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**PLATTS RESPONSE TO CALL FOR EVIDENCE ON RECORD KEEPING,
TRANSPARENCY, SUPPLY CONTRACTS AND DERIVATIVES FOR ELECTRICITY
AND GAS**

Attachments: Platts Methodology for European Power, Platts Methodology for European Gas, Platts Methodology for North American Natural Gas, Platts Methodology for European Oil Products, *Platts' European Power Daily*, *Platts' European Gas Daily*, *Platts' Gas Daily*, *Platts' European Marketscan*.

Dear Sir,

Platts, the energy and commodities information division of the McGraw-Hill Companies, is pleased to have the opportunity to contribute to the discussion on improving transparency in European power and natural gas markets. Enclosed is Platts' response to the call for evidence on record keeping, transparency, supply contracts and derivatives for electricity and gas, issued jointly by CESR and ERGEG on February 18, 2008. It includes an overview and answers to specific questions. In its response, Platts also outlines some different approaches to transparency we have taken in the various markets we observe so as to give a flavour of the different options open to regulators.

Platts has long advocated the goal of increased price transparency in natural gas and electricity markets both in the US and in Europe. In recent years Platts has taken a number of steps to enhance the reliability of voluntary price reporting and to increase information available to the marketplace on its price surveys. Platts continues to examine ways to provide still more transparency in its price reporting.

Platts appreciates the deliberation with which the Commission and regulators are approaching the issue of transparency of market data, taking time to consult stakeholders and care to ensure that future regulation does not slow the development of liquidity in Europe's power and gas markets. Platts encourages market-driven solutions that provide industry participants with choices and do

not pre-determine winners and losers. However, without the proper regulatory framework in place, those market solutions may not develop.

If you have any questions regarding this submission, please do not hesitate to contact Sharon Levrez, Platts' director, European Power Product Development, on +32 2 733 77 94 or email sharon_levrez@platts.com.

Best regards

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PLATTS RESPONSE TO CESR/EREGG CALL FOR EVIDENCE ON RECORD KEEPING, TRANSPARENCY, SUPPLY CONTRACTS AND DERIVATIVES FOR ELECTRICITY AND GAS

About Platts

Platts, a division of The McGraw-Hill Companies, is a leading global provider of energy and metals information. With nearly a century of business experience, Platts serves customers across more than 150 countries. From 15 major offices worldwide, Platts serves the oil, natural gas, electricity, nuclear power, coal, petrochemical and metals markets.

Platts' real-time news, pricing, analytical services, and conferences help markets operate with transparency and efficiency. Traders, risk managers, analysts, and industry executives depend upon Platts to help them make better trading and investment decisions.

Founded in 1888, The McGraw-Hill Companies (NYSE: MHP) is a leading global information services provider meeting worldwide needs in the financial services, education and business information markets through leading brands such as Standard & Poor's, McGraw-Hill Education, BusinessWeek and J.D. Power and Associates.

The Corporation has more than 280 offices in 40 countries. Sales in 2007 were \$6.8 billion. Additional information is available at www.mcgraw-hill.com.

Overview

A starting point for the present discussions on improving transparency in traded electricity and natural gas markets in Europe is the findings of the Sector Inquiry carried out by the European Commission's directorates for Transport and Energy and for Competition. That Sector Inquiry found in January 2007 that competition in electricity and natural gas markets was not functioning well because of 1) market concentration/market power, 2) vertical foreclosure, 3) a lack of market integration, 4) a lack of transparency.

Platts believes structural problems are impeding the development of the European electricity and natural gas markets. There is an imbalance between buyers and sellers. National markets and even the European market tend to be dominated by a handful of major players. There is a lack of market integration between member states and no common market design. Moreover, there is a varying degree of transparency in fundamental supply and demand data (plant outages, field outages, available transmission capacity, gas storage etc.) Measures that address these issues first will surely go a long way towards creating more liquid wholesale electricity and natural gas markets in which there is greater consumer confidence and more competitive prices. Platts believes that elements of the Third Energy Package, including unbundling requirements, will help lay the groundwork needed for these markets to flourish.

Transparency rules, too, will play a vital role in market development. However, the benefits and disadvantages of enforced trade reporting as an additional measure to improve market functioning must be carefully weighed. There is little doubt that opaque markets are generally inefficient and greater transparency will generally lead to greater liquidity and market integrity. However, potential new market entrants may be put off by the prospect of having to reveal all transactional data to national regulatory authorities and would almost certainly be deterred by the prospect of having those trades made public, at least in a timely fashion. New entrants and smaller market players may rightfully be concerned that revealing their trades would give the dominant market participants a strong tool to further consolidate their position.

It is important to strike the right balance between ensuring market participants have fair and equal access to information that affects prices and recognizing that companies from a competitive standpoint will desire to keep some of their activities confidential. US legislators and regulators have recognized these concerns and opted for an initial step of voluntary transparency measures. Platts encourages CCSR and ERGEG to take that approach as well.

Platts has considerable experience in assessing prices and analysing market development in a number of commodities, including oil, electricity, natural gas, coal, emissions, metals, petrochemicals and shipping in Europe, the US and Asia. No two markets are the same. The degree of liquidity and transparency varies greatly from market to market and the solutions that have been found to improve the market's functioning are also quite diverse. In some markets there is a higher portion of exchange or other online trade; in others trade is mostly done over the counter either bilaterally or using a broker. Some markets see hundreds, even thousands of fixed price deals a day; others see only a handful a week. In some markets the details of trades that form part of the price setting process are known to all, up to and including counterparties. In other markets trades are mostly private and confidential, often with an index-related price, and only the price and volume may be known.

Platts exists to bring greater transparency to opaque markets. Platts has long advocated greater transparency in all the markets it covers, including European electricity and natural gas. In answering the questions below, Platts has outlined some of the approaches it uses in various markets and the kinds of information it makes available on a commercial basis. We have also commented generally on the information available currently in Europe's electricity and natural gas markets and the proposed measures to improve transparency of market data and have drawn upon our experiences in markets in other regions, notably the US. Platts has focused its comments on questions pertaining to transparency, the topic where it has the most expertise.

Responses to specific questions

Question 11. What guidelines and arrangements do energy regulators propose for the making available of aggregate market data by them under paragraph 3 of Article 22f/24f?

Response to Question 11. The issue of how to make public market data is perhaps the most sensitive. New market entrants may be put off by the prospect of having to reveal all their trades to national regulatory authorities and would almost certainly be deterred by the prospect of having those trades made public. There would be concerns that publication of trade data could enable dominant market participants to further consolidate their position. Therefore, it is important to strike the right balance between ensuring all market participants have access to the information they need to allow that market to function efficiently and recognizing that companies will desire from a competitive standpoint to keep some of their activities confidential.

In market transparency provisions of the Energy Policy Act of 2005, the US Congress recognized this dilemma. Congress directed the US Federal Energy Regulatory Commission to facilitate market transparency in gas and electricity markets. It specified, though, that in determining the amount of information to be made available, FERC must “seek to ensure that consumers and competitive markets are protected from the adverse effects of potential collusion or other anticompetitive behaviors that can be facilitated by untimely public disclosure of transaction-specific information.”

In an April 2007 proposed rule (RM07-10) to implement the EPAct provisions, FERC acknowledged Congress’ concerns about possible anticompetitive impacts of publishing transaction-level data and also noted that the Department of Justice “echoed this caution, stating that the Commission ‘may be able to achieve the benefits of transparency while limiting its potential harm by aggregating, masking, and lagging the release of such information.’ ” In its final rule, Order 704, issued 26 December 2007, FERC required buyers and sellers to report aggregate volumes of relevant transactions on an annual basis, thus avoiding anticompetitive concerns by aggregating volumes, masking delivery points and delaying the release. The Commission determined that mandatory reporting to the government of transactional data would not be imposed at this time. Platts was an active participant in the FERC proceeding and supports the Commission’s findings.

Platts would also like to note that the term “market data” covers a broad range of information. It includes transactions concluded by market participants and fundamental information on supply and demand. Platts believes that fundamental supply and demand market data is vital to a full understanding of electricity and natural gas prices and is a key component of market transparency. Platts welcomes, therefore, that national regulatory authorities and the European Commission and regulatory authorities are working towards improving transparency on both types of information. In US gas and electricity markets, FERC is taking the same approach, determining that physical flow data is critical to understanding market functioning. The experience in the UK is instructive; although some parties initially objected to the near-real-time publication of gas flow data by National Grid, the system in place since 2006 has demonstrated the value of fundamental supply and demand data in explaining price movements.

Platts believes that such sensitive market data is best handled by a recognized information provider with experience of analysing market data. That company should be wholly independent, with no vested interest in the market. In calling on FERC to facilitate price transparency, Congress instructed that the Commission “shall consider the degree of price transparency provided by existing price publishers and providers of trade processing services, and shall rely on such publishers and services to the maximum extent possible.” In Order 704, the Commission established only the annual reporting requirement for aggregate data and pointed out that “commercial trade publishers are the most significant source of market price information in US wholesale natural gas markets.”

In terms of the kind of transactional market data that would be of benefit to market participants, information on total volume traded, share of trade of top five market participants, high price, low price, simple average and weighted average price, as well as deviation from the mean, would all be relevant. Share of exchange trade, other online trade and pure over-the-counter trade would also be useful.

With regard to market fundamental data, there are a variety of categories which are necessary in the formulation of an informed market position and confident market entry. These fundamental supply and demand categories not only influence trade strategy, but also dictate asset portfolio movements, production decisions, geographic focus, asset and infrastructure development requirements, and long-term market strategy. The availability of indicators such as fuel consumption, production, plant efficiencies, segmented actual and forecast demand, available pipeline capacities, actual and forecast gas flows, fuel reserves, and hourly emissions are all highly conducive to competitive and accessible markets.¹

Compulsory FERC and Energy Information Administration reporting of the indicators listed above, on a facility level and at a fairly high frequency, has fostered an undeniably

¹ US Market information sources cited: Power: FERC forms 1, 423, 714, 906 report monthly or annual statistics by facility on fuel cost, fuel quality, plant operation, wholesale transactions and counterparties, retail sales, forecast and actual load by planning area, marginal costs, generator inventories and historical outages; EIA forms 411, 423, 759, 860, 861, 900, 906, 920 report monthly or annual statistics on power plant operations, generation, consumption, production costs, sales by customer type, historical/projected sales and capacity purchases, proposed infrastructure investment, historical/projected interstate power flows, power wheeling between utilities, fuel utilization, and historical/projected supply and demand by planning area; EPA (CEMS-Continuous Emissions Monitoring Service): Provides hourly emissions figures and operational data; Gas: For interstate pipelines-FERC Orders 636, 637, FERC form 2, and the FERC Operational Capacity Report provide available pipeline capacity, daily release of contracted pipeline capacity, index of contracted pipeline capacity and customers, scheduled and actual flows at receipt and delivery points, company financials, and weekly regional storage figures.

competitive industry in the US. This is evident in the proliferation of active investor-owned utilities (IOUs- >220) and independent power producers (IPPs- >1,900) in the US market. Platts information confirms that the comparable figures for the EU 27 plus Norway, Iceland, and Switzerland are less than 50 and 1,200, respectively.

The aggregator and publisher of market data would need to consider carefully the conditions surrounding each trade. While most electricity and natural gas are fairly standard products and European electricity and natural gas trades are done to standard contracts, usually those designed by European Federation of Energy Traders, many have special conditions regarding, for example, volume, location, timing, and/or payment terms. The aggregator and publisher of the market data would also need to consider whether trades formed part of a spread, be it a location spread, time spread or other, as here the difference in prices is more important than the outright prices put on each leg of the spread.

Platts has considerable experience in handling sensitive market data in various commodities markets. Platts' experts gather market data from principals through phone surveys, by email and by instant messenger. They use this data to produce benchmark assessments and indices for the oil, gas, electricity, coal, uranium, petrochemicals and metals markets and to provide related market analysis. Platts' approach relies on basic principles – independence, impartiality, precision and accuracy, compliance review – but varies by market in recognition of the specific features of each market. A few examples are given below. Platts would be happy to give a more detailed view should it be required.

Example 1: In the US spot gas market, transactional data is gathered from a central contact point in the mid- or back-office (a segment of the reporting entity that does not have a commercial interest in the reported prices). The reporting entity 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. The entity is also obligated to make reasonable efforts to inform Platts in the case of any errors or omissions.

The following transactional level information on fixed-price, physical deals is requested: trade date, flow date(s), point of delivery, price, volume, source, counterparty, intermediary (broker or trading platform), special terms, time of trade. Platts also requests that companies indicate whether a trade is financial or forms part of a spread.

This information is used to produce volume-weighted indices for the day-ahead and monthly bidweek markets, as well as ranges for high and low prices, volume traded and number of transactions. Prices are published in several ways, ranging from a daily data feed to a biweekly newsletter. Platts' prices are available to any party who subscribes to the publication or news service in which those prices are published.

Companies reporting gas and electricity prices to Platts must comply with a FERC Policy Statement issued in 2003 outlining best practices. For instance, companies may not “cherry-pick” transactions but rather must report all deals done at all locations.

Companies that follow the Policy Statement guidelines in turn are granted a “safe harbour” that FERC will not prosecute any inadvertent errors in reporting.

Following irregularities in price reporting practices by trading desks early in this decade and the subsequent near collapse of the energy merchant sector, Platts’ US gas price surveys have rebuilt to strong levels. Platts collects around 4,000 individual transactions in both its daily and monthly gas price surveys.

A more detailed description of the editorial process used to calculate Platts’ US natural gas assessments is given in the attached document Platts Methodology for North American Gas.

Example 2: In the European oil product market Platts operates a market-on-close “window” assessment, drawing on trades, bids and offers in the run-up to 16.30 London time. The assessment represents the transactable value at 16.30 precisely.

Platts considers transactions, bid/offer levels and market indications that are reflective of typical conditions and originating from sources deemed reliable. Details of bids/offers and deals for European oil products, including counterparty names, are provided on the electronic screen service *Platts’ Global Alert* page PGA005, offering considerable transparency in the price-setting process. Bids and offers must in principle be open to any reputable and creditworthy counterparty. Platts’ assessments and a list of the deals concluded within the window are published in *Platts’ European Marketscan*, which is available to any company wishing to subscribe.

Because of the variety of grades of oil products available, Platts bases its assessments on strict product specifications. A detailed explanation of Platts’ assessment methodology and specifications considered is given in the attached document, Platts Methodology for European Oil Products.

Example 3: In the Polish power market, Platts gathers transactional data from market participants on a monthly basis. Information on trade date, flow dates, location, timing, price, volume, whether the trade was a buy or a sell, intermediary (broker or online trading platform) and counterparty are requested.

This information is used to calculate monthly assessments for the next three months, next quarter and next year in the form of a high-low range. The assessments are weighted towards trade at the end of the month, where volumes are normally greatest.

Information on total volume traded in megawatts and megawatt hours, number of transactions and number of reporting companies is also provided along with the assessments. This gives market participants an indication both of the size of the market and of the robustness of Platts’ assessments. This information is available to all subscribers to *Platts’ European Power Daily*, *Power in Europe* and *Energy in East Europe*.

For more information on the methodology used to calculate Platts Polish power assessments and the information provided, see the attached document Platts Methodology for European Power.

Example 4: In the UK gas market Platts' market specialists gather data on daily trades from key market participants. This data is used to calculate an assessment of the price of spot and forward gas at 4.30pm London time. Day-ahead and month-ahead trades concluded between 8am and 4.30pm are also used to calculate a daily volume-weighted average index, which is published along with the volume of trade and number of trades included in the index. In addition, reported trades are published on page 615 of *Platts' European Power Alert* as soon as possible after they are received.

Platts is not able to gather information on all trades concluded on any given day, although this would be our preference. Platts market specialists do aim to gather a representative portion of the market and to give market participants as much additional information as possible on the state of the market on any given day.

Platts only accepts data from a reliable person within the reporting company and would prefer to receive trades from the back or middle office. The following information is requested: delivery period, location, price, volume, timing of trade, whether the trade was a buy or a sell, intermediary (broker or online trading platform) and counterparty. Platts excludes from its indices trades that are deemed outside the normal bid/offer range, that involve unusually small or large volumes, that are concluded outside of normal business hours or that are not confirmed by at least one counterparty involved in the trade.

A detailed description of Platts' methodology and specifications for European gas is contained in the attached document, Platts Methodology for European Gas.

Question 14. Is there a difference in transparency requirements for spot trading compared to future and forward trading? If so why?

Response to Question 14. There is a considerable difference between spot trading and forward/futures trading in electricity and gas, particularly regarding trade via an exchange and trade done over the counter (see below). Generally, liquidity and price volatility are much greater in the spot market. Exchanges use both continuous trade and an auction model for day-ahead electricity trade.

It should be borne in mind that market participants often use the spot market (day-ahead and intraday) for fine-tuning of positions and to cover unforeseen shortages and surpluses, for example arising from a field outage or plant restart. Forward and futures trade is used to hedge risks and cover expected sales and purchasing needs.

Price drivers in the spot market are very different from those in the forward market and are much more focused on immediate supply and demand. For example, expected and unexpected production outages, weather conditions and transmission constraints would

all have a significant impact on short-term prices. Therefore, transparency of fundamental data is vital to the spot market.

In the forward market, electricity prices react more to feedstock prices such as those for coal and gas, emissions prices, planned production outages and foreign exchange rates. Gas prices are highly dependent on movements in oil prices, due to the contractual link between oil and gas in continental Europe. Forward prices for electricity, coal and emissions may also have an impact, as might US gas prices and news of planned pipeline and storage outages.

Question 15. Is there a difference in transparency requirements for exchange trading compared to OTC trading? If so why?

Response to Question 15. Trading participants use the day-ahead market to optimize the procurement and sale of gas and electricity in the short term. Transactions can take place on exchanges as well as in the over-the-counter market. Exchanges provide standard contracts and real-time trade visibility in addition to a varying degree of information and transparency of underlying market fundamentals. For the over-the-counter market independent information providers provide transparency on transactions through the use of market surveys. Information on transactions, bids and offers, market fundamentals and daily price assessments are published real-time and in daily market reports available to all market participants via subscription service. Several brokers operate electronic platforms that offer real-time transparency on trade.

In addition to spot trade, regulated futures exchanges provide the marketplace for the trade of futures contracts, standardized contracts to buy and sell a certain underlying instrument at a certain date in the future, at a specified price. The exchange's clearinghouse acts as the central counterparty on all contracts and sets the margin requirements. Futures contracts are marked to market every day to a daily spot price with the same agreed-upon delivery price and underlying asset, eliminating the credit risk by forcing the holder to update daily to the price of an equivalent forward purchased that day.

Futures traders are traditionally in one of two groups: hedgers, who have an interest in the underlying commodity and are seeking to hedge out the risk of price changes; and speculators, who seek to make a profit by predicting market moves and buying a commodity on paper for which they have no practical use.

Futures contracts ensure their liquidity by being highly standardized, whereas some forward contracts are unique, giving flexibility and the opportunity to customize contractual agreements in line with counterparty requirements. In the case of physical delivery, the forward contract specifies to whom to make the delivery. The counterparty on a futures contract is chosen by the clearinghouse. More mature energy markets show that both marketplaces and types of contracts can co-exist and complement each other providing a rounded set of tools and instruments to the market for physical supply, hedging and risk management.

As in the spot market, futures exchanges provide standardized contracts and real-time trade visibility to the entire marketplace. For the over-the-counter forward market, independent information providers survey the market and bring transparency to off-exchange transactions by publishing information on actual trades, bid/offer spreads and daily price assessments. This information is available to all market participants via subscription service. Several brokers operate electronic platforms that offer real-time transparency on forward trade.

Question 16. What information, other than required by law or regulation, is made public by energy traders, brokers, information services or exchanges?

Response to Question 16. Platts offers an independent information service to the energy and related markets. Our business provides news and market information on a commercial basis and is not subject to regulation.

Platts aims to provide information to subscribers that will help them make better business decisions, with a strong emphasis on market information. Information published by Platts includes benchmark prices (assessments and indices), market commentaries, market analysis, exchange prices, information on production and consumption, information on scheduled and unscheduled outages, weather data and market-related news stories. Price and market information is available in real-time, electronic format, daily, weekly and monthly publications, and in database form. Various Platts publications also publish “trackers” of planned and existing infrastructure projects in Europe and beyond.

In the European electricity market, Platts offers a comprehensive analytical database tool called European Powervision. It includes a database of Platts’ assessments, exchange prices and volumes, cross-border capacity availabilities and prices, production data, flow data and reservoir levels. It also offers a database of existing and planned infrastructure assets by owner, capacity, generation type etc. Platts is one of the few commercial suppliers of data to the European Commission’s new Energy Market Observatory System. In the US, Platts Energy Advantage has been used by FERC to monitor the US electricity and natural gas markets.

In terms of the other information available to market participants, the following exchanges publish hourly volumes and prices, as well as a daily average price and volume: APX (UK, Netherlands), Belpex (Belgium), Borzen (Slovenia), EEX (Germany, Austria), EXAA (Austria), IPEX (Italy), Nord Pool (Denmark, Finland, Germany, Norway, Sweden), Omel (Spain, Portugal), Polish Power Exchange, Powernext (France), Prague Power Exchange, Opcom (Romania).

The following exchanges offer continuous trade in forward products, including information on current bid, current offer, volume of bid, volume of offer, last traded price, total traded volume and, usually, open interest: EEX (Germany, France), Endex (Netherlands, Belgium), ICE (UK), Nord Pool (Denmark, Finland, Norway, Sweden),

Powernext (France). EEX and Nord Pool also offer information on planned and unplanned production outages.

The following brokers offer continuous electronic trade in spot and forward products, including information on current bid, current offer, volume of bid, volume of offer, last traded price, and volume traded: GFI Group, ICAP Energy, Spectron Group, Tradition Financial Services, Tullett Prebon Energy. These companies also offer daily reports and historical data, including information on individual trades.

Finally, in addition to Platts the following companies provide benchmark prices and analysis: Argus Media, Bloomberg, Dow Jones, Heren Energy, the London Electricity Brokers' Association, Montel, Prospex and various other consultants. Other organizations such as Energy System Analysis and Planning, Genscape, Montel and VGB PowerTech provide fundamental supply and demand data for the European electricity market.

Question 17. Is access to information on traded volumes equal for all parties active in that market?

Response to Question 17. All Platts products and services are available on a subscription basis to any market participant or interested party. A list of prices can be found at Platts' website, www.platts.com.

With regard to volume information, Platts would note that it is very difficult to give an accurate figure for the total volume of trade conducted in each market. While the share of electronic trade for European power and gas is large compared with other markets Platts covers, a large portion of trade is still conducted over-the-counter and many of these trades are confidential and/or non-standard. Where possible Platts tries to give an indication of the volume of standard trade reported to its market specialists. However, Platts cannot give an indication of total volumes traded for many European electricity and gas markets, nor do we believe can any information provider at this point in time.

Likewise, measurement of overall market size is one of the main objectives of FERC's new rule, Order 704. As the Commission pointed out in its proposed rule, "As noted by the price index developer Platts, the question of what is the total size of the traded market has 'hung over the gas market for years.' Without the most basic of volumetric information, the Commission has been hampered in its oversight and its ability to assess the adequacy of price-forming transactions."

According to the UK Financial Services Authority's latest annual market report for the period from August 2006 to July 2007, the following volumes were traded: UK gas 437,042 million therms, Continental European gas 37,871 million therms, UK power 984,811 GWh, Continental European power 6,336,909 GWh. The share of electronic trade compared with voice-brokered trade, according to the FSA, is: UK gas 84% electronic, 16% voice-brokered trade; Continental European gas 59% electronic trade, 41% voice-brokered trade; UK power 67% electronic, 33% voice-brokered trade; Continental European power 71% electronic, 29% voice-brokered. Platts has calculated

that roughly the following percentages of trade were in exchange-traded futures: UK gas 7.68%, Continental European gas less than 1%, UK power 1.04%, Continental European power 32.5%. The FSA figures do not include pure bilateral trades (i.e. counterparty to counterparty).

In general there is greater transparency regarding prices and volumes traded on exchanges and other online trading platforms than in the voice-brokered market (but not necessarily greater transparency on what forms those prices). Many exchanges, but by no means all, provide this information free of charge to any interested party. Others offer it as a paid service. Some brokers also offer this information.

Question 18. If not, is unequal access to or general lack of information on trading causing distortion of competition?

Response to Question 18. Due to the comparatively high level of electronic trade in Europe's electricity markets there is already a considerable amount of transparency on prices and volumes traded in these markets compared with some other markets Platts assesses. In the natural gas market, the same is true at the small number of more mature trading hubs such as the UK's NBP, Belgium's Zeebrugge, and the Dutch TTF and somewhat less transparency at newer hubs such as France's PEG Nord, Germany's EGT and Italy's PSV. As other hubs develop in other regions transparency will increase.

More important, perhaps, is the lack of fundamental supply and demand data in many European gas markets. As noted previously, this information is of key importance to prices. One area specific to trade where Platts has identified a lack of information is in counterparties. If information on counterparties were more readily available, even in aggregated form, it might foster greater confidence in these markets. However, there is resistance among electricity and gas traders to revealing counterparties.

Question 19. In light of the findings in the Commission Sector Inquiry on energy and the subsequent study of the electricity wholesale markets, please consider:

- a) whether, pending the outcome of the legislative process in respect of the proposed Directives amending Directives 2003/54/EC and 2003/55/EC, greater EU-wide pre- and/or post-trade transparency rules for electricity and gas supply contracts (physical and spot trading) and electricity and gas derivatives would contribute to a more efficient wholesale price formation process and efficient and secure energy markets;**
- b) whether such transparency arrangements could be expected to effectively mitigate the concerns identified in the Sector Inquiry above;**

Response to Questions 19a and 19b. The Sector Inquiry found that there was a failure in European natural gas and electricity markets that was mainly due to structural problems, i.e., continued dominance of a few large market players, vertical foreclosure and a lack of transparency on fundamental supply and demand data. Improving transactional

transparency would not address these problems. Platts believes the various elements of the Third Energy Package, including on unbundling, the Agency for Coordination of Energy Regulators and transparency of fundamental supply and demand data are better suited to deal with these problems. Requirements on record-keeping should address any additional concerns, as long as national regulatory authorities are well placed to demand access to those records and to analyse them effectively in the case of complaint or suspected wrongdoing.

c) whether uniform EU-wide pre- and post-trade transparency could have other benefits

Response to Question 19c. In Platts' opinion, uniform EU-wide pre- and post-trade transparency rules would be preferable to different approaches in the different EU member states. However, Platts reiterates that transparency objectives could be met through guidelines or principles that permit market-developed voluntary solutions rather than government-imposed mandates.

d) whether additional transparency in trading could have negative effects on these markets, for example could liquidity in these markets be expected to decrease? Is there a risk that trading could shift to third countries to escape regulation?

Response to Question 19d. A requirement on all market participants to report all trades and to have those trades made public could have a negative effect on liquidity. New market entrants may be put off by the prospect of having to reveal all their trades to regulatory authorities and would almost certainly be deterred by the prospect of having those trades made public. There would be concerns that publication of trade data could enable dominant market participants to further consolidate their position. Therefore, it is important to strike the right balance between ensuring all market participants have access to the information they need to allow that market to function efficiently and recognizing that companies will desire to keep some of their activities confidential.

Given the regional and even national nature of electricity and gas markets it is difficult to envisage a scenario in which a large portion of trading of physical commodities could shift to third countries to escape regulation. Buyers of gas might be tempted to trade more at source in countries such as Russia, Algeria, Libya, etc. However, they would have to weigh up the benefits of avoiding regulation against the lack of transparency in these markets and at times the sellers' reluctance to conclude fixed-price deals. In financial markets, traders might decide to focus on commodities other than electricity and gas, or to trade in other regions, or to trade on other platforms, which could ultimately affect liquidity. For instance, ICE Futures Europe's listing of a cash-settled WTI crude oil contract raised concerns in the US. Similarly, there are concerns that new EUA and CER contracts offered by NYMEX might attract liquidity away from EU-based emissions exchanges as traders seek to avoid regulation.

- e) If you believe that there are risks arising from additional pre- and post-trade transparency requirements, how do you believe that these risks can be mitigated (e.g. aggregation, delay in publication, anonymity)?**

Response to Question 19e. Platts does not believe there is a single answer on how best to mitigate risks of anticompetitive effects from immediate publication of all transaction-level data. In highly liquid markets, aggregation may be needed simply to boil down a mass of data to manageable size. In some instances, immediate publication of transactional information on an anonymous basis followed by delayed publication of parties identities, may meet the objectives of transparency. In all markets, price data must be published as soon as possible after trading ends to be useful.

Question 21. What timelines or delays should be built into the implementation of any of the above recommendations?

Response to Question 21. The above recommendations, if implemented, would require a considerable lead time to allow companies and regulators to prepare for the additional workload they will face. Platts would suggest a lead time of not less than one year.

Methodology and Specifications Guide

European Natural Gas Assessments and Indices

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INTRODUCTION

Platts methodology for assessing European gas markets has developed over a number of years. It draws on our experience in the international oil markets and in the US gas and power markets. Platts sets great importance on producing independent reports, indices and assessments. The indices and assessments we publish are not compiled in alliance with any other participant in the market.

Platts indices and assessments are based on our own surveys of market participants completed by Platts price reporters each day. Assessments aim to reflect the fair, repeatable value of the commodity at the close of normal business.

At the same time, Platts indices and assessment give priority weighting to confirmed trades and aim to maintain realistic spreads between markets and products. Therefore, the methodology for compiling these is relatively complex.

Platts assessments are based on a survey of as broad a cross-section of the market as possible. This includes canvassing brokers, traders, foreign and local producers, distributors and endusers. Usually, key market players are contacted by phone or email on a daily basis, while other smaller players are canvassed on a less frequent but regular basis. In addition, some companies email us trade and market information, which we would consider in conjunction with other information gathered during our phone surveys. In each case, we aim to speak to those participants that were most active in the market on that particular day.

Platts reporters aim to call 8-10 players per market each day, but in practice would call as many players as we need until we are comfortable that we have sufficient information to start assessing the market. Most calls are made from mid- to late-afternoon UK time. Platts market reporters may also call market participants at other times for intra-day market updates.

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.

PLATTS MOC ASSESSMENTS

Platts assessments are market-on-close prices based on the most recent trades and/or bids and offers prevailing at the end of the normal trading cycle. For European gas we define this as:

UK day-ahead contracts – 4:30 pm UK time (17:30 CET)

Continental European day-ahead contracts – noon UK time (13:00 CET)

Continental European forward contracts – 4 pm UK time (17:00 CET)

UK forward contracts – 5 pm UK time.

The market-on-close assessment reflects the tradable value of the commodity at the given points in time, based on repeatable trades, bids and offers. In addition, only bids and offers that are raised or lowered in realistic increments would be considered.

Confirmed trades are given preference when making the assessment. In the absence of trade, Platts reporters look at firm bids and offers at the end of the day. Finally, if there are no qualified trades in a product and no firm bids and offers in the market, we look at spreads against other products or markets (e.g. Q2 versus Q3, Zeebrugge gas versus UK NPB gas, etc).

Platts monitors the market structure throughout the day to ensure that market-on-close business converges with prevailing market values at the stated assessment times.

PLATTS INDICES

Daily Indices

Platts daily indices for the UK gas market are essentially volume-weighted averages of qualifying trades reported to Platts on the day before contract delivery. However, Platts would discount trades that are deemed outside the market, that involve unusually small or large volumes, that are concluded outside normal business hours or that are not confirmed by at least one counterparty involved in the trade. Normal business is defined as 8 am to 4:30 pm UK time. Known sleeve and spread trades are also discounted from Platts indices.

For the purpose of daily indices, Platts uses a minimum volume threshold of 500,000 th/d before producing an index based on transactions alone for UK and continental gas. In addition, at least ten trades involving four counterparties must be obtained before producing an index based on transactional information alone. If these volume criteria are not met, the midpoint of the relevant day-ahead assessment will be used as the index price.

Monthly Indices

Platts publishes daily average and cumulative indices for month-ahead gas contracts at the UK's NBP. Daily average indices are based on all qualified trades concluded between 8 am and 5 pm UK time on the day of publication. Known outliers, spread trades and wash trades are excluded from the index, as is unconfirmed trade in which Platts has reason to doubt the veracity of the information.

Cumulative indices are based on all qualified trades concluded in the contract from 8 am UK time on the first working day of the month

until the close of normal business on the last working day of the month (normally 5pm UK time). The final cumulative index price is published on the last working day of the month. Again, known outliers, spread trades and wash trades are excluded from the index, as is unconfirmed trade in which Platts has reason to doubt the veracity of the information.

For the purpose of monthly forward indices, Platts uses a minimum volume threshold of 250,000 th/d before producing an index based on transactions alone for UK and continental gas. In addition, at least ten trades involving four counterparties must be obtained before producing an index based on transactional information alone. If these volume criteria are not met, the midpoint of the relevant month-ahead assessment will be used as the index price.

BANK HOLIDAY CLOSING TIMES

On certain days ahead of a UK Bank Holiday, such as Christmas Eve and New Year's Eve, Platts assesses the MOC price earlier than normal, at noon UK time (13:00 CET). This is to take account of typically much lower liquidity and the earlier end of trade. The cut-off point for all indices, daily and forward, would also be noon UK time on these days.

STANDARD CONTRACT DEFINITIONS

Platts assessments are based on standard contract definitions and volumes, as outlined in the following sections of this document. These vary according to market.

For UK and Zeebrugge gas markets, the standard prompt trade is 25,000-500,000 th/d in 25,000 th/d increments. The standard forward trade is 25,000 or 50,000 th/d. For the Dutch Title Transfer Facility, the Bunde-Oude gas markets, the Italian Punto di Scambio Virtuale, the French Point d'Exchange de Gaz, the German BEB and E.ON Ruhrgas trading points, the standard lot size would be 30MW.

Trades involving smaller or larger volumes may be considered indirectly for the purpose of compiling Platts European gas assessments and indices. This would depend on other features of the deal, however, and whether or not the price was in line with other market indications at the time of transaction.

CONFIRMATION OF TRADES

When considering transactional information, Platts aims wherever possible to confirm trades reported by market participants with the counterparty and broker involved in the trade. Therefore, we request that market parties supply details of the contract type, location, price, volume, timing of the trade, whether the trade was a buy or a sell, counterparty, broker and platform with each trade.

Priority when compiling indices and assessments will be given to trades which can be fully confirmed with the counterparties as bona fide. If details of the timing, counterparty and broker are not

provided, Platts reporters must use their judgment to decide whether to include the individual trade in the index or assessments.

SLEEVE/ROUND TRIP/WASH TRADES

All trades discovered to be "round trip" or "wash" trades are excluded from all Platts assessments and indices. For this reason Platts requests information on counterparties, volumes and timings of transactions and Platts reporters may call for additional information from reporting companies with regard to certain trades as part of its market surveys.

Transactions involving a "sleeve" – a middleman to facilitate a trade between two counterparties that are otherwise prevented from trading with each other — are generally excluded from Platts indices and assessments.

SPREAD TRADES AND BASIS TRADES

Trades concluded as one leg of a transaction linked to a similar trade in another product or market – spread or basis trades – are excluded from Platts indices. Here it is the difference between the two products or markets, not the outright values, that is important. Platts produces separate assessments of the "basis" spread between the UK NBP and Zeebrugge gas markets for added transparency.

OTHER NON-STANDARD TRANSACTIONS

Transactions known to be between affiliates, subsidiaries or otherwise related companies are also generally excluded from Platts indices and assessments.

Transactions involving counterparties for whom trade with the majority of market participants is restricted would also be discounted. This is because the price tag on the deal may be inflated or depressed as a result of the special relationship between the companies involved.

WHEN PLATTS ASSESSMENTS AND INDICES ARE PUBLISHED

Platts publishes a day-ahead assessment and index for the UK's NBP Monday-Friday each week. This includes UK bank holidays. On Fridays the day-ahead price is for delivery on the Monday.

Platts publishes spot assessments for Zeebrugge, the Dutch Title Transfer Facility, the Bunde-Oude gas markets, Bacton and St Fergus, Punto di Scambio Virtuale, Point d'Exchange de Gaz, BEB and E.ON Ruhrgas facilities and forward assessments for the NBP, Zeebrugge, Dutch Title Transfer Facility, Bunde-Oude gas markets, the Punto di Scambio Virtuale, the Point d'Exchange de Gaz, the BEB and E.ON Ruhrgas facilities on all UK working days. A schedule of UK bank holidays and publication dates can be found on the Platts web site at www.platts.com.

PLATTS UK GAS MARKET COVERAGE

The UK is home to Europe's oldest spot gas market. Trading emerged at UK beach terminals—the place where gas shipped in from offshore fields comes ashore—in the early 1990s. In 1996 with the signing of the Network Code, trade concentrated on a notional “National Balancing Point.” The NBP contract has become the standard for UK gas trade and allows counterparties to trade gas on the same terms for delivery anywhere within the National Transmission System operated by UK gas pipeline company Transco.

Trade continues in limited form at the UK's two biggest beach terminals, St Fergus in Scotland and Bacton in East Anglia, at one end of the Belgium-UK Interconnector. St Fergus receives large volumes of gas from UK and Norwegian North Sea fields and remains a convenient spot for taking delivery where the seller does not have entry capacity. Bacton also remains a favorable place for trade, with counterparties sometimes preferring to pay for the privilege of getting gas delivered on the spot. From Bacton gas can easily be shipped to the continental market.

SPECIFICATIONS

Delivery: Platts quotes prices for firm, physical delivery in the UK at the notional “National Balancing Point” (NBP) as well as beach deliveries at St Fergus in Scotland and Bacton in East Anglia.

Units: All Platts UK gas assessment prices are in UK pence/therm, with equivalent prices provided in euro per megawatt hour and euro per gigajoule for easy comparison with continental European gas markets.

Lot size: Standard qualifying trades are 25,000-500,000 th/d in 25,000 th/d increments for prompt trade (within-day, day-ahead and weekend) and 25,000 or 50,000 th/d for forward trades. Trades involving smaller and larger volumes may be taken into account depending on other features of the trade.

Timing

Within-day = delivered within day of assessment/trade

Day-ahead = delivered next working day after assessment, (Friday's assessment reflects Monday delivery, including bank holidays when the price will often be close to the weekend price)

Weekend = delivered Saturday, Sunday

Week + 1 = delivered Monday-Friday of the front week

Balance Month = delivery starting the next working day until the end of month. On the last day of the month balance month = within day.

All months are calendar months

Gas year = October 1-September 30

PLATTS CONTINENTAL EUROPEAN GAS COVERAGE

Platts launched coverage of the continental gas markets in August 1999, with assessments for the fledgling Belgian hub of Zeebrugge. As one end of the UK-Belgium Interconnector, the growth and features of the Zeebrugge market have—unsurprisingly—been dictated to a large extent by UK shippers. Zeebrugge gas typically trades in pence per therm, using the UK model, and will often follow the NBP market at a premium or discount, depending on market conditions.

Trading at Zeebrugge has steadily increased over the years, and can occur at the “flange” of the pipeline, the Interconnector Zeebrugge Terminal, as well as at the formal trading hub operated by Distrigas subsidiary Huberator. Most trade, especially for forward delivery, occurs within the official hub. Platts assessments reflect delivery at the official hub, but IZT trade may be considered indirectly when assessments are made.

Hubs are coming into being elsewhere in northwest Europe. The Dutch transporter Gasunie has created a version of the national balancing point called the Title Transfer Facility. As of January 5, 2004, Platts has also assessed prices at this trading point and at the Dutch-German border point Bunde-Oude.

Trading points elsewhere in continental Europe are developing as market and infrastructure conditions improve. As of June 18, 2007, Platts is assessing prices at the Punto di Scambio Virtuale, the Point d'Exchange de Gaz, the BEB and E.ON Ruhrgas facilities.

SPECIFICATIONS

Zeebrugge

Delivery: Prices are for firm, physical delivery at the Zeebrugge hub operated by Huberator. Flange (IZT) trades are excluded.

Unit: All prices are quoted in UK pence/therm, with equivalent values given in euro per gigajoule and euro per megawatt hour.

Quality: As defined by Belgian network operator Fluxys.

Lot size: Standard qualifying trades are 25,000-500,000 th/d in 25,000 th/d increments for prompt trade (within-day, day-ahead and weekend) and 25,000 or 50,000 th/d for forward trades. Trades involving smaller and larger volumes may be taken into account depending on other features of the trade.

Timing:

Within-day = delivered within day of assessment/trade

Day-ahead = delivered next working day after assessment, (Friday's assessment reflects Monday delivery)

Weekend = delivered Saturday, Sunday

Week + 1 = delivered Monday-Friday of the front week

Balance Month = delivery starting the next working day until the end of month. On the last day of the month balance month = within day.

Months: All months are calendar months

Gas year = October 1-September 30

Bunde-Oude

Delivery: Prices are for firm, physical delivery at the Wingas, Ruhrgas, or BEB flange at Bunde-Oude where German grid networks connect with the GasTransport Services Dutch grid.

Unit: All prices are quoted in euro per megawatt hour with equivalent values given in pence/therm and euro per gigajoule.

Quality: Prices are typically for high cal gas. Other specs are as defined by the Dutch and German network operators.

Lot size: Standard qualifying trades are 30 MW for prompt (day-ahead and weekend) and forward trade. Trades involving smaller and larger volumes may be taken into account indirectly, depending on other features of the trade.

Timing:

Day-ahead = delivered next working day after assessment, (Friday's assessment reflects Monday delivery)

Weekend = delivered Saturday, Sunday

Week + 1 = delivered Monday-Friday of the front week

Months: All months are calendar months

Gas year = October 1-September 30

Cal year = Calendar year

Dutch Title Transfer Facility

Delivery: Prices are for firm, physical delivery at the notional trading point, the Dutch Title Transfer Facility.

Unit: All prices are quoted in euro per megawatt hour with equivalent values given in pence/therm and euro per gigajoule.

Quality: Prices are typically for high cal gas. Other specs are as defined by the Dutch network operator, Gasunie.

Lot size: Standard qualifying trades are 30 MW for prompt (day-ahead and weekend) and forward trade. Trades involving smaller and larger volumes may be taken into account indirectly, depending on other features of the trade.

Timing:

Day-ahead = delivered next working day after assessment, (Friday's assessment reflects Monday delivery)

Weekend = delivered Saturday, Sunday

Months: All months are calendar months

Gas year = October 1-September 30

Cal year = Calendar year

Italian Punto di Scambio Virtuale

Delivery: Prices are for firm, physical delivery at the notional trading point, the Punto di Scambio Virtuale.

Unit: All prices are quoted in euro per megawatt hour with equivalent values given in pence/therm and euro per gigajoule.

Quality: Prices are typically for high cal gas. Other specs are as defined by the Italian network operator.

Lot size: Standard qualifying trades are 30MW for prompt (day-ahead) and forward (month-ahead) trade. Trades involving smaller and larger volumes may be taken into account indirectly, depending on other features of the trade.

Timing:

Day-ahead = delivered next working day after assessment, (Friday's assessment reflects Monday delivery)

Month = calendar month

French Point d'Exchange de Gaz

Delivery: Prices are for firm, physical delivery at the notional trading point, the Point d'Exchange de Gaz Nord.

Unit: All prices are quoted in euro per megawatt hour with equivalent values given in pence/therm and euro per gigajoule.

Quality: Prices are typically for high cal gas. Other specs are as defined by the French network operator.

Lot size: Standard qualifying trades are 30MW for prompt (day-ahead) and forward (month-ahead) trade. Trades involving smaller and larger volumes may be taken into account indirectly, depending on other features of the trade.

Timing:

Day-ahead = delivered next working day after assessment, (Friday's assessment reflects Monday delivery)

Month = calendar month

German BEB facility

Delivery: Prices are for firm, physical delivery at the notional trading point, the BEB facility.

Unit: All prices are quoted in euro per megawatt hour with equivalent values given in pence/therm and euro per gigajoule.

Quality: Prices are typically for high cal gas. Other specs are as defined by the German network operator.

Lot size: Standard qualifying trades are 30MW for prompt (day-ahead) and forward (month-ahead) trade. Trades involving smaller and larger volumes may be taken into account indirectly, depending on other features of the trade.

Timing:

Day-ahead = delivered next working day after assessment, (Friday's assessment reflects Monday delivery)

Month = calendar month

German E.ON Ruhrgas facility

Delivery: Prices are for firm, physical delivery at the notional trading point, the E.ON Ruhrgas facility.

Unit: All prices are quoted in euro per megawatt hour with equivalent values given in pence/therm and euro per gigajoule.

Quality: Prices are typically for high cal gas. Other specs are as defined by the German network operator.

Lot size: Standard qualifying trades are 30MW for prompt (day-ahead) and forward (month-ahead) trade. Trades involving smaller and larger volumes may be taken into account indirectly, depending on other features of the trade.

Timing:

Day-ahead = delivered next working day after assessment, (Friday's assessment reflects Monday delivery)

Month = calendar month

SPARK SPREADS

Platts spark spreads are indicative prices giving the average difference between the cost of gas and the equivalent price of electricity on any given day. Platts quotes day-ahead and month-ahead spark spread prices for the day ahead and the month ahead.

Prices are quoted for the UK, Benelux and German markets. UK spark spreads are based on Platts NBP gas assessments and the equivalent UK electricity assessment. Belgian spark spreads are based on Zeebrugge gas assessments and equivalent Belgian power assessment.

Dutch spark spreads are based on Dutch gas assessments and equivalent Dutch power assessment. German prices are based on Bunde-Oude gas assessments and equivalent German power assessments.

The source of all gas prices is *European Power Alert* and *European Natural Gas Report*. The source of all power prices is *European Power Alert* and *European Power Daily*.

Platts calculates the spark spread for gas-fired plants with standard efficiencies of 50% and 60%.

Note: UK gas and power contracts roll at different times of the month. Therefore, Platts takes UK power conventions as the basis for its month-ahead spark spreads contracts.

CROSS-FUELS COMPARISONS

Platts cross-fuels comparisons are indicative prices of the costs of burning oil, gas and coal in power stations. In each case, the price of the fuel for spot and forward delivery is converted into an equivalent electricity price, quoted in Euro cents/kWh and US cents/kWh. The conversions assume the following plant efficiencies:

Natural Gas: 55%_Fuel Oil: 32%_Gasoil: 32%_Coal: 34%.

The standard specifications and sources of each fuel type are as follows:

Natural Gas

Quality: As specified by UK transporter National Grid.

Volumes: All prices are based on a standard contract lot size of 25,000 or 50,000 th/d.

Delivery: All prices are for physical delivery at the UK's National Balancing Point.

Timing: Balance month, one calendar month ahead, two calendar months ahead, and one quarter ahead.

Source: *European Natural Gas Report*.

Gasoil

Quality: Gasoil with 0.1% sulfur content, including French Fuel Oil Domestique (FOD) and German Deutsche Industrie Norm (DIN) heating oil grades with a density of 0.845 g/ml and a sulfur content of 0.1% maximum. The assumed calorific value is 18,500 Btu/lb.

Volume: Prices are for 10,000-25,000 mt cargoes. Handy-size Russian cargoes delivered basis ARA and meeting DIN/FOD are also included.

Delivery: Prices are for cargoes delivered CIF Northwest Europe. This normally means cargoes delivered in a Le Havre/Hamburg port range.

Timing: Spot = 10-25 days ahead of publication, forward prices (one calendar month ahead, two calendar months ahead and one quarter ahead) are based on the volume-weighted average prices published by ICE for its futures contracts the previous day.

Source: *Platts Global Alert/ICE Futures*.

Fuel Oil

Quality: 1% sulfur fuel oil prices are based on a maximum 1% sulfur content. Cargo assessments are typically based on a viscosity of 380 centistokes at 50 degrees C, a specific gravity of 0.965 to 0.990 g/ml. 3.5 % sulfur fuel oil prices typically represent bunker grade material with a 3-4% sulfur content, specific gravity of 0.998-0.991 g/ml and a viscosity of 380 to 420 centistokes at 50 degrees C, a maximum of 300 parts per million of vanadium. The assumed calorific value is 17,800 Btu/lb.

Volume: 1% sulfur cargo prices typically reflect cargo parcels of 17,000-25,000 mt each, although smaller volumes may be considered. Cargoes up to 50,000 mt may also be taken into account for physical (spot) prices. 3.5% sulfur prices typically represent FOB barges of 1,000-5,000 mt.

Delivery: 1% sulfur prices are for cargoes sold FOB Northwest Europe. 3.5% sulfur prices are for barges sold FOB Amsterdam-Rotterdam-Antwerp.

Timing: For 1% prices, spot = 10-25 days ahead of publication. Forward contracts are for one calendar month ahead, two calendar months ahead and one quarter ahead. 3.5% sulfur prices are for barges loading 2-15 days forward.

Source: *Platts Global Alert*.

Coal

Quality: Prices are for steam coal standardized to 6,000 kilocalories per kilogram (10,800 Btu/lb) with a maximum 1% sulfur content.

Volume: Standard cargo volumes consider Capesize vessels.

Delivery: Prices are based on cargoes delivered CIF Northwest Europe (Amsterdam-Rotterdam-Antwerp).

Timing: Prices are assessed daily for the prompt month-ahead delivery and weekly for the 90-day forward delivery. Full methodology at www.platts.com.

Source: *Platts International Coal Report/Coal Trader International*.

Electricity

Delivery: All prices are for physical delivery on the England, Wales and Scotland high voltage (380 kV) grids. Distribution costs are not included.

Timing: Prices are quoted for the month ahead, two months ahead

and quarter ahead.

Volume: All prices are based on trades in a standard volume of 10 or 20 MW.

Source: *European Power Alert*.

GLOSSARY

AACHEN-EYNATTEN—Gas delivery hub at the border of Germany and Belgium

ABANDON—To allow an option to expire worthless

AMERICAN STYLE OPTION—An option which can be exercised by the buyer (holder) at anytime during its life

ANTHRACITE—A hard, black coal with high energy content, often referred to as hard coal

ARBITRAGE—The simultaneous purchase of a commodity/derivative in one market and the sale of the same, or similar, commodity/derivative in another market in order to exploit price differentials

AT-THE-MONEY—An option whose exercise price is equal, or close to, the current price in the underlying market

BACKWARDATION—A market where the price for nearby delivery is higher than for further forward months

BARREL—A volumetric unit of crude oil, equivalent to 42 US gallons

BASELOAD—The minimum amount of electric power delivered or required over a given period of time at a steady rate. The minimum continuous load or demand in a power system over a given period of time

BBL—Balgzand-Bacton Line. Pipeline between the UK and the Netherlands, online in 2006.

Bcf—billion cubic feet

Bcm—billion cubic meters

BEARISH—Belief that a price will fall

BEB—A notional point within the German gas pipeline network.

BID—A proposal to buy a commodity/derivative at a specified price

BID PRICE—The price at which a buyer is prepared to buy

BITUMINOUS COAL—The most common coal, which is dense, black and has a moisture content of less than 20%. Used for generating electricity, making coke, and space heating

BRITISH THERMAL UNIT (Btu)—The amount of energy necessary to

raise the temperature of one pound of water one degree Fahrenheit

BULLISH—Belief that a price is going to rise

BUNDE-OUDE—Gas delivery hub at the border of Germany and the Netherlands

CALL OPTION—An option that gives the buyer (holder) the right but not the obligation to buy a specified quantity of an underlying futures at a fixed price, on or before a specified date. The grantor of the option is obliged to deliver the future at the fixed price if the holder exercises the option

CAPACITY—The gas throughput rating of a pipeline or storage rating of a storage facility.

CASH MARKET—The physical market underlying a futures or options contract

CASH AND CARRY—An arbitrage transaction involving the simultaneous purchase of a cash commodity with borrowed money and the sale of the appropriate futures contract

CASH SETTLEMENT—The settlement of futures or options by paying a cash difference, rather than taking/making physical delivery

CLEARING—The process of matching trades, settling trades and provision of a guarantee for traded contracts, often a service performed by exchanges

CLEARING FEE—A fee charged by a clearing house for clearing trades

CLOSE OUT—Finalizing a transaction by making an equal and opposite trade to an open position

COGENERATION—The simultaneous production of both useable heat or steam and electricity from a common fuel source

COMBINED CYCLE—The combination of one or more gas turbine and steam turbines in an electric generation plant. An electric generating technology in which electricity is produced from otherwise lost waste heat exiting from one or more gas (combustion) turbines. The heat is routed to a conventional boiler or to a heat recovery steam generator for use by a steam turbine in the production of electricity. This process increases the efficiency of the electric generating unit

CONNECTION—The physical junction between two gas systems permitting the transfer of gas

CONTANGO—Where the prompt price a commodity/derivative is less than the price of further forward markets. Often described as the “healthy” state of commodities markets, except where seasonality is very strong

CONTI INDEX—Platts demand-weighted index of continental European power assessments

CONTRACT—A binding agreement between a buyer and a seller in a

transaction

CONTRACT FOR DIFFERENCES (CFD)—A cash-settled futures contract between a supplier and buyer that is referenced to a settlement price

CUBIC FEET/METERS PER SECOND—A measurement of gas or water flow representing one cubic foot of gas or water moving past a given point in one second

CURTAILABLE RATE—An option offered by utilities to customers who can accept specified amounts of service reduction in return for reduced gas supply

DELTA HEDGING—The process whereby the grantor of an option decides to buy or sell more or less of an underlying futures contract in order to protect against being declared upon by the options holder. If delta hedging, the grantor of a call option will buy more of the futures contract if it rises in value towards the strike price (as the probability of being declared upon rises towards 100%). The grantor of a put option will typically sell more of the underlying futures contract if it slides in value (as the probability of being declared upon rises towards 100%)

DELTA NEUTRAL—When the grantor of an option has balanced the probability of being declared upon through buying/selling the underlying futures contract

DEGREE DAY—A measure of seasonal variation and intensity of temperature. In residential customer load, the more negative degree days in a year than the norm, the higher the electricity/gas consumption.

DEMAND—The rate at which gas is delivered to or by a system at a given instant or averaged over a designated period, usually expressed in cubic meters, cubic feet or kilowatt hours

DEMAND SIDE MANAGEMENT (DSM)—All activities or programs undertaken by a gas system or consumers to influence the amount and timing of gas use

DISCOUNT—The amount by which a future or option is priced below its existing market value

DISTRIBUTION—The system of gas pipelines that connect between the transmission network and end customers. The transport of gas to ultimate use points such as homes and businesses

EFP—Exchange of futures for physical, refers to the exchange of a futures position for a physical (swap) position

E.ON RUHRGAS FACILITY—Notional point within the German gas pipeline network

EXERCISE—The procedure by which an option holder takes up the rights to the contract and is delivered a long (call) or short (put) futures position by the grantor at a fixed price

EXIT FEE—A fee that is paid by a customer leaving a utility network

intended to compensate the utility in whole or part for the loss of fixed cost contribution from the exiting customer

EXPIRY (OPTIONS)—The date by which an option holder must decide whether to exercise or abandon an option

FIRM ENERGY—Energy sales which, although not subject to interruption for economic purposes, may be interrupted under force majeure conditions

FIRM GAS—Gas sold on a continuous basis for a defined contract term

FORCE MAJEURE—A contractual provision which contemplates forgiveness of an obligation to perform due to uncontrollable events such as acts of God, war or forces of the elements that are out of the control of the parties

FUTURES CONTRACT—An agreement to make or take delivery of a commodity at a fixed date or strip of dates in the future, at a price agreed upon at the time of dealing

GIGAWATT—One billion watts

GIGAWATT HOUR (GWh)—One billion watt-hours

GRID—The layout of an electrical transmission system or a synchronized transmission network or a gas mainline pipeline network

HEDGE—The reduction of risk by covering anticipated commitments at a fixed price in the future through a futures or options contract. Buyers and sellers can hedge

IBT—International Bacton Terminal. Point at which the UK-Belgium gas pipeline lands in the UK.

INTERCONNECTION—Facilities that connect two electricity or gas grids or control areas

INTERRUPTIBLE DEMAND—The amount of customer demand that, in accordance with contractual arrangements, can be interrupted by direct control of the system operator, remote tripping, or by action of the customer at the direct request of the system operator

INTERRUPTIBLE GAS—Gas sold to customers with a provision that permits curtailment or cessation of service at the discretion of the supplier or transporter

IN-THE-MONEY—An option which has intrinsic value. A put option is in-the-money when its strike price is above the value of the underlying futures contract. A call option is in-the-money when its strike price is below the value of the underlying futures contract

IZT—International Zeebrugge Terminal. Point at which UK-Belgium gas interconnector lands in Belgium.

INITIAL MARGIN—The returnable collateral required to establish an options position

INTRINSIC VALUE—The value to an option holder if (s)he were to exercise an option today

JOULES—A measure of energy equal to 1 watt second

KILOWATT (kW)—A unit of electricity equal to one thousand watts

KILOWATT-HOUR (kWh)—A unit of electricity equivalent to one kilowatt of power used for one hour. One kilowatt-hour is equal to 1,000 watt-hours. An average household will use between 800-1300kWh/month

KILOWATT YEAR (kW-y)—A unit of electrical capacity equivalent to one kilowatt of power used for 8760 hours

LIGNITE—A brownish-black coal of low rank with high inherent moisture and volatile matter (used almost exclusively for electric power generation). It is also referred to as brown coal

LONG—When the holder of futures positions has contract to buy more than (s)he has contracted to sell

LONG-RUN MARGINAL COSTS—All costs associated with the lowest cost incremental unit including variable production costs and capital costs

MARGINAL COST PRICING—A system of pricing designed to ignore all costs except those associated with producing the next incremental unit of gas. Sometimes referred to as incremental cost pricing

MARK-TO-MARKET—To revalue futures/options positions using current market prices to determine profit/loss. The profit/loss can then be paid/collected daily (see variation margin)

MEGAWATT (MW)—A unit of electrical power equal to one million watts or one thousand kilowatts

MEGAWATT-HOUR (MWh)—One million watt-hours of electricity. A unit of electrical energy which equals one megawatt of power used for one hour

MMBtu—One million British thermal units

MMcf—One million cubic feet of natural gas.

MUNICIPAL UTILITY—A utility owned and operated by a municipality or group of municipalities

NATURAL GAS—A naturally occurring mixture of hydrocarbon and non-hydrocarbon gases found in porous geological formations beneath the earth's surface, often in association with crude. The principal constituent is methane

NBP—National Balancing Point. A notional point within the UK gas pipeline network. Basis for most UK gas trades.

NETWORK—An interconnected system of gas transmission lines, compressors, gasification units etc connected together in such a way

as to provide reliable transmission of gas

OFFER—An indication of willingness to sell a specified amount of a commodity at a specific price

OPEN INTEREST—The number of contracts left open in a market which need to be closed out or taken through to delivery

OPEN OUTCRY—A trading system in which members trade verbally on a trading floor

OUT-THE-MONEY – An option which has no intrinsic value. A put option is out-of-the-money when its strike price is below the value of the underlying futures contract. A call option is out-of-the money when its strike price is above that of an the underlying futures contract

PEAK LOAD—The maximum electrical load demand in a stated period of time. On a daily basis, peak loads occur at midmorning and/or in the early evening

PEAK LOAD PLANT—A plant usually housing low-efficiency, quick response steam units, gas turbines, diesels, or pumped-storage hydroelectric equipment normally used during the maximum load periods. Characterized by quick start times and generally high operating costs, but low capital costs

PEAKING CAPACITY—Capacity of generating equipment normally reserved for operation during the hours of highest daily, weekly, or seasonal loads.

PEG—Point d'Exchange de Gaz. A notional point within the French gas pipeline network

PEP INDEX—Platts demand-weighted index of all European electricity assessments

PHYSICAL DELIVERY—The transfer of ownership of an underlying commodity between a buyer and seller to settle a futures contract following expiry

POSTAGE STAMP RATE—A rate for electric transmission that does not vary according to distance from the source of the power supply. So-called because postage stamps for letters are typically at a fixed price, regardless of destination, within the same country.

PREMIUM—The price paid by the option holder to the option grantor

PRICE CAP—A method of setting a utility distribution company's rates where a maximum allowable price level is established by regulators, flexibility in individual pricing is allowed, and where efficiency gains can be encouraged and captured by the company

PSV—Punto di Scambio Virtuale. A notional point within the Italian gas pipeline network

PUT OPTION—An option that gives the holder the right (but not the obligation) to sell a specified quantity of the underlying instrument at a fixed price, on or before a specified date. The grantor of the

option has the obligation to take delivery of the underlying instrument if the option is exercised

RALLY—A rapid rise in a price

RENEWABLE SOURCE—A power source that is continuously or cyclically renewed by nature like solar, wind, hydroelectric, geothermal or biomass

ROLL OVER—The transfer of a position from one futures period to another—involving the purchase (sale) of the nearby month and simultaneous sale (purchase) of a further-forward month

SETTLEMENT PRICE—A price established at the close of a trading day used to calculate the settlement of futures contracts

SHORT—When the holder of a futures position has contracted to sell more than (s)he has contracted to buy

SPOT MARKET—A market where goods are traded through rapid negotiation. Opposite of long-term contracting

SPREAD—The differential between two futures periods, or the difference between bids and offers for a specific period

SPREAD (OPTIONS)—An option trade in which two or more open positions are established in order to trade the differentials and offset risk. Option spreads may use different strike prices and/or expiry dates

STRIKE PRICE—The price at which an option holder has the right to buy or sell an underlying commodity/derivative

SYSTEM OPERATOR—A person or entity who operates the gas system

TARIFF—Rates an regulated entity will charge to provide service to its customers as well as the terms and conditions that it will follow in providing service

TERAWATT HOURS (TWh)—Thousand Gigawatt hours

THERMAL GENERATION—The production of electricity from plants that convert heat energy into electrical energy. The heat in thermal plants can be produced from a number of sources such as coal, oil, gas or nuclear fuel

TIERED RATES—A rate design which divides customer use into different tiers, or blocks, with different prices charged for each

TIME VALUE—The time component in a premium for an option art. Typically the time value of an option declines as it moves closer to expiry

TRANSMISSION—The network of pipelines used to move gas from generators to the distribution system. Also used to interconnect different utility systems into a synchronized network. Transmission is considered to end when the energy is transformed for distribution to the consumer

TRANSMISSION LOSS—The gas lost in transmission between one

point and another. It is measured as the difference between the net gas passing the first point and the net gas passing the second point

TTF—Title Transfer Facility. A notional point within the Dutch gas pipeline network.

TURBINE—The part of a generating unit usually consisting of a series of curved vanes or blades on a central spindle, which is spun by the force of water, steam or hot gas to drive an electricity generator

UNCOVERED POSITION (FUTURES)—Where a long market player has bought more of a commodity than he has agreed to sell, or where a short market player has sold more of a commodity than (s)he has to deliver

UNCOVERED POSITION (OPTIONS)—When the grantor of an options position has no cover in the underlying futures market against a price swing in the holder's favour (see delta hedging)

VAR—Voltage-Ampere-Reactive. A measure of reactive power

VARIABLE COSTS—The total costs incurred to produce energy, excluding fixed costs which are incurred regardless of whether the

resource is operating. Variable costs usually include fuel, increased maintenance and additional labor

VARIATION MARGIN—Profits and losses on open positions which are calculated daily by the mark-to-market process, which are then paid or collected daily

VOLATILITY (HISTORICAL VOLATILITY)—The degree to which a particular price has fluctuated in the past

VOLATILITY (OPTIONS)—A value attributed to an underlying futures contract which determines the premium that is set by the grantor. Includes an element of historical volatility, and the volatility which the grantor of an option believes will still be seen in that futures contract

WATT—A measure of real power production or usage equal to one Joule per second. The rate of energy transfer equivalent to 1 ampere flowing under a pressure of 1 volt

WATT HOUR (Wh)—An electrical energy unit of measure equal to 1 watt of power supplied to, or taken from, an electricity circuit steadily for 1 hour

Methodology and Specifications Guide

European Electricity Assessments and Indices

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INTRODUCTION

Platts methodology for assessing European power markets has developed over a number of years. It draws on our experience in the international oil markets and in the US gas and power markets. Platts sets great importance on producing independent reports, indices and assessments. The indices and assessments we publish are not compiled in alliance with any other participant in the market.

Platts indices and assessments are based on our own surveys of market participants completed by Platts price reporters each day. Assessments aim to reflect the fair, repeatable value of the commodity at the close of normal business.

At the same time, Platts indices and assessment give priority weighting to confirmed trades and aim to maintain realistic spreads between markets and products. Therefore, the methodology for compiling these is relatively complex.

Platts assessments are based on a survey of as broad a cross-section of the market as possible. This includes canvassing brokers, traders, foreign and local producers, distributors and endusers. Usually, key market players are contacted by phone or e-mail on a daily basis, while other smaller players are canvassed on a less frequent but regular basis. In addition, some companies e-mail us trade and market information, which we would consider in conjunction with other information gathered during our phone surveys. In each case, we aim to speak to those participants that were most active in the market on that particular day.

Platts reporters aim to call 8-10 players per market each day, but in practice would call as many players as we need until we are comfortable that we have sufficient information to start assessing the market. Most calls are made from mid- to late-afternoon UK time. Platts market reporters may also call market participants at other times for intra-day market updates.

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.

PLATTS MOC ASSESSMENTS

Platts market-on-close assessments are closing prices based on the most recent trades and/or bids and offers prevailing at the

end of the normal trading cycle. For European power we define this as:

All day-ahead contracts – noon UK time (13:00 CET).

German, French, and Benelux forward contracts – 4 pm UK time (17:00 CET).

UK and Spanish forward contracts – 5 pm UK time.

Polish forward contracts – 4 pm UK time (17:00 CET) on the last working day of the month.

The market-on-close assessment reflects the tradable value of the commodity at the given points in time, based on repeatable trades, bids and offers. In addition, only bids and offers that are raised or lowered in realistic increments would be considered.

Confirmed trades are given preference when making the assessment. In the absence of trade, Platts reporters look at firm bids and offers and how these have moved on the day. Finally, if there are no qualified trades in a product and no firm bids and offers in the market, we look at spreads against other products or markets (e.g. Q2 versus Q3, French power versus German power etc.).

Platts monitors the market structure throughout the day to ensure that market-on-close business converges with prevailing market values at the stated assessment times.

PLATTS INDICES

Platts daily indices for the European power markets are essentially volume-weighted averages of qualified trades reported to Platts on the day before contract delivery. However, Platts would discount trades that are deemed outside the market, that involve unusually small or large volumes, that are concluded outside normal business hours or that are not confirmed by at least one counterparty involved in the trade. Sleeve and spread trades are also discounted from Platts indices.

Platts' day-ahead indices for the UK power market look at trade between 8 am and noon UK time.

For the purpose of daily power indices, Platts uses a total minimum volume threshold of 500 MW. In addition, at least ten trades involving four counterparties must be obtained before producing an index based on transactional information alone. If these volume criteria are not met, the midpoint of the UK day-ahead assessment will be used as the index price. For forward indices, the volume threshold is 200 MW and the other thresholds are the same.

In addition, Platts publishes daily average and cumulative indices for UK month-ahead and season-ahead power contracts.

Daily average indices are based on all qualified trades concluded between 8 am and 5 pm UK time on the day of publication.

Known outliers, spread trades and wash trades are excluded from the index, as would be unconfirmed trade in which Platts has reason to doubt the veracity of the information.

Cumulative indices are based on all qualified trades concluded in the contract from the first working day when it became the front period until expiry. Again, outliers, spread trades and wash trades are excluded from the index, as would be unconfirmed trade in which Platts has reason to doubt the veracity of the information.

The final cumulative index price is published on the last working day of the month.

BANK HOLIDAY CLOSE

On certain days ahead of a UK Bank Holiday, such as Christmas Eve and New Year's Eve, Platts assesses the market-on-close price earlier than normal, at noon UK time (13:00 CET). This is to take account of typically much lower liquidity and the earlier end of trade. The cut-off point for all indices, daily and forward, would also be noon UK time on these days.

STANDARD CONTRACT DEFINITIONS

Platts assessments are based on standard contract definitions and volumes, as outlined in subsequent sections of this document. These vary according to the market. For day-ahead power trade, the standard lot size considered in all markets is 50-100 MW. For UK forward power trade, Platts considers trades of 10 MW or 20 MW. For German and French forward power markets, Platts considers trades from 10-25 MW in 5 MW increments. For Dutch and Belgian forward power markets Platts considers trades from 5-15 MW in 5 MW increments. For the Spanish power market, trades of 10-25 MW in 5 MW increments are considered.

Other volumes may be considered indirectly for the purpose of Platts assessments. However, they would not be included in Platts indices and they would not be used as the sole basis of any assessments.

CONFIRMATION OF TRADES

When considering transactional information, Platts aims wherever possible to confirm trades reported by market participants with the counterparty and broker involved in the trade. Therefore, we request that market parties supply details of the contract type, location, price, volume, timing of the trade, whether the trade was a buy or a sell, counterparty, broker and platform with each trade.

Priority when compiling indices and assessments will be given to trades which can be fully confirmed with the counterparties as

bona fide. If details of the timing, counterparty and broker are not provided, Platts reporters must use their judgment to decide whether to include the individual trade in the index or assessments.

SLEEVE/ROUND TRIP/WASH TRADES

All trades discovered to be "round trip" or "wash" trades are excluded from all Platts assessments and indices. For this reason Platts requests information on counterparties, volumes and timings of transactions and Platts reporters may call for additional information from reporting companies with regard to certain trades as part of its market surveys.

Transactions involving a "sleeve" – a middleman to facilitate a trade between two counterparties that are otherwise prevented from trading with each other – are generally excluded from Platts indices and assessments.

SPREAD TRADES

Trades concluded as one leg of a transaction linked to a similar trade in another product or market – spread trades – are excluded from Platts indices. Here it is the difference between the two products or markets, not the outright values, that is important.

OTHER NON-STANDARD TRANSACTIONS

Transactions between affiliates, subsidiaries or otherwise related companies are also generally excluded from Platts indices and assessments. Transactions involving counterparties for whom trade with the majority of market participants is restricted would also be discounted. This is because the price tag on the deal may be inflated or depressed as a result of the special relationship between the companies involved.

WHEN PLATTS ASSESSMENTS AND INDICES ARE PUBLISHED

Platts publishes a day-ahead assessment for continental European power markets seven days a week on each day of the year. These are databased both by trade date and by flow date. Saturday, Sunday and Monday assessments are calculated each Friday and assessments for bank holidays are calculated on the last working day before the bank holiday.

Platts publishes Pep and Conti power indices seven days a week on each day of the year. These are databased both by trade date and by flow date. Saturday, Sunday and Monday indices are calculated each Friday and indices for bank holidays are calculated on the last working day before the bank holiday.

Platts publishes UK day-ahead power market assessments and indices for Monday to Friday and a single weekend assessment for Saturday and Sunday. On Fridays, the day-ahead price reflects Monday's delivery date.

Platts publishes forward assessments for power on all UK working days. A calendar of UK bank holidays is published on our web site at www.platts.com.

ROLL DATES

All continental European weekly power contracts roll on the first working day of each new week. All continental European monthly power contracts roll on the first working day of each new month. Quarterly, seasonal and annual power contracts follow the rolling convention for months.

UK power contracts roll according to the EFA calendar, which uses a series of four- or five-week blocks. The roll dates for these contracts to December 2008 are printed on pages 5 and 6 of this document in the section on UK power market specifications.

UK ELECTRICITY MARKET COVERAGE

Platts assesses over-the-counter trade under the Grid Trade Master Agreement contract for the day ahead, weekend (Fridays only), week ahead, next three months, next two quarters, next four seasons and next April annual contract. Platts also produces daily and forward indices for a variety of delivery periods. These include a volume-weighted day-ahead baseload index for each working day of the week, a single weekend index published on Fridays, and daily and cumulative indices for the month ahead and season ahead.

Daily average day-ahead indices are based on all qualified trades concluded between 8 am and noon UK time on the day of publication. Known outliers, spread trades and wash trades are excluded from the index, as would be unconfirmed trade in which Platts has reason to doubt the veracity of the information.

Daily average forward indices are based on all qualified trades concluded between 8 am and 5 pm UK time on the day of publication. Known outliers, spread trades and wash trades are excluded from the index, as would be unconfirmed trade in which Platts has reason to doubt the veracity of the information.

Cumulative forward indices are based on all qualified trades concluded in the contract from 8 am on the first working day when it became the front period until 5 pm UK time on the day of expiry. Again, known outliers, spread trades and wash trades are excluded from the index, as is unconfirmed trade in which Platts has reason to doubt the veracity of the information.

The UK power market trades under EFA calendar terms. Under this calendar (similar to financial calendars), there are 12

monthly blocks in the year, running in four blocks of three months. In each three-month block, the months are broken down into four-four-five week months. Roll dates out to December 2008 are provided on pages 5 and 6.

"SCHEDULE 5"

A "Schedule 5" was inserted into some standard GTMA contracts between some trading counterparties in the early days of NETA. Under contracts with Schedule 5 turned on (Schedule 5 On), balancing and transmission losses are settled separately, and do not form part of the contract price. Under GTMA contracts with Schedule 5 turned Off (Schedule 5 Off), or with Schedule 5 not included, these charges are a component of the contract price, and charges are typically deemed to be settled as 55:45, buyer:seller. As of July 2001, GTMA Schedule 5 Off had been established as the industry standard. Platts has provided benchmarks only for Schedule 5 Off since June 1, 2001.

SPECIFICATIONS

Delivery: Prices are for firm delivery on the high-voltage (380-kV) grid network of England, Wales and/or Scotland. This includes the Scotland-Northern Ireland interconnector but not Northern Ireland itself. Distribution network costs are not included. All prices are for physically delivered trades.

Unit: All prices are quoted in GBP/MWh with Eur/MWh equivalents.

Lot size: Qualifying trades are 50-100 MW for prompt (day-ahead, week-ahead and weekend delivery) and 10 MW or 20 MW for forwards.

Timing: Baseload = 23:00-23:00, Peak = 07:00-19:00, Off-peak = 19:00-07:00, Overnight = 23:00-07:00 (all UK time).

EFA Block definitions (UK time)

Block 1 = 23:00-03:00

Block 2 = 03:00-07:00

Block 3 = 07:00-11:00

Block 4 = 11:00-15:00

Block 5 = 15:00-19:00

Block 6 = 19:00-23:00.

Day-ahead = Baseload for delivery from 23:00 the day of trade until 23:00 to day after. Peaks for delivery 07:00-19:00 the day following trade.

Platts roll dates for UK power market indices

Roll date	Front Month	Front Quarter	Front Season	Front Annual
2-Apr-01	May-01	Q3 2001	Winter 01	April 02 Annual
30-Apr-01	Jun-01	Q3 2001	Winter 01	April 02 Annual
28-May-01	Jul-01	Q3 2001	Winter 01	April 02 Annual
2-Jul-01	Aug-01	Q4 2001	Winter 01	April 02 Annual
30-Jul-01	Sep-01	Q4 2001	Winter 01	April 02 Annual
27-Aug-01	Oct-01	Q4 2001	Winter 01	April 02 Annual
1-Oct-01	Nov-01	Q1 2002	Summer 02	April 02 Annual
29-Oct-01	Dec-01	Q1 2002	Summer 02	April 02 Annual
26-Nov-01	Jan-02	Q1 2002	Summer 02	April 02 Annual
31-Dec-01	Feb-02	Q2 2002	Summer 02	April 02 Annual
28-Jan-02	Mar-02	Q2 2002	Summer 02	April 02 Annual
25-Feb-02	Apr-02	Q2 2002	Summer 02	April 02 Annual
1-Apr-02	May-02	Q3 2002	Winter 02	April 03 Annual
29-Apr-02	Jun-02	Q3 02	Winter 02	April 03 annual
27-May-02	Jul-02	Q3 02	Winter 02	April 03 annual
01-Jul-02	Aug-02	Q4 02	Winter 02	April 03 annual
29-Jul-02	Sep-02	Q4 02	Winter 02	April 03 annual
26-Aug-02	Oct-02	Q4 02	Winter 02	April 03 annual
30-Sep-02	Nov-02	Q1 03	Summer 03	April 03 annual
28-Oct-02	Dec-02	Q1 03	Summer 03	April 03annual
25-Nov-02	Jan-03	Q1 03	Summer 03	April 03 annual
30-Dec-02	Feb-03	Q2 03	Summer 03	April 03 annual
27-Jan-03	Mar-03	Q2 03	Summer 03	April 03 annual
24-Feb-03	Apr-03	Q2 03	Summer 03	April 03 annual
31-Mar-03	May-03	Q3 03	Winter 03	April 04 annual
28-Apr-03	Jun-03	Q3 03	Winter 03	April 04 annual
26-May-03	Jul-03	Q3 03	Winter 03	April 04 annual
30-Jun-03	Aug-03	Q4 03	Winter 03	April 04 annual
28-Jul-03	Sep-03	Q4 03	Winter 03	April 04 annual
25-Aug-03	Oct-03	Q4 03	Winter 03	April 04 annual
29-Sep-03	Nov-03	Q1 04	Summer 04	April 04 annual
27-Oct-03	Dec-03	Q1 04	Summer 04	April 04 annual
24-Nov-03	Jan-04	Q1 04	Summer 04	April 04 annual
29-Dec-03	Feb-04	Q2 04	Summer 04	April 04 annual
26-Jan-04	Mar-04	Q2 04	Summer 04	April 04 annual
23-Feb-04	Apr-04	Q2 04	Summer 04	April 04 annual
29-Mar-04	May-04	Q3 04	Winter 04	April 05 annual
26-Apr-04	Jun-04	Q3 04	Winter 04	April 05 annual
24-May-04	Jul-04	Q3 04	Winter 04	April 05 annual
28-Jun-04	Aug-04	Q4 04	Winter 04	April 05 annual
26-Jul-04	Sep-04	Q4 04	Winter 04	April 05 annual
23-Aug-04	Oct-04	Q4 04	Winter 04	April 05 annual
27-Sep-04	Nov-04	Q1 05	Summer 05	April 05 annual
25-Oct-04	Dec-04	Q1 05	Summer 05	April 05 annual
22-Nov-04	Jan-05	Q1 05	Summer 05	April 05 annual
03-Jan-05	Feb-05	Q2 05	Summer 05	April 05 annual
31-Jan-05	Mar-05	Q2 05	Summer 05	April 05 annual
28-Feb-05	Apr-05	Q2 05	Summer 05	April 05 annual
04-Apr-05	May-05	Q3 05	Winter 05	April 06 annual
02-May-05	Jun-05	Q3 05	Winter 05	April 06 annual
30-May-05	Jul-05	Q3 05	Winter 05	April 06 annual
04-Jul-05	Aug-05	Q4 05	Winter 05	April 06 annual
01-Aug-05	Sep-05	Q4 05	Winter 05	April 06 annual
29-Aug-05	Oct-05	Q4 05	Winter 05	April 06 annual
03-Oct-05	Nov-05	Q1 06	Summer 06	April 06 annual
31-Oct-05	Dec-05	Q1 06	Summer 06	April 06 annual
28-Nov-05	Jan-06	Q1 06	Summer 06	April 06 annual
02-Jan-06	Feb-06	Q2 06	Summer 06	April 06 annual
30-Jan-06	Mar-06	Q2 06	Summer 06	April 06 annual

Platts roll dates for UK power market indices (cont.)

27-Feb-06	Apr-06	Q2 06	Summer 06	April 06 annual
03-Apr-06	May-06	Q3 06	Winter 06	April 07 annual
01-May-06	Jun-06	Q3 06	Winter 06	April 07 annual
29-May-06	Jul-06	Q3 06	Winter 06	April 07 annual
03-Jul-06	Aug-06	Q4 06	Winter 06	April 07 annual
31-Jul-06	Sep-06	Q4 06	Winter 06	April 07 annual
28-Aug-06	Oct-06	Q4 06	Winter 06	April 07 annual
02-Oct-06	Nov-06	Q1 07	Summer 07	April 07 annual
30-Oct-06	Dec-06	Q1 07	Summer 07	April 07 annual
27-Nov-06	Jan-07	Q1 07	Summer 07	April 07 annual
01-Jan-07	Feb-07	Q2 07	Summer 07	April 07 annual
29-Jan-07	Mar-07	Q2 07	Summer 07	April 07 annual
26-Feb-07	Apr-07	Q2 07	Summer 07	April 07 annual
02-Apr-07	May-07	Q3 07	Winter 07	April 08 annual
30-Apr-07	Jun-07	Q3 07	Winter 07	April 08 annual
28-May-07	Jul-07	Q3 07	Winter 07	April 08 annual
02-Jul-07	Aug-07	Q4 07	Winter 07	April 08 annual
30-Jul-07	Sep-07	Q4 07	Winter 07	April 08 annual
27-Aug-07	Oct-07	Q4 07	Winter 07	April 08 annual
01-Oct-07	Nov-07	Q1 08	Summer 08	April 08 annual
29-Oct-07	Dec-07	Q1 08	Summer 08	April 08 annual
26-Nov-07	Jan-08	Q1 08	Summer 08	April 08 annual
31-Dec-07	Feb-08	Q2 08	Summer 08	April 08 annual
28-Jan-08	Mar-08	Q2 08	Summer 08	April 08 annual
25-Feb-08	Apr-08	Q2 08	Summer 08	April 08 annual
31-Mar-08	May-08	Q3 08	Winter 08	April 09 annual
28-Apr-08	Jun-08	Q3 08	Winter 08	April 09 annual
26-May-08	Jul-08	Q3 08	Winter 08	April 09 annual
30-Jun-08	Aug-08	Q4 08	Winter 08	April 09 annual
28-Jul-08	Sep-08	Q4 08	Winter 08	April 09 annual
25-Aug-08	Oct-08	Q4 08	Winter 08	April 09 annual
29-Sep-08	Nov-08	Q1 09	Summer 09	April 09 annual
27-Oct-08	Dec-08	Q1 09	Summer 09	April 09 annual
24-Nov-08	Jan-09	Q1 09	Summer 09	April 09 annual

Weekend = Baseload for delivery from 23:00 Friday until 23:00 on Sunday.

Week-ahead = Delivered each day Monday-Sunday the following week for baseload and delivered each day Monday-Friday the following week for peak.

Months = UK EFA months are comprised of four- or five-week blocks. They follow the pattern 4-4-5, meaning March, June, September and December have five weeks and other months have four.

Winter = The period from October-March. Exact dates depend on the EFA calendar.

Summer = The period from April-September. Exact dates depend on the EFA calendar.

April Annual = April-March.

Roll dates: Forward contracts roll according to the EFA calendar.

CENTRAL EUROPEAN POWER COVERAGE

SPECIFICATIONS

Germany

Delivery: Prices are for firm delivery on the German high-voltage (380-kV) grid network. Distribution network costs are not included. All prices are for physically delivered trades.

Unit: All prices are in Eur/MWh. Deutsche Mark equivalents were provided until January 1, 2001, when the euro replaced the Deutsche Mark as Germany's national currency.

Lot size: Qualifying trades are 50-100 MW for prompt (day-ahead, week-ahead and weekend delivery) and 10-25 MW in 5 MW increments for forwards.

Timing: Baseload = 00:00-24:00 CET, Peak = 08:00-20:00 CET.

Day-ahead = Delivery next day from day of assessment.

Week-ahead = Delivered each day Monday-Sunday the following week for baseload and delivered each day Monday-Friday the following week for peak.

All forward months are calendar months.

All forward years are calendar years.

Roll dates: Forward contracts roll on the first working day of each month.

Switzerland

Delivery: Prices are for firm delivery on the Swiss high voltage (380-kV) grid at the Laufenburg International hub. All prices are for physically delivered trades.

Units: All prices are in Eur/MWh. Swiss franc equivalents are provided.

Lot size: Standard qualifying trades are 50-100 MW (for day-ahead).

Timing: Baseload = 00:00-24:00 CET, Peak = 08:00-20:00 CET.

Day-ahead = Delivery day after day of assessment.

Week-ahead baseload = delivered Monday-Sunday the following week.

Week-ahead peak = Delivered Monday-Friday the following week.

Austria

Delivery: Prices are for firm delivery on the Austrian high voltage (380-kV) grid. All prices are for physically delivered trades.

Units: All prices are in Eur/MWh.

Lot size: Standard qualifying trades are 50-100 MW (for day-ahead).

Timing: Baseload = 00:00-24:00 CET, Peak = 08:00-20:00 CET.

Day-ahead = Delivery on day after day of assessment.

Week-ahead baseload = delivered Monday-Sunday the following week.

Week-ahead peak = Delivered Monday-Friday the following week.

FRENCH, DUTCH, SPANISH, BELGIAN AND CZECH POWER COVERAGE

SPECIFICATIONS

France

Delivery: Prices are for firm delivery on France's high-voltage (400/220-kV) electricity network. Distribution network costs are not included. All prices are for physically delivered trades.

Units: All prices are in Eur/MWh.

Lot size: Standard qualifying trades are 50-100 MW for day-ahead and 10-25 MW in 5 MW increments for forward trade, based on firm delivery.

Timing: Baseload = 0000-2400 CET, Peak = 0800-2000 CET.

Week-ahead = Delivered Monday-Sunday the following week.

All forward months are calendar months.

All forward years are calendar years.

All forward month and year peak assessments include public holidays.

Roll dates: Forward contracts roll on the first working day of each month.

The Netherlands

Delivery: Prices are for firm delivery on the Dutch high-voltage (380-kV) electricity network. Distribution network costs are not included. All prices are for physically delivered trades.

Units: All prices are in Eur/MWh.

Lot size: Standard qualifying trades are 50-100 MW for day-ahead and 5, 10 and 15 MW for forward trade, basis firm delivery.

Timing: Baseload = 0000-2400 CET, Peak = 0700-2300 CET, Superpeak = 0800-2000 CET.

Week-ahead baseload = Delivered Monday-Sunday the following week.

Week-ahead peak = Delivered Monday-Friday the following week.

All forward months are calendar months.

All forward years are calendar years.

Note: peaks for forward months, quarters and years do not include public holidays.

Roll dates: Forward contracts roll on the first working day of each month.

Belgium

Delivery: Prices are for firm delivery on the Belgian high-voltage (380-kV) grid network. Distribution network costs are not included. All prices are for physically delivered trades.

Unit: All prices are in Eur/MWh.

Lot size: Qualifying trades are 50-100 MW for prompt (day-ahead, week-ahead and weekend delivery) and 5,10 and 15 MW for forwards.

Timing: Baseload = 00:00-24:00 CET, Peak = 07:00-23:00 CET, Superpeak = 08:00-20:00 CET.

Week-ahead baseload = Delivered Monday-Sunday the following week.

Week-ahead peak = Delivered Monday-Friday the following week.

All forward months are calendar months.

All forward years are calendar years.

Note: peaks for forward months, quarters and years do not include public holidays.

Roll dates: Forward contracts roll on the first working day of each month.

Spain

Delivery: Prices are for firm delivery on Spain's high-voltage (400/220-kV) electricity network. Distribution network costs are not included.

Unit: All prices are in Eur/MWh.

Lot size: Standard qualifying trades are 10,15,20 and 25 MW for forwards, based on firm delivery.

Timing: Baseload = 00:00-24:00 CET, Peak = 09:00-21:00 CET. (Peaks are no longer assessed).

Week-ahead = Delivered Monday-Sunday the following week.

All forward months are calendar months.

All forward years are calendar years.

Roll dates: Forward contracts roll on the first working day of each month.

Note: Trade in the Spanish market is financial, settled against the Spanish pool.

Czech Republic

Delivery: Prices are for firm delivery on the Czech high-voltage (380-kV) grid network. Distribution network costs are not included. All prices are for physically delivered trades.

Unit: All prices are in Eur/MWh. Trade is in euros in the OTC market and on the Prague Power Exchange (PXE). Day-ahead and intraday trade on the market operator OTE's exchange is in Czech crowns. Platts assesses OTC trades only. Third party data from PXE and OTE is published in the original currencies. OTE also gives the conversion into euros for its day-ahead indices. Platts publishes these directly from OTE.

Lot size: Qualifying trades are 50-100 MW for prompt (day-ahead, week-ahead and weekend delivery) and 10-25 MW in 5 MW increments for forwards.

Timing: Baseload = 00:00-24:00 CET, Peak = 08:00-20:00 CET.

Day-ahead = Delivery next day from day of assessment.

Week-ahead = Delivered each day Monday-Sunday the following week for baseload and delivered each day Monday-Friday the following week for peak.

All forward months are calendar months.

All forward years are calendar years.

Roll dates: Forward contracts roll on the first working day of each month.

Note: The Czech market has extended peak contracts (0600-2200), which is an historical feature of the industrial consumer need to have power distributed early and late in the day, e.g. pulp factories. Extended peak trades regularly in the day-ahead product, seldom in the other contracts. These contracts do not form part of Platts assessments. Peak hours are in line with the German market, 0800-2000.

POLAND

Platts' Polish power assessments are monthly assessments of actual trade, bids and offers for baseload and peakload contracts delivered in the next three calendar months, next quarter and next calendar year. They are published on the 10th of each month or the first working day thereafter, based on information supplied by market participants covering trade in the previous calendar month.

Platts' Polish power assessments are based first and foremost on actual trades, weighted toward trade at the end of the month. In the absence of trade, Platts reporters look at repeatable, firm bids and offers prevailing at the end of the month. At the same time, Platts assessments aim to maintain realistic spreads between products and markets. Therefore, market specialists look at how the contract was valued as a spread against other products in the Polish market or against markets such as Germany.

In addition to giving an assessment range for the value of Polish power over the month, Platts gives as much additional information as possible on volume traded, number of transactions, number of market participants who participated in the survey, where prices opened and where they closed the month.

Platts considers all transactions concluded from the first working day of the month up until 17:00 CET on the last working day of the month. Trade, bids and offers at the end of the month take precedence.

SPECIFICATIONS

Delivery: Prices are for firm delivery on PSE's high voltage electricity network. Distribution network costs are not included. All prices are for physically delivered trades.

Units: All prices are in Zloty per megawatt hour. Euro equivalents are also given.

Lot size: Platts considers trades from 5 MW up to 100 MW in 5 MW increments for the months ahead and 5 MW up to 50 MW for the year ahead. But prices are normalized to a standard volume of 10 MW or 20 MW for the purpose of the assessment.

Timing: Baseload = 00:00-24:00 CET. Peak = 07:00-22:00 CET, excluding weekends and public holidays. Off-peak = 22:00-07:00 CET on working days, weekends and public holidays.

All months are calendar months. All years are calendar years.

Roll dates: Contracts roll on the first working day of the following month.

Contract: Platts considers trades done according to standard EFET or other similar terms and conditions.

Special conditions: Platts considers all normal transactions for physically delivered power in Poland for the purpose of the assessment. However, any power bought for export with special arrangements for capacity included in the price are discarded. Assessments assume the buyer pays excise duty.

PEP AND CONTI INDEXES

Platts Pan-European Power (PEP) Index and Continental (Conti) Power Index are demand-weighted day-ahead baseload indices indicating price trends for Europe's free electricity markets as a whole. Europe is moving towards a continental market model, and while transmission constraints mean the reality may be some way off, these indexes meet the demand for representative, Europe-wide indexes.

The indices use the mid-points of Platts assessments for the European power markets, giving each country a weighting according to demand. As spot trade has developed at a different pace in each European market, Platts has used demand weighting to replace traditional trade volume weightings to give a more representative price for the pan-European market. Demand figures are taken from the latest statistics published by the UK's National Grid and European association of grid operators, the UCTE.

The Conti Index is based on Platts day-ahead assessments for Germany, Switzerland, Austria, the Netherlands, Belgium and France. These countries are closely linked through interconnection and share many of the same market fundamentals.

The PEP index is based on all the assessments used in the Conti index, plus Platts assessments for the UK and Spanish day-ahead markets. This index gives a picture of the value of power across all of the major free markets in Europe, including the "electricity islands" in Spain and the UK. These markets often move independently of the central markets in the Conti index. The PEP and Conti indexes are published in Eur/MWh, for every day in the year. These are databased by trade date (ie the date of the day-ahead trade) and by flow date. Saturday, Sunday and Monday indices are calculated each Friday and indices for bank holidays are calculated on the last working day before the bank holiday.

Saturday and Sunday PEP and Conti indices use the midpoint of the weekend assessment for the UK in lieu of a daily price for those two days.

SPARK SPREADS

Platts spark spreads are indicative prices giving the average difference between the cost of gas and the equivalent price of electricity on any given day.

Prices are quoted for the UK, Benelux and German markets.

UK spark spreads are based on NBP gas assessments and equivalent UK electricity assessment. For the UK, Platts publishes spark spreads for day-ahead, three months ahead, two quarters ahead, and four seasons ahead. The UK day-ahead spark spread is based on the midday London time prices for gas and power.

Belgian spark spreads are based on Zeebrugge gas assessments and equivalent Belgian power assessment. For Belgium, Platts publishes spark spreads for day-ahead, three calendar months ahead, and two quarters ahead.

Dutch spark spreads are based on Dutch TTF gas assessments and equivalent Dutch power assessment. For the Netherlands, Platts publishes spark spreads for day-ahead, two calendar months ahead, two quarters ahead, and one calendar year ahead.

German prices will be based on TTF gas assessments and equivalent German power assessments, until such time as a liquid physical forward market for German gas becomes available. For Germany, Platts publishes spark spreads for day-ahead, two calendar months ahead, two quarters ahead, and one calendar year ahead.

The source of all gas prices is *European Power Alert* and *European Natural Gas Report*. The source of all power prices is *European Power Alert* and *European Power Daily*.

Platts calculates the spark spread for gas-fired plants with standard efficiencies of 50% and 60%.

Note: UK gas and power contracts roll at different times of the month. Therefore, Platts takes UK power conventions as the basis for its forward spark spreads contracts.

CLEAN SPARK SPREADS

Platts clean spark spreads are indicative prices giving the average difference between the cost of gas and emissions, and the equivalent price of electricity on any given day.

Prices are quoted for the UK, Benelux and German markets.

UK clean spark spreads are based on NBP gas assessments, equivalent EU emissions Allowances assessments, and equivalent UK electricity assessment. For the UK, Platts publishes clean spark spreads for day-ahead, three months ahead, two quarters ahead, and four seasons ahead. The UK day-ahead clean spark spread is based on the midday London time prices for gas and power, and the end of day assessment for the equivalent EUA.

Belgian clean spark spreads are based on Zeebrugge gas assessments, equivalent EUA assessments, and equivalent Belgian power assessment. For Belgium, Platts publishes clean spark spreads for day-ahead, three calendar months ahead, and two quarters ahead.

Dutch clean spark spreads are based on Dutch TTF gas assessments, equivalent EUA assessments, and equivalent Dutch power assessment. For the Netherlands, Platts publishes clean spark spreads for day-ahead, two calendar months ahead, two quarters ahead, and one calendar year ahead.

German clean spark spreads will be based on TTF gas assessments, equivalent EUA assessments, and equivalent German power assessments, until such time as a liquid physical forward market for German gas becomes available. For Germany, Platts publishes clean spark spreads for day-ahead, two calendar months ahead, two quarters ahead, and one calendar year ahead.

The source of all gas prices is *European Power Alert* and *European Natural Gas Report*. The source of all power prices is *European Power Alert* and *European Power Daily*. The source of all emissions prices is *Emissions Daily*.

Platts calculates the clean spark spread for gas-fired plants with standard efficiencies of 50% and 60%, and carbon intensity of 0.055 kg CO₂/MMBtu.

Note: UK gas and power contracts roll at different times of the month. Therefore, Platts takes UK power conventions as the basis for its forward spark spreads contracts.

CROSS-FUELS COMPARISONS

Platts cross-fuels comparisons are indicative prices of the costs of burning oil, gas and coal in power stations. In each case, the price of the fuel for spot and forward delivery is converted into an equivalent electricity price, quoted in Euro cents/kWh and US cents/kWh. The conversions assume the following plant efficiencies:

Natural Gas: 55%, Fuel Oil: 32%, Gasoil: 32%, Coal: 34%.

The standard specifications and sources of each fuel type are as follows:

NATURAL GAS

Quality: As specified by UK transporter National Grid.

Volumes: All prices are based on a standard contract lot size of 25,000-50,000 th/d.

Delivery: All prices are for physical delivery at the UK's National Balancing Point.

Timing: balance month, one calendar month ahead, two calendar months ahead, and one quarter ahead.

Source: *European Natural Gas Report*.

GASOIL

Quality: Gasoil with 0.1% sulfur content, including French Fuel Oil Domestique (FOD) and German Deutsche Industrie Norm (DIN) heating oil grades with a density of 0.845 g/ml and a sulfur content of 0.1% maximum. The assumed calorific value is 18,500 Btu/lb.

Volume: Prices are for 10,000-25,000 mt cargoes Handy-size Russian cargoes delivered basis ARA and meeting DIN/FOD are also included.

Delivery: Prices are for cargoes delivered CIF Northwest Europe. This normally means cargoes delivered in a Le Havre/Hamburg port range.

Timing: Spot = 10-25 days ahead of publication, forward prices (one calendar month ahead, two calendar months ahead and one quarter ahead) are based on the volume weighted average prices published by ICE for its futures contracts the previous day.

Source: *Platts Global Alert*/ICE Futures.

FUEL OIL

Quality: 1% sulfur fuel oil prices are based on a maximum 1% sulfur content.

Cargo assessments are typically based on a viscosity of 380 centistokes at 50 degrees C, a specific gravity of 0.965 to 0.990 g/ml. 3.5 % sulfur fuel oil prices typically represent bunker grade material with a 3-4% sulfur content, specific gravity of 0.998-0.991 g/ml and a viscosity of 380 to 420 centistokes at 50 degrees C, a maximum of 300 parts per million of vanadium. The assumed calorific value is 17,800 Btu/lb.

Volume: 1% sulfur cargo prices typically reflect cargo parcels of 17,000-25,000 mt each, although smaller volumes may be considered. Cargoes up to 50,000 mt may also be taken into account for physical (spot) prices. 3.5% sulfur prices typically represent FOB barges of 1,000-5,000 mt.

Delivery: 1% sulfur prices are for cargoes sold FOB Northwest Europe. 3.5% sulfur prices are for barges sold FOB Amsterdam-Rotterdam-Antwerp.

Timing: For 1% prices, spot = 10-25 days ahead of publication. Forward contracts are for one calendar month ahead, two calendar months ahead and one quarter ahead. 3.5% sulfur prices are for barges loading 2-15 days forward.

Source: *Platts Global Alert*.

COAL

Quality: Prices are for steam coal standardized to 6,000 kilocalories per kilogram (10,800 Btu/lb) with a maximum 1% sulfur content.

Volume: Standard cargo volumes consider Capesize vessels.

Delivery: Prices are based on cargoes delivered CIF Northwest Europe (Amsterdam-Rotterdam-Antwerp).

Timing: Prices are assessed daily for the prompt month-ahead delivery and weekly for the 90-day forward delivery. Full methodology at www.platts.com.

Source: *Platts International Coal Report*/Coal Trader International.

GLOSSARY

ABANDON—To allow an option to expire worthless

ALTERNATING CURRENT (AC)—A periodic current, the average value of which over a period is zero. Typically refers to a current that reverses its direction at regularly recurring intervals of time and that has alternately positive and negative values. Almost all electricity utilities generate AC electricity because it can easily be transformed to higher or lower voltages

ALTERNATING CURRENT DISTRIBUTION—The supply of electricity from one or more major receiving stations to the point of consumption. Energy is generally supplied at a voltage that can be directly used by large rotating machinery and step-down transformers are used to reduce the voltage for most commercial or residential utilization

AMERICAN STYLE OPTION—An option which can be exercised by the buyer (holder) at anytime during its life

AMPERE (AMP)—The unit of measurement of electrical current produced in a circuit by 1 volt acting through a resistance of 1 ohm. The measure of the rate of flow of electrons past a given point in an electric conductor such as a power line

ANCILLARY SERVICES—Any service required by a system operator to deliver electricity to the ultimate consumer. Ancillary services include balancing services, load following, or providing kilovars (reactive power)

ANTHRACITE—A hard, black coal with high energy content, often referred to as hard coal

ARBITRAGE—The simultaneous purchase of a commodity/derivative in one market and the sale of the same, or similar, commodity/derivative in another market in order to exploit price differentials

AT-THE-MONEY—An option whose exercise price is equal, or close to, the current price in the underlying market

AVAILABLE BUT NOT NEEDED CAPACITY—Net capability of main generating units that are operable, but not considered necessary to carry load and cannot be connected to load within 30 minutes

AVERAGE COST PRICING—A pricing mechanism based on dividing the total cost of providing electricity incurred in a period by the number MWh (wholesale) and kWh (retail) sold in the same period

AVOIDED COST—The cost to produce or procure electric power that an electricity utility does not incur because it purchases this increment of power from a qualifying facility. It may include a capacity payment and/or an energy payment component

BACKWARDATION—A market where the price for nearby delivery is higher than for further forward months

BALANCING—The requirement imposed by electricity grids or natural gas pipelines that supply and demand be equal over a certain time period

BARREL—A volumetric unit of crude oil, equivalent to 42 US gallons

BASELOAD—The minimum amount of electric power delivered or required over a given period of time at a steady rate. The minimum continuous load or demand in a power system over a given period of time

BASELOAD CAPACITY—The generation units normally used to meet demand around-the-clock

BASELOAD PLANT—A plant normally operated to take all or part of the minimum continuous load of a system, and which consequently produces electricity at an essentially constant rate. A base load plant typically has relatively high fixed costs and low unit operating costs. Traditionally, nuclear plants have been considered as base load plants

Bcf-billion cubic feet

Bcm-billion cubic meters

BEARISH—Belief that a price will fall

BID—A proposal to buy a commodity/derivative at a specified price

BID PRICE—The price at which a buyer is prepared to buy

BIOMASS CONVERSION—The process by which organic materials, such as wood waste or garbage, are burned for direct energy or electrical generation, or by which these materials are converted to synthetic natural gas

BITUMINOUS COAL—The most common coal, which is dense, black and has a moisture content of less than 20%. Used for generating electricity, making coke, and space heating

BLACK START—A rapid start up of an off-line generation source

BLACKOUT—The emergency loss of the source of electricity serving an area caused by failure of the generation, transmission, or distribution system

BRITISH THERMAL UNIT (Btu)—The amount of energy necessary to raise the temperature of one pound of water one degree Fahrenheit

BROWNOUT—The partial reduction of electrical voltages caused by customer demand being higher than anticipated or by the failure of the generation, transmission, or distribution system

BULLISH—Belief that a price is going to rise

BUSBAR—The point at which power is available for transmission. A conductor or group of conductors that serve as a common connection for two or more circuits, generally in the form of insulated cable, rigid rectangular or round bars, or stranded overhead cables held under tension

BUSBAR COST—The cost of producing one kWh of electricity delivered to, but not through, the transmission system (typically US)

CALL OPTION—An option that gives the buyer (holder) the right but not the obligation to buy a specified quantity of an underlying futures at a fixed price, on or before a specified date. The grantor of the option is obliged to deliver the future at the fixed price if the holder exercises the option

CAPACITOR—A transmission element designed to inject reactive power into the transmission network. Also used to increase voltages, reduce loadings, and increase available kW output from generators. Capacitor ratings typically given in Megavars

CAPACITY—The power output rating of a generator, typically in megawatts, measured on an instantaneous basis

CAPACITY (PURCHASED)—The amount of capacity available for purchase from other power systems

CAPACITY CHARGE—One element of a two-part pricing method used in power transactions (energy charge is the other element. Assessed on the amount of capacity being purchased, typically Eur(GBP, NOK)/MWh

CAPACITY MARGIN—The amount of capacity above planned peak system demand available to provide for scheduled maintenance, emergency outages, system operating requirements, and unforeseen demand

CASH MARKET—The physical market underlying a futures or options contract

CASH AND CARRY—An arbitrage transaction involving the simultaneous purchase of a cash commodity with borrowed money and the sale of the appropriate futures contract

CASH SETTLEMENT—The settlement of futures or options by paying a cash difference, rather than taking/making physical delivery

CIRCUIT—A conductor or a system of conductors through which electric current flows

CLEARING—The process of matching trades, settling trades and provision of a guarantee for traded contracts, often a service performed by exchanges

CLEARING FEE—A fee charged by a clearing house for clearing trades

CLOSE OUT—Finalizing a transaction by making an equal and opposite trade to an open position

COGENERATION—The simultaneous production of both useable heat or steam and electricity from a common fuel source

COMBINED CYCLE—The combination of one or more gas turbine and steam turbines in an electric generation plant. An electric generating technology in which electricity is produced from otherwise lost waste heat exiting from one or more gas (combustion) turbines. The heat is routed to a conventional boiler or to a heat recovery steam generator for use by a steam turbine in the production of electricity. This process increases the efficiency of the electric generating unit

CONDUCTOR—A substance or body, usually in the form of a wire, cable, or busbar, that allows a current of electricity to pass continuously along it

CONNECTION—The physical junction (transmission lines, transformers, switch gear, etc) between two electric systems permitting the transfer of electricity

CONTANGO—Where the prompt price a commodity/derivative is less than the price of further forward markets. Often described as the “healthy” state of commodities markets, except where seasonality is very strong

CONTI INDEX—Platts demand-weighted index of continental European power assessments

CONTRACT—A binding agreement between a buyer and a seller in a transaction

CONTRACT FOR DIFFERENCES (CFD)—A cash-settled futures contract between a supplier and buyer that is referenced to a settlement price

CUBIC FEET/METERS PER SECOND—A measurement of gas or water flow representing one cubic foot of gas or water moving past a given point in one second

CURRENT—A flow of electrons in an electrical conductor. The rate of movement of the electricity, measured in amperes

CURTAILABLE RATE—An option offered by utilities to customers who can accept specified amounts of service reduction in return for reduced electric rates

DECLINING BLOCK RATE—A fall in an electricity rate when an increase in consumption cuts the cost to a utility of providing service

DELTA HEDGING—The process whereby the grantor of an option decides to buy or sell more or less of an underlying futures contract in order to protect against being declared upon by the options holder. If delta hedging, the grantor of a call option will buy more of the futures contract if it rises in value towards the strike price (as the probability of being declared upon rises towards 100%). The grantor of a put option will typically sell more of the underlying futures contract if it slides in value (as the probability of being declared upon rises towards 100%)

DELTA NEUTRAL—When the grantor of an option has balanced the probability of being declared upon through buying/selling the underlying futures contract

DEGREE DAY—A measure of seasonal variation and intensity of temperature. In residential customer load, the more negative degree days in a year than the norm, the higher the electricity/gas consumption.

DEMAND—The rate at which electricity is delivered to or by a system at a given instant or averaged over a designated period, usually expressed in kilowatts or megawatts

DEMAND SIDE MANAGEMENT (DSM)—All activities or programs undertaken by an electricity system or consumers to influence the amount and timing of electricity use

DIRECT CURRENT (DC)—An electricity current that flows in one direction with a magnitude that does not vary or that varies only slightly

DIRTY POWER—Momentary disturbances in transmission that only able to be detected by sensitive electronic equipment

DISCOUNT—The amount by which a future or option is priced below its existing market value

DISPLACEMENT—The substitution of less expensive energy generation for more expensive generation. Usually this means reducing or shutting down production at a high cost plant and using cheaper generation when it is available

DISTRIBUTION—The system of lines, transformers and switches that connect between the transmission network and customer load. The transport of electricity to ultimate use points such as homes and businesses (relatively low voltages)

ECONOMY ENERGY—Energy sold on a non-firm basis and subject to recall at the discretion of the selling party

EFP—Exchange of futures for physical, refers to the exchange of a futures position for a physical (swap) position

ELECTRO-MAGNETIC FIELDS (EMF)—Invisible force fields that surround the movement of electricity

EMBEDDED COST—The historical cost of all facilities in the power supply system

ENABLING AGREEMENT—An agreement that provides the general terms and conditions for the purchase, sale, or exchange of electricity but does not list specific contract details or obligate either party to perform.

ENERGY CHARGE—That portion of the charge for electricity based upon the electric energy (kWh) consumed or billed. The commodity charge

EXERCISE—The procedure by which an option holder takes up the rights to the contract and is delivered a long (call) or short (put) futures position by the grantor at a fixed price

EXIT FEE—A fee that is paid by a customer leaving a utility network intended to compensate the utility in whole or part for the loss of fixed cost contribution from the exiting customer

EXPIRY (OPTIONS)—The date by which an option holder must decide whether to exercise or abandon an option

FIRM ENERGY—Energy sales which, although not subject to interruption for economic purposes, may be interrupted under force majeure conditions

FIRM GAS—Gas sold on a continuous basis for a defined contract term

FIRM POWER—Electricity capacity intended to be available at all times during the period covered by a guaranteed commitment to deliver, even under adverse conditions, but subject to force majeure interruptions. Firm power consists of either firm energy, firm capacity, or both

FIXED CHARGE—The charge calculated to recover all or a portion of the fixed costs of a utility, including generation facility and transmission lines, meters, and some taxes

FIXED COST—Cost of facilities incurred regardless of the amount of energy produced. Such costs normally include capital costs, the cost of financing construction, and insurance

FLUE GAS DESULFURIZATION UNIT (SCRUBBER)—Equipment used to remove sulfur oxides from the combustion gases of a boiler plant before discharge to the atmosphere. Chemicals like lime are used

FORCE MAJEURE—A contractual provision which contemplates

forgiveness of an obligation to perform due to uncontrollable events such as acts of God, war or forces of the elements that are out of the control of the parties

FORCED OUTAGE RATE—The rate of shutdown of a generating unit, transmission line, or other facility for emergency reasons or a condition in which the generating equipment is unavailable for load because of unanticipated breakdown

FUEL CELL—A device that generates direct current to electricity by means of an electrochemical process

FUEL SWITCHING—Substituting one fuel for another based on price and availability. Large industries often have the capability of using either oil or natural gas to fuel their operation and of making the switch on short notice

FULL-FORCED OUTAGE—The net capability of main generating units that is unavailable for load for emergency reasons

FUTURES CONTRACT—An agreement to make or take delivery of a commodity at a fixed date or strip of dates in the future, at a price agreed upon at the time of dealing

GENERATION—The process of producing electricity by transforming other forms of energy such as steam, heat or falling water. Also, the amount of electricity produced, expressed in kilowatt-hours (kWh) or megawatt-hours (MWh)

GEO THERMAL—Power generated from heat energy derived from hot rock, hot water, or steam below the earth's surface

GIGAWATT—One billion watts

GIGAWATT HOUR (GWh)—One billion watt-hours

GRID—The layout of an electrical transmission system or a synchronized transmission network

GTMA—Grid Trade Master Agreement agreed for the UK electricity market in 2000. Replaced the pool-based EFA power market in the UK in March 2001

GROSSKROTZENBURG—A switchyard just south of Frankfurt-am-Main. As the single connection point between grids operated by RWE, PreussenElektra and Bayernwerk (now E.ON), this long-forgotten delivery point formed the basis of the current German electricity market before successive Association Agreements simplified transmission charges between grids. Understood to be the single German delivery point for power trading between April 1999 and February 2000

HEDGE—The reduction of risk by covering anticipated commitments at a fixed price in the future through a futures or options contract. Buyers and sellers can hedge

HYDROELECTRIC PLANT—A plant in which the turbine generators are driven by falling water

IMPEDENCE—The opposition in an electrical circuit to the flow of alternating current (AC)

IN-LIEU ENERGY—Energy exchanged between a reservoir owner and the owner of a downstream project. The agreement allows reservoir owners to retain water above a reservoir's energy content curve; however, owners of downstream projects may request release of such water

INDEPENDENT POWER PRODUCER (IPP)—A non-utility power generator that typically sells the power it generates to electricity utilities at wholesale prices

INTERCONNECTION—Facilities that connect two electricity or gas grids or control areas

INTERMEDIATE LOAD—The range from base load to a point between base load and peak. This point may be the midpoint, a percent of the peakload, or the load over a specified time period

INTERRUPTIBLE DEMAND—The amount of customer demand that, in accordance with contractual arrangements, can be interrupted by direct control of the system operator, remote tripping, or by action of the customer at the direct request of the system operator

INTERRUPTIBLE GAS—Gas sold to customers with a provision that permits curtailment or cessation of service at the discretion of the supplier or transporter

IN-THE-MONEY—An option which has intrinsic value. A put option is in-the-money when its strike price is above the value of the underlying futures contract. A call option is in-the-money when its strike price is below the value of the underlying futures contract

INITIAL MARGIN—The returnable collateral required to establish an options position

INTRINSIC VALUE—The value to an option holder if (s)he were to exercise an option today

JOULES—A measure of energy equal to 1 watt second

KILOWATT (kW)—A unit of electricity equal to one thousand watts

KILOWATT-HOUR (kWh)—A unit of electricity equivalent to one kilowatt of power used for one hour. One kilowatt-hour is equal to 1,000 watt-hours. An average household will use between 800-1300 kWh/month

KILOWATT YEAR (kW-y)—A unit of electrical capacity equivalent to one kilowatt of power used for 8760 hours

LAMBDA—The measure of the rate at which fuel is consumed relative to electric output, expressed in Btu's per kWh

LAUFENBURG—An electricity delivery hub in Switzerland,

divided between Laufenburg National and Laufenburg International (see Platts Guide to Specifications above)

LIGNITE—A brownish-black coal of low rank with high inherent moisture and volatile matter (used almost exclusively for electric power generation). It is also referred to as brown coal

LOAD—The amount of electricity delivered or required at any specific point or points on a system. The load of an electricity system is affected by many factors and changes on a daily, seasonal, and annual basis, typically following a pattern. System load is usually measured in megawatts (MW)

LOAD CURVE—A curve of power versus time showing the level of a load for each time period covered. The horizontal axis is time and the vertical access is load (MW)

LOAD FACTOR—The ratio of average load to peak load during a specific period of time, expressed as a percent. The load factor indicates to what degree energy has been consumed compared to maximum demand or the use of units relative to total system capability. An system's load factor shows the variability in all customers' demands

LOAD MANAGEMENT—The management of load patterns in order to better use the system. Generally, load management attempts to shift load from peak use periods to other periods of the day or year

LOAD SHAPE—Variations in the power load over a daily, weekly or annual period

LONG—When the holder of futures positions has contract to buy more than (s)he has contracted to sell

LONG-RUN MARGINAL COSTS—All costs associated with the lowest cost incremental unit including variable production costs and capital costs

LOOP FLOW—The tendency of electricity to flow along the path of least resistance, which may not necessarily be the same as that intended in the contract between the two transmitting entities. If power sold along a contractual path goes a different physical path, the power-flow may interfere with control of the systems which were unaware of the contractual power transfer

LOSS OF LOAD PROBABILITY (LOLP)—A measure of expectation that system demand will exceed capacity during a given period, often expressed as the expected number of days per year

MARGINAL COST PRICING—A system of pricing designed to ignore all costs except those associated with producing the next increment of power generation. Sometimes referred to as incremental cost pricing

MARGINAL PRICE OF ENERGY—Price for power from a unit which is already running. (System Lambda + markup)

MARK-TO-MARKET—To revalue futures/option positions using

current market prices to determine profit/loss. The profit/loss can then be paid/collected daily (see variation margin)

MEGAWATT (MW)—A unit of electrical power equal to one million watts or one thousand kilowatts

MEGAWATT-HOUR (MWh)—One million watt-hours of electricity. A unit of electrical energy which equals one megawatt of power used for one hour

MMBtu—One million British thermal units

MMcf—One million cubic feet of natural gas.

MOTHBALL—To place a generating facility in an inactive state so that it can neither be brought into operation immediately nor counted towards reserve margin

MUNICIPAL UTILITY—A utility owned and operated by a municipality or group of municipalities

NAMEPLATE CAPACITY—The full-load continuous rating of a generator or other electric power production equipment under specific conditions as designated by the manufacturer. Installed generator nameplate rating is usually indicated on a nameplate physically attached to the generator

NATURAL GAS—A naturally occurring mixture of hydrocarbon and non-hydrocarbon gases found in porous geological formations beneath the earth's surface, often in association with crude. The principal constituent is methane

NET CAPABILITY—The maximum load-carrying ability of a power plant under specified conditions for a given time interval. Capability is determined by design characteristics, physical conditions, energy supply and operating limitations such as cooling and circulating water supply and temperature, headwater and tailwater elevations, and electrical use

NET GENERATION—Gross generation less the electric energy consumed at the generating station for station use.

NETWORK—An interconnected system of electrical transmission lines, transformers, switches and other equipment connected together in such a way as to provide reliable transmission of electricity

NORTHERN ZONE—Between February 1, 2000 and July 1, 2000 Germany's electricity grids were divided into northern and southern zones, for trading purposes. Northern Zone, as defined in Verbandvereinbarung II (the Second Association Agreement on grid access), was comprised by 380 kV grids run by PreussenElektra (later part of E.ON), Veag, HEW, Bewag and VEW). The Southern Zone comprised the 380 kV grids run by Bayernwerk (later part of E.ON), EnBW and RWE.

NUCLEAR FUEL—Fissionable materials that have been enriched to such a composition that, when placed in a nuclear reactor, will support a self-sustaining fission chain reaction, producing heat in a controlled manner for process use

NUCLEAR POWER PLANT—A facility in which heat produced in a reactor by the fissioning of nuclear fuel is used to drive a steam turbine

NUCLEAR REACTOR—A device in which a fission chain reaction can be initiated, maintained and controlled. Nuclear reactors are used in the power industry to produce steam for electricity

OFFER—An indication of willingness to sell a specified amount of a commodity at a specific price

OFF-PEAK—Light load hours. The time of the day when an power system would experience its lightest load, usually in the middle of the night

OHM—The unit of measurement of electrical resistance. The resistance of a circuit in which a potential difference of 1 volt produces a current of 1 ampere

OPEN INTEREST—The number of contracts left open in a market which need to be closed out or taken through to delivery

OPEN OUTCRY—A trading system in which members trade verbally on a trading floor

OPERATING RESERVE MARGIN—The amount of unused available capability that can be applied to the system within ten minutes at peakload for a utility system, expressed as a percentage of total capability

OUT-THE-MONEY – An option which has no intrinsic value. A put option is out-of-the-money when its strike price is below the value of the underlying futures contract. A call option is out-of-the money when its strike price is above that of an the underlying futures contract

PEAK DEMAND—The maximum load during a specified period of time

PEAK LOAD—The maximum electrical load demand in a stated period of time. On a daily basis, peak loads occur at midmorning and/or in the early evening

PEAK LOAD PLANT—A plant usually housing low-efficiency, quick response steam units, gas turbines, diesels, or pumped-storage hydroelectric equipment normally used during the maximum load periods. Characterized by quick start times and generally high operating costs, but low capital costs

PEAKING CAPACITY—Capacity of generating equipment normally reserved for operation during the hours of highest daily, weekly, or seasonal loads.

PEP INDEX—Platts demand-weighted index of all European electricity assessments

PHYSICAL DELIVERY—The transfer of ownership of an underlying commodity between a buyer and seller to settle a futures contract following expiry

POSTAGE STAMP RATE—A rate for electric transmission that does not vary according to distance from the source of the power supply. So-called because postage stamps for letters are typically at a fixed price, regardless of destination, within the same country.

PREMIUM—The price paid by the option holder to the option grantor

PRICE CAP—A method of setting a utility distribution company's rates where a maximum allowable price level is established by regulators, flexibility in individual pricing is allowed, and where efficiency gains can be encouraged and captured by the company

PRIME MOVER—The engine, turbine, water wheel or similar machine that drives an electric generator; or, for reporting purposes, a device that converts energy to electricity

PUMPED-STORAGE HYDROELECTRIC PLANT—A plant that generates electricity by using water pumped during off-peak periods into an elevated storage reservoir. At peak periods, when additional generating capacity is needed, the water is released from the elevated storage reservoir to turbine generators in a power plant at a lower elevation. A hydroelectric power plant that uses both pumped water and natural stream flow to produce electricity is a Combined Pumped-Storage Hydroelectric Plant

PUT OPTION—An option that gives the holder the right (but not the obligation) to sell a specified quantity of the underlying instrument at a fixed price, on or before a specified date. The grantor of the option has the obligation to take delivery of the underlying instrument if the option is exercised

RALLY—A rapid rise in a price

RENEWABLE SOURCE—A power source that is continuously or cyclically renewed by nature like solar, wind, hydroelectric, geothermal or biomass

RESERVE CAPACITY—Extra generating capacity available to meet unanticipated demands for power or to generate power in the event of loss of generation

RESERVOIR—A structure which stores water for later use in the production of electricity

ROLL OVER—The transfer of a position from one futures period to another—involving the purchase (sale) of the nearby month and simultaneous sale (purchase) of a further-forward month

RUN-OF-RIVER PLANT—A hydroelectric plant which depends chiefly on the flow of a stream as it occurs for generation, as opposed to a storage project, which has space available to store water from one season to another. Some run-of-river projects have a limited storage capacity (pondage) which permits them to regulate streamflow on a daily or weekly basis

SCHEDULE 5—A clause inserted in some UK power contracts in the early days of Neta. Under schedule 5 balancing and

transmission loss costs are settled separately from the contract price

SETTLEMENT PRICE—A price established at the close of a trading day used to calculate the settlement of futures contracts

SHORT—When the holder of a futures position has contracted to sell more than (s)he has contracted to buy

SOLAR GENERATION—The use of radiation from the sun to substitute for electricity or natural gas heating

SOUTHERN ZONE—Between February 1, 2000 and July 1, 2000 Germany's electricity grids were divided into northern and southern zones, for trading purposes. Northern Zone, as defined in Verbandvereinbarung II (the Second Association Agreement on grid access), was comprised by 380 kV grids run by PreussenElektra (later part of E.ON), Veag, HEW, Bewag and VEW). The Southern Zone comprised the 380 kV grids run by Bayernwerk (later part of E.ON), EnBW and RWE.

SPILL—Release of water from a reservoir over a spillway rather than putting it through turbines to generate electricity. A spillway is the overflow structure of a dam

SPINNING RESERVE—Unused capacity available from units connected to and synchronized with the grid to serve additional demand. The spinning reserve must be under automatic control to instantly respond to system requirements

SPOT MARKET—A market where goods are traded through rapid negotiation. Opposite of long-term contracting.

SPREAD—The differential between two futures periods, or the difference between bids and offers for a specific period

SPREAD (OPTIONS)—An option trade in which two or more open positions are established in order to trade the differentials and offset risk. Option spreads may use different strike prices and/or expiry dates

STEAM GENERATION PLANT—A thermal electricity generating plant which creates steam to drive a turbine

STRANDED INVESTMENT/STRANDED COSTS—An investment with a cost recovery schedule that was initially approved by regulatory action that subsequent regulatory action or market forces has rendered not practically recoverable. Costs that utilities are currently permitted to recover through their rates but whose recovery may be impeded or prevented by the advent of competition in the industry

STRIKE PRICE—The price at which an option holder has the right to buy or sell an underlying commodity/derivative

SUBSTATION—Facility equipment that switches, changes, or regulates electric voltage. An electric power station which serves as a control and transfer of power flow, transform voltage levels, and serve as delivery points to industrial customers

SUPERCONDUCTOR—A material that becomes a perfect conductor of electricity when chilled to cold temperatures. Developments beginning in 1986 have raised the threshold temperature to levels which, in the near future, may provide wires capable of conducting large electric currents without line loss. Almost all substances have some resistance to electrical currents and this causes the loss of some of the electrical power generated. Only a superconducting wire could prevent such line losses because a current that is started in a superconductor can flow forever

SUPERCONDUCTIVITY—The flow of electric current without resistance in certain metals and alloys at temperatures near absolute zero. Perpetual motion on an atomic scale; the conduction of electricity without the slightest power loss; perfect conductivity

SURPLUS ENERGY—Energy generating capability that is beyond the immediate needs of the producing system. This energy may be sold on an interruptible basis or as firm power

SWITCHING STATION/SWICH YARD—Facility used to tie together two or more electric circuits through switches. The switches are selectively arranged to permit a circuit to be disconnected, or to change the electric connection between the circuits

SYSTEM LAMBDA—The marginal, variable production cost of electricity at a given level of system output

SYSTEM OPERATOR—A person or entity who operates the electric system

TARIFF—Rates an regulated entity will charge to provide service to its customers as well as the terms and conditions that it will follow in providing service

TERAWATT HOURS (TWh)—Thousand Gigawatt hours

THERMAL GENERATION—The production of electricity from plants that convert heat energy into electrical energy. The heat in thermal plants can be produced from a number of sources such as coal, oil, gas or nuclear fuel

TIERED RATES—A rate design which divides customer use into different tiers, or blocks, with different prices charged for each

TIME VALUE—The time component in a premium for an option art. Typically the time value of an option declines as it moves closer to expiry

TOLLING ARRANGEMENT—An arrangement whereby a party moves fuel to a power generator and receives kilowatt hours (kWh) in return for a pre-established fee

TOLLING FEE—A fee paid for use of electric generation assets used to convert fuel to power

TRANSFORMER—An electrical device for changing the voltage of alternating current

TRANSMISSION—The network of high voltage lines, transformers and switches used to move electricity from generators to the distribution system. Also used to interconnect different utility systems and independent power producers together into a synchronized network. Transmission is considered to end when the energy is transformed for distribution to the consumer

TRANSMISSION LOSS—The power lost in transmission between one point and another. It is measured as the difference between the net power passing the first point and the net power passing the second point

TRANSMISSION VOLTAGE—Voltage levels utilized for bulk transmission systems: generally 69 KV-750 KV AC or DC

TURBINE—The part of a generating unit usually consisting of a series of curved vanes or blades on a central spindle, which is spun by the force of water, steam or hot gas to drive an electricity generator

TWO-PART RATE—A charge for electricity consisting of a demand (kW) component and an energy or commodity (kWh) component

UNCOVERED POSITION (FUTURES)—Where a long market player has bought more of a commodity than he has agreed to sell, or where a short market player has sold more of a commodity than (s)he has to deliver

UNCOVERED POSITION (OPTIONS)—When the grantor of an options position has no cover in the underlying futures market against a price swing in the holder's favour (see delta hedging)

VAR—Voltage-Ampere-Reactive. A measure of reactive power

VARIABLE COSTS—The total costs incurred to produce energy, excluding fixed costs which are incurred regardless of whether the resource is operating. Variable costs usually include fuel, increased maintenance and additional labor

VARIATION MARGIN—Profits and losses on open positions which are calculated daily by the mark-to-market process, which are then paid or collected daily

VOLATILITY (HISTORICAL VOLATILITY)—The degree to which a particular price has fluctuated in the past

VOLATILITY (OPTIONS)—A value attributed to an underlying futures contract which determines the premium that is set by the grantor. Includes an element of historical volatility, and the volatility which the grantor of an option believes will still be seen in that futures contract

VOLT—The unit of measurement of electromotive force. It is equivalent to the force required to produce a current of one ampere through a resistance of one ohm. The unit of measure for electrical potential. Generally measured in kilovolts or kV. Typical transmission level voltages are 115 kV, 230 kV and 500 kV

VOLTAGE CONTROL—The control of transmission voltage adjustments in generator reactive output and transformer taps, and by switching capacitors and inductors on the transmission and distribution systems

VOLTAGE REDUCTION—Any intentional reduction of system voltage by 3 percent or greater for reasons of maintaining the continuity of service of the bulk electric power supply system

WATT—A measure of real power production or usage equal to one Joule per second. The rate of energy transfer equivalent to 1 ampere flowing under a pressure of 1 volt

WATT HOUR (Wh)—An electrical energy unit of measure equal

to 1 watt of power supplied to, or taken from, an electricity circuit steadily for 1 hour

WHEELING—The use of the transmission facilities of one system to transmit power for another system. Wheeling can apply to either wholesale or retail service

WHEELING SERVICE—The movement of electricity from one system to another over transmission facilities of intervening systems. Wheeling service contracts can be established between two or more systems

WHOLESALE WHEELING—The transmission of electricity from a wholesale supplier to another wholesale supplier by a third party

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GENERAL TERMS AND CONDITIONS

TIME OF ASSESSMENT

Platts European products assessments reflect the transactable value prevailing at 16.30:00 London time precisely. The assessment methodology reflects values on a market-on- close basis. Trading activity, including bids/offers and transactions, is covered during the typical operating hours of the European markets with market values determined precisely at 16.30:00 London time.

Platts tracks outright and spread levels through the day between 08.30:00-16.30:00 London time and these levels may have a bearing on final assessment levels, depending on transparency and the patterns of liquidity over the day. Transactions and activity in futures, physical or derivatives markets before 08.30:00 and after 16.30:00 London time are not taken into account. All market activity is viewed in light of its market relevance, repeatability and transparency. Transactions between related parties or transactions that do not meet Platts high standards for transparency, verifiability and repeatability may not be taken into account.

Platts European products assessments have reflected the transactable value prevailing at 16.30:00 London time since October 1, 2005. Before that, from April 1, 2003, a 17.30:00 London time close was reflected.

BIDS/OFFERS

Platts considers transactions, bid/offer levels and market indications that are reflective of typical conditions and originating from sources deemed reliable.

Details of bids/offers and deals for European oil products are provided on Platts electronic screen service Platts Global Alert on PGA005.

Bids and offers must in principle be open to any reputable and creditworthy counterparty.

Platts will exclude transactions, bids/offers or any market indications when these appear to be unrepresentative of the market, or unrepeatable. Deals done below the level of prevailing bids or above the level of prevailing offers (i.e., selling through the bid or buying through the offer) will not be reflected in Platts assessments.

More comprehensive details of the procedures for bidding and offering on PGA005 are provided in a separate document "Platts Editorial Guidelines and Methodologies: European Oil Products". The web URL for this document is:

<http://www.platts.com/Oil/Resources/Methodology%20&%20Specifications/europeanoilproductspecsguideline.pdf?S=n>

EXECUTABILITY

Platts only takes into account bids and offers where trading participants have demonstrated that those bids and offers are firm and executable.

For the purposes of its assessments, Platts will only consider in its assessment process bids and offers that have been communicated to reporters/price specialists before 15.45:00 London time for cargoes, 16.00:00 for barges and 16.15:00 for swaps. Any new bid/offer submitted later than these cutoffs will not be considered in the assessment process.

Platts considers in its assessment incremental price changes made to applicable bids or offers up to but no later than 16.28:00 London time, after which only deals will be considered.

Platts takes into account bids/offers that are executable under normal circumstances. Where provisions in the bid or offer make it difficult or impossible to execute, the bid or offer will not be considered in the assessment. Such provisions may include, for instance, non-standard nomination procedures and charter party or loading options outside the normal range of ports considered as standard in each market.

PERFORMANCE

Platts' editorial guidelines governing its assessment process require it must consider only those transactions, bids or offers where market participants perform under typical contractual terms.

Platts accepts that individual companies may have trading limits with counterparties and that national legislation may prevent companies from dealing in materials of certain origins. Such counterparty issues will be dealt with on a case-by-case basis.

Participants intending to sell should not offer when there is a known and distinct possibility that loading/delivery may be delayed. If congestion or delays prevent performance under the contractual terms, the seller should make reasonable and timely efforts to supply from an alternative source, or the seller should engage in other measures to alleviate the buyers' exposure.

Equally, a buyer should not over-commit and then aggregate nominations in a way that makes it logistically impossible for the seller to perform.

Platts will take appropriate steps to ensure the integrity of its assessments if issues of non-performance should arise.

QUALITY

Platts products assessments are based on merchantable grades.

For both cargoes and barges, no distinction is made between refinery and storage in terms of the origin of the material. Typical specifications for each product are detailed below.

Bids/offers that exclude legitimate supply sources may be deemed restrictive and excluded from the assessment process.

INCREMENTABILITY

Price changes to bids and offers will be considered in the assessment process only if the improvements in the price of bids and offers are incremental in nature. Typically the increments considered would be of a maximum of \$1/mt but this varies according to market conditions. Price changes made very rapidly, that do not allow a counterparty to execute, may be disregarded.

Where related futures markets exhibit unusual volatility, Platts may increase the level of increment accepted without prior notice. Platts will typically advise such increment changes on PGA005

Please note that market participants may withdraw bids/offers at any point, provided no counterparty has expressed an intention to execute the bid/offer. Also market participants may back away from the price non-incrementally.

REPEATABILITY

Bids, offers and transactions are viewed against the broader supply/demand generated by those bids/offers and transactions. Hence if a low price offer generates too much demand, Platts may determine in its editorial process that the market value is higher than the level offered. Likewise if a high bid generates too much supply and the buyer is unable to buy all the volume that is offered, Platts in its editorial process may determine that the market value is lower than the level bid.

SPREADS

Platts typically reflects fixed price deals, bids and offers in its assessments. Platts also uses bids/offers and transactions on a Platts related and EFP-related basis, for instance on middle distillates where bids/offers and deals are frequently concluded on an IPE-related basis.

Platts may use additional indications as appropriate including the market value of spread relationships with other oil grades and associated markets such as derivatives and futures. In certain illiquid markets, it may establish FOB or CIF values based on freight differentials to more liquid benchmarks.

ICE GASOIL PRICES

Platts publishes the ICE gasoil weighted average as well as the settlement prices for the first two futures months. Platts also publishes the settlements for the first six months of ICE futures trading. The figures reflect the values provided by the ICE rounded to the nearest 25 cts/mt and are not an assessment by Platts. Platts rolls the trading months on the day after expiry (i.e. on expiry day, the expiring front-month and the second-month futures contracts are carried in the assessment tables).

Effective November 1, Platts started to reflect in its European middle distillate assessment processes the prevailing value of ICE gasoil futures at exactly 16:30 London time rather than the ICE settlements which reflect a three minute weighted average of transactions.

Platts typically determines the fixed price value of transactions after taking into consideration the EFP differential and the Intercontinental Petroleum Exchange gasoil futures contract settlement levels. Platts has generally used ICE gasoil settlements and its assessment of the EFP premium in calculating the physical values for middle distillates since April 1, 2003. Before April 1, 2003, the ICE gasoil weighted averages were used.

Please note, however, that while the prevailing values of ICE gasoil futures at exactly 16:30 London time are typically used in calculating physical values, Platts reserves the right to adapt or abandon this methodology if required. For instance, Platts may use alternative systems if in Platts opinion the prevailing values were to appear anomalous. On days when technical outages or other exigencies mean there is no ICE trade at 1630 London time, for instance because of technical problems, Platts' assessments will continue to reflect prevailing values at 16:30 London time. The outright distillate prices for cargoes and barges will be calculated using Platts' assessments of fixed price values at 16:30 London time as usual. Platts typically tracks both fixed price as well as inter-product and crude-to-product relationships prevailing at 16:30 London time.

Please note that assessment timings may be changed due to a variety of reasons including power outages, communication problems or any other issue affecting the normal flow of information and/or business. Platts will make reasonable efforts to communicate to its subscribers the time resets.

NYMEX VALUES

Effective Oct 1, 2005, Platts European Marketscan added a series of new assessments reflecting the prevailing market value precisely at 1630 London time for several futures contracts on NYMEX.

These include the front-two months for the NYMEX futures WTI crude contract, the front-two months for the heating oil and the front-two months for the unleaded gasoline contracts, all at 1630 London time.

TIMING

Assessments reflect arrivals or loadings between 10-25 days from date of publication for all grades on cargoes, and a minimum of 3 days to a maximum of 15 days from date of publication on barges. In practice, because of the 48-hour nomination procedure on barges, the assessment reflects trading activity for 3-15 days from date of publication on Monday and Tuesday and 5-15 days from date of publication on Wednesday through Friday. On holidays, the 48 hour nomination clause may result in a loadings 4, 5 or 6 days forward and this may be factored into the assessment.

The Platts assessment process typically considers bids and offers made with 5 day loading /delivery windows within the standard 3-15 or 5-15 days forward for barges and 10-25 days forward for cargoes.

Nomination procedures are detailed below. Normal notice of readiness procedures will be considered..

Note: Prior to April 1, 2003, the cargo assessments reflected reasonably prompt arrival or lifting, typically between 5 to 15 days from date of publication for cargo assessments, while barges typically reflected 2-8 days from date of publication.

NOMINATIONS

Effective August 1, 2007, Platts started to reflect CIF Northwest Europe gasoline, jet fuel, diesel, gasoil and fuel oil cargoes and CIF Mediterranean gasoline, diesel and fuel oil cargoes that stipulate vessel nomination and narrowing to a 3 day delivery range by the earliest of either 5-calendar or 3-working days prior to the first day of the actual delivery range. In the case of CIF Mediterranean gasoil cargoes, the vessel nomination and narrowing should be made by the earliest of either 7-calendar or 5-working days prior to the first day of the actual delivery range.

On barges, the nomination process gives the buyer the right to nominate the laycan but the buyer must give the seller 48 working hours notice of the dates required.

PRICE UNITS

All the primary bulk product prices in Europe are in US dollars per metric tonne (mt). The minimum fluctuation in price is 25 cts/mt for all products, on both cargoes and barges.

EURO-DENOMINATED VALUES

Platts publishes euro-denominated values for a selection of its key crude oil and European and US product benchmarks as a supplement to the existing US dollar-denominated values. Because decision-making in international oil markets is inherently exposed to foreign exchange currency fluctuations, Platts provides this additional information to allow subscribers to compare prices more efficiently across regions.

Please note that the Euro-denominated assessments are not derived directly from market indications expressed in Euros, but are calculated from the published US dollar price assessments converted at the prevailing Euro/\$ foreign exchange rate at 1630 London time.

The euro-denominated assessments were launched on February 14th, 2005, and reflect values prevailing at 1630 local London time. They include Premium Unleaded Cargoes CIF NWE/Basis ARA, Naphtha Physical Cargoes CIF NWE/Basis ARA, Jet Cargoes CIF NWE/Basis ARA, 1 Pct Cargoes FOB NWE, Premium Unleaded Barges FOB Rotterdam, 10 PPM Barges FOB Rotterdam, Gasoil 0.2 Pct Sulfur Barges FOB Rotterdam, 3.5 Pct Barges FOB Rotterdam.

FOREX RATES

Platts publishes key foreign exchange currency rates in the European market in Platts European Marketscan and its Platts Global Alert electronic publication. The forex rates reflect prevailing values at 1630 London time.

CREDIT/PAYMENT TERMS

Payment is as per standard commercial practice which may be prompt or within a few working days of lifting or discharge. Wherever greater credit is given this will be allowed for in the assessment process.

TIME GRADIENT

Platts assessments fully take into account any backwardation or contango in the marketplace. The assessments thus reflect the value after taking into consideration the difference in prices prevailing along the time curve assessed by Platts. Typically,

EUROPEAN MARKETSCAN ASSESSMENTS

		FOB Med (Italy)			CIF Med(Genova/Lavera)	
Premium Gasoline 50ppm	+X.00	AAOPW00-AAOPW00	+X.00	+X.00	AAOPX00-AAOPX00	+X.00
Naphtha	+X.00	PAAAI00-PAAAI00	+X.00	+X.00	PAAAH00-PAAAH00	+X.00
Jet	+X.00	AAIDL00-AAIDL00	+X.00			
50ppm ULSD	+X.00	AAOQC00-AAOQC00	+X.00	+X.00	AAOQD00-AAOQD00	+X.00
Gasoil.2	+X.00	POAAB00-POAAB00	+X.00	+X.00	POAAA00-POAAA00	+X.00
Fuel Oil 1%	+X.00	PUAAK00-PUAAK00	+X.00	+X.00	PUAAJ00-PUAAJ00	+X.00
Fuel Oil 3.5%	+X.00	PUAAZ00-PUAAZ00	+X.00	+X.00	PUAAY00-PUAAY00	+X.00
Jet FOB Med premium	Prem	AAIDN00-AAIDN00				

		Cargoes CIF NWE/Basis ARA			Cargoes FOB NWE	
Premium Gasoline 50 ppm	+X.00	AAIJ00-AAIJ00	+X.00	+X.00	AAIJH00-AAIJH00	+X.00
Premium gasoline 10 ppm	+X.00	AAOPZ00-AAOPZ00	+X.00	+X.00	AAOPY00-AAOPY00	+X.00
Regular gasoline 50 ppm	+X.00	AAIJN00-AAIJN00	+X.00	+X.00	AAIJL00-AAIJL00	+X.00
Naphtha (Month)	+X.00	PAAAJ00-PAAAJ00	+X.00			
Naphtha	+X.00	PAAAL00-PAAAL00	+X.00			
Jet	+X.00	PJAAU00-PJAAU00	+X.00	+X.00	PJAAV00-PJAAV00	+X.00
Diesel 10 ppm	+X.00	AAKWP00-AAKWP00	+X.00	+X.00	AAKWR00-AAKWR00	+X.00
Diesel 50 ppm UK	+X.00	AAIKO00-AAIKO00	+X.00	+X.00	AAIKM00-AAIKM00	+X.00
Diesel 50 ppm	+X.00	AAOQB00-AAOQB00	+X.00	+X.00	AAOQA00-AAOQA00	+X.00
Russian gasoil 0.2%	+X.00	AAOQZ00-AAOQZ00	+X.00			
Gasoil 0.2%	+X.00	POAAC00-POAAC00	+X.00	+X.00	POAAD00-POAAD00	+X.00
Fuel Oil 1%		PUAAL00-PUAAL00		+X.00	PUAAM00-PUAAM00	+X.00
Fuel Oil 3.5%	+X.00	PUABA00-PUABA00	+X.00	+X.00	PUABB00-PUABB00	+X.00
Straight run 0.5-0.7%.				+X.00	PKABA00-PKABA00	+X.00
VGO 0.5-0.6%	+X.00	AAHMZ00-AAHMZ00	+X.00	+X.00	AAHMX00-AAHMX00	+X.00
VGO 2% max	+X.00	AAHND00-AAHND00	+X.00	+X.00	AAHNB00-AAHNB00	+X.00

		Barges FOB Rotterdam		Barge differential - 50ppm		
98 RON gasoline 10 ppm	+X.00	AAKOD00-AAKOD00	+X.00	AALBJ00/AALBJ00		
Premium gasoline 10 ppm	+X.00	PGABM00-PGABM00	+X.00			
Premium gasoline 50ppm	+X.00	AANWY00-AANWY00	+X.00	International Petroleum Exchange		
Regular gasoline 10 ppm	+X.00	AAKOF00-AAKOF00	+X.00	Gasoil Settlements		
MTBE	+X.00	PHAKZ00-PHAKZ00	+X.00	M01	n/a M04	n/a
Naphtha	+X.00	PAAAM00-PAAAM00	+X.00	M02	n/a M05	n/a
Jet	+X.00	PJABA00-PJABA00	+X.00	M03	n/a M06	n/a
Diesel 10 ppm	+X.00	AAJUS00-AAJUS00	+X.00	IPE gasoil GWAVE		1630
Diesel 50 ppm	+X.00	AAGMK00-AAGMK00	+X.00	M01	PXAAJ00 M01	n/a
Gasoil 0.2%	+X.00	POAAG00-POAAG00	+X.00	M02	PXAAK00 M02	n/a
Fuel oil 1%	+X.00	PUAAP00-PUAAP00	+X.00			
Fuel oil 1.5%	+X.00	AASXR00-AASXR00	+X.00	Platts Gasoil Futures		
Fuel Oil 3.5%	+X.00	PUABC00-PUABC00	+X.00	Prevailing gasoil futures 1630 London time		
Rotterdam bunker 380 cst	+X.00	PUAYW00-PUAYW00	+X.00	Jul	AARIN00	
VGO 0.5-0.6%	+X.00	AAHNF00-AAHNF00	+X.00	Aug	AARIO00	
VGO 2% max	+X.00	AAHNI00-AAHNI00	+X.00	Sep	AARIP00	

Platts assesses to the middle of the loading/delivery window specified for each market. Backwardation and contango is factored into all assessments, whether cargoes or barges.

For instance, if a cargo were to trade at a fixed price of \$530.00/mt for 10-14 days forward, in a backwardated market where the daily value of the backwardation is 0.50/mt, then the assessment would need to reflect a value representative for the entire window (10-25 days forward) and not just the 10-14 day forward window. In this case, the assessment would have a range centered on the mean assessed value of \$527.25/mt, i.e. \$530.00 less 5.5 days of backwardation. The opposite could occur in a contango market. If a trade occurs at \$530.00/mt for a cargo loading 10-14 days forward and the market exhibits contango at the rate of \$0.50/mt per day then the assessment would be centered on \$532.75/mt.

FLOATING PRICE INDICATIONS

For any bid or offer made on a floating basis using Platts as the underlying, the standard is five day pricing around bill of lading, unless stated otherwise. In those cases where bids and offers are done Platts related using non-standard pricing days, Platts will then assess the proper underlying value for the dates expressed and add or subtract the differentials.

EMBEDDED OPTIONS

Platts overall objective is to reflect the transactable value of the commodity assessed. In cases where the apparent value of the commodity includes extra optionalities and the intrinsic value of the commodity is masked, Platts may use its editorial judgement to factor out such extraneous elements from the value of the commodity, or it may decide not to use the bid, offer or transaction in its assessment process.

Optionalities that typically mask the value of the commodity include loading or delivery options held by the buyer or seller, volume option tolerances exercisable by the buyer or seller or quality specifications among others.

For example, where a buyer bids on barges for full window dates rather than a 5-day window, Platts may consider the bid to contain more than usual optionality for the buyer and may disregard such bids in its assessments.

OPERATIONAL TOLERANCE

Platts issued a subscriber note in September 2005 stating that it is reviewing the standards used in Platts European oil products cargo assessments relating to operational tolerance, in light of continuing extreme price volatility in the market. Market

participants have raised several concerns over the potential risk in volatile markets associated with the current operational plus or minus 10% tolerance. Platts requested subscriber feedback on the current volume tolerances and comments on potential mechanisms that could be implemented to lower the operational tolerance or lower the financial risk associated with volume tolerances. While no immediate decision was taken, Platts is keeping the issue of operational tolerance under review.

LOADING/DELIVERY LOCATION

Cargoes—Unless otherwise stated, the CIF NWE cargo assessments reflect deliveries into ARA, basis Rotterdam and the CIF Med cargo assessments reflect a Genoa/Lavera basis. On the CIF, a normal range of charter options is considered. Where these have been defined, they are listed separately by product. The location basis of assessments FOB NWE and FOB Med vary by product.

Barges—Unless otherwise specified, loading for material covered by 'Barges FOB Rotterdam' assessments is assumed to be from refinery or storage in the Amsterdam, Rotterdam or Antwerp area. The assessment are basis Rotterdam except when stated otherwise. Other sources such as Flushing and Ghent may be considered in individual assessments where these are deemed relevant, but at a differential which may reflect freight differentials to Rotterdam or to related end-user markets such as Germany.

PARCEL SIZE

Cargoes: Platts seeks to reflect bids/offers and transactions typical of each of the markets it reflects. Because trading patterns vary over time, Platts defines the typical cargo sizes reflected under the individual assessments, but these may vary according to market conditions. Where a range of cargo sizes is considered, Platts will reflect typical cargo sizes prevailing in the market at the time of the assessment.

Barges: Typical barge size is 1,000-5,000mt, except for jet fuel where a range of 2,000-5,000 mt is reflected. On diesel and gasoil, a standard parcel size of 1,000-2,000 mt buyer's option is reflected. In all cases the smallest tradeable barge sets the assessment.

FREIGHT DIFFERENTIALS

Platts may take into account prevailing freight rate levels in establishing both FOB and CIF values. Where a market has become illiquid, Platts may routinely determine the FOB value from the CIF value. Where there is limited local demand but longer range arbitrage opportunities emerge, the FOB value may rise relative to the CIF value and may at times be assessed at parity or even above the CIF value.

In the past, Platts has tended to track broader freight trends over time to establish FOB/CIF relationships. Platts now actively assesses those relationships on a daily basis, and actively uses freight information published by Platts in the assessment of product values. Platts tanker publications Platts Clean Tankerwire and Platts Dirty Tankerwire now carry both worldscale and \$/mt freight assessments for clean products and fuel oil, which may be incorporated in assessments where appropriate.

SHIPPING

Platts typically reflects good quality modern tonnage in its freight assessments, and excludes from its CIF assessments any vessels which are outside the normal parameters of acceptability. Platts may take into account a variety of factors when establishing whether it will include bids or offers with specific shipping requirements or conditions in its assessments, such as the vessel's age and chartering history.

Platts considers in its CIF cargo assessments offers where the seller a) names the ship carrying the oil product, b) seller commits to meet 'normal' requirement by buyer, c) seller commits to have ship approved by at least three named majors which need to be stated, d) or commits to ship which will be approved by major selling, major buying, and second major named by buyer.

SWAPS

Bids and offers for Over the Counter derivative instruments such as swaps (also known as Contracts for Differences or CFDs) are subject to the same incrementability and repeatability standards applicable to the physical markets. Bids/offers should move up or down in increments not exceeding \$1/mt. Bids or offers submitted on a firm basis should be open for execution to the first reputable and creditworthy party of record. Bids and offers for paper instruments should be submitted no later than 16.15:00 London time. Changes to the bids and offers will be recognized up to 16.28:00 London time. Firm bids and offers automatically expire at 16.30:00 London time. Please note that the purpose of these time cut-offs and standards of incrementability and repeatability are primarily logistical, and designed to ensure orderly price discovery. As such, they may be changed at short notice if evolving market conditions require.

SEASONALITY

The switch in gasoline and diesel qualities from summer to winter grade and vice versa may have a significant impact on gasoline prices in Europe.

Platts generally announces a phase-in period for the summer and winter grades on cargoes and barges, in which the incoming seasonal grade is given an increasing weighting in the assessment.

For example, on gasoline, from April 1 2006, European gasoline markets traded summer grades of fuel. Platts reflected cargoes loading and discharging 10-25 days forward and barges loading 3-15 days forward. On March 7, the first day of the cargo window to pass April 1, Platts reflected 1 day of summer grade gasoline and 14 days of winter grade, with summer gaining increasing weighting in the assessment as each day passed. On March 22, as the last day of the cargo window passed April 1, only summer grades of fuel were reflected in the cargo assessment. The same weighting approach is applied to reflecting summer grades of gasoline in the barge market.

Each year, Platts publishes details of the timetable for including seasonal specifications in subscriber notes, an example of which is provided below:

GASOLINE AND DIESEL SUBSCRIBER NOTE: Platts proposes effective March 7 to start reflecting summer grades of gasoline and diesel on a pro-rated basis in the Northwest European and Mediterranean cargo assessments, with summer spec having an increasing weighting in the assessment towards March 22. Winter grades will continue to be taken into account until March 21, after which only summer spec will be reflected. Platts proposes effective March 17 to start reflecting summer grades of gasoline and diesel on a pro-rated basis in the ARA barge market, with summer spec having an increasing weighting until March 28. From March 29 summer will be fully reflected. For further details regarding the pro-rating system or any comments regarding the proposal please contact annalisa_jeffries@platts.com, simon_thorne@platts.com with a cc to peter_stewart@platts.com and jorge_montepeque@platts.com.

Because Platts aims to synchronise the transition in seasonal qualities in its assessments with market practice, Platts may revise these timeframes at short notice if market practice changes in this regard.

DATA CODES

Each Platts assessment is identified in the electronic databases by a 7-character data code. The following table provides the data codes for European oil product assessment carried in Platts European Marketscan. The table layout is based on the telex/newsletter version of Platts European Marketscan; when assessments are carried in related publications such as Platts Oilgram price Report or the regional marketscans, the actual layout may vary.

GASOLINE

European premium gasoline assessments reflect EN228 material. The maximum sulfur allowed in EN228 was reduced to 50 ppm from January 1, 2005. The aromatics limit was also reduced from 42 to 35 in the same timeframe. The tighter standards became mandatory within the EU from January 1, 2005 because of changes in EU regulations. The EU is targeting further reduction in the sulfur limits by 2009.

Detailed parameters for individual assessments are provided below.

SEASONALITY ISSUES ON GASOLINE

The switch in gasoline quality from summer to winter grade and vice versa may have a significant impact on gasoline prices in Europe. Platts typically has reflected winter spec material until April 1, after which summer grade only is reflected; similarly, Platts has reflected summer grade until October 1, after which winter grade only is reflected. In NWE and the Med, material up to 90 kPa is reflected in winter, and up to 60 kPa in summer.

Platts generally announces a phase-in period for the summer and winter grades on cargoes and barges, in which the incoming seasonal grade is given an increasing weighting in the assessment.

For example, from April 1 2006, European gasoline markets traded summer grades of fuel. Platts reflected cargoes loading and discharging 10-25 days forward and barges loading 3-15 days forward. On March 7, the first day of the cargo window to pass April 1, Platts reflected 1 day of summer grade gasoline and 14 days of winter grade, with summer gaining increasing weighting in the assessment as each day passed. On March 22, as the last day of the cargo window passed April 1, only summer grades of fuel were reflected in the cargo assessment. The same weighting approach is applied to reflecting summer grades of gasoline in the barge market.

Because Platts aims to synchronise the transition in seasonal qualities in its assessments with market practice, Platts may revise these timeframes at short notice if market practice changes in this regard.

AAOPX00 PREMIUM GASOLINE 50 PPM CARGOES CIF MED

Quality: The Mediterranean unleaded cargo assessments represent EN 228 95 RON meeting Italian, French, and Spanish specifications. The RON is 95 and the MON is 85. The specific gravity for Mediterranean assessments is 0.755 g/ml. Aromatics limit is 35 max.

Size: Cargo assessments reflect parcels of 25,000-30,000mt each.

Location: Assessment is CIF basis Genoa/Lavera with normal CP options within the Med.

Timing: Reflects material for delivery 10-25 days from date of publication, with prices normalized to the mid-point of this delivery window.

Other: N/A

Background: The 50 ppm assessment was introduced July 1, 2004.

Dispatch Category	EB
12 Char. Symbol	AAOPX0000000
9 Char. Symbol(s)	.
7 Char. Symbol	AAOPX00
Earliest Date	01-JUL-2004
Vendors	BLM CQI DRI EMS FTP FUT KR RTR SAR
Description	Prem Unl 50 PPM CIF Med

AAOPW00 PREMIUM GASOLINE 50 PPM CARGOES FOB MED

Quality: The Mediterranean unleaded cargo assessments represent EN 228 95 RON meeting Italian, French, and Spanish specifications. The RON is 95 and the MON is 85. The specific gravity for Mediterranean assessments is 0.755 g/ml. Aromatics limit is 35 max.

Size: Cargo assessments reflect parcels of 25,000-30,000mt each, though FOB cargoes of up to 33,000 mt may be considered when arbitrage opening mean these are a significant market factor.

Location: FOB basis Italy but with other origins considered in the assessment on the basis that neither buyer nor seller is disadvantaged by additional costs incurred if non-Italy origin.

Timing: Reflects material for loading 10-25 days from date of publication, with prices normalized to the mid-point of this delivery window.

Other: N/A

Background: The 50 ppm assessment was introduced July 1, 2004.

Dispatch Category	EB
12 Char. Symbol	AAOPW0000000
9 Char. Symbol(s)	.
7 Char. Symbol	AAOPW00
Earliest Date	01-JUL-2004
Vendors	BLM CQI DRI EMS FTP FUT KR RTR SAR
Description	Prem Unl 50 PPM FOB Med

AAIJ00 PREMIUM UNLEADED CARGOES CIF NWE

Quality: The NWE cargo assessments represent EN 228 95 RON material with a maximum sulfur content of 50 ppm and specific

gravity of 0.755 g/ml. The Motor Octane (MON) number is 85. Aromatics limit is 35 max.

Size: Effective November 1 Platts standardized cargo sizes reflected in its northwest European gasoline cargo assessments as follows: Premium gasoline 50 ppm CIF cargo assessment to reflect 10,000 metric tonnes +/- 10% operational tolerance, basis Thames with normal NWE charter party options. Before this, the standards encompassed a range of cargo sizes from 10,000-30,000 metric tonnes on both FOB and CIF.

Location: The assessment is CIF basis Rotterdam, with normal CP options within NWE

Timing: Reflects material for delivery 10-25 days from date of publication, with prices normalized to the mid-point of this delivery window.

Other: N/A

Background: Effective 2 January 2003, the assessment reflected 50ppm sulphur specification only. Before that date, 150 ppm sulfur material was reflected in the assessment.

Dispatch Category	EB
12 Char. Symbol	PRPPRUNWECEO
9 Char. Symbol(s)	.
7 Char. Symbol	PGABH00
Earliest Date	01-JUN-1992
Vendors	BLM CQI DRI EMS FTP FUT KR RTR SAR
Description	Prem Unl CIF NWE Cargoes

AAIJH00 PREMIUM GASOLINE 50 PPM CARGOES FOB NWE

Quality: The NWE cargo assessments represent EN 228 95 RON material with specific gravity of 0.755 g/ml. The Motor Octane (MON) number is 85. Aromatics limit is 35 max.

Size: Effective November 1 2005, Platts standardized cargo sizes reflected in its northwest European gasoline cargo assessments as follows: Premium gasoline 50 ppm FOB NWE assessments to reflect 30,000 metric tonnes +/- 10% operational tolerance, NWE basis Rotterdam, with material from other locations considered at differentials. Before this, the standards encompassed a range of cargo sizes from 10,000-30,000 metric tonnes on both FOB and CIF.

Location: FOB NWE. Typically the assessment is normalized to Rotterdam, but material from other origins is considered at differentials according to market conditions.

Timing: Reflects material for loading 10-25 days from date of publication, with prices normalized to the mid-point of this delivery window.

Other: Following a switch to non-oxygenated gasoline by US refiners from May 2006, the freight netback to the highest value export market is reflected as the floor for this assessment. Before

the legal situation on oxygenates in the US changed, the netback value from the US acted as a floor for the FOB NWE assessment (based on the freight netback to basis Rotterdam from New York Harbour using the NWE-USAC Worldscale freight rate published in Platts Clean tankerwire).

Background: Effective 2 January 2003, the assessment reflected 50ppm sulphur specification only. Before that date, 150 ppm sulfur material was reflected in the assessment.

Dispatch Category	EB
12 Char. Symbol	PRPPRUNWECEO
9 Char. Symbol(s)	.
7 Char. Symbol	PGABH00
Earliest Date	01-JUN-1992
Vendors	BLM CQI DRI EMS FTP FUT KR RTR SAR
Description	Prem Unl FOB NWE Cargoes

AAOPZ00 PREMIUM GASOLINE 10 PPM CARGOES CIF NWE

Quality: The NWE cargo assessments represent EN 228 95 RON material with a maximum sulfur of 10 ppm. Specific gravity is basis 0.755 g/ml. The Motor Octane (MON) number is 85. Aromatics limit is 35 max.

Size: Effective November 1, 2005, Platts standardized cargo sizes reflected in its northwest European gasoline cargo assessments as follows: Premium gasoline 10ppm CIF cargo assessment to reflect 10,000 metric tonnes +/- 10% operational tolerance, basis North Sea with normal NWE charter party options. Before this, the standards encompassed a range of cargo sizes from 10,000-30,000 metric tonnes on both FOB and CIF.

Location: The assessment is basis German North Sea with normal charter-party options within NWE.

Timing: Reflects material for delivery 10-25 days from date of publication, with prices normalized to the mid-point of this delivery window.

Other: N/A

Background: The assessment was introduced July 1, 2004.

Dispatch Category	EB
12 Char. Symbol	AAOPZ0000000
9 Char. Symbol(s)	.
7 Char. Symbol	AAOPZ00
Earliest Date	01-JUL-2004
Vendors	BLM CQI DRI EMS FTP FUT KR RTR SAR
Description	Prem Unl 10 PPM CIF ARA

AAOPY00 PREMIUM GASOLINE 10 PPM CARGOES FOB NWE

Quality: The NWE cargo assessments represent EN 228 95 RON

material with a maximum sulfur of 10 ppm. Specific gravity is basis 0.755 g/ml. The Motor Octane (MON) number is 85. Aromatics limit is 35 max.

Size: Effective November 1 Platts standardized cargo sizes reflected in its northwest European gasoline cargo assessments as follows: Premium gasoline 10ppm FOB NWE assessments to reflect 30,000 metric tonnes +/- 10% operational tolerance, NWE basis Rotterdam, with material from other locations considered at differentials. Before this, the standards encompassed a range of cargo sizes from 10,000-30,000 metric tonnes on both FOB and CIF.

Location: FOB NWE. Typically the assessment is normalized to Rotterdam, but material from other origins is considered at differentials according to market conditions.

Timing: Reflects material for loading 10-25 days from date of publication, with prices normalized to the mid-point of this delivery window.

Other: N/A

Background: The assessment was introduced July 1, 2004.

Dispatch Category	EB
12 Char. Symbol	AAOPY0000000
9 Char. Symbol(s)	.
7 Char. Symbol	AAOPY00
Earliest Date	01-JUL-2004
Vendors	BLM CQI DRI EMS FTP FUT KR RTR SAR
Description	Prem Unl 10 PPM FOB ARA

AAIJN00 REGULAR GASOLINE 50 PPM CARGOES CIF NWE

Note: Effective Jan 1 2007 Platts has proposed to discontinue the CIF NWE regular cargo assessment.

Quality: Assessments are based on specific gravity of 0.745 grams per liter; the RON is typically 91 and the MON 82.5. Aromatics limit is 35 max.

Size: Cargo assessments reflect parcels of 10,000-25,000mt each.

Location: The assessment is basis German North Sea with normal charter-party options within NWE.

Timing: Reflects material for delivery 10-25 days from date of publication, with prices normalized to the mid-point of this delivery window.

Other: Effective April 3, 2006 the CIF NWE regular unleaded gasoline cargo assessments has been based on a freight differential to the FOB NWE assessment using the cross-NWE freight assessments, published in Platts clean tanker wire. Prior to that date, the CIF NWE regular unleaded cargo assessment was calculated as a differential to 50ppm unleaded gasoline

assessments.

Background: Effective 2 January 2003, the assessment reflected 50ppm sulphur specification only.

Dispatch Category	EB
12 Char. Symbol	PRPGU\$NWEICIF
9 Char. Symbol(s)	.
7 Char. Symbol	PGACZ00
Earliest Date	08-FEB-1988
Vendors	BLM CQI DRI EMS FTP FUT KR RTR SAR
Description	Reg Unl CIF NWE Cargoes

AAIJL00 REGULAR GASOLINE 50 PPM CARGOES FOB NWE

Quality: Assessments are based on specific gravity of 0.745 grams per liter, the RON is typically 91 and the MON 82.5. Aromatics limit is 35 max.

Size: Cargo assessments reflect parcels of 10,000-25,000mt each.

Location: FOB NWE. Typically the assessment is normalized to Rotterdam, but material from other origins is considered at differentials according to market conditions.

Timing: Reflects material for loading 10-25 days from date of publication, with prices normalized to the mid-point of this delivery window.

Other: Effective April 3, 2006 Platts has assessed FOB NWE Regular unleaded gasoline cargoes with the US netback acting as floor to the assessment. The netback is calculated using differentials to M-grade gasoline in New York harbor. Prior to that date, the FOB NWE regular unleaded cargo assessment was calculated as a differential to 50ppm unleaded gasoline assessments.

Background: Effective 2 January 2003, the assessment reflected 50ppm sulphur specification only.

Dispatch Category	EB
12 Char. Symbol	PRPGU\$NWEICIF
9 Char. Symbol(s)	.
7 Char. Symbol	PGADA00
Earliest Date	01-JUN-1992
Vendors	BLM CQI DRI EMS FTP FUT KR RTR SAR
Description	Reg Unl FOB NWE Cargoes

AAKOD00 98 RON GASOLINE 10 PPM BARGES FOB ARA

Quality: The NWE barge assessments represent German grade with maximum sulfur 10 ppm, specific gravity of 0.755 g/ml and a maximum benzene content of 1%. The RON is 98 and the MON is 88. Aromatics limit is 35 max.

Size: Barge assessments reflect parcels of 1,000-5,000mt each.

Location: Gasoline barges are typically basis AR(Amsterdam/Rotterdam). Any transactions occurring at other loading ports in NWE (including Antwerp) are normalized to AR basis on an incremental freight differential basis into the main consuming area, which is typically Germany.

Timing: Reflects material for loading 3-15 (Monday-Tuesday) or 5-15 (Wednesday through Friday) days from date of publication, with prices normalized to the mid-point of this loading window.

Other: Because this assessment is illiquid, it is generally established through a differential to Prem Unl barges.

Background: Platts has made a number of changes in recent years in the maximum sulphur content in line with EU regulations on gasoline quality. Eff Jan 2 2002, Platts Unl 98 assessment reflected 50ppm sulfur material in line with prevailing market trends. Platts clarified that in 2001 the Unl 98 assessment already incorporated 50ppm as the traded grade in ARA. Platts introduced experimental 10ppm barge assessments for the above, effective 1 October to 31 December 2002 to run in tandem with 50ppm barge assessments. Unleaded 98 FOB Rotterdam barge assessments have reflected 10 ppm maximum sulfur effective 2 January 2003.

Dispatch Category	EB
12 Char. Symbol	PRPM9URTTBFO
9 Char. Symbol(s)	.
7 Char. Symbol	PGAMR00
Earliest Date	03-OCT-1994
Vendors	BLM CQI DRI EMS FTP FUT KR RTR SAR
Description	Unl 98 FOB R'dam Barges

PGABM00 PREMIUM GASOLINE 10 PPM BARGES FOB ARA

Quality: The barge assessments represent 95 RON, 85 MON German grade material with a specific gravity basis of 0.755 g/ml. The maximum sulfur is 10 ppm. Aromatics limit is 35 max.

Size: Barge assessments reflect parcels of 1,000-5,000mt each.

Location: Gasoline barges are typically basis AR(Amsterdam/Rotterdam). Any transactions occurring at other loading ports in NWE (including Antwerp) are normalized to AR basis on an incremental freight differential basis into the main consuming area, which is typically Germany.

Timing: Reflects material for loading 3-15 (Monday-Tuesday) or 5-15 (Wednesday through Friday) days from date of publication, with prices normalized to the mid-point of this loading window.

Other: The assessment has reflected 10 ppm maximum sulfur from January 2, 2003. Platts introduced experimental 10ppm barge assessments effective 1 October to 31 December 2002 to run in tandem with 50ppm barge assessments. Platts has made a

number of changes in recent years in the maximum sulphur content in line with EU regulations on gasoline quality. Platts introduced a 50ppm assessment for premium unleaded barges FOB Rotterdam as an experimental assessment effective 1 October 2001 to run until 31 December, 2001. The premium unleaded barge assessment became 50ppm on Jan 2, 2002.

Dispatch Category	EB
12 Char. Symbol	PRPPRURTTCEY
9 Char. Symbol(s)	.
7 Char. Symbol	PGABM00
Earliest Date	01-JUN-1992
Vendors	BLM CQI DRI EMS FTP FUT KR RTR SAR
Description	Prem Unl FOB R'dam Barges

AANWY00 PREMIUM GASOLINE 50 PPM BARGES FOB ARA

Quality: Assessments reflect Benelux spec material, and are based on specific gravity of 0.755 grams per liter, the RON is typically 95 and the MON 85. The assessment reflects a maximum sulfur of 50 ppm. Aromatics limit is 35 max.

Location: The 50ppm barge assessment reflects spot activity in the Amsterdam Rotterdam and Antwerp area, with the value normalized to Rotterdam basis.

Size: Barge assessments reflect parcels of 1,000-5,000mt each.

Timing: Reflects material for loading 3-15 (Monday-Tuesday) or 5-15 (Wednesday through Friday) days from date of publication, with prices normalized to the mid-point of this loading window.

Other: N/A

Background: The 50 ppm barge assessment was introduced April 1, 2004. Prior to that Platts had assessed the 50 ppm market as a differential to 10 ppm (see barge differential assessments below).

Dispatch Category	EB
12 Char. Symbol	AANWY0000000
9 Char. Symbol(s)	.
7 Char. Symbol	AANWY00
Earliest Date	01-APR-2004
Vendors	BLM CQI DRI EMS FTP FUT KR RTR SAR
Description	Prem Unl 50 PPM FOB AR

AAKOF00 REGULAR GASOLINE 10 PPM BARGES FOB ARA

Quality: Assessments are based on specific gravity of 0.745 grams per liter, the RON is typically 91 and the MON 82.5. The maximum sulfur is 10 ppm. Aromatics limit is 35 max.

Location: Gasoline barges are typically basis AR(Amsterdam/Rotterdam). Any transactions occurring at other loading ports in NWE (including Antwerp) are normalized to AR

basis on an incremental freight differential basis into the main consuming area, which is typically Germany.

Size: Barge assessments reflect parcels of 1,000-5,000mt each.

Timing: Reflects material for loading 3-15 (Monday-Tuesday) or 5-15 (Wednesday through Friday) days from date of publication, with prices normalized to the mid-point of this loading window.

Other: N/A

Background: The assessment has reflected 10 ppm maximum sulfur since 2 January 2003. Platts introduced experimental 10ppm barge assessments for the above, effective 1 October to 31 December 2002 to run in tandem with 50ppm barge assessments. Platts has made a number of changes in recent years in the maximum sulphur content in line with EU regulations on gasoline quality. Effective Jan 2, 2002, the sulfur content of the assessment for Regular Unleaded barges became 50ppm in line with premium unleaded. On 1 October 2001, Platts introduced the assessment for ultra low sulfur 50ppm regular unleaded barges as a separate experimental assessment to run until 31 December 2001, when the new quality was reflected in the main assessment.

Dispatch Category	EB
12 Char. Symbol	PRPGU\$RTTCIP
9 Char. Symbol(s)	.
7 Char. Symbol	PGADE00
Earliest Date	02-APR-1987
Vendors	BLM CQI DRI EMS FTP FUT KR RTR SAR
Description	Reg Unl FOB R'dam Barges

AALBJ00 GASOLINE BARGE QUALITY DIFFERENTIAL

Quality: The assessment reflects the differential between 10 ppm and 50 ppm material

Size: 1,000-5,000 mt parcels

Location: FOB ARA basis Rotterdam

Timing: 3-15 (Monday-Tuesday) or 5-15 (Wednesday through Friday) days from date of publication

Other: The mid-point of the differential is used to establish the value of the Prem 50 ppm assessment.

Background: Effective 2 January 2003, Platts introduced an assessment of the differential of prem unl 50ppm to prem unl 10ppm barges, basis FOB Rotterdam.

Note: Platts has proposed to discontinue the 50 vs 10ppm barge differential assesment, effective Jan 1 2005 and has invited feedback on this proposal.

Dispatch Category	EB
12 Char. Symbol	AALBJ0000000
9 Char. Symbol(s)	.
7 Char. Symbol	AALBJ00
Earliest Date	02-JAN-2003
Vendors	BLM CQI DRI EMS FTP FUT KR RTR SAR
Description	Barge Differential 50 PPM-10 PPM

PHAKZ00 MTBE BARGES

Quality: Platts quotes MTBE in Rotterdam complying with T2 (duty paid) status. In Northwest Europe, the quote is for product with a minimum purity of 98%, a maximum water content of 1,000 ppm and a maximum methanol content of 1.5% of the total weight.

Location: Northwest European assessments reflect sales made on an FOB Rotterdam basis, and no adjustments are made to reflect handling costs.

Size: The assessment reflects barges of 1,000-5,000 mt. Cargoes of a minimum 5,000 mt may be taken into account, with values netted back to a FOB Rotterdam basis. Smaller lots are only used as a guide in the absence of any deals. All FOB assessments are for product ex-refinery, ex-storage, and ex-terminal in the Rotterdam area. Aside from specific details listed above in Basis and Location, all other business concluded on the basis of FOB ARA or other northwest ports is used only as a guide.

Timing: Assessments for MTBE are 3-15 days forward.

Other: Daily MTBE assessments are published in European Marketscan and Platts Petrochemical Alert. The Friday daily assessments also appear in the Platts Europe & Americas regional editions of Platts Petrochemical Scan. Weekly Averages: Platts publishes weekly averages for daily MTBE assessments in Northwest Europe. These appear in Platts Europe & Americas Petrochemical Scan published on Fridays. These averages represent an arithmetic average of the daily assessments as published in Platts Petrochemical Alert.

Dispatch Category	EB
12 Char. Symbol	PCPMTBRTTANE
9 Char. Symbol(s)	PHYPRTA AH · PHYPRTAAL
7 Char. Symbol	PHAKZ00
Earliest Date	22-JUN-1992
Vendors	BLM CQI DRI EMS FTP FUT KR RTR SAR
Description	MTBE FOB AR MOC

AAYDT00 (FOB) ; AAYDS00 (CIF) ETHANOL (FUEL GRADE)

Basis and Locations: Prices are assessed daily on a FOB Rotterdam T2 (duty paid for European origin material) basis in Euro/cubic meters, and CIF NWE T1 (duty unpaid) basis in \$/cubic meter. Assessments reflect prices for loading Platts' barge dates (3-15 days forward Monday-Tuesday and 5-15 days forward Wednesday-Friday) for FOB Rotterdam T2 and 10-25 days forward from the date of publication for CIF NWE T1 cargoes.

Standard cargo size: Typical 1,000mt to 2,000mt for FOB Rotterdam T2 barges and minimum 3,000 mt for CIF NWE T1 cargoes. Conversion metric tons to cubic meters: 0.7925.

Product Purity Specification: Assessments are for anhydrous undenatured ethanol conforming with the European standard prEN 15376 specifications. These include:

- Minimum ethanol content + higher saturated alcohol: 98.7%
- Maximum higher saturated (C3-C5) mono-alcohol content: 2.0%
- Maximum water content by mass: 0.3%
- Maximum methanol content: 1.0%

NAPHTHA**PAAAL00 NAPHTHA CARGOES CIF NWE**

Quality: The CIF NWE cargo assessment reflects open spec material with a min 65 paraffin content and a typical specific gravity of 0.69 to 0.73 g/ml. Other qualities – for instance 70-min paraffins and pipe spec — may be taken into account when traded but these may command a premium or discount to cargoes fitting Platts' typical specifications. The assessment is always normalized to the open spec quality naphtha and any market indicator that fits those parameters overrides signals stemming from other quality cargoes. The premium or discount to be applied will be at the reporter's discretion, based on relevant market activity. Platts products assessments are based on merchantable grades. Bids/offers that exclude legitimate supply sources may be deemed restrictive and excluded from the assessment process. As an example, naphtha bids that exclude Tees as a supply source can not be taken into account for assessment purposes. Likewise, naphtha with larger than normal mercury levels may not be considered in the assessment process. The maximum mercury considered in the assessment is 5 parts per billion.

Size: The physical assessments reflect parcels of 12,500 mt +/- a maximum 10% operational tolerance, full or part-cargo. A cargo meeting these volume specifications meets the standard and overrides signals stemming from other cargo sizes. Specific volumes in the range 10,000-15,000 mt with a maximum 10% operational tolerance, full or part-cargo, may be considered in the assessment if any other clear indicators are lacking. Other

cargo sizes —for example 10-15,000 mt sellers' option or cargoes up to 30,000 mt may be taken into account when traded but these may command a premium or discount to cargoes fitting Platts' typical specifications. The premium or discount to be applied will be at the reporter's discretion, based on relevant market activity.

Location: CIF basis Rotterdam. Where part-cargoes are delivered CIF basis Rotterdam, it is assumed that the buyer should not be disadvantaged by the seller's decision to not deliver a full cargo. Therefore Platts will tend to reflect deals in which charter party and demurrage paid by the buyer is on a pro-rata basis to destinations in NWE, even when these are outside the ARA range.

Timing: Reflects material for delivery 10-25 days from date of publication, with prices normalized to the mid-point of this delivery window.

Effective June 15, 2005, Platts changed its naphtha CIF NWE cargo assessment process to consider bids, offers and transaction where seller has the obligation to nominate vessel three days prior to the first day of the delivery laycan. The editorial standard up to June 14 was to reflect the ship nomination 5 calendar days prior to the first day of the laycan. Platts will continue to reflect bids, offers and transactions made on a five day delivery window where the seller has the obligation to narrow down to a three day delivery window five days prior to the first day of the laycan. In addition, Platts will consider transactions where the expected quality and quantity of the cargo is disclosed 3 days prior to the first day of the delivery laycan with final quality and quantity is disclosed as soon as possible.

Other: Platts recognizes that certain companies have legal constraints that prevent them trading with certain counterparties, or taking material from certain origins. Platts will consider bids and offers under standard industry terms and conditions, including those which are consistent with national legislation, for instance for US companies which are unable to trade in materials of certain origin. Platts accepts bids and offers on either a fixed price or a floating (quotes-linked) basis. Platts may incorporate such quotes-linked indications in making its physical assessments, by adding spot differentials or discounts to the underlying swaps, normalized using the time gradient of the market. Fixed price and floating price indications will in general be normalized to reflect the midpoint of the loading/delivery ranges assessed.

Dispatch Category	EB
12 Char. Symbol	PRPNPHNWECQC
9 Char. Symbol(s)	PPNANEDDH · PPNANEDDL
7 Char. Symbol	PAAAL00
Earliest Date	19-NOV-1990
Vendors	BLM CQI DRI EMS FTP FUT KR RTR SAR
Description	Naphtha CIF NWE Physical

PAAAJ00 NAPHTHA PAPER CIF NWE

The assessment reflects swap market values for one month ahead

of publication. The rollover is on the first day of each month. Therefore on June 1, July swaps are quoted.

Background: In the past, the rollover was the first working day after the 25th of the month. Therefore, on Jan 26 the quoted month was moved from February to March.

Dispatch Category	EB
12 Char. Symbol	PRPNPHNWECPY
9 Char. Symbol(s)	PPNANEDAH · PPNANEDAL
7 Char. Symbol	PAAAJ00
Earliest Date	19-NOV-1990
Vendors	BLM CQI DRI EMS FTP FUT KR RTR SAR
Description	Naphtha CIF NWE Paper

PAAAH00 NAPHTHA CARGOES CIF MED

Quality: The cargo assessments include both full range and paraffinic grades, with prices normalized to reflect 65 min paraffins.

Size: 27,500 mt

Location: CIF basis Lavera.

Timing: Reflects material for delivery 10-25 days from date of publication, with prices normalized to the mid-point of this delivery window.

Other: The differential between the FOB Med and CIF Med naphtha assessment is evaluated using the freight value between Alexandria and Lavera. This is calculated using Platts cross-Med clean tanker assessments for 27,500 mt naphtha cargoes plus an allowance of \$3/mt for port costs. Adjustments to the freight cost are made on the first working day of January each year to reflect updated Worldscale flat rates as published by Worldscale. Effective Jan 3, 2006, the Worldscale flat rate used to calculate the CIF MED Naphtha assessment will become \$5.67 based on published freight values between Alexandria and Lavera using Platts cross-Med clean tanker naphtha assessments.

Background: Platts introduced the new methodology for the freight calculation on Jul 1, 2004. Before then, FOB values were assessed as a differential to the CIF Med assessment, but using the same freight calculation FOB/CIF. Effective Jan 2, 2001, the adjustment for superior tonnage was discontinued.

Dispatch Category	EB
12 Char. Symbol	PRPNPHGNACPU
9 Char. Symbol(s)	PPNAMGDCH · PPNAMGDCL
7 Char. Symbol	PAAAH00
Earliest Date	03-SEP-1979
Vendors	BLM CQI DRI EMS FTP FUT KR RTR SAR
Description	Naphtha CIF Med Cargoes

PAAAI00 NAPHTHA CARGOES FOB MED

Quality: The cargo assessments include both full range and paraffinic grades, with prices normalized to reflect 65 min paraffins.

Size: 27,500 mt

Location: FOB basis Alexandria.

Timing: Reflects material for loading 10-25 days from date of publication, with prices normalized to the mid-point of this delivery window.

Other: Effective Jan 3, 2006 the Worldscale basket flat rate used to calculate FOB Mediterranean naphtha is \$9.25. FOB Med naphtha is assessed as a freight differential to the CIF Northwest Europe assessment. The actual rate applied to the netback will fluctuate daily based on changes in Platts UKC-Med freight assessments for 27.5kt naphtha cargoes, applied against the \$9.25/mt rate.

Background: Platts introduced the new methodology for the freight calculation on Jul 1, 2004. Before then, FOB values were assessed as a differential to the CIF Med assessment, using the freight value between Alexandria and Lavera. This was calculated using Platts cross-Med clean tanker assessments for 27,500 mt naphtha cargoes plus an allowance of \$3/mt for port costs. _

Dispatch Category	EB
12 Char. Symbol	PRPNPHMEDCPW
9 Char. Symbol(s)	PPNAMISCH · PPNAMISCL
7 Char. Symbol	PAAAI00
Earliest Date	03-SEP-1979
Vendors	BLM CQI DRI EMS FTP FUT KR RTR SAR
Description	Naphtha FOB Med Cargoes

PAAAM00 NAPHTHA BARGES FOB ARA

Quality: Barge naphtha assessments notionally reflects open spec material, with prices normalized to reflect 65 min paraffins.

Size: Barge assessments notionally reflect parcels of 1,000-5,000mt each.

Location: FOB ARA basis Rotterdam.

Timing: Barge assessments reflect parcels for loading 3-15 (Monday-Tuesday) or 5-15 (Wednesday through Friday) days forward.

Other: Because of illiquidity in this market, the barge assessment is often made based on comparability with cargoes CIF NWE taking account of freight costs. Bids and offers may be considered on a case-by-case basis to determine if they are typical and repeatable.

Background: In the past, Platts has tended to reflect the most recent trade on barges, and has reflected this in the cargo-barge differential. Because this market is extremely illiquid, Platts now realigns the cargo-barge spread in line with prevailing freight rates on a daily basis.

Dispatch Category	EB
12 Char. Symbol	PRPNPHRTTCQE
9 Char. Symbol(s)	PPNARTSBH · PPNARTSBL
7 Char. Symbol	PAAAM00
Earliest Date	03-SEP-1979
Vendors	BLM CQI DRI EMS FTP FUT KR RTR SAR
Description	Naphtha FOB R'dam Barges

JET FUEL

PJAAU00 JET CARGOES CIF NWE

Quality: The assessments reflect standard commercial Jet-A1 specifications, as defined by UK Ministry of Defence in DEFSTAN 91/91 latest issue and the Joint Fueling System Checklist. The Joint Fueling System Checklist requires jet fuel to meet the more stringent requirements of Defstan 91 91 5 and the American Society for Testing & Materials', Standard Specification D 1655-04a. Typical DEFSTAN specifications under issue 5 are as follows: Sulfur is 0.3% maximum, specific gravity is 0.775-0.840 g/ml, flash point is 38 degrees C minimum, freeze point is minus 47 degrees C maximum.

Size: Cargo assessments reflect standard tradable parcels. Because of a change in the production and consumption patterns in Europe, spot parcels have become increasingly larger with typical spot trade within 25-45,000 mt with a standard emerging to around 30,000mt.. Platts takes into account spot deliveries made in full or part cargoes at seller's options. Typically the assessment is normalized to 30 kt full or part-cargo, seller's option, delivered basis a "par" port within NWE where the seller guarantees lay-time of 36 plus 6 hours to the buyer of each parcel. Full-cargo only bids will be considered restrictive.

Location: CIF NWE. Typically, cargoes delivered into ARA, UK and northern France are considered in the assessment but because trading patterns are diverse, no single base location is reflected. Deliveries into Scandinavia including Copenhagen are not considered, however. Offers are assumed to carry a normal range of CP options within NWE. Where an offer is made without CP options, it is regarded restrictive.

Timing: Reflects material for delivery 10-25 days from date of publication, with prices normalized to the mid-point of this delivery window.

Other: "Par" ports are typically considered to be those with flexibility to handle a variety of cargo sizes from MR to LR.

Offers or bids basis non-par ports may be considered in the assessment, but these will typically be normalized to the standard. Typical "par" ports within NWE include Fawley, Milford Haven, Shell Haven. Royal Portbury Docks is considered as par port in those situations when the seller absorbs the extra discharge costs and when offers/bids are made that do not penalize the counterparty based on tidal draft conditions. Le Havre is typically reflected at a slight discount to a "par" port as this port can receive very large cargoes that may not fit in other locations, while smaller ports with vessel-size restrictions such as Isle of Grain may be considered at a premium to the standard.

Background: DEFSTAN 91/91 was formerly referred to as DERD 2494. The UK Ministry of Defence has updated Defstan 91-91, the defining standard for Jet A1 in Europe, with the release Feb 8 of issue 5. Since Feb 8, 2005, Platts jet NWE and Mediterranean assessments have reflected issue 5 spec, having previously Platts reflected Defstan 91-91 issue 4 specification. Defstan 91/91 issue 4 was published June 14, 2002 and defined a sulfur limit of 0.3% maximum

Dispatch Category	EB
12 Char. Symbol	PRPJK\$NWECLS
9 Char. Symbol(s)	PPJKNEDCH · PPJKNEDCL
7 Char. Symbol	PJAAU00
Earliest Date	03-SEP-1979
Vendors	BLM CQI DRI EMS FTP FUT KR RTR SAR
Description	Jet Kero CIF NWE Cargoes

PJAAV00 JET CARGOES FOB NWE

Quality: The assessments reflect standard commercial Jet-A1 specifications, as defined by UK Ministry of Defence in DEFSTAN 91/91 latest issue and the Joint Fueling System Checklist. The Joint Fueling System Checklist requires jet fuel to meet the more stringent requirements of Defstan 91 91 5 and the American Society for Testing & Materials', Standard Specification D 1655-04a. Typical DEFSTAN specifications under issue 5 are as follows: Sulfur is 0.3% maximum, specific gravity is 0.775-0.840 g/ml, flash point is 38 degrees C minimum, freeze point is minus 47 degrees C maximum.

Timing: Cargo assessments reflect parcels loading or delivered 10-25 days forward.

Size: Cargo assessments reflect standard tradable parcels. Because of a change in the production and consumption patterns in Europe, spot parcels have become increasingly larger with typical spot trade within 25-45,000 mt. Platts will also take into account spot deliveries made in full or part cargoes.

Location: FOB NWE.

Timing: Reflects material for loading 10-25 days from date of publication, with prices normalized to the mid-point of this delivery window.

Other: The FOB NWE assessment is typically derived from the CIF value based on a freight differential representing freight costs for handy size vessels on typical routes within NWE.. Platts uses the \$/mt for cross UK Cont vessels carried in Platts Clean Tankerwire, rounded to the nearest \$0.25/mt.

Background: DEFSTAN 91/91 was formerly referred to as DERD 2494. The UK Ministry of Defence has updated Defstan 91-91, the defining standard for Jet A1 in Europe, with the release Feb 8 of issue 5. Since Feb 8, 2005, Platts jet NWE and Mediterranean assessments have reflected issue 5 spec, having previously Platts reflected Defstan 91-91 issue 4 specification. Defstan 91/91 issue 4 was published June 14, 2002 and defined a sulfur limit of 0.3% maximum

Dispatch Category	EB
12 Char. Symbol	PRPJK\$NWECLU
9 Char. Symbol(s)	PPJKNESCH · PPJKNESCL
7 Char. Symbol	PJAAV00
Earliest Date	01-JUL-1986
Vendors	BLM CQI DRI EMS FTP FUT KR RTR SAR
Description	Jet Kero FOB NWE Cargoes

PJABA00 JET BARGES FOB ARA

Quality: The assessments reflect standard commercial Jet-A1 specifications, as defined by UK Ministry of Defence in DEFSTAN 91/91 latest issue. The UK Ministry of Defence has updated Defstan 91-91, the defining standard for Jet A1 in Europe, with the release Feb 8 of issue 5. Since Feb 8, Platts jet NWE and Mediterranean assessments have reflected issue 5 spec, having previously Platts reflected Defstan 91-91 issue 4 specification. Typical DEFSTAN specifications under issue 5 are as follows: Sulfur is 0.3% maximum, specific gravity is 0.775-0.840 g/ml, flash point is 38 degrees C minimum, freeze point is minus 47 degrees C maximum.

Size: Barge assessments reflect parcels of 2,000-5,000mt each. Parcels of 1,000 mt are not considered in the assessment.

Location: Jet barges are basis FOB Rotterdam. Any transactions occurring at other loading ports in NWE are typically normalized on a freight differential basis back to Rotterdam. Platts considers bids and offers from Rotterdam, Antwerp, Amsterdam, Ghent and Flushing.

Timing: Reflects material for loading 3-15 (Monday-Tuesday) or 5-15 (Wednesday through Friday) days from date of publication, with prices normalized to the mid-point of this loading window.

Other: N/A

Background: DEFSTAN 91/91 was formerly referred to as DERD 2494. The UK Ministry of Defence has updated Defstan 91-91, the defining standard for Jet A1 in Europe, with the release Feb 8

of issue 5. Since Feb 8, 2005, Platts jet NWE and Mediterranean assessments have reflected issue 5 spec, having previously Platts reflected Defstan 91-91 issue 4 specification. Defstan 91/91 issue 4 was published June 14, 2002 and defined a sulfur limit of 0.3% maximum

Dispatch Category	EB
12 Char. Symbol	PRPJK\$RTTCMC
9 Char. Symbol(s)	PPJKRTSBH · PPJKRTSBL
7 Char. Symbol	PJABA00
Earliest Date	03-SEP-1979
Vendors	BLM CQI DRI EMS FTP FUT KR RTR SAR
Description	Jet FOB R'dam Barges

AAIDL00 JET FUEL FOB MED

Quality: The assessments reflect standard commercial Jet-A1 specifications, as defined by UK Ministry of Defence in DEFSTAN 91/91 latest issue and the Joint Fueling System Checklist. The Joint Fueling System Checklist requires jet fuel to meet the more stringent requirements of Defstan 91 91 5 and the American Society for Testing & Materials', Standard Specification D 1655-04a. Typical DEFSTAN specifications under issue 5 are as follows: Sulfur is 0.3% maximum, specific gravity is 0.775-0.840 g/ml, flash point is 38 degrees C minimum, freeze point is minus 47 degrees C maximum.

Size: 27.5 kt.

Location: FOB Med basis Augusta

Timing: Reflects material for delivery 10-25 days from date of publication, with prices normalized to the mid-point of this delivery window.

Other: Details of the calculation methodology for Jet Fuel FOB Med are as follows: The calculation takes the spot Worldscale rate as published in Platts Marine Alert and Platts Clean Tankerwire, for jet fuel Med-Northwest Europe pro-rated from 30kt to 27.5kt. This total is multiplied by the flat rate Augusta-Rotterdam as defined by Worldscale, and the appropriate allowance for harbor dues at Rotterdam is then added. The result of this formula is rounded to the nearest \$0.25/mt and subtracted from the mean of the CIF Northwest European jet assessment, to define the FOB Med mean. The spread low to high on the FOB Med is set \$0.50/mt either side of this mean.

Platts Marine Department assess the worldscale rate for jet cargoes for the route Med-Northwest Europe. The rate has been published on a daily basis in Platts Marine Alert and in the daily Clean Tankerwire, effective Nov 1, 2001. This rate is applied to determine the netback calculation of the FOB Mediterranean Jet Aviation Fuel assessment.

Adjustments to the formula are made on the first working day of January each year to reflect updated Worldscale flat rates as

published by Worldscale.

Effective Jan 3, 2006 the Worldscale flat rate Augusta-Rotterdam used to calculate the netback formula for FOB Med jet fuel became \$7.24/mt.

Background: DEFSTAN 91/91 was formerly referred to as DERD 2494. The UK Ministry of Defence has updated Defstan 91-91, the defining standard for Jet A1 in Europe, with the release Feb 8 of issue 5. Since Feb 8, 2005, Platts jet NWE and Mediterranean assessments have reflected issue 5 spec, having previously Platts reflected Defstan 91-91 issue 4 specification. Defstan 91/91 issue 4 was published June 14, 2002 and defined a sulfur limit of 0.3% maximum

Effective Nov 1, 2001, Platts introduced a new FOB Mediterranean assessment entitled Jet Aviation Fuel. The Jet Aviation Fuel assessment was published at the bottom of the Mediterranean spot assessments table until April 30, 2003, after which it replaced Jet Fob Med in the main table. The Jet Av Fuel FOB Med assessment resulted from a proposal issued in June 2001 to more accurately reflect the cost of marine freight between the Med and NWE.

Dispatch Category	EB
12 Char. Symbol	AAIDL0000000
9 Char. Symbol(s)	.
7 Char. Symbol	AAIDL00
Earliest Date	01-NOV-2001
Vendors	BLM CQI DRI EMS FTP FUT KR RTR SAR
Description	AvJet Fuel FOB Med

AAIDN00 MED JET FOB MED PREMIUM ASSESSMENT

Quality: The assessments reflect standard commercial Jet-A1 specifications, as defined by UK Ministry of Defence in DEFSTAN 91/91 latest issue and the Joint Fueling System Checklist. The Joint Fueling System Checklist requires jet fuel to meet the more stringent requirements of Defstan 91 91 5 and the American Society for Testing & Materials', Standard Specification D 1655-04a. Typical DEFSTAN specifications under issue 5 are as follows: Sulfur is 0.3% maximum, specific gravity is 0.775-0.840 g/ml, flash point is 38 degrees C minimum, freeze point is minus 47 degrees C maximum.

Size: Cargo assessments reflect standard tradable parcels on MR size vessels.

Location: basis FOB Italy. Jet fuel from a wide geographic area bounded approximately by North Africa, Greece and Spain may form the basis of the assessment, with freight differentials applied to ensure consistency.

Timing: Reflects material for delivery 10-25 days from date of publication, with prices normalized to the mid-point of this delivery window.

Other: In line with Jet Fuel Subscriber Notes published in October and November 2001, Platts from Jan 2 2002 to Dec 31 2002 published an assessment to reflect the premium paid on a spot basis to FOB Med jet. From Jan 2 2003, the Platts premium assessment has reflected the premium paid to the Jet Aviation Fuel assessment. The premium assessed is for jet fuel cargoes meeting normal aviation fuel requirements. Platts clarified that the FOB Med jet premium is a separate assessment, and the premium will not be included in the formula used to calculate Jet Aviation Fuel.

Background: DEFSTAN 91/91 was formerly referred to as DERD 2494. The UK Ministry of Defence has updated Defstan 91-91, the defining standard for Jet A1 in Europe, with the release Feb 8 of issue 5. Since Feb 8, 2005, Platts jet NWE and Mediterranean assessments have reflected issue 5 spec, having previously Platts reflected Defstan 91-91 issue 4 specification. Defstan 91/91 issue 4 was published June 14, 2002 and defined a sulfur limit of 0.3% maximum

Dispatch Category	EB
12 Char. Symbol	AAIDN0000000
9 Char. Symbol(s)	.
7 Char. Symbol	AAIDN00
Earliest Date	02-JAN-2002
Vendors	BLM CQI DRI EMS FTP FUT KR RTR SAR
Description	FOB Med Jet Prem Cargo

ULSD

Seasonal changes: Platts set out its schedule for changing the seasonal specification of diesel fuels in early spring and late summer, ahead of the switch from winter to summer and then summer to winter grades. Platts intends to follow broadly similar schedules each year, but the exact dates may be varied in line with prevailing patterns of refining activity and trading liquidity. As trading and seasonal patterns change from year to year, any schedule is provisional and subject to change with only limited notice.

AAKWP00 DIESEL 10 PPM CIF NWE

Quality: The ULSD 10 ppm CIF NWE assessment reflects German and UK quality diesel fuel with a maximum sulfur of 10 ppm normalized to reflect German quality diesel fuel. German and UK specs reflect a reference density of 0.845 g/l.

Size: Typical cargo sizes of 10-20,000 mt are reflected. Platts currently normalizes to reflect the smaller end of the range of parcel-sizes as this is the prevailing cargo size traded at present. Platts monitors changes in shipping practices to ensure its assessments are in line with shipping logistics.

Location: The CIF assessment reflects German North Sea delivery basis Hamburg with normal CP options within NWE calculated pro rata at cost.

Timing: Reflects material for delivery 10-25 days from date of publication, with prices normalized to the mid-point of this delivery window.

Other: N/A

Background: Platts started the CIF NWE 10ppm cargo assessment effective December 1, 2002.

Note: For typical qualities traded in individual countries, see attached table.

Dispatch Category	EB
12 Char. Symbol	AAKWP0000000
9 Char. Symbol(s)	.
7 Char. Symbol	AAKWP00
Earliest Date	02-DEC-2002
Vendors	BLM CQI DRI EMS FTP FUT KR RTR SAR
Description	Gsl ULSD 10 PPM CIF NWE Crg

AAKWR00 DIESEL 10 PPM FOB NWE

Quality: The ULSD 10 ppm CIF NWE assessment reflects German and UK quality diesel fuel with a maximum sulfur of 10 ppm normalized to reflect German quality diesel fuel. German and UK specs reflect a reference density of 0.845 g/l.

Size: Typical cargo sizes of 10-20,000 mt are reflected. Platts currently normalizes to reflect the smaller end of the range of parcel-sizes as this is the prevailing cargo size traded at present. Platts monitors changes in shipping practices to ensure its assessments are in line with shipping logistics.

Location: FOB NWE. Typically the FOB assessment is derived at a freight differential to the CIF assessment, based on the following routes: Wilhelmshaven, Porvoo, Tees, Slagen, Klaipeda, Ventspils and Antwerp.

Timing: Reflects material for delivery 10-25 days from date of publication, with prices normalized to the mid-point of this delivery window.

Other: Effective Jan 2, 2008 the Worldscale basket flat rate used to calculate the FOB NWE diesel 10ppm assessment is \$5.35/mt. The assessment is typically based on a freight differential to the CIF NWE assessments. The actual freights applied to the netback fluctuate daily based on changes in Platts cross UKC-UKC assessments in the Clean Tankerwire, applied against the respective 2008 flat rates.

Background: Platts started the FOB NWE 10ppm cargo assessment effective December 1, 2002.

Dispatch Category	EB
12 Char. Symbol	AAKWR0000000
9 Char. Symbol(s)	.
7 Char. Symbol	AAKWR00
Earliest Date	02-DEC-2002
Vendors	BLM CQI DRI EMS FTP FUT KR RTR SAR
Description	Gsl ULSD 10 PPM FOB NEW Crg

AAVBG00 ULSD 10 PPM CIF NWE

Quality: The assessment reflects material with a flash point of 60 degrees with seasonality and cold properties congruent with the UK market. Bids, offers and transactions for other 10ppm grades into typical CIF NWE locations will be considered in the assessment process and normalized to the base assessment.

Size: Typical cargo sizes of 10-20,000 mt are reflected. Platts currently normalizes to reflect 12,500 mt size. Platts monitors changes in shipping practices to ensure its assessments are in line with shipping logistics.

Location: The CIF assessment reflects Amsterdam-Rotterdam-Antwerp delivery basis with typical charter party options, including the German North Sea, the German Baltic Sea, ARA, Poland, the East Coast and the South Coast of the UK. West Coast UK charter party options may not be unreasonably withheld.

Timing: Reflects material for delivery 10-25 days from date of publication, with prices normalized to the mid-point of this delivery window.

Other: N/A

Background: Platts started the CIF NWE 10ppm cargo assessment effective November 1, 2007.

Dispatch Category	EB
12 Char. Symbol	AAVBG0000000
9 Char. Symbol(s)	•
7 Char. Symbol	AAVBG00
Earliest Date	01-NOV-200&
Vendors	BLM CQI DRI EMS FTP FUT KR PL12 RTR SAR
Description	ULSD 10ppm CIF NWE

Platts also launched on November 1, 2007 a 10ppm UK diesel index based on a freight differential from CIF NWE ULSD to typical UK ports. For further information please check the following link:
<http://www.platts.com/Oil/Resources/Market%20Issues/ulsd.pdf?S=n>

AAIK000 DIESEL 50 PPM UK CARGOES CIF NWE

Quality: The ULSD CIF NWE assessment reflects UK spec diesel fuel which currently has a maximum sulfur of 50 ppm. UK spec ULSD ranges from 0.82-0.835 g/l and the assessment reflects a reference density of 0.835 g/l.

Size: Typical cargo sizes of 10-20,000 mt are reflected. Platts currently normalizes to reflect the smaller end of the range of parcel-sizes as this is the prevailing cargo size traded at present. Platts monitors changes in shipping practices to ensure its assessments are in line with shipping logistics.

Location: The CIF assessment reflects UK east coast delivery basis Thames with normal UK delivery options.

Timing: Reflects material for delivery 10-25 days from date of publication, with prices normalized to the mid-point of this delivery window.

Other: N/A

Background: The assessment was introduced February 1, 2002 and originally represented a high-low range including Dutch/German and UK spec ULSD. Platts stated when it introduced the assessment that the qualities reflected would be reviewed in the light of prevailing liquidity patterns. The switch to UK spec followed Germany's move to 10 ppm sulphur diesel. In response to UK road fuel legislation, effective March 31, 2008, Platts proposes to discontinue the existing CIF diesel 50ppm UK cargo assessments.

Dispatch Category	EB
12 Char. Symbol	AAIKO0000000
9 Char. Symbol(s)	.
7 Char. Symbol	AAIKO00
Earliest Date	01-FEB-2002
Vendors	BLM CQI DRI EMS FTP FUT KR RTR SAR
Description	ULSD CIF NWE Cargo \$/Mt

AAIKM00 DIESEL 50 PPM UK CARGOES FOB NWE

Quality: The ULSD FOB NWE assessment reflects UK spec diesel fuel which currently has a maximum sulfur of 50 ppm. UK spec ULSD ranges from 0.2-0.835 g/l and the assessments reflect a reference density of 0.835 g/l.

Size: Typical cargo sizes of 10-20,000 mt are reflected. Platts monitors changes in shipping practices to ensure its assessments are in line with shipping logistics.

Location: FOB NWE. Typically the FOB assessment is derived at a freight differential to the CIF assessment, based on the following routes: Wilhelmshaven, Porvoo, Tees, Slagen, Klaipeda, Ventspils and Antwerp.

Timing: Reflects material for loading 10-25 days from date of publication, with prices normalized to the mid-point of this

delivery window.

Other: Effective Jan 2, 2008 the Worldscale basket flat rate used to calculate the FOB NWE diesel 50ppm UK assessment is \$5.85/mt. The assessment is typically based on a freight differential to the CIF NEW assessments. The actual freights applied to the netback fluctuate daily based on changes in Platts cross UKC-UKC assessments in the Clean Tankerwire for 22,000 mt cargoes, applied against the respective 2008 flat rates.

Background: The assessment was introduced February 1, 2002 and originally represented a high-low range including Dutch/German and UK spec ULSD. Platts stated when it introduced the assessment that the qualities reflected would be reviewed in the light of prevailing liquidity patterns. The switch to UK spec followed Germany's move to 10 ppm sulphur diesel. In response to UK road fuel legislation, effective March 31, 2008, Platts proposes to discontinue the existing FOB diesel 50ppm UK cargo assessments.

Dispatch Category	EB
12 Char. Symbol	AAIKM0000000
9 Char. Symbol(s)	.
7 Char. Symbol	AAIKM00
Earliest Date	01-FEB-2002
Vendors	BLM CQI DRI EMS FTP FUT KR RTR SAR
Description	ULSD FOB NWE Cargo \$/Mt

AAOQB00 DIESEL 50 PPM CARGOES CIF NWE

Quality: The 50 ppm ULSD CIF NWE assessment reflects Benelux and French quality diesel fuel with a maximum sulfur of 50 ppm and SG in the range 0.82-0.845. The reference density is 0.845 g/l.

Size: Typical cargo sizes of 10-25,000 mt are reflected. Platts currently normalizes to reflect the standard flexi volume of 20,000 mt as this is the prevailing cargo size at present.

Location: The CIF assessment is basis Havre with normal charter party options in the Hamburg to Bordeaux and North Spain range.

Timing: Reflects material for delivery 10-25 days from date of publication, with prices normalized to the mid-point of this delivery window.

Other: N/A

Background: Platts introduced the 50 ppm ULSD assessments reflecting Benelux and French quality on July 1, 2004. which has run concurrently with the ULSD assessments reflecting UK spec.

Dispatch Category	EB
12 Char. Symbol	AAOQB00000000
9 Char. Symbol(s)	.
7 Char. Symbol	AAOQB00

Earliest Date 01-JUL-2004
 Vendors BLM CQI DRI EMS FTP FUT KR RTR SAR
 Description ULSD 50 PPM CIF ARA

AAOQA00 DIESEL 50 PPM CARGOES FOB NWE

Quality: The 50 ppm ULSD FOB NWE assessment reflects Benelux and French quality diesel fuel with a maximum sulfur of 50 ppm and SG in the range 0.82-0.845. The reference density is 0.845 g/l.

Size: Typical cargo sizes of 10-25,000 mt are reflected. Platts currently normalizes to reflect the standard flexi volume of 20,000 mt as this is the prevailing cargo size at present.

Location: FOB NWE. Typically the FOB assessment is derived at a freight differential to the CIF assessment, based on the following routes: ARA, Klaipeda, Wilhemshaven, Ventspils.

Timing: Reflects material for delivery 10-25 days from date of publication, with prices normalized to the mid-point of this delivery window.

Other: Effective Jan 2, 2008 the Worldscale basketflat rate used to calculate the FOB NWE diesel 50ppm assessment is \$6.63/mt. The assessment is typically based on a freight differential to the CIF NWE assessments. The actual freights applied to the netback fluctuate daily based on changes in Platts cross UKC-UKC assessments in the Clean Tankerwire for 22,000 mt cargoes, applied against the respective 2008 flat rates.

Background: Platts introduced the 50 ppm ULSD assessments reflecting Benelux and French quality on July 1, 2004. This assessment has run concurrently with the ULSD assessments reflecting UK spec.

Dispatch Category EB
 12 Char. Symbol AAOQA0000000
 9 Char. Symbol(s) ·
 7 Char. Symbol AAOQA00
 Earliest Date 01-JUL-2004
 Vendors BLM CQI DRI EMS FTP FUT KR RTR SAR
 Description ULSD 50 PPM FOB ARA

AAOQD00 50 PPM ULSD CIF MED CARGOES

Quality: The Mediterranean 50 ppm ULSD CIF assessment typically reflects French spec diesel but other grades such as Italian and Spanish may be considered.

Size: Cargo assessments reflect parcels of 25,000-30,000mt each.

Location: CIF assessment is calculated basis Lavera, with normal

CP options within the Med considered.

Timing: Reflects material for delivery 10-25 days from date of publication, with prices normalized to the mid-point of this delivery window.

Other: N/A

Background: The assessment was introduced on July 1, 2004

Dispatch Category EB
 12 Char. Symbol AAOQD00000000
 9 Char. Symbol(s) ·
 7 Char. Symbol AAOQD00
 Earliest Date 01-JUL-2004
 Vendors BLM CQI DRI EMS FTP FUT KR RTR SAR
 Description ULSD 50 PPM CIF Med

AAOQC00 50 PPM ULSD FOB MED CARGOES

Quality: The Mediterranean 50 ppm ULSD FOB assessment typically reflects French spec diesel but other grades such as Italian and Spanish may be considered.

Size: Cargo assessments reflect parcels of 25,000-30,000mt each.

Location: FOB Med (see freight calculation below).

Timing: Reflects material for loading 10-25 days from date of publication, with prices normalized to the mid-point of this delivery window.

Other: The FOB assessment is calculated as a freight netback from the CIF value, using a Worldscale rate published in Platts Clean Tankerwire and a basket of flat rates including typical routes in the Mediterranean from Genoa and Lavera: Santa, Aliaga, Aghio, Batumi. Effective January 2, 2008 the Worldscale basket flat rate used to calculate FOB Med diesel 50ppm assessment is \$6.60. FOB Med ULSD is assessed as a freight differential to the CIF Med diesel 50ppm. The actual freight applied to the netback will fluctuate daily based on changes in Platts Med-Med assessments in the Clean Tankerwire for 30,000 mt cargoes applied against the respective 2008 flat rates.

Background: The assessment was introduced on July 1, 2004

Dispatch Category EB
 12 Char. Symbol AAOQC00000000
 9 Char. Symbol(s) ·
 7 Char. Symbol AAOQC00
 Earliest Date 01-JUL-2004
 Vendors BLM CQI DRI EMS FTP FUT KR RTR SAR
 Description ULSD 50 PPM FOB Med

EN590 barges FOB Rotterdam (assessment discontinued April 1, 2003)

AAJUS00 DIESEL 10 PPM BARGES

Quality: The assessment reflects German spec diesel with a maximum sulfur content of 10 ppm. The typical density is basis 0.845 g/ml (actual SG ranges from 0.82 to 0.845 g/ml)

Size: Platts increased the minimum assessable barge volume from 1,000mt to a range of 1,000-2,000mt where the buyer has the option to choose the actual volume. However, the buyer has the obligation to specify the actual volume at the time of the deal. Platts will continue to include in the assessment process transactions of up to 5,000mt.

Location: FOB basis Rotterdam. Other load ports are typically normalized on an incremental freight differential basis. i.e. if the barge is loading from Antwerp, the freight differential from Antwerp to Germany against the freight differential from Rotterdam to Germany would generally be applied.

Timing: Barge assessments reflect parcels for loading 3-15 (Monday-Tuesday) or 5-15 (Wednesday through Friday) days forward, with prices normalized to the midpoint of these loading ranges.

Other: Effective August 1 Platts started to define non-intentionally blended trace elements of biodiesel in hydrocarbon diesel assessments as diesel with a maximum biodiesel content of no more than 0.30%. This is in line with the current technology for repeatable testing the bio-content of hydrocarbon diesel and is also in line with analysis following the Platts biodiesel web forum held on June 25, 2007.

Background: Platts started the 10ppm FOB ARA gasoil barge assessment reflecting German spec material from October 1, 2002, to run in tandem with the existing 50 ppm ULSD barge assessment.

Dispatch Category	EB
12 Char. Symbol	AAJUS0000000
9 Char. Symbol(s)	.
7 Char. Symbol	AAJUS00
Earliest Date	01-OCT-2002
Vendors	BLM CQI DRI EMS FTP FUT KR RTR SAR
Description	Gasoil 10 PPM FOB NWE Brg

AAGMK00 DIESEL 50 PPM BARGES

Quality: The assessment reflects qualities of diesel fuel typically traded in the Benelux region. The typical density is basis 0.845 g/ml (actual SG ranges from 0.82 to 0.845 g/ml) and the maximum sulfur is 50 ppm.

Size: Platts increased the minimum assessable barge volume from 1,000mt to a range of 1,000-2,000mt where the buyer has the option to choose the actual volume. However, the buyer has

the obligation to specify the actual volume at the time of the deal. Platts will continue to include in the assessment process transactions of up to 5,000mt.

Location: FOB ARA basis Antwerp.

Timing: Barge assessments reflect parcels for loading 3-15 (Monday-Tuesday) or 5-15 (Wednesday through Friday) days forward, with prices normalized to the midpoint of these loading ranges.

Other: N/A

Background: Platts 50 ppm sulfur ULSD FOB barges in the ARA region are assessed basis Antwerp. In 2005, Dutch consumption switched from 50 ppm sulfur to 10 ppm sulfur. This switch prompted a change in the typical pattern of barge trade from basis Rotterdam to basis Antwerp. Transactions occurring at other loading ports in NWE are typically normalized on a freight differential basis back to Antwerp.

Platts introduced the assessment for 50ppm sulfur Ultra Low Sulfur Diesel barges FOB Rotterdam on Apr 2, 2001, using Netherlands spec as the base grade. The ULSD barge assessment incorporated German spec ULSD from Oct 15, 2001. From October 1 2002 Platts started a new 10ppm FOB ARA gasoil barge assessment reflecting German spec material, to run in tandem with the 50 ppm ULSD barge assessment, and the ULSD assessment reverted to qualities typical of Benelux.

Following subscriber feedback and due to declining liquidity in the 50ppm diesel barge market following specification changes in Belgium, Platts will discontinue the European FOB Diesel 50 ppm barge assessment from Jan 1, 2008.

Dispatch Category	EB
12 Char. Symbol	AAGMK00000000
9 Char. Symbol(s)	.
7 Char. Symbol	AAGMK00
Earliest Date	02-APR-2001
Vendors	BLM CQI DRI EMS FTP FUT KR RTR SAR
Description	Gasoil ULSD R'dam Brg

AAWGY00 BIODIESEL FOB ARA

Quality: The quality reflected will be EN 14214 that meets minus 10 degree Celsius cold properties throughout the year. Biodiesel blended with any non-bio additives will not be included in the assessment. The assessment will be for 99.9% biodiesel, and would exclude tax refunds or other rebates.

Size: The assessment will reflect barges of 1,000-5,000 mt.

Location: FOB ARA basis Rotterdam.

Timing: Loading 5-15 days from date of publication with prices normalized to the mid-point of this range.

Other: N/A

Dispatch Category	EB
12 Char. Symbol	AAWGY0000000
9 Char. Symbol(s)	.
7 Char. Symbol	AAWGY00
Earliest Date	02-JAN-2007
Vendors	BLM CQI DRI EMS FTP FUT KR RTR SAR
Description	Biodsl Rdam Brg

AAXQL00 FAME 0 FOB ARA

Quality: The quality reflected will be fatty acid methyl ester that conforms to EN 14214 with cold properties set at 0 degrees Celsius year round. Biodiesel blended with any non-bio additives will not be included in the assessment. The assessment will be for 99.9% biodiesel, and would exclude tax refunds or other rebates.

Size: The assessment reflects barges of 1,000-5,000 mt.

Location: FOB ARA basis Rotterdam.

Timing: Loading 5-15 days from date of publication with prices normalized to the mid-point of this range.

Other: N/A

Dispatch	Category EB
12 Char. Symbol	AAXQL0000000
9 Char. Symbol(s)	•
7 Char. Symbol	AAXQL00
Earliest Date	01-MAY-2007
Vendors	BLM CQI DRI EMS FTP FUT KR PL12 RTR SAR
Description	FAME 0 FOB Rdam

GASOIL

NOTE: European NWE gasoil assessments currently reflect 0.2% and 0.1% maximum sulfur. European Union directives aim to reduce the sulfur in gasoil to 0.1% maximum from the beginning of 2008. Effective October 1, 2007 Platts launched 0.1% sulfur gasoil assessments for barges FOB Rotterdam and cargoes FOB and CIF NWE. These will run concurrently with the existing 0.2% gasoil assessments in ARA and NWE. Platts will continue to monitor trade in the 0.2% sulfur gasoil market to determine whether, and for how long, those assessments should continue. Platts will continue to monitor trading patterns of

0.1% and 0.2% gasoil in the Mediterranean to determine whether an assessment would be appropriate.

POAAC00 GASOIL 0.2% CARGOES CIF NWE

Quality: The NWE 0.2% CIF assessment reflects material meeting the minimum requirements of French Fuel Oil Domestique (FOD), German Deutsche Industrie Norm (DIN) and Spanish (B&C) quality gasoil fuel with a maximum sulfur of 0.2%, and reflects cracked gasoil for heating oil use. The quality is normalized to reflect German DIN gasoil fuel. SG is basis 0.845 g/l.

Size: Typical cargo sizes of 10-30,000 mt are reflected. Platts currently normalizes to reflect 20,000 mt.

Location: CIF assessments are calculated basis Le Havre with normal charter party options. Cargoes with charter party options in the range Hamburg to North Spain would typically be included.

Timing: Reflects material for delivery 10-25 days from date of publication, with prices normalized to the mid-point of this delivery window.

Other: Effective Jan 2, 2008 the Worldscale basketflat rate used to calculate the FOB NWE gasoil 0.2% assessment is \$6.86/mt. The assessment is typically based on a freight differential to the CIF NWE assessments. The actual freights applied to the netback fluctuate daily based on changes in Platts cross UKC-UKC assessments in the Clean Tankerwire for 22,000 mt cargoes, applied against the respective 2008 flat rates.

Background: The assessment was introduced in September 1990. Before that, 0.3% maximum sulfur gasoil was reflected.

Dispatch Category	EB
12 Char. Symbol	PRP202NWEBHZ
9 Char. Symbol(s)	PPD2NEDCH · PPD2NEDCL
7 Char. Symbol	POAAC00
Earliest Date	03-SEP-1990
Vendors	BLM CQI DRI EMS FTP FUT KR RTR SAR
Description	Gasoil 0.2 CIF NWE Cargoes

POAAD00 GASOIL 0.2% CARGOES FOB NWE

Quality: The NWE 0.2% CIF assessment reflects material meeting the minimum requirements of French Fuel Oil Domestique (FOD) and German Deutsche Industrie Norm (DIN) spec, and reflects cracked gasoil for heating oil use. Typically the assessment reflects the higher in value of FOD or DIN. SG is basis 0.845 and sulfur is max 0.2%.

Size: Cargo size is for full cargoes of 10-20 kt.

Location: FOB NWE.

Timing: Reflects material for loading 10-25 days from date of publication, with prices normalized to the mid-point of this delivery window.

Other: Effective Jan 3, 2006 the Worldscale basket flat rate used to calculate the FOB NWE gasoil 0.2% assessment is \$5.57/mt. The assessment is typically based on a freight differential to the CIF NWE assessments. The actual freights applied to the netback fluctuate daily based on changes in Platts cross UKC-UKC assessments in the clean tanker wire, applied against the respective 2006 flat rates. The actual routes used in the calculation are unchanged from 2005, the rate change simply reflects the new Worldscale flat rates that became effective in the New Year.

Background: The assessment was introduced in September 1990. Before that, 0.3% maximum sulfur gasoil was reflected.

Dispatch Category	EB
12 Char. Symbol	PRP202NWEBIB
9 Char. Symbol(s)	PPD2NESCH · PPD2NESCL
7 Char. Symbol	POAAD00
Earliest Date	03-SEP-1990
Vendors	BLM CQI DRI EMS FTP FUT KR RTR SAR
Description	Gasoil 0.2 FOB NWE Cargoes

AAYWS00 GASOIL 0.1% CARGOES CIF NWE

Quality: The NWE 0.1% CIF assessment reflects material meeting the minimum requirements of French Fuel Oil Domestique (FOD), German Deutsche Industrie Norm (DIN) and Spanish (B&C) quality gasoil fuel with a maximum sulfur of 0.1%, and reflects cracked gasoil for heating oil use. The quality is normalized to reflect German DIN gasoil fuel. SG is basis 0.845 g/l.

Size: Typical cargo sizes of 10-30,000 mt are reflected. Platts currently normalizes to reflect 20,000 mt.

Location: CIF assessments are calculated basis Le Havre with normal charter party options. Cargoes with charter party options in the range Hamburg to North Spain would typically be included.

Timing: Reflects material for delivery 10-25 days from date of publication, with prices normalized to the mid-point of this delivery window.

Other: N/A

Background: The assessment was introduced in October 2007.

Dispatch Category	EB
12 Char. Symbol	AAYWS0000000
9 Char. Symbol(s)	•
7 Char. Symbol	AAYWS00
Earliest Date	01-OCT-2007
Vendors	BLM CQI DRI EMS FTP FUT KR PL12 RTR SAR
Description	Gsl 0.1% Crg CIF NWE

AAYWR00 GASOIL 0.1% CARGOES FOB NWE

Quality: The NWE 0.1% FOB assessment reflects material meeting the minimum requirements of French Fuel Oil Domestique (FOD), German Deutsche Industrie Norm (DIN) and Spanish (B&C) quality gasoil fuel with a maximum sulfur of 0.2%, and reflects cracked gasoil for heating oil use. The quality is normalized to reflect German DIN gasoil fuel. SG is basis 0.845 g/l.

Size: Typical cargo sizes of 10-30,000 mt are reflected. Platts currently normalizes to reflect 20,000 mt.

Location: FOB NWE. Typically the FOB assessment is derived at a freight differential to the CIF assessment, based on the following routes: Ventspils, Antwerp, Stockholm.

Timing: Reflects material for loading 10-25 days from date of publication, with prices normalized to the mid-point of this delivery window.

Other: Effective Jan 2, 2008 the Worldscale basket flat rate used to calculate the FOB NWE gasoil 0.2% assessment is \$6.86/mt. The assessment is typically based on a freight differential to the CIF NWE assessments. The actual freights applied to the netback fluctuate daily based on changes in Platts cross UKC-UKC assessments in the Clean Tankerwire for 22,000 mt cargoes, applied against the respective 2008 flat rates.

Background: The assessment was introduced in October 2007.

Dispatch Category	EB
12 Char. Symbol	AAYWR00000000
9 Char. Symbol(s)	•
7 Char. Symbol	AAYWR00
Earliest Date	01-OCT-2007
Vendors	BLM CQI DRI EMS FTP FUT KR PL12 RTR SAR
Description	Gsl 0.1% Crg FOB NWE

AAOQZ00 RUSSIAN GASOIL 0.2% CARGOES CIF NWE

Quality: The 0.2% Russian gasoil CIF NWE assessment (0.2 RGO) reflects straight-run Russian gasoil with maximum 0.2% sulfur. Because the gasoil quality is straight-run, it may carry a

blending premium over standard heating oil grades such as DIN.

Size: The 0.2 RGO assessment reflects full- or part- cargoes of 25-30,000 mt.

Location: The assessment is CIF ARA basis Antwerp with normal CP options within NWE calculated pro rata at cost.

Timing: Reflects material for delivery 10-25 days from date of publication, with prices normalized to the mid-point of this delivery window.

Other: N/A

Background: The assessment was introduced on July 1, 2004.

Dispatch Category	EB
12 Char. Symbol	AAOQZ0000000
9 Char. Symbol(s)	.
7 Char. Symbol	AAOQZ00
Earliest Date	01-JUL-2004
Vendors	BLM CQI DRI EMS FTP FUT KR RTR SAR
Description	Russian Gsl 0.2 CIF ARA \$/Mt

POAAA00 GASOIL 0.2% CARGOES CIF MED

Quality: The assessment reflects generally merchantable qualities for heating oil use. Russian material meeting these qualities would typically be included in the assessment. Grades which are not widely merchantable, (for instance because of low cetane or above normal water content), may not be reflected in the assessments.

Size: Cargo assessments reflect parcels of 25,000-30,000mt each.

Location: CIF assessment is are basis Genoa with normal CP options considered.

Timing: Reflects material for delivery 10-25 days from date of publication, with prices normalized to the mid-point of this delivery window.

Other: N/A

Background: The assessment was introduced in December 1991. Before that, 0.3% maximum sulfur gasoil was reflected.

Dispatch Category	EB
12 Char. Symbol	PRP202GNABHV
9 Char. Symbol(s)	PPD2MGDCH · PPD2MGDCL
7 Char. Symbol	POAAA00
Earliest Date	16-DEC-1991
Vendors	BLM CQI DRI EMS FTP FUT KR RTR SAR
Description	Gasoil 0.2 CIF Med Cargoes

POAAB00 GASOIL 0.2% CARGOES FOB MED

Quality: The assessment reflects generally merchantable qualities for heating oil use. Russian material meeting these qualities would typically be included in the assessment. Grades which are not widely merchantable, (for instance because of low cetane or above normal water content), may not be reflected in the assessments.

Size: Cargo assessments reflect parcels of 25,000-30,000mt each.

Location: Platts in 2002 formalized that the basis of its 0.2% FOB Med assessment includes material from Black Sea ports, when these form a significant part of the trade.

Timing: Reflects material for delivery 10-25 days from date of publication, with prices normalized to the mid-point of this delivery window.

Other: The FOB assessment is typically calculated as a freight netback from the Genoa and Lavera, using a worldscale rate published in Platts Clean Tankerwire and a basket of flat rates including typical routes within the Mediterranean from Black Sea ports. The routes include origin ports Tuapse, Novorossiysk, Batumi and Odessa and destination ports Genoa/Lavera. Effective Jan 2, 2008 the Worldscale basketflat rate used to calculate FOB Med 0.2 assessment is \$9.03. FOB Med gasoil 0.2% is assessed as a freight differential to the CIF Med gasoil 0.2% assessment. The actual freight applied to the netback will fluctuate daily based on changes in Platts BSea-Med assessments in the Clean Tankerwire for 30,000 mt cargoes applied against the respective 2008 flat rates.

Background: The assessment was introduced in December 1991. Before that, 0.3% maximum sulfur gasoil was reflected.

Dispatch Category	EB
12 Char. Symbol	PRP202MEDBHX
9 Char. Symbol(s)	PPD2MISCH · PPD2MISCL
7 Char. Symbol	POAAB00
Earliest Date	04-JAN-1993
Vendors	BLM CQI DRI EMS FTP FUT KR RTR SAR
Description	Gasoil 0.2 FOB Med Cargoes

POAAG00 GASOIL 0.2% BARGES

Quality: The barge assessments represent heating oil grades with a specific gravity of 0.845 g/ml with a maximum sulfur content of 0.2%.

Size: Platts increased the minimum assessable barge volume from 1,000mt to a range of 1,000-2,000mt where the buyer has the option to choose the actual volume. However, the buyer has the obligation to specify the actual volume at the time of the deal. Platts will continue to include in the assessment process transactions of up to 5,000mt.

Location: FOB basis Rotterdam. Transactions occurring at other loading ports in NWE are typically normalized on a freight differential basis back to Rotterdam.

Timing: Barge assessments reflect parcels for loading 3-15 (Monday-Tuesday) or 5-15 (Wednesday through Friday) days forward, with prices normalized to the midpoint of these loading ranges.

Other: N/A

Background: The assessment was introduced in September 1990. Before that, 0.3% maximum sulfur gasoil was reflected.

Dispatch Category	EB
12 Char. Symbol	PRP202RTTBIH
9 Char. Symbol(s)	PPD2RTSBH · PPD2RTSBL
7 Char. Symbol	POAAG00
Earliest Date	03-SEP-1990
Vendors	BLM CQI DRI EMS FTP FUT KR RTR SAR
Description	Gasoil 0.2 FOB R'dam Barges.

Quality: The barge assessments represent heating oil grades with a specific gravity of 0.845 g/ml with a maximum sulfur content of 0.1%.

Size: The assessment reflects barges of 1,000-2,000mt where the buyer has the option to choose the actual volume. However, the buyer has the obligation to specify the actual volume at the time of the deal. Platts will continue to include in the assessment process transactions of up to 5,000mt.

Location: FOB basis Rotterdam. Transactions occurring at other loading ports in NWE are typically normalized on a freight differential basis back to Rotterdam.

Timing: Barge assessments reflect parcels for loading 3-15 (Monday-Tuesday) or 5-15 (Wednesday through Friday) days forward, with prices normalized to the midpoint of these loading ranges.

Other: N/A

Background: The assessment was introduced in October 2007.

Dispatch Category	EB
12 Char. Symbol	AAYWT0000000
9 Char. Symbol(s)	•
7 Char. Symbol	AAYWT00
Earliest Date	01-OCT-2007
Vendors	BLM CQI DRI EMS FTP FUT KR PL12 RTR SAR
Description	Gasoil Gsl 0.1% Brg FOB ARA

CRACKED FUEL OIL

CRACKED FUEL OIL

In the cracked fuel oil market, a multitude of qualities trade. For the fuel assessments, therefore, the combination of qualities is extremely important as individual specifications can not be considered in isolation.

Platts may in some cases incorporate freight differentials in establishing FOB to CIF spreads. Platts introduced fuel oil freight assessments for a number of European routes from February 2003 in Platts Dirty tankerwire.

Platts fuel oil assessments reflect both high and low sulfur material. Low sulfur cracked grades reflect a maximum 1% sulfur. On the high sulfur, material in the range 3-4% is typically considered, and the price is normalized to 3.5%.

In the past utility companies used to buy 3.5% sulfur cargoes for burning purposes, but limits endorsed by the EU on the sulfur content mean that utility grade trades on high sulfur are rare. Most utilities now use 1% max for burning purposes.

PUAAJ00 FUEL OIL 1% CARGOES CIF MED

Quality: The typical quality traded CIF is that imported by the Italian utility Enel. Platts reflects a maximum sulfur of 1%, material with a density of up to 0.995 SG and a maximum viscosity of 420 CST. Material with higher densities such as 0.998 max may be considered at a discount to this typical quality.

Size: Cargo assessments typically reflect parcels of around 25-30,000 mt each except where otherwise stated.

Location: The assessment is CIF basis Milazzo. Platts considers bids, offers and transactions into a range of east and West Med locations and normalizes these prices to basis Milazzo.

Timing: Reflects material for delivery 10-25 days from date of publication, with prices normalized to the mid-point of this delivery window.

Other: Where the CIF Med market is illiquid, and when there is insufficient local supply to meet utility demand in the region, Platts may derive the CIF Med value using FOB NWE plus freight into Milazzo.

Effective Jan 3, the Worldscale basket flat rate used to calculate NWE-Med low sulfur fuel oil is \$8.25/mt. The corresponding rate in 2005 was \$7.40/mt. Please note that

FOB/CIF fuel oil differentials reflect actual market conditions and are not set according to a fixed freight netback. As such the differentials may be affected by arbitrage openings and other market factors.

Background: Platts implemented a number of redefinitions in the quality of fuel oil reflected in the assessment, in response to changes in the structure of the market. Platts previously based its assessment on a viscosity of 380 centistokes at 50 degrees C and a specific gravity of 0.965 to 0.990 g/ml. Platts has also in the past reelected cargoes of as little as 17,000 mt but such sizes are no longer typical under current market conditions.

Dispatch Category	EB
12 Char. Symbol	PRP610GNABRG
9 Char. Symbol(s)	PPF5MGDCH · PPF5MGDCL
7 Char. Symbol	PUAAJ00
Earliest Date	02-JAN-1990
Vendors	BLM CQI DRI EMS FTP FUT KR RTR SAR
Description	1PCT Fuel CIF Med Cargoes

PUAAK00 FUEL OIL 1% CARGOES FOB MED

Quality: The typical quality reflected in the FOB assessment is that imported by the Italian utility Enel. Platts reflects a maximum sulfur of 1%, material with a density of up to 0.995 SG and a maximum viscosity of 420 CST. Material with higher densities such as 0.998 max may be considered at a discount to this typical quality.

Size: Cargo assessments typically reflect parcels of 25,000-30,000mt each, although smaller volumes may be considered. On the FOB Med assessments, cargoes up to 50,000 mt may be taken into account.

Location: FOB Med.

Timing: Reflects material for loading 10-25 days from date of publication, with prices normalized to the mid-point of this loading window.

Other: In the absence of FOB fixed price bids/offers, the FOB may be calculated as a freight differential to the CIF Med assessment using a flat rate based on a basket of typical tanker routes, multiplied by the current Worldscale rate assessed in Platts Dirty Tankerwire.

Effective Jan 3, the Worldscale basket flat rate used to calculate the cross Med low sulfur fuel oil freight is \$5.00/mt. The corresponding rate in 2005 was \$4.60mt. Please note that FOB/CIF fuel oil differentials reflect actual market conditions and are not set according to a fixed freight netback. As such the differentials may be affected by arbitrage openings and other market factors.

Background: Platts implemented a number of redefinitions in

the quality of fuel oil reflected in the assessment, in response to changes in the structure of the market. Platts previously based its assessment on a viscosity of 380 centistokes at 50 degrees C and a specific gravity of 0.965 to 0.990 g/ml.

Dispatch Category	EB
12 Char. Symbol	PRP610MEDBRI
9 Char. Symbol(s)	PPF5MISCH · PPF5MISCL
7 Char. Symbol	PUAAK00
Earliest Date	03-SEP-1979
Vendors	BLM CQI DRI EMS FTP FUT KR RTR SAR
Description	1PCT Fuel FOB Med Cargoes

PUAAL00 FUEL OIL CARGOES 1% CIF NWE

Quality: Cargo assessments are typically based on a maximum sulfur of 1%, a viscosity of 420 centistokes at 50 degrees C, and a specific gravity of around 0.995 g/ml.

Size: Typically 25,000-30,000 mt

Location: CIF basis Rotterdam with normal range of CP options within NWE.

Timing: Reflects material for delivery 10-25 days from date of publication, with prices normalized to the mid-point of this delivery window.

Other: In recent years, CIF NWE trade has been extremely limited. In the absence of fixed price bids/offers, the CIF may be calculated as a freight differential to the FOB NWE assessment using a flat rate based on a basket of typical tanker routes, multiplied by the current Worldscale rate assessed in Platts Dirty Tankerwire.

Effective Jan 3, the Worldscale basket flat rate used to calculate cross NWE low sulfur fuel oil is \$4.80/mt. The corresponding rate in 2005 was \$4.45/mt. Please note that FOB/CIF fuel oil differentials reflect actual market conditions and are not set according to a fixed freight netback. As such the differentials may be affected by arbitrage openings and other market factors.

Background: Platts has also in the past reelected cargoes of as little as 17,000 mt but such sizes are no longer typical under current market conditions.

Dispatch Category	EB
12 Char. Symbol	PRP610NWEBRK
9 Char. Symbol(s)	PPF5NEDCH · PPF5NEDCL
7 Char. Symbol	PUAAL00
Earliest Date	03-SEP-1979
Vendors	BLM CQI DRI EMS FTP FUT KR RTR SAR
Description	1PCT Fuel CIF NWE Cargoes

PUAAM00 FUEL OIL 1% CARGOES FOB NWE

Quality: A range of qualities from Northwest European refineries is reflected. Cargo assessments are typically based on a maximum sulfur of 1%, a viscosity of 420 centistokes at 50 degrees C, and a specific gravity of 0.965 to 0.990 g/l. Currently the top end of this SG range (0.990) is considered more typical. of the market overall Very low sulfur material may be considered at a premium.

Size: Cargo assessments typically reflect parcels of 25-30,000mt each, although smaller volumes may be considered. On the FOB Northwest Europe, cargoes up to 50,000 mt may be taken into account when arbitrage openings present themselves.

Location: FOB NWE basis Antwerp.

Timing: Reflects material for loading 10-25 days from date of publication, with prices normalized to the mid-point of this delivery window.

Other: Material trading from other origins may be normalized back to Antwerp, depending on the destination for the oil. Where the FOB value is calculated from values in the USAC, Platts uses the price at New York Harbour to FOB Antwerp based on 50,000 mt cargo size and using a SG conversion of 6.4.

Background: PLatts has in the past reflected material with specific gravity of .965 to 0.990 g/ml but such qualities are no longer typical under current market conditions.

Dispatch Category	EB
12 Char. Symbol	PRP610NWEBRM
9 Char. Symbol(s)	PPF5NESCH · PPF5NESCL
7 Char. Symbol	PUAAM00
Earliest Date	01-JUL-1980
Vendors	BLM CQI DRI EMS FTP FUT KR RTR SAR
Description	1PCT Fuel FOB NWE Cargoes

PUAAP00 FUEL OIL 1% BARGES

Quality: The assessment reflects Belgium spec fuel oil with a maximum sulfur of 1%. German DIN spec material is not reflected. The quality represented is, however, in line with power plant requirements in the region. This results in the price of the material being influenced by specification such as metals content s much as the sulfur content. The metals content in the 3.5% sulfur is tighter than the specs in 1.0% barges. This may result in 1.0% sulfur being at times cheaper than 3.5%, but the cause is the metals content, obviously not the sulfur.

Size: Barge assessments reflect parcels of 1,000- 5,000mt each.

Location: FOB ARA basis Antwerp.

Timing: Barge assessments reflect parcels for loading 3-15 (Monday-Tuesday) or 5-15 (Wednesday through Friday) days forward.

Other: N/A

Background: In the past, the low-high range included both German and Belgian spec.

Dispatch Category	EB
12 Char. Symbol	PRP610RTTBRS
9 Char. Symbol(s)	PPF5RTSBH · PPF5RTSBL
7 Char. Symbol	PUAAP00
Earliest Date	03-SEP-1979
Vendors	BLM CQI DRI EMS FTP FUT KR RTR SAR
Description	1PCT Fuel FOB R'dam Barges

PUAAY00 FUEL OIL 3.5% CARGOES CIF MED

Quality: The typical quality reflected is 3.5% maximum sulfur with 420 cst max viscosity and 0.995 density. Platts takes an inclusive approach to the assessment, as the quality of fuel oil in the Med is less homogenous than that in NWE. Bunker grade material is considered in the CIF Med assessment, but typically at a premium to the typical quality assessed. The premium varies according to market conditions.

Size: Cargo assessments typically reflect handy size parcels of 25-30,000mt each although smaller volumes may be considered. The smaller volume on CIF reflects local port constraints.

Location: CIF basis Genoa/Lavera

Timing: Reflects material for delivery 10-25 days from date of publication, with prices normalized to the mid-point of this delivery window.

Other: N/A

Background: From Apr 2, 2001, bunker grade material was considered in the assessment with the specific gravity range extended to 0.991-0.998. Higher density cargoes of up to 1.020 SG were viewed as typically traded at a discount to the assessed quality.

Dispatch Category	EB
12 Char. Symbol	PRP635GNABSM
9 Char. Symbol(s)	PPFBMGDCH · PPFBMGDCL
7 Char. Symbol	PUAAY00
Earliest Date	03-SEP-1979
Vendors	BLM CQI DRI EMS FTP FUT KR RTR SAR
Description	3.5PCT Fuel CIF Med Cargoes

PUAAZ00 FUEL OIL 3.5% CARGOES FOB MED

Quality: The typical quality reflected is 3.5% maximum sulfur with 420 cst max viscosity and 0.995 density. Platts takes an inclusive approach to the assessment, as the quality of fuel oil in the Med is less homogenous than that in Northwest Europe. Bunker grade material is considered in the CIF Med assessment, but typically at a premium to the typical quality assessed. The premium varies according to market conditions.

Size: Cargo assessments typically reflect parcels of 25-30,000mt each, but cargoes up to 50,000 mt may be taken into account when arbitrage openings present themselves, for instance to the Far East.

Location: FOB Med basis Italy.

Timing: Reflects material for loading 10-25 days from date of publication, with prices normalized to the mid-point of this loading window.

Other: Where the market is illiquid, the FOB Med value may be inferred from the CIF Med value, or from related swaps markets plus any physical premium or discount. Effective Jan 3, 2006, the Worldscale basket flat rate used to calculate the cross Med high sulfur fuel oil freight is \$5.00/mt. The corresponding rate in 2005 was \$4.60mt. Please note that FOB/CIF fuel oil differentials reflect actual market conditions and are not set according to a fixed freight netback. As such the differentials may be affected by arbitrage openings and other market factors.

Background: From Apr 2, 2001, bunker grade material was considered in the assessment with the specific gravity range extended to 0.991-0.998. Higher density cargoes of up to 1.020 SG were viewed as typically traded at a discount to the assessed quality.

Dispatch Category	EB
12 Char. Symbol	PRP635MEDBSO
9 Char. Symbol(s)	PPFBMISCH · PPFBMISCL
7 Char. Symbol	PUAAZ00
Earliest Date	03-SEP-1979
Vendors	BLM CQI DRI EMS FTP FUT KR RTR SAR
Description	3.5PCT Fuel FOB Med Cargoes

PUABA00 FUEL OIL 3.5% CARGOES CIF NWE

Quality: The assessment typically reflects 3.5% sulfur cracked fuel oil with 0.991 max density and 12 engler max viscosity. Typically, standard cracked Russian quality M100 is reflected in the assessment. The quality of M100 may vary widely in density, viscosity and water content.

Size: The cargo assessment reflect parcels of 25-30,000 mt.

Location: CIF NWE basis Rotterdam.

Timing: Reflects material for delivery 10-25 days from date of publication, with prices normalized to the mid-point of this delivery window.

Other: Where the market is illiquid, CIF NWE values may be derived from the time gradient on barges extrapolated to cargo dates (10-25 forward rather than the barge dates of 3-15 (Monday-Tuesday) or 5-15 (Wednesday through Friday) forward) plus blending costs to meet 12 engler basis. Platts also monitors differentials to the two means formula.

Background: From Apr 2, 2001, cargo assessments for 3.5% sulfur were renamed CIF basis ARA and have incorporated duty-paid utility grade fuel oil and bunker grade fuel oil. Specific gravity range was expanded to cover 0.991 to 0.998g/ml. Utility grade cargoes traded on FOB basis continue to be taken into account, but some grades such as 16ccr (Conradson Carbon Residue) material are seen as grades typically commanding a premium to the assessed quality. In the past, Platts has reflected cargoes of as little as 17,000 mt but such sizes are no longer typical under current market conditions. Similarly, higher density cargoes around 1.005 SG are viewed as typically traded at a discount to assessed quality. Effective July 3, 2000, assessments for 3% sulfur cargoes FOB and CIF NWE were discontinued.

Dispatch Category	EB
12 Char. Symbol	PRP635NWEBSQ
9 Char. Symbol(s)	PPFBNEDCH · PPFBNEDCL
7 Char. Symbol	PUABA00
Earliest Date	03-SEP-1979
Vendors	BLM CQI DRI EMS FTP FUT KR RTR SAR
Description	3.5PCT Fuel CIF NWE Cargoes

PUABB00 FUEL OIL 3.5% CARGOES FOB NWE

Quality: The assessment reflects standard cracked Russian quality M100 with 0.991 max density and 12 engler max viscosity. The quality of M100 may vary widely in density, viscosity and water content, and Platts monitors differentials to the two means formula in making assessment.

Size: Cargo assessments typically reflect parcels of 25-30,000mt each, although smaller volumes may be considered. On the FOB Med, cargoes up to 50,000 mt may be taken into account when arbitrage openings present themselves, for instance to the Far East.

Location: FOB Baltic ports.

Timing: Reflects material for loading 10-25 days from date of publication, with prices normalized to the mid-point of this delivery window.

Other: The FOB NWE assessment may be assessed as a freight differential to the CIF NWE cargoes. Effective Jan 3, the Worldscales basket flat rate used to calculate cross NWE high sulfur fuel oil freight is \$5.40/mt. The corresponding rate in 2005 was \$5.0/mt. Please note that FOB/CIF fuel oil differentials reflect actual market conditions and are not set according to a fixed freight netback. As such the differentials may be affected by arbitrage openings and other market factors.

Background: In the past utility companies used to buy 3.5% sulfur cargoes for burning purposes, but limits endorsed by the EU on the sulfur content mean that utility grade trades on high sulfur are rare. Most utilities now use 1% max for burning purposes. From Apr 2, 2001, 3.5% sulfur cargoes FOB Northwest Europe have incorporated bunker grade cargoes. Utility grade cargoes traded on FOB basis continue to be taken into account, but some grades such as 16ccr (Conradson Carbon Residue) material are seen as grades typically commanding a premium to the assessed quality. Similarly, higher density cargoes around 1.005 SG are viewed as typically traded at a discount to assessed quality. Effective July 3, 2000, assessments for 3% sulfur cargoes FOB and CIF NWE were discontinued.

Dispatch Category	EB
12 Char. Symbol	PRP635NWEBSS
9 Char. Symbol(s)	PPFBNESCH · PPFBNESCL
7 Char. Symbol	PUABB00
Earliest Date	01-JUL-1980
Vendors	BLM CQI DRI EMS FTP FUT KR RTR SAR
Description	3.5PCT Fuel FOB NWE Cargoes

AASXR00 FUEL OIL 1.5% BARGES

Quality: Typical specifications are 1.5% max sulfur content, with other parameters in line with RMG35 bunker spec. Material is bunker quality for supply into the shipping market.

Volume: Barge assessments reflect parcels of 1,000 to 5,000mt each. Barges are traded typically in 1-2kt lots, but 3-5kt trades are not uncommon. In all cases the smallest tradeable volume sets the market prices and in this case the smallest volume applicable is 1,000mt.

Location: FOB basis Rotterdam

Timing: Barge assessments reflect parcels for loading 3-15 (Monday-Tuesday) or 5-15 (Wednesday through Friday) days forward, with prices normalized to the mid-point of these loading ranges.

Other: N/A

Background: Platts introduced the 1.5% assessment on April 1 subscriber feedback and in light of new regulations

by the International Convention for the Prevention of Pollution from ships (Marpol), Platts will start 1.5PCT sulphur fuel oil bunkers delivered basis Rotterdam May 22 2006, for both 380cst and 180cst. May 22. The Marpol regulations limit sulfur in fuel oil used in bunkers to a maximum of 1.5% in certain designated areas including the Baltic Sea.

Dispatch Category	EB
12 Char. Symbol	AASXR00000000
9 Char. Symbol(s)	·
7 Char. Symbol	AASXR00
Earliest Date	03-APR-2006
Vendors	BLM CQI DRI EMS FTP FUT KR RTR SAR
Description	Fuel Oil 1.5% FOB Rdam

PUABC00 FUEL OIL 3.5% BARGES

Quality: 3.5% sulfur barges reflect RMG 35 bunker grade material. Typical specifications are 3 to 4% sulfur content, specific gravity of 0.991 g/ml, and viscosity of around 380 centistokes at 50 degrees C.

Volume: Barge assessments reflect parcels of 1,000 to 5,000mt each. Barges are traded typically in 1-2kt lots, but 3-5kt trades are not uncommon. In all cases the smallest tradeable volume sets the market prices and in this case the smallest volume applicable is 1,000mt.

Location: FOB basis Rotterdam

Timing: Barge assessments reflect parcels for loading 3-15 (Monday-Tuesday) or 5-15 (Wednesday through Friday) days forward, with prices normalized to the mid point of these loading ranges. Barges typically trade for full window dates and the front five days or the back five days depending on whether the market is in contango or backwardation. Platts 3.5% barge assessment is based on bids/offers and deals for 5-day loading windows. Full window bids which give the buyer a wider optionality may be disregarded in the assessment process.

Other: N/A

Background: In the past, Platts has assessed slightly different specs: the typical quality for high sulfur cargo assessments was a viscosity of 380 to 420 centistokes at 50 degrees C, a maximum of 300 parts per million of vanadium.

Dispatch Category	EB
12 Char. Symbol	PRP635RTTBBSU
9 Char. Symbol(s)	PPFBRTSBH · PPFBRTSBL
7 Char. Symbol	PUABC00
Earliest Date	03-SEP-1979
Vendors	BLM CQI DRI EMS FTP FUT KR RTR SAR

Description 3.5PCT Fuel FOB R'dam Barges

PUAYW00 ROTTERDAM BUNKER 380 CST

Quality: IFO 380: Specifications generally conform with that for RMG 35 Bunker fuel . Approximate Kinematic Viscosity: At 100degC, max 25 cst; at 50degC, max 225 cst. Flash point 60degC minimum. Pour point (upper) winter quality, 30degC maximum; summer quality the same. Ash 0.15 m/m maximum. Sulphur, maximum 5%. Vanadium max 500 mg/kg. Aluminum plus silicon, 80 mg/kg max; water, 1% maximum. The specifications followed are generally those found in ISO 8217:1996 (E) - Petroleum products - Fuels (class F) - Specifications of marine fuels.

Size: Typical volumes reflected are between 300-1000 mt.

Location: IFO 380 CST delivered prices reflect prices at Rotterdam, but delivered on board, ie delivered into ship.

Timing: Prices are typically quoted for product to be supplied 1-8 days ahead

Other: N/A

Note: Platts bunker price assessments are based on typical trading levels during the course of the day, and are based on actual transactable market levels, i.e. confirmed trades, bids and offers. Much of the price direction is derived early in the day at European ports, based on the previous day's outright cargo fuel oil assessments. respectively, on the high and low of the distillate price

Dispatch Category	EB
12 Char. Symbol	PRPF38RTTDBK
9 Char. Symbol(s)	PPFDRTSVH · PPFDRTSVL
7 Char. Symbol	PUAYW00
Earliest Date	02-JAN-1996
Vendors	BLM CQI DRI EMS FTP FUT KR RTR SAR
Description	Rotterdam Bunker 380 CST

FEEDSTOCKS

PKABA00 STRAIGHT-RUN 0.5-0.7% CARGOES FOB NWE

Quality: The assessments reflect prices for straight-run fuel oil from Northwest Europe with the following specifications: Sulfur 0.5-0.7%, normalized to 0.6% CCR max 7 Density 0.935-0.95 at 15 degrees, Viscosity 200cst max at 50 degrees Vanadium 10ppm Sodium 10ppm Nickel 10ppm

Size: The cargo assessments typically reflects parcels of 25,000-30,000mt each within NWE, but cargoes of up to 55,000 tonnes may be taken into account when arbitrage openings present

themselves.

Location: FOB NWE basis Rotterdam.

Timing: Reflects material for loading 10-25 days from date of publication, with prices normalized to the mid-point of this delivery window.

Other: LSSR is typically negotiated at a differential to IPE Brent crude oil futures. When this occurs, the prevailing value of IPE Brent at 1630 London time is used in setting the outright level. The IPE trading month used in the calculation is generally the front-month trading 17.5 days from publication date. A conversion factor of 6.77 is used to calculate the price in \$/mt.

Background: Effective Apr 2, 2001, the timing window for assessing FOB Northwest Europe cargoes changed to 10-25 days to take account of prevailing trading patterns.

Note: Platts ceased running its assessment of E-4 straight run from January 1, 2003, because of the market's illiquidity. Effective Apr 2, 2001, M-40 assessments CIF Mediterranean were discontinued.

Dispatch Category	EB
12 Char. Symbol	PRPSR6NWE COY
9 Char. Symbol(s)	PPMONESCH · PPMONESCL
7 Char. Symbol	PKABA00
Earliest Date	03-OCT-1994
Vendors	BLM CQI DRI EMS FTP FUT KR RTR SAR
Description	St Run 0.5-0.7 PCT FOB NWE

AAHMZ00 VGO 0.5-0.6% CARGOES CIF NWE

Quality: The assessments represent VGO cargoes of 0.5-0.6pct sulfur with a specific gravity of 0.900-0.920 g/ml.

Size: Cargo assessments reflect parcels of 10,000-25,000mt.

Location: CIF NWE basis ARA.

Timing: Reflects material for delivery 10-25 days from date of publication, with prices normalized to the mid-point of this delivery window.

Other: N/A

Background: The assessment was introduced June 1, 2001.

Dispatch Category	FS
12 Char. Symbol	AAHMZ00000000
9 Char. Symbol(s)	·
7 Char. Symbol	AAHMZ00
Earliest Date	01-JUN-2001
Vendors	BLM CQI DRI EMS FTP FUT KR RTR SAR
Description	VGO 0.5-0.6%S CIF NWE

AAHMX00 VGO 0.5-0.6% CARGOES FOB NWE

Quality: The assessments represent VGO cargoes of 0.5-0.6pct sulfur with a specific gravity of 0.900-0.920 g/ml.

Size: Cargo assessments reflect parcels of 10,000-25,000mt each though FOB cargoes of up to 50,000 mt may be considered when arbitrage opening mean these are a significant market factor.

Location: FOB NWE basis Rotterdam.

Timing: Reflects material for loading 10-25 days from date of publication, with prices normalized to the mid-point of this loading window.

Other: N/A

Background: The assessment was introduced June 1, 2001.

Dispatch Category	FS
12 Char. Symbol	AAHMX0000000
9 Char. Symbol(s)	.
7 Char. Symbol	AAHMX00
Earliest Date	01-JUN-2001
Vendors	BLM CQI DRI EMS FTP FUT KR RTR SAR
Description	VGO 0.5-0.6%S FOB NWE

AAHNF00 VGO 0.5-0.6% BARGES

Quality: The assessments represent VGO cargoes of 0.5-0.6pct sulfur with a specific gravity of 0.900-0.920 g/ml.

Size: Barge assessments reflect parcels of 1,000 to 5,000mt each.

Location: FOB ARA basis Rotterdam

Timing: Barge assessments reflect parcels for loading 3-15 (Monday-Tuesday) or 5-15 (Wednesday through Friday) days forward.

Other: N/A

Background: The assessment was introduced June 1, 2001, replacing barge assessment reflecting 1.5-1.6% sulfur VGO.

Dispatch Category	FS
12 Char. Symbol	AAHNF0000000
9 Char. Symbol(s)	.
7 Char. Symbol	AAHNF00
Earliest Date	01-JUN-2001
Vendors	BLM CQI DRI EMS FTP FUT KR RTR SAR
Description	VGO 0.5-0.6%S FOB Rdam

AAHND00 VGO 2% MAX CARGOES CIF NWE

Quality: The assessments represent VGO cargoes of 2% max sulfur with a specific gravity of 0.900-0.920 g/ml.

Size: Cargo assessments reflect parcels of 10,000-25,000mt each.

Location: CIF NWE basis ARA.

Timing: Reflects material for delivery 10-25 days from date of publication, with prices normalized to the mid-point of this delivery window.

Other: N/A

Background: The assessment was introduced June 1, 2001.

Dispatch Category	FS
12 Char. Symbol	AAHND0000000
9 Char. Symbol(s)	.
7 Char. Symbol	AAHND00
Earliest Date	01-JUN-2001
Vendors	BLM CQI DRI EMS FTP FUT KR RTR SAR
Description	VGO 2.0% Max CIF NEW

AAHNB00 VGO 2% MAX CARGOES FOB NWE

Quality: The assessments represent VGO cargoes of 2% max sulfur with a specific gravity of 0.900-0.920 g/ml.

Size: Cargo assessments reflect parcels of 10,000-25,000mt each though FOB cargoes of up to 50,000 mt may be considered when arbitrage opening mean these are a significant market factor.

Location: FOB NEW basis Rotterdam.

Timing: Reflects material for loading 10-25 days from date of publication, with prices normalized to the mid-point of this loading window.

Other: N/A

Background: The assessment was introduced June 1, 2001.

Dispatch Category	FS
12 Char. Symbol	AAHNB0000000
9 Char. Symbol(s)	.
7 Char. Symbol	AAHNB00
Earliest Date	01-JUN-2001
Vendors	BLM CQI DRI EMS FTP FUT KR RTR SAR
Description	VGO 2.0% Max FOB NEW

AAHNI00 VGO 2% MAX BARGES

Quality: 2% max with a specific gravity of 0.900-0.920 g/ml.

Size: Barge assessments reflect parcels of 1,000 to 5,000mt each.

Location: FOB ARA basis Rotterdam

Timing: Barge assessments reflect parcels for loading 3-15 (Monday-Tuesday) or 5-15 (Wednesday through Friday) days forward.

Other: N/A

Background: The assessment was introduced June 1, 2001, replacing barge assessment reflecting 1.5-1.6% sulfur VGO.

Dispatch Category	FS
12 Char. Symbol	AAHNI0000000
9 Char. Symbol(s)	.
7 Char. Symbol	AAHNI00
Earliest Date	01-JUN-2001
Vendors	BLM CQI DRI EMS FTP FUT KR RTR SAR
Description	VGO 2.0% Max FOB Rdam

LPG

Platts European and west Mediterranean LPG assessments typically reflect transactable values over the course of the trading day, typically 08.30-16.30 local London time. All bids, offers and transactions will be included over the set time period, but prices will be normalized to reflect end of day market values. As such, the timing of the transaction will be taken into consideration.

BIDS/OFFERS

Platts considers transactions, bid/offer levels and market indications that are reflective of typical conditions and originating from sources deemed reliable. Bids and offers must in principle be open to the market at large. Platts accepts that individual companies may have trading limits with counter parties and that national legislation may prevent companies from dealing in materials from certain origins and specifications. These will be dealt with on a case-by-case basis.

The time cut-off for new bids/offers on coasters and cargoes is 15.45:00 London time and on barges and FCA material 16.00:00 London time.

Platts will exclude transactions, bids/offers or any market indications when these appear to be unrepresentative of the market, or unrepeatable. Deals done below the level of prevailing bids or above the level of prevailing offers (ie, selling through the bid or buying through the offer) will not be reflected in

Platts assessments. Exception will be given to circumstances where one party can demonstrate a necessity to pay above the offer or sell below the bid, ie, paying a higher FOB price from a location where there is a demonstrable freight advantage.

Reported transactions must be confirmed by both parties including approximate time of price agreement, irrespective of outstanding subjects. All other deals may be taken into account at the editor's discretion. Only arm's length deals will be taken into account. Parties should report any terms, conditions or clauses that would distort the typical market value. This would include charter-party options, price options, credit terms or transactions that are commercially linked to any other transaction etc.

REPEATABILITY

Bids, offers and transactions are also viewed against the broader supply/demand generated by those bids/offers and transactions. Hence if a low price offer generates too much demand, Platts may determine in its editorial process that the market value is hence higher. Likewise if a high bid generates too much supply and the buyer is unable to buy all the volume that is offered, Platts in its editorial process may determine that the market value is lower.

SPREADS

Platts typically reflects fixed price transactions, bids and offers in its assessments, but may use additional indications as appropriate including the market value of spread relationships with other oil products where there is a demonstrable price relationship with LPG as well as associated markets such as derivatives. When assessing the market, Platts will give priority to, in descending order, deals, firm bids and offers, indications, market fundamentals and price relationship with associated markets. In certain illiquid markets, Platts may establish FOB or CIF values based on freight differentials. However Platts recognizes that FOB and CIF prices within northwest Europe may operate independently.

TIME GRADIENT

Platts' assessments take into account any backwardation or contango in the market place. Typically, Platts assesses to the middle of the loading/delivery window specified for each market. The assessment thus reflects the value after taken into consideration the difference in prices prevailing along the time curve, assessed by Platts, where appropriate.

FREIGHT ISSUES

LPGASWIRE EUROPEