipeline, Natural Gas Pipeline Co. of America, Northern Natural Gas, Delhi Pipeline, Oasis Pipeline, and the former EPGT Texas and Lone Star Pipelines.

White River

Deliveries to or from pools or interconnects that make up the White River Hub in Rio Blanco County, Colorado.

Westcoast Stn 2

Deliveries into Station 2 along Spectra's Westcoast Energy (WEI) pipeline. Station 2 is located near Chetwynd, BC, and is the main aggregation point from which supplies from the Northeastern part of British Columbia are shipped south along the main WEI pipeline.

National Package

M2MS-GAS NATIONAL PACKAGE SYMBOLS (BATE CODE: U)

Location	Location Category	10 Year Symbol	20 Year Symbol	Location	Location Category	10 Year Symbol	20 Year Symbol
ALGONQUIN	Market	NAGTxyy	NAGPxyy	NW CAN BD SUMAS	Market	NSUMxyy	NSUPxyy
COL GAS APPAL	Market	NCATxyy	NCAPxyy	NW WY POOL/RKY	Market	NNRMxyy	NNRPxyy
CHICAGO CG	Market	NCGMBxyy	NCGPxyy	PANHANDLE TX-OK	Market	NPTMxyy	NPTPxyy
COL GULF MNLIN	Market	NCMMxyy	NCMPxyy	PG&E CG	Market	NPGMxyy	NPGPxyy
DAWN ONTARIO	Market	NDOMxyy	NDOPxyy	SOCAL GAS	Market	NSCMxyy	NSCPxyy
DOMINION S PT	Market	NDSMxyy	NDSPxyy	SONAT LA	Market	NSLMxyy	NSLPxyy
EL PASO PERMIAN	Market	NEPMxyy	NEPPxyy	TC ALB AECO-C	Market	NNAMxyy	NNAPxyy
EL PASO SAN JUAN	Market	NESMxyy	NESPxyy	TENN 500 LEG	Market	NT5Mxyy	NT5Pxyy
FL GAS ZN3	Market	NF3Mxyy	NF3Pxyy	TRANSCO ZN3	Market	NTCMxyy	NTCPxyy
HENRY HUB	Market	NHHMxyy	NHHPxyy	TRANSCO ZN4	Market	NT4Mxyy	NT4Pxyy
HOUSTON SHIPCHL	Market	NHSMxyy	NHSPxyy	TRANSCO ZN6 NY	Market	NTNMxyy	NTNPxyy
MICH CON CG	Market	NMGMxyy	NMGPxyy	TRANSCO ZN6 XNY	Market	NT6Mxyy	NT6Pxyy
NGPL TEXOK ZN	Market	NGOMxyy	NGOPxyy	TX EASTERN M-3	Market	NTEMxyy	NTEPxyy
NRTHRN NG DEMARC	Market	NNDMxyy	NNDPxyy	WAHA	Market	NWAMxyy	NWAPxyy
NRTHRN VENTURA	Market	NNVMxyy	NNVPxyy				

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REVISION HISTORY

January 2020: 1 hub, Westcoast Stn 2 was added. And the monthly 20year publication updated as semimonthly publication.

August 2019: 3 hubs, PNGTS, Tres Palacios Injection and Tres Palacios Withdrawal were added.

May 2018: Simplified symbol charts. Removed outdated reference to realized vols. Added National Package symbols.

January 2018: 1 hub, Transco Zone 5 South was added.

February 2017: Platts revamped this Methodology And Specifications Guide effective February 2017. This revision was completed to remove references to the following discontinued products: 10 & 20 year historical volatility curves (which are being replaced by implied volatility curves), spark spreads and correlation curves. This revision was also

completed to include coverage changes to the M2MS-Gas product. Specifically, 8 hubs were added to bring the total number of hubs covered to 96.

November 2015: Platts revised this Methodology and Specifications Guide effective November 2015. This revision was completed to include coverage and definition changes to the M2MS-Gas product – 12 location additions, 3 location name changes, and 3 location discontinuations. This revised guide also reflects a balance of the month definition, and an update to the definition and units of TC Alberta AECO-C.

March 2015: Platts revamped this Methodology And Specifications Guide effective March 2015. This revamp was completed to enhance the clarity and usefulness of the guide, and to introduce greater consistency of layout and structure across all published methodology guides. This revamp also updates this guide to reflect that the methodology no longer uses broker quotes in the production of forward curves for M2MS-Gas.