# platts

# Methodology and Specifications Guide

# North American Electricity

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# **INTRODUCTION**

This statement of methodology for Platts' North American electricity indexes and assessments reflects core principles that long have provided the foundation for Platts' price reporting in North American electricity markets. It also includes detailed information on the submission of price data from market participants, the formation of indexes and assessments, and the publication of index-related information, including volumes and deal counts.

Platts' methodology will continue to evolve as electricity markets change. This update reflects changes in weekend assessments for South MAPP, North SPP and five trading hubs in the Southeast: VACAR, Into Southern, Florida, Into Entergy and Into TVA. This statement of methodology incorporates price reporting standards that went into effect July 1, 2003. The statement also takes into consideration standards for price reporting stated in the Federal Energy Regulatory Commission's July 24, 2003, policy statement on U.S. electricity and gas markets (PL03-3).

If you have questions concerning reporting to Platts or our statement of methodology, or would like to discuss any price reporting issues, please call or e-mail Mike Wilczek, senior editor for market development, 202-383-2246 (mike\_wilczek@platts.com) or Brian Jordan, editorial director for North American electricity and gas markets, 202-383-2181 (brian\_jordan@platts.com).

Platts also has a compliance staff independent of the editorial group. For more information, contact Director of Compliance John Burnett, 212-904-6943 (john\_burnett@platts.com).

Platts discloses publicly the days of publication of its price assessments and indices, and the times during each trading day in which Platts considers transactions in determining its assessments and index levels. The dates of publication and the assessment 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 assessment periods, with as much advance notice as possible.

# HOW THIS METHODOLOGY STATEMENT IS ORGANIZED

This description of methodology for electricity indexes and assessments in North America is divided into six major parts (I-VI) that parallel the entire process of producing the benchmarks.

 Part I describes what goes into Platts electricity benchmarks, including details on what market participants are expected to submit and the process for submitting data as well as the components of published data.

- Part II describes the security and confidentiality practices that Platts uses in handling and treating data, including the separation between Platts price reporting/index creation and its newsgathering and reporting.
- Part III is a detailed account of what Platts does with the data to formulate its electricity indexes and assessments, and includes descriptions of the statistical and editorial tools Platts uses to convert raw data into indexes and assessments. This section describes the process for screening outliers and the criteria for determining which daily benchmarks are indexes based on volume-weighted averages and which are assessments based on reported transactions and other market information. Part III also describes how Platts creates indexes and assessments for various products other than next-day electricity trades.
- Part IV lays out the verification and correction process for revising published prices and the criteria Platts uses to determine when it publishes a correction.
- Part V explains the process for verifying that published prices comply with Platts' standards.
- Part VI is a list of detailed definitions of the trading locations for which Platts publishes daily indexes or assessments.

# PART I: DATA QUALITY AND DATA SUBMISSION

Platts' standards for data quality are at the heart of its process to produce reliable indexes and assessments and are designed to ensure that market participants provide complete and accurate information.

To that end, Platts requires formalized reporting relationships with market participants in which data is submitted from a central point in the mid- or back-office. If the reporting entity chooses, Platts will sign a standard confidentiality agreement protecting the submitted data. A copy of the standard agreement is available upon request. The data provider must certify that it is making a good-faith effort to report completely and accurately, and will have staff assigned to respond to questions concerning data submittals. In addition, reporting entities, in cases of error or omission, have an obligation to make reasonable efforts to inform Platts and, as necessary, modify their internal processes to eliminate or minimize the likelihood of future errors or omissions in their data submissions.

Data submitted to Platts must be detailed, transaction-level data. Below is a summary of what should be reported. (A suggested

format for reports for Platts electricity and natural gas price surveys is also available; to receive a copy, e-mail electricityprice@platts.com.)

# WHAT TO REPORT

- Report each business day all fixed-price physical and financial deals for delivery in North America.
- Report the price at which the two parties agreed to transact. Do not add estimated transmission cost to make the transaction fit one of Platts' delivery location definitions.
- by Platts using the name of the control area, tie point or congestion management zone. Examples would include power for delivery to ISO New England's Connecticut zone and the West Wing substation in the Phoenix area. Although Platts may not currently assess those locations, if sufficient trading develops at a location and is sustained, Platts would be able to add that pricing point to its daily indexes. (Definitions for the locations for which indexes and assessments are currently published are in Part VI of this methodology statement.) In addition, information on deals at those points adds to Platts' understanding of the market and aids Platts in assessing thinly traded points in that geographic area.
- List all transactions individually and with the following information: location, trade date, start flow date, end flow date, shape (peak or off-peak), deal type (physical or financial), firm or non-firm, price (\$/MWh), volume (MW), side of transaction (buy or sell), counterparty name, and intermediary name (broker or trading platform).
- Market participants remain divided on the question of counterparties, and Platts for now will accept data that does not include counterparty information. Platts firmly believes that counterparty information is the best single way to verify transactions. Platts encourages market participants that are not already doing so to initiate changes to agreements that currently prevent them from reporting counterparties. Some companies already provide this information, and Platts will continue to press for it.
- Deals should be reported only for transactions done that day. The cutoff for all transactions, including forward packages, is 2:30 p.m. Eastern Prevailing Time. The cutoff time applies to the time a trade was transacted, not the time the trade is entered into the company's system. Do not include "early" daily deals done after the cutoff on the previous day. Platts considers these transactions to be nonstandard deals done before the opening of the market. There is no formal close to the over-the-counter electricity markets, so we have selected 2:30 p.m. EPT. We use that time as a close for assessing the value of forward power markets because it allows us to provide assessments that

- are comparable to New York Mercantile Exchange daily settlement prices for natural gas. The 2:30 closing time for transactions that are included in a daily report ensures that all deals are captured and reported; the end of daily trading in the marketplace in practice is earlier than 2:30 EPT because of scheduling deadlines and the expiration of daily options. For New York over-the-counter markets, which are financial swaps, the cutoff is the release of the independent system operator's day-ahead market-clearing prices.
- Platts will, for the foreseeable future, include deals done after options expiration in its daily indexes and assessments, as long as those deals are priced within the range of the bulk of the day's trading. Platts in the past has attempted to exclude all deals done after options expiration because of the low level of trading activity and liquidity in most markets after options expiration, and the concern that such low liquidity would mean trades done after expiration were transacted under distressed conditions that could result in non-comparable prices. However, the lack of time stamps that would identify after-options trades makes it difficult to identify such trades in a straightforward and consistent manner. Platts believes that it would be preferable to exclude post-options trading, but until time-stamp information is available, Platts will eliminate the impact of such potentially "distressed" deals through its procedure for eliminating outliers. That process is described in detail in Part III.
- Platts will continue to push for time stamps to allow our editors to identify deals that were done after daily options expiration, as well as match up transaction information we receive from various market participants. In addition, time stamps also would provide Platts with a clearer picture of the movement of prices through the trading period and provide another tool for evaluating the quality of the data. Platts understands that many market participants are currently unable to provide time stamps because deals are entered into trading systems in bulk after trading is completed rather than as each transaction occurs.

# **HOW TO REPORT**

- Reports of each day's deals should be compiled and sent to Platts by a non-commercial department of the company. Generally the reporting function is the responsibility of the mid- or back-office. Even in the case of small entities, FERC's standards state that prices should be provided by individuals "separate from trading activities" such as accounting or bookkeeping staff. Platts values the participation in its surveys of smaller market participants that may not have formal back-office or risk-management groups and will discuss with them ways to meet Platts and FERC standards for assuring the quality of data provided to Platts.
- Platts should be provided at least two contacts (with phone numbers and e-mail addresses for both) who are

responsible for submissions and can answer questions about transactions reported to Platts.

- Individuals compiling reports in the mid- or back-office should make certain that all transactions done by the trading desk have been entered into the system before the report is submitted to Platts.
- Reports should be sent electronically in either Excel or CSV (comma separated values) format. Platts can provide reporting entities with a sample Excel sheet showing the preferred format and the information needed for each transaction.
- Reports should be sent to electricityprice@platts.com each day by 4:30 p.m. EPT.
- Reporting entities should be prepared in the rare cases of e-mail malfunctions to fax submissions to Platts. Our fax numbers are 713-658-3240 for our Houston market reporting team and 202-383-2023 for our Washington market reporting group.
- If a reporting entity is unable to compile the needed information by the deadline set by Platts on a given day, it should notify Platts editors of the delay and the length of the delay by either e-mail or phone. This will help Platts editors decide whether to wait for the submission.

# PART II: SECURITY AND CONFIDENTIALITY

Platts has a long history of keeping price data secure and confidential. There are two key aspects to ensuring the security and confidentiality of data: the security of the information technology systems and policies on access to data. Following is a description of Platts' processes.

- Price data is e-mailed to a specific Platts e-mail address, electricityprice@platts.com. E-mails to that address enter a secure network protected by firewalls and are accessible only by market editors. Encryption is available upon request of the reporting company.
- A senior market editor does an initial screening of data submissions and then distributes the relevant data to market editors who specialize in specific regions and market hubs.
- The data is then entered into a proprietary software system designed specifically to store and analyze trade data.
- Data is stored in a secure network, and under internal procedures audited and enforced by a Platts compliance officer, is kept for a period of at least three years.

- The compliance audit checks for adherence to the parameters set forth in the Platts Compliance Plan, which seeks to ensure that accurate records are kept, in order to document a market reporter's research. All U.S. electricity market reporters undergo audits at least twice a year.
- Data is protected under formal confidentiality agreements signed by data providers and Platts.
- Price data is used only for constructing indexes and assessments. Platts has a strict internal policy, reflected in its confidentiality agreements, of never using individual price data for news reporting purposes. Nor do Platts news reporters have access to individual entities' transaction reports. Data aggregated from all reporting sources e.g., changes in prices and trading volumes over time may be used as the basis for news stories.

# PART III: CALCULATING INDEXES AND MAKING ASSESSMENTS

Platts editors produce indexes and assessments of the next-day trading market. In addition, Platts produces daily assessments of forward electricity markets.

For daily trading hubs where there is sufficient liquidity, market editors use volume-weighted averages to calculate an index value.

For each daily index, Platts publishes the index price, the change from the previous day, the low, the high, the volume, the number of transactions the index is based on, and the running average for the index price for the month. Index prices, lows, and highs are expressed in S/MWh. The daily change is expressed in dollars. The volume in expressed in megawatts (MW) across the on-peak or off-peak period, rather than in megawatt hours. For instance, if ten 50-MW on-peak deals are reported, the volume would be expressed as 500 MW, rather than the equivalent value of 8,000 MWh (ten 50-MW deals multiplied by 16 hours).

Prior to calculating a volume-weighted average, Platts editors go through the critical process of analyzing the transactional data for potential mistakes made by data providers as well as for outliers. Editors have a number of statistical and journalistic tools available to them in scrubbing the raw data for errors and outliers.

In the beginning of the process the editor weeds out non-standard-size deals. Standard-size packages are multiples of 25 MW.

Non-standard-size deals are automatically excluded, regardless of where they fall in the range of trading. There often are special considerations attached to odd-sized deals that can affect price.

Platts uses customized spreadsheets for data analysis that display the distribution of the deals and flag deals more than two standard deviations from the mean. In addition, deals submitted that are outside what the editor has seen as the range of trading are flagged as questionable.

Transactions at prices more than two standard deviations from the mean are not necessarily deals done out of market or inaccurately reported deals. Platts often handles sets of data that are not normally distributed around the mean. This so-called "skew" of the normal distribution reflects normal market activity on a given day and means that some deals outside two standard deviations from the mean should be included in calculating the volume-weighted average to determine the index value.

After the initial flagging of outliers, Platts uses a number of tests to determine if a deal should be eliminated. If the deal fails these tests, it will be excluded from the calculation used to determine the final index.

On page 6 are two examples of how Platts editors determined whether to eliminate a deal when calculating an index based on a volume-weighted average. As the examples demonstrate, among the considerations or tests used to make that determination are:

- The direction and magnitude of the skew for the set of data, compared with how far out of the range of two standard deviations the deal is.
- An explanation based on market fundamentals for the "outlier" nature of the deal; the explanation must hold for deals other than the potential outlier. For example, a runup in prices during the latter part of daily trading caused by an unplanned generation outage would provide an explanation based on market fundamentals for deals near the high end of the distribution, including those just inside two standard deviations from the mean and those just outside.
- Information that would demonstrate the deal was distressed, such as credit issues for either counterparty, or the fact that the deal was done after the expiration of daily options.
- The completeness of the set of transaction-specific information reported with the deal, including buy/sell and counterparty name.
- Information from another reporting party that verifies the deal; for example, the reporting of the deal by a named counterparty.

The following examples are hypothetical and do not include actual data provided by Platts sources. However, each example reflects characteristics of data sets commonly seen by Platts electricity market editors.

One other factor that Platts takes into consideration when deciding whether to exclude an outlier is the record of the data-

submitting entity concerning data quality. Deals from reporting entities that consistently report fully and accurately are given greater credence.

The most credible market participants are those that:

- Report electronically from a non-commercial department of the company, such as the back office or risk group.
- Submit full reports of all deals in North America, for both the Eastern and Western interconnections, as well as both physical and financial transactions.
- Report all deals at the transaction level and provide all necessary descriptive information including buy/sell indicator and counterparty name.
- Make sure that the contacts designated to answer inquiries on data submissions are easily accessible and responsive to inquiries by Platts editors.
- Report every day and on time, and when problems arise that prevent reporting on time, notify Platts of the delay in a timely fashion.
- Rarely make errors in data submissions and follow up quickly when errors are made.
- Submit reports that include few outliers, and provide explanations for any outliers at the time when the outliers are reported.

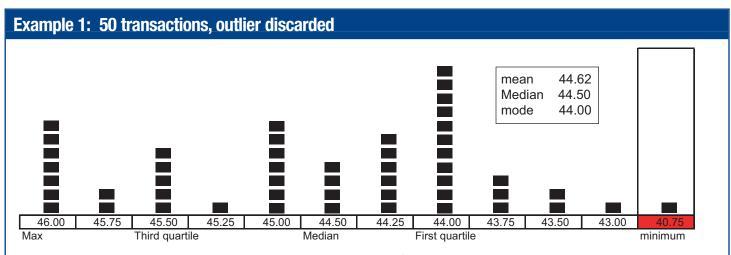
# **LOW-LIQUIDITY DAILY MARKETS**

For trading locations with very limited liquidity, Platts strongly believes it is better to publish an assessment rather than allow one or two market players to set the index based on very limited dealmaking. For that reason, Platts assesses such illiquid points using transactions, differentials to other locations, physical bid/ask spreads, derivatives trading and other information.

Platts clearly indicates when it assesses a daily electricity market rather than calculating an index based on a volume-weighted average. Assessments are indicated by an "NA" (not applicable) in the volume column.

Platts believes such assessments for low-liquidity markets allow editors to provide a value that is more representative and reflective of the market than a volume-weighted average determined by a very limited number of market participants. Platts editors assess daily markets when either of two conditions applies:

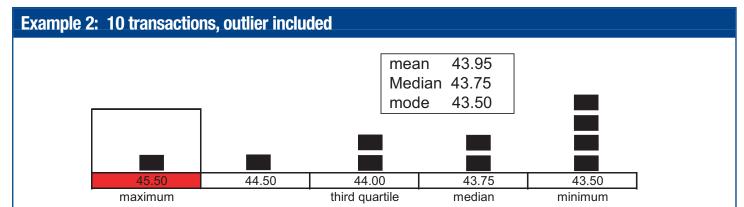
- (1) There are fewer than five individual transactions reported for a given location.
- (2) The number of reporting entities providing transactionlevel data is fewer than three.



In this example the editor has a set of 50 next-day deals with a range of \$5.25, and one outlier beyond two standard deviations from the mean. That single outlier is \$2.25 lower than the next-lowest deal.

Using the list of "tests" or considerations applied to outliers (see above), there are several that weigh on the side of including the deal. It is a standard-volume transaction. There is considerable deal-making on the outlier's side of the mean. The data set also has a negative skew which causes low deals to be further from the mean. This causes our use of two standard deviations from the mean to identify outliers to give more room on the high side and less room on the low side. In addition, the source is in good standing.

However, there are other considerations that weigh toward discarding the deal. When the reporter calls to check the deal, the source verifies that the deal was done after options. The reporter was already aware that deals were done at that lower level after the expiration of daily options. The status of the deal as an after-options transaction and the great disparity between it and the other deals in our sample strongly indicate this could be a distressed deal—market conditions were substantially different after options on this day in this market. Those reasons would lead Platts to discard the deal. The decision to cut the deal would raise the volume-weighted index by 7 cents to \$44.77/MWh.



In this example the editor has a smaller data set of 10 transactions. The first consideration here is that Platts is handling a limited set of data. It fulfills the requirement of at least five deals, and they are all standard-size packages, but the number of transactions is relatively small. For smaller samples, statistical measures like the standard deviation are less meaningful, and therefore are not given as much weight by editors relative to when they are handling larger samples (like example 1). The magnitude of a deal's outlier nature logically carries less weight in a small sample.

A second consideration: The outlier is the minimum-size standard package for its market. A larger package size would increase the impact of the single transaction on the volume-weighted index.

The gap between the outlier and the next-highest-priced deal is limited to \$1.00. In addition, the next-highest deal is reported by a different source, providing corroboration of trading activity on the high side of the data set.

The editor has no information that the deal was done after the expiration of daily options, and a call to the source confirms that the deal was not done after options. Although there is no matching price from another source, and there is no counter-party information, the other considerations weigh toward retaining the deal as part of the data set. The deal appears to have been accurately reported, and the list of tests weighs toward including the transaction. It is retained, and the inclusion of the deal leaves us a volume-weighted average at \$43.78/MWh, 17 cents higher than it would have been if the deal had been discarded.

A trading location must meet both of these thresholds before an index determined by the volume-weighted average will be calculated. These are the minimum thresholds, and Platts editors may decide on a case-by-case basis to assess a market even when these minimum standards are met if there is concern that a large, dominant market participant can effectively set a volume-weighted average. Platts will not allow one or two market participants to set an index value.

Below is an example of how Platts editors determine an assessment in a low-liquidity market. Like the earlier examples, this example is hypothetical and does not include actual data provided by Platts sources. However, it reflects the general characteristics of data sets commonly seen by Platts electricity market editors in cases in which they assess daily markets.

# ASSESSMENTS FOR WEEKEND-DELIVERY POWER

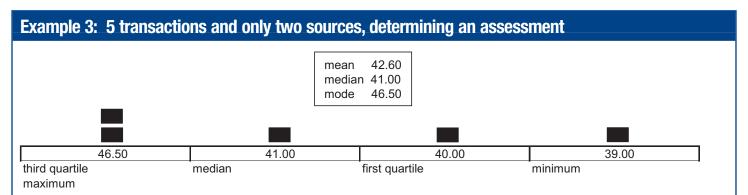
Indexes and assessments are also formulated for weekends for standard packages in various regions. In the Eastern Interconnection, for trading hubs within the ISO New England, the New York ISO, the Ontario Independent Electricity System Operator, the PJM Interconnection and the Midwest Independent Transmission System Operator, on-peak indexes and assessments for standard non-holiday weekends are formulated based on 2x16 packages traded Friday for delivery during on-peak hours Saturday and Sunday. Off-peak indexes and assessments are based on 2x8 packages traded Friday for off-peak hours Saturday and Sunday. Single-day packages may be used to assess the value of these packages in the absence of

reported transactions for two-day packages. However, final assessments will be the same for both Saturday and Sunday. Single-day deals will not be included with two-day packages in a volume-weighted index. Mixing single-day packages with two-day packages is avoided for the same reason Platts does not mix on-peak and around-the-clock packages in a day-ahead assessment.

For the US Southeast, the Electric Reliability Council of Texas (ERCOT), the Southwest Power Pool (SPP) and for other trading hubs in the Eastern Interconnection that are not part of an ISO, for standard non-holiday weekends, Platts formulates its off-peak assessments and indexes for the weekend based on transactions traded Friday for delivery during off-peak hours Saturday through Monday, known as 3x8 packages. On-peak assessments for standard weekends for these trading hubs, like other Eastern and Central hubs, are based on 2x16 packages.

In the West, Saturday is normally part of a Friday and Saturday package. Single-day deals are not included in the volume-weighted index of either day, and assessments for the two days are the same. Sunday power is traded in the West for delivery around-the-clock as a package with the Monday off-peak deals. The price for Sunday will be equal to that of the Monday off-peak. Again, no single-day deals will be included in these calculations.

In all regions, these standard weekend packages are changed to reflect the market practice of altering standard weekend packages to accommodate holidays and to avoid splitting a weekend package between two months. When weekend packages are altered because of holidays, indexes and assessments are based



In this example the editor has a data set that fails to meet one of the three thresholds for using a volume-weighted average to calculate an index. There are five transactions totaling 300 MW (which meets the thresholds of five deals and 250 MW) but only two sources of data (compared with the threshold minimum of three), so Platts will assess this market based on the deals reported as well as other market information.

This other information includes, but is not limited to, bids and offers gathered through discussions with traders and other sources and recent locational spreads between this market and a more-liquid adjacent market.

In this example there is no congestion between this location and the most liquid adjacent market. The daily market being assessed has been pricing about \$2 above the more liquid adjacent market, which has a volume-weighted average of \$39.80/MW.

The mid-market level from bids and offers is slightly above the \$41.80 assessment based strictly on the spread to the more-liquid adjacent market.

In this example the volume-weighted average, based only on the deals reported by the two sources, would have been \$42/MWh. One of the deals is a 100-MW deal at \$39/MWh; the others were all 50-MW packages done at higher prices.

The editor assesses this market at \$41.75/MWh based on three factors: the spread to the more-liquid adjacent market, the mid-market of the bids and offers, and the volume-weighted average of the limited amount of reported transactions.

on the standard holiday packages and single-day packages are not included in the volume-weighted indexes.

# **NEAR-TERMS**

Platts changed its methodology for standard near-term packages (balance-of-the-week, balance-of-the-month and next-week) effective December 1, 2005 to make its coverage more complete and consistent. Platts publishes an assessed range (low-high assessment) for those standard packages based on reported transactions. If there is only one transaction reported, the assessed range will be created by adding a minimum 50-cent range around the transaction. If no transactions are reported, Platts may elect to publish an assessed range based on bid/offer information, locational spreads, and other market information.

### DAILY FORWARD ASSESSMENTS

Platts produces daily market-on-close assessments of the value of standard over-the-counter forward packages each business day. Platts uses 2:30 p.m. Eastern Prevailing Time in the absence of a formal close for the OTC market. This is the close for open-outcry trading for the NYMEX Henry Hub gas contract and allows our daily forward power assessments to be compared with NYMEX gas settlement prices.

For a complete description of the methodology for the daily forward electricity assessments, including the hubs and markets covered, please see the separate Methodology and Specifications Guide for the Platts-ICE Forward Curve—Electricity (North America) at Platts.com

 $(www.platts.com/MethodologyAndSpecifications.aspx?commodit\\y=ElectricPower).$ 

The assessments are formulated by editors based on forward transactions (including spread trades), differentials to other trading locations, differentials between time periods, physical bid/ask spreads, derivatives trading and other market information, including market fundamentals. Bids and offers made and transactions done nearer the close receive greater weight in the assessment process than those from early in the day.

Assessments across the curve should be in agreement. For example, the average for two months reported individually should be the price reported for the two-month package.

Daily forward assessments are for both standard on-peak and offpeak forward products.

Standard on-peak packages in Eastern and Central markets are 5x16 packages, which include power delivered during on-peak hours on weekdays and exclude weekends and holidays defined by the North American Electric Reliability Council (NERC).

Standard on-peak forward packages in Western markets are 6x16

packages, which include power delivered during the 16 on-peak hours each day Monday through Saturday and exclude Sundays and NERC holidays.

The standard off-peak package in the New England, New York, Ontario, PJM, MISO,ERCOT, Into Entergy, Into Southern and Into TVA markets is a 5x8 plus a 2x24 package, known as a wrap, which includes power for delivery during the eight off-peak hours each weekday, plus all 24 hours (around-the-clock) on weekends.

In Western markets, the standard off-peak package is a 6x8 plus a 1x24 package, also known as a wrap, which includes power for delivery during the eight off-peak hours Monday through Saturday plus all 24 hours (around the clock) on Sunday.

Platts gathers information on the forward market through the non-commercial departments of companies as well as in discussions with traders active in the market. In addition, Platts incorporates electricity forward trading activity from IntercontinentalExchange, including transactions and bids and offers.

The curve is a subjective assessment of market activity and assessments are made when there is no trading for a given market on that day.

# PART IV: CORRECTIONS

Platts makes every effort to verify the accuracy of prices based on the information it has when it makes final determinations of indexes and assessments at the end of the day. As described in Part III, Platts editors routinely contact data providers about transactions that appear questionable and may request supporting information, such as counterparty, to verify the deal.

In cases where editors cannot obtain a satisfactory answer to their questions about an individual or series of transactions, or where they see indications of a possible pattern of questionable deals, they may choose to take their concerns to the entity's chief risk officer or comparable senior official. If editors still cannot resolve their concerns, they may opt to exclude the entity from participating in Platts' price surveys until senior company management provides sufficient reassurance that the entity is responsibly reporting accurate data.

Platts is committed to promptly correcting any material errors in published prices that result from human or computational mistakes. When corrections are made because of such errors, they are limited to corrections to data that was available when the index or assessment was calculated.

Because it is extremely important that Platts' indexes and assessments provide certainty, Platts' policy long has been not to revise prices after the fact for reasons other than human or computational errors. In particular, Platts cannot revise indexes or assessments in cases where market participants submit new, as

opposed to corrected, information that they want included in the published prices. Allowing such revisions could open Platts to a never-ending revision process as market participants continually come forward with more data.

Errors in data submission discovered within 10 business days following the submission should be brought to the attention of the appropriate Platts editor — listed in the introduction of this methodology — as soon as possible. Data providers should have price-reporting processes in place that identify errors in data submittals within that 10-day period. Data providers are not expected to monitor transactions beyond that 10-day period for purposes of reporting errors in submittals to Platts, with one important exception. In cases in which a problem in a data provider's reporting system has caused discrepancies between what it has reported to Platts and what is in its books and records, the data provider should notify Platts as soon as possible of the systemic problem, and steps being taken to correct it, regardless of the time elapsed.

Errors that data providers should report to Platts are limited to inaccuracies in the attributes (price, volume, location, etc.) at the time the transaction was done and reported to Platts, and do not include operationally driven, after-the-fact changes in the nature of the transaction. For instance, if an interruption in transmission service forces two counterparties to alter flows and delivery points, Platts does not consider those changes to be corrections so long as the price, volume, and location information originally reported to Platts accurately reflected those attributes at the time the trade was made and reported to Platts.

If Platts is notified of an error in a submission after a price is calculated and published, editors will determine the nature of the error, whether the erroneous data was used in calculating an index or making an assessment, the impact of the erroneous data if it was used, and whether Platts had in hand other data corroborating that the data should not have been included.

The impact of the error also will be considered. If the removal of the data fails to make a material change in the index or assessment, no correction will be made.

In defining what constitutes a material change, in cases of computational and human errors on the part of Platts or data providers, Platts will consider three primary factors: the percentage change in the index or assessment; the number of business days since the price in question was published; and the liquidity of the trading point as reflected in the volumes reported to Platts.

For example, an error resulting in a change of greater than 2% that is discovered within five business days of publication of a price for a high-liquidity point would be deemed material; an error resulting in a change of less than 0.5% that is discovered more than 15 days after publication of a price for a low-liquidity point would be deemed immaterial.

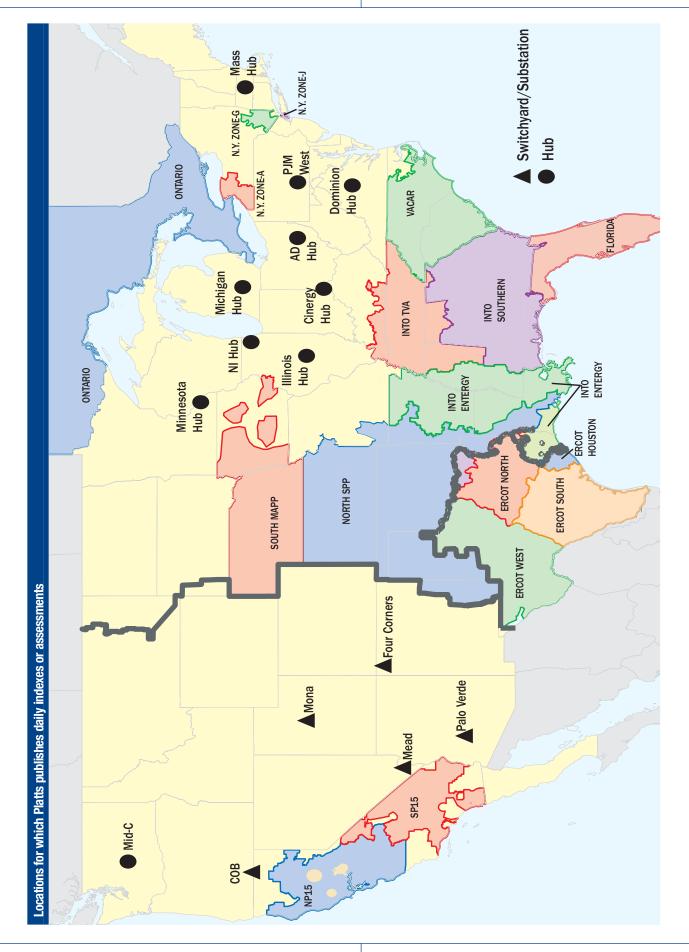
In addition to the three principal factors used to determine materiality, Platts will also consider other measures of the magnitude of the error, including: the absolute change in the price; the change in the range (low trade and high trade); the change in an index as a percentage of the range; the number of sources represented in the published price; the volume represented in the published price and the volume affected by the error; and the number of deals represented in the published price and the number of deals affected by the error

# PART V: PLATTS EDITORIAL STANDARDS

Platts has in place a Code of Ethics with which all of its employees, including its editorial staff, must comply. Components of the code specifically address standards for market reporting.

In addition, all Platts employees must adhere to The McGraw-Hill Companies' Code of Business Ethics. Editors must re-sign each code annually. Company policies, among other things, prohibit editorial personnel and their spouses from trading in commodities or stocks, bonds or options of companies in the industry covered by their publication(s) and from dealing with outside parties in a manner that creates even an appearance of a conflict of interest. The McGraw-Hill Companies' Code of Business Ethics reflects McGraw-Hill's commitment to integrity, honesty and acting in good faith in all its dealings. The Platts Code of Ethics is designed to ensure that Platts information is the product of honest, fair and open reporting.

Platts has an independent compliance staff whose function is to ensure that Platts' market editors follow the stated methodology, records retention policy and code of ethics. In addition, The McGraw-Hill Companies' internal auditor, an independent group that reports directly to the parent company's board of directors, reviews the Platts compliance program.



# PART VI: DEFINITIONS OF THE TRADING LOCATIONS FOR WHICH PLATTS PUBLISHES DAILY INDEXES OR ASSESSMENTS

# EASTERN MARKETS

# Mass Hub

AKA: Massachusetts Hub, ISO New England Internal Hub

**Description**: The ISO New England's Internal hub comprises 36 nodes in central Massachusetts and is the most commonly used location in the six-state region for bilateral trading.

Market type: LMP

Grid operator: ISO New England

On-peak hours: Hour-ending 8 through 23

Off-peak hours: Hour-ending 1 through 7 and 24

Product assessed: Physical power, energy only (no capacity),

firm with liquidated damages

Start date: Mar 2003

Predecessor/start date: New England (seller's choice)/May 1995

Platts day-ahead flow date code on-peak: AAMWY20

Platts day-ahead flow date code off-peak: AAMWX20

## N.Y. Zone-G

AKA: Hudson Valley

**Description**: The New York ISO's Zone-G, for delivery to the Hudson Valley, comprises four sub-zone in eastern New York.

Market type: LMP

**Grid operator**: New York ISO

On-peak hours: Hour-ending 8 through 23

Off-peak hours: Hour-ending 1 through 7 and 24

Product assessed: Financial swap settled against the New York

ISO day-ahead market clearing price

Start date: Nov 1999

Predecessor/start date: New York East/Mar 1997

Platts day-ahead flow date code on-peak: WEADV20

# N.Y. Zone-J

AKA: New York City

**Description**: The New York ISO's Zone-J, for delivery to New York City, comprises one sub-zone covering New York City.

Market type: LMP

**Grid operator**: New York ISO

On-peak hours: Hour-ending 8 through 23

Off-peak hours: Hour-ending 1 through 7 and 24

Product assessed: Financial swap settled against the New York

ISO day-ahead market clearing price

Start date: Sep 2000

Predecessor/start date: None

Platts day-ahead flow date code on-peak: AAFYS20

# N.Y. Zone-A

AKA: West New York

**Description**: The New York ISO's Zone-A, for delivery to West New York, comprises two sub-zones in Western New York.

Market type: LMP

**Grid operator**: New York ISO

On-peak hours: Hour-ending 8 through 23

Off-peak hours: Hour-ending 1 through 7 and 24

Product assessed: Financial swap settled against the New York

ISO day-ahead market clearing price

Start date: Nov 1999

Predecessor/start date: New York West/Mar 1997

Platts day-ahead flow date code on-peak: WEADW20

#### **Ontario**

AKA: none

**Description**: The Ontario market and pricing area comprises the grid controlled by Ontario's independent system operator, the Independent Electricity System Operator. The grid operator was originally named the Independent Market Operator.

Market type: LMP

Grid operator: Ontario's Independent Electricity System

Operator

On-peak hours: Hour-ending 8 through 23

Off-peak hours: Hour-ending 1 through 7 and 24

**Product assessed**: Financial swap settled against the Ontario Independent Electric System Operator hourly market clearing

price

Start date: Jun 2002

Predecessor/start date: none

Platts day-ahead flow date code on-peak: WEBER20

#### PJM West

AKA: PJM Western Hub

**Description**: The PJM Interconnection's Western Hub comprises a group of 110 nodes in a large, crescent-shaped subregion of the PJM Interconnection that stretches along the southern boundary of PJM, from southern Maryland north to Washington D.C. and northwest to central and western Pennsylvania.

Market type: LMP

**Grid operator**: The PJM Interconnection

On-peak hours: Hour-ending 8 through 23

Off-peak hours: Hour-ending 1 through 7 and 24

Product assessed: Physical power, energy only (no capacity),

firm with liquidated damages

Start date: April 1, 1998

Predecessor/start date: PJM (seller's choice)/Oct 1994

Platts day-ahead flow date code on-peak: WEBDA20

Platts day-ahead flow date code off-peak: WEACH20

#### **Dominion Hub**

AKA: Virginia Power Company and PJM South

**Description**: The PJM Interconnection's Dominion hub comprises a group of approximately 644 nodes in Virginia within Dominion's Virginia Power control area. The Dominion control area is also referred to PJM South; the hub is a defined subset of nodes within PJM South. Transactions for delivery in the Dominion's Virginia Power control area were formerly used in the VACAR assessment.

Market type: LMP

**Grid operator**: The PJM Interconnection

On-peak hours: Hour-ending 8 through 23

Off-peak hours: Hour-ending 1 through 7 and 24

Product assessed: Physical power, energy only (no capacity),

firm with liquidated damages

Start date: May 2005

Predecessor/start date: Formerly included in the VACAR

index/Jan 2002; SERC/Oct 1994

Platts day-ahead flow date code on-peak: ABMCI20

Platts day-ahead flow date code off-peak: ABMCB20

# **VACAR**

AKA: none

**Description**: VACAR comprises the control areas in the Virginia and Carolinas subregion of the Southeastern Electric Reliability Council, including: Progress Energy's Carolina Power and Light east and west, Duke, South Carolina Electric and Gas, Santee Cooper, Southeastern Power Administration and APGI Yadkin Division. Dominion's Virginia Power control area has been excluded since it joined the PJM interconnection on May 1, 2005.

Market type: no formal market design

Grid operator: individual utilities

On-peak hours: Hour-ending 7 through 22

Off-peak hours: Hour-ending 1 through 6 and 23 through 24

Product assessed: Physical power, energy only (no capacity),

firm with liquidated damages

Start date: Jan 2002

Predecessor/start date: Formerly included in the SERC

index/Oct 1994

Platts day-ahead flow date code on-peak: AAMCI20

Platts day-ahead flow date code off-peak: AAMCB20

#### Into Southern

AKA: Into SoCo

**Description**: Into Southern comprises power delivered to an interface with or a delivery point within the Southern Company control area, which spans a swath of SERC from Georgia to Mississippi including a portion of the Florida pan handle. (Control area for purposes of this location description is defined to exclude any other entity's transmission system for which the utility acts as the balancing authority.)

Market type: no formal market design

**Grid operator**: Southern Company

On-peak hours: Hour-ending 7 through 22

Off-peak hours: Hour-ending 1 through 6 and 23 through 24

Product assessed: Physical power, energy only (no capacity),

firm with liquidated damages

Start date: Jan 2002

Predecessor/start date: Formerly included in the SERC

index/Oct 1994

Platts day-ahead flow date code on-peak: AAMBJ20

Platts day-ahead flow date code off-peak: AAMBC20

# Florida

AKA: Florida instate

**Description**: The Florida instate pricing area comprises control areas within the State of Florida or the Florida Reliability Coordination Council (FRPCC), excluding Gulf Power, which is part of the Southern Company control area. Florida control areas include: Progress Energy Florida, Florida Power & Light Company, Tampa Electric Company, Florida Municipal Power Agency, Gainesville Regional Utilities, JEA, City of Lakeland, Orlando Utilities Commission, City of Tallahassee and Seminole Electric Cooperative.

Market type: no formal market design

**Grid operator**: Individual utilities

On-peak hours: Hour-ending 7 through 22

Off-peak hours: Hour-ending 1 through 6 and 23 through 24

Product assessed: Physical power, energy only (no capacity),

firm with liquidated damages

Start date: Jan 2002

Predecessor/start date: Florida-Georgia Border/Apr 1997

Platts day-ahead flow date code on-peak: AAMAV20

Platts day-ahead flow date code off-peak: AAMAO20

# Into TVA

AKA: none

**Description**: Into TVA comprises power delivered to an interface with or a delivery point within the control area of the Tennessee Valley Authority, which includes Tennessee and the northern portion of Alabama. (Control area for purposes of this location description is defined to exclude any other entity's system for which TVA acts as the balancing authority.)

Market type: no formal market design

**Grid operator**: Tennessee Valley Authority

On-peak hours: Hour-ending 7 through 22

Off-peak hours: Hour-ending 1 through 6 and 23 through 24

Product assessed: Physical power, energy only (no capacity),

firm with liquidated damages

Start date: May 1997

Predecessor/start date: N.A.

Platts day-ahead flow date code on-peak: WEBAB20

Platts day-ahead flow date code off-peak: AAJER20

**CENTRAL MARKETS** 

### AD Hub

AKA: AEP-Dayton Hub

**Description**: The PJM Interconnection's AEP-Dayton Hub comprises a group of 1181 nodes located in the AEP and Dayton Power and Light's control areas in Ohio and Michigan.

Market type: LMP

**Grid operator**: The PJM Interconnection

On-peak hours: Hour-ending 8 through 23

Off-peak hours: Hour-ending 1 through 7 and 24

**Product assessed**: Physical power, energy only (no capacity), firm with liquidated damages

Start date: May 1997

Predecessor/start date: Into AEP/Feb 2004; Northern ECAR/May

1999; ECAR/Oct 1994

Platts day-ahead flow date code on-peak: WEBYO20

Platts day-ahead flow date code off-peak: AALDW20

# NI Hub

AKA: Northern Illinois Hub

**Description**: The PJM Interconnection's Northern Illinois Hub comprises a group of 234 nodes located in the Commonwealth Edison control area in Northern Illinois.

Market type: LMP

**Grid operator**: The PJM Interconnection

On-peak hours: Hour-ending 8 through 23

Off-peak hours: Hour-ending 1 through 7 and 24

**Product assessed**: Physical power, energy only (no capacity),

firm with liquidated damages

Start date: May 2004

Predecessor/start date: Into ComEd/May 1997

Platts day-ahead flow date code on-peak: WEBAC20

Platts day-ahead flow date code off-peak: AAJED20

### South MAPP

AKA: none

**Description**: South MAPP comprises control areas in the southern portion of the Mid-Continent Area Power Pool (MAPP) region, mainly in Nebraska and Iowa, that are not part of the Midwest Independent Transmission System Operator. Those control areas include: Corn Belt Power Cooperative, MidAmerican Energy Company, Lincoln Electric System, Nebraska Public Power District and Omaha Public Power District.

Market type: no formal market design

Grid operator: individual utilities

On-peak hours: Hour-ending 7 through 22

Off-peak hours: Hour-ending 1 through 6 and 23 through 24

**Product assessed**: Physical power, energy only (no capacity), firm with liquidated damages

Start date: Sep 2000

Predecessor/start date: MAPP/Jan 1996

Platts day-ahead flow date code on-peak: AAFYP20

Platts day-ahead flow date code off-peak: AAJGZ20

#### North SPP

**AKA**: Southwest Power Pool

Description: North SPP comprises control areas in the Southwest Power Pool (SPP) in Kansas, Oklahoma, Arkansas, Louisiana and Texas. This pricing area was identified as North SPP after Entergy was broken out of the SPP index in February 1997. Control areas include: American Electric Power's Public Service Company of Oklahoma and Southwestern Electric Power Company, Aquila's Missouri Public Service and WestPlains Energy, Cleco Power, Kansas City Power & Light, OG&E Electric Services, Southwestern Public Service Company, Empire District Electric Company, Westar Energy's Kansas Gas and Electric Company, Sunflower Electric Power Corporation, Western Farmers Electric Cooperative, City of Lafayette Louisiana, City Power & Light Independence Missouri, The Board of Public Utilities Kansas City Kansas, Grand River Dam Authority and Louisiana Energy & Power Authority

**Market type**: no formal market design (SPP run balancing market planned for Oct 2006)

**Grid operator**: individual utilities; SPP can order redispatch of generation if necessary

On-peak hours: Hour-ending 7 through 22

Off-peak hours: Hour-ending 1 through 6 and 23 through 24

**Product assessed**: Physical power, energy only (no capacity), firm with liquidated damages

Start date: Feb 1997

Predecessor/start date: SPP/May 1995

Platts day-ahead flow date code on-peak: WEBCQ20

Platts day-ahead flow date code off-peak: WEBCS20

# Michigan Hub

14

AKA: none

**Description**: The Midwest Independent Transmission System Operator's (MISO) Michigan hub comprises approximately 260 nodes covering a large portion of the lower peninsula of Michigan. The Michigan hub replaced the North ECAR trading area, which included the northern potion of the ECAR NERC region, excluding the AEP and Dayton Power and Light control areas.

Market type: LMP

Grid operator: Midwest Independent Transmission System

Operator

On-peak hours: Hour-ending 8 through 23

Off-peak hours: Hour-ending 1 through 7 and 24

Product assessed: Physical power, energy only (no capacity),

firm with liquidated damages

Start date: April 1, 2005

Predecessor/start date: Northern ECAR/May 1999; ECAR/Oct

1994

Platts day-ahead flow date code on-peak: ADMCI20

Platts day-ahead flow date code off-peak: ADMCB20

# FirstEnergy Hub

AKA: none

**Description**: The Midwest Independent Transmission System Operator's FirstEnergy Hub comprises a group of 276 nodes in the traditional control area of FirstEnergy in northern Ohio.

Market type: LMP

Grid operator: Midwest Independent Transmission System

Operator

On-peak hours: Hour-ending 8 through 23

Off-peak hours: Hour-ending 1 through 7 and 24

Product assessed: Physical power, energy only (no capacity),

firm with liquidated damages

Start date: April 1, 2007

End date: May 31, 2011

Predecessor/start date: None

Platts day-ahead flow date code on-peak: WECY020

Platts day-ahead flow date code off-peak: ADJDW20

# Cinergy Hub

AKA: none

**Description**: The Midwest Independent Transmission System Operator's (MISO) Cinergy hub comprises approximately 330 nodes on that portion of the electric grid within the Midwest ISO footprint covering parts of southwestern Ohio, northern Kentucky, and Indiana. Cinergy Hub replaced the Into Cinergy trading point, which was based on the Cinergy utility control area.

Market type: LMP

Grid operator: Midwest Independent Transmission System

Operator

On-peak hours: Hour-ending 8 through 23

Off-peak hours: Hour-ending 1 through 7 and 24

Product assessed: Physical power, energy only (no capacity),

firm with liquidated damages

Start date: April 1, 2005

Predecessor/start date: Into Cinergy/Jan 1997; ECAR/Oct 1994

Platts day-ahead flow date code on-peak: WEAYO20

Platts day-ahead flow date code off-peak: AAJDW20

#### Illinois Hub

AKA: none

**Description**: The Midwest Independent Transmission System Operator's (MISO) Illinois Hub comprises approximately 150 nodes located mainly in central, south, and southwest Illinois. The Illinois hub replaced the South MAIN (Mid-America Interconnected Network) index, which included the portion of the MAIN NERC region south of the Commonwealth Edison's control area.

Market type: LMP

**Grid operator**: Midwest Independent Transmission System

Operator

On-peak hours: Hour-ending 8 through 23

Off-peak hours: Hour-ending 1 through 7 and 24

Product assessed: Physical power, energy only (no capacity),

firm with liquidated damages

Start date: April 1, 2005

Predecessor/start date: South MAIN/May 1999

Platts day-ahead flow date code on-peak: ACMCI20

Platts day-ahead flow date code off-peak: ACMCB20

## Minnesota Hub

AKA: none

**Description**: The Midwest Independent Transmission System Operator's (MISO) Minnesota hub comprises approximately 170 nodes in and around the cities of Minneapolis and St. Paul, Minn. The Minnesota hub replaced the North MAIN and North MAPP trading areas, which encompassed the northern portions of the MAIN and MAPP NERC regions.

Market type: LMP

Grid operator: Midwest Independent Transmission System

Operator

On-peak hours: Hour-ending 8 through 23

Off-peak hours: Hour-ending 1 through 7 and 24

Product assessed: Physical power, energy only (no capacity),

firm with liquidated damages

Start date: April 1, 2005

Predecessor/start date: North MAIN/May 1999 and North

MAPP/Sep 2000; MAPP/Jan 1996

Platts day-ahead flow date code on-peak: AEMCI20

Platts day-ahead flow date code off-peak: AEMCB20

## Into Entergy

AKA: none

**Description**: Into Entergy comprises power delivered to an interface with or a delivery point within the Entergy control area, which spans portions of Arkansas, Mississippi, Louisiana and Texas. (The portion of Entergy's control area in Texas is not part of ERCOT; (Control area for purposes of this location description is defined to exclude any other entity's system for which Entergy acts as balancing authority.)

Market type: no formal market design

**Grid operator**: Entergy

On-peak hours: Hour-ending 7 through 22

Off-peak hours: Hour-ending 1 through 6 and 23 through 24

Product assessed: Physical power, energy only (no capacity),

firm with liquidated damages

Start date: Feb 1997

Predecessor/start date: SPP/May 1995

Platts day-ahead flow date code on-peak: WEAZO20

Platts day-ahead flow date code off-peak: AAJEK20

# **ERCOT**

AKA: ERCOT seller's choice

**Description**: The Electric Reliability Council of Texas operates much of the grid in Texas, with the ERCOT control area covering approximately 75% of the land area in Texas. ERCOT does not include the El Paso region, the northern panhandle, a small area around Texarkana, and a small portion of the region around Beaumont. ERCOT seller's choice includes contracts for power that can be delivered to any of the five zones that ERCOT is divided into: North, South, West, Northeast and Houston. ERCOT seller's choice product is often valued closely with the South zone, which has surplus generation.

Market type: Zonal

Grid operator: Electric Reliability Council of Texas

On-peak hours: Hour-ending 7 through 22

Off-peak hours: Hour-ending 1 through 6 and 23 through 24

Product assessed: Physical power, energy only (no capacity),

firm with liquidated damages

Start date: Jan 1996

End date: April 8, 2009

Predecessor/start date: none

Platts day-ahead flow date code on-peak: WEADO20

Platts day-ahead flow date code off-peak: WEADH20

# **ERCOT Houston**

AKA: none

Description: ERCOT's Houston aggregate nodal trading hub

Market type: Nodal locational marginal price system as of

December 1, 2010

Grid operator: Electric Reliability Council of Texas

On-peak hours: Hour-ending 7 through 22

Off-peak hours: Hour-ending 1 through 6 and 23 through 24

Product assessed: Physical power, energy only (no capacity),

firm with liquidated damages

Start date: Mar 2002

Predecessor/start date: ERCOT/Jan 1996

Platts day-ahead flow date code on-peak: WEAFJ20

Platts day-ahead flow date code off-peak: WEAFI20

**ERCOT North** 

AKA: none

Description: ERCOT's North aggregate nodal trading hub

Market type: Nodal locational marginal price system as of

December 1, 2010

Grid operator: Electric Reliability Council of Texas

On-peak hours: Hour-ending 7 through 22

Off-peak hours: Hour-ending 1 through 6 and 23 through 24

Product assessed: Physical power, energy only (no capacity),

firm with liquidated damages

Start date: Mar 2002

Predecessor/start date: ERCOT/Jan 1996

Platts day-ahead flow date code on-peak: WEADY20

Platts day-ahead flow date code off-peak: WEADX20

**ERCOT West** 

AKA: none

**Description**: ERCOT's West aggregate nodal trading hub

Market type: Nodal locational marginal price system as of

December 1, 2010

Grid operator: Electric Reliability Council of Texas

On-peak hours: Hour-ending 7 through 22

Off-peak hours: Hour-ending 1 through 6 and 23 through 24

Product assessed: Physical power, energy only (no capacity),

firm with liquidated damages

Start date: Mar 2002

Predecessor/start date: ERCOT Jan 1996

Platts day-ahead flow date code on-peak: WEAFY20

Platts day-ahead flow date code off-peak: WEAFX20

**ERCOT South** 

AKA: none

Description: ERCOT's South aggregate nodal trading hub

Market type: Nodal locational marginal price system as of

December 1, 2010

Grid operator: Electric Reliability Council of Texas

On-peak hours: Hour-ending 7 through 22

Off-peak hours: Hour-ending 1 through 6 and 23 through 24

Product assessed: Physical power, energy only (no capacity),

firm with liquidated damages

Start date: Mar 2002

Predecessor/start date: ERCOT Jan 1996

Platts day-ahead flow date code on-peak: WEAEY20

Platts day-ahead flow date code off-peak: WEAEQ20

**WESTERN MARKETS** 

Mid-C

AKA: Mid-Columbia

**Description**: Mid-C is a power trading hub for the Northwest U.S. comprising the control areas of three public utility districts in Washington that run hydro electric projects on the Columbia River. The three PUDs are Grant, Douglas and Chelan. Hydro projects include Wells, Rocky Reach, Rock Island, Wanapum and Priest Rapids dams.

Market type: no formal market design

Grid operator: individual utilities

On-peak hours: Hour-ending 7 through 22

Off-peak hours: Hour-ending 1 through 6 and 23 through 24

 $\textbf{Product assessed} : Physical power, energy only (no \ capacity),$ 

firm with liquidated damages

Start date: Oct 1994

Predecessor/start date: N.A.

Platts day-ahead flow date code on-peak: WEABF20

Platts day-ahead flow date code off-peak: WEACL20

## COB

AKA: California-Oregon Border

**Description**: COB comprises the Captain Jack and Malin substations on the AC transmission system between Oregon and

California.

Market type: no formal market design

Grid operator: individual utilities

On-peak hours: Hour-ending 7 through 22

Off-peak hours: Hour-ending 1 through 6 and 23 through 24

Product assessed: Physical power, energy only (no capacity),

firm with liquidated damages

Start date: Oct 1994

Predecessor/start date: N.A.

Platts day-ahead flow date code on-peak: WEABE20

Platts day-ahead flow date code off-peak: WEACJ20

# Palo Verde

AKA: PV or Palo

**Description**: Palo Verde comprises the switchyard at the Palo Verde nuclear power station west of Phoenix, Arizona.

Market type: no formal market design

Grid operator: individual utilities

On-peak hours: Hour-ending 7 through 22

Off-peak hours: Hour-ending 1 through 6 and 23 through 24

Product assessed: Physical power, energy only (no capacity),

firm with liquidated damages

Start date: Oct 1994

Predecessor/start date: N.A.

Platts day-ahead flow date code on-peak: WEACC20

Platts day-ahead flow date code off-peak: WEACT20

### Mead

AKA: none

**Description**: Mead comprises the switchyard at the Hoover Dam

on the Colorado River, forming Lake Mead near Las Vegas, Nevada.

Market type: no formal market design

**Grid operator**: individual utilities

On-peak hours: Hour-ending 7 through 22

Off-peak hours: Hour-ending 1 through 6 and 23 through 24

Product assessed: Physical power, energy only (no capacity),

firm with liquidated damages

Start date: Feb 2004

Predecessor/start date: Mead May 1995-Sep 1996.

Platts day-ahead flow date code on-peak: AAMBW20

Platts day-ahead flow date code off-peak: AAMBQ20

### Mona

AKA: none

**Description**: Mona comprises the Mona substation in central Utah, directly south of Salt Lake City and linked to major generating units in the region, such as the Intermountain Power Project.

Market type: no formal market design

**Grid operator**: individual utilities

On-peak hours: Hour-ending 7 through 22

Off-peak hours: Hour-ending 1 through 6 and 23 through 24

Product assessed: Physical power, energy only (no capacity),

firm with liquidated damages

Start date: Aug 2005

Predecessor/start date: N.A.

Platts day-ahead flow date code on-peak: AARLQ20

Platts day-ahead flow date code off-peak: AARLO20

# **Four Corners**

AKA: none

**Description**: Four Corners comprises the switchyard of the coalfired Four Corners power plant in Fruitland, New Mexico, located in the Northwestern corner of the state where Arizona,

Colorado, New Mexico and Utah meet.

Market type: no formal market design

**Grid operator**: individual utilities

On-peak hours: Hour-ending 7 through 22

Off-peak hours: Hour-ending 1 through 6 and 23 through 24

Product assessed: Physical power, energy only (no capacity),

firm with liquidated damages

Start date: May 1995

Predecessor/start date: N.A.

Platts day-ahead flow date code on-peak: WEABI20

Platts day-ahead flow date code off-peak: WEACR20

**NP15** 

AKA: North-of-Path 15 or North Path

**Description**: NP15 comprises the California Independent System Operator's northern congestion zone. The zone is north of the main north-south AC transmission pathway, California Path 15.

Market type: Zonal with plans to move to a nodal system in 2007

Grid operator: California Independent System Operator

On-peak hours: Hour-ending 7 through 22

Off-peak hours: Hour-ending 1 through 6 and 23 through 24

Product assessed: Physical power, energy only (no capacity),

firm with liquidated damages

Start date: Mar 1999

Predecessor/start date: Midway/May 1995

Platts day-ahead flow date code on-peak: AABDA20

Platts day-ahead flow date code off-peak: AABCZ20

**SP15** 

AKA: South-of-Path 15 or South Path

**Description**: SP15 comprises the California Independent System Operator's southern congestion zone. The zone is south of the main north-south AC transmission pathway, California Path 15.

 $\boldsymbol{Market\ type} {:}\ \boldsymbol{Zonal\ with\ plans\ to\ move\ to\ a\ nodal\ system\ in}$ 

2007

**Grid operator**: California Independent System Operator

On-peak hours: Hour-ending 7 through 22

Off-peak hours: Hour-ending 1 through 6 and 23 through

24

**Product assessed**: Physical power, energy only (no capacity),

firm with liquidated damages

Start date: Mar 1999

Predecessor/start date: Midway/May 1995

Platts day-ahead flow date code on-peak: AABDF20

Platts day-ahead flow date code off-peak: AABDG20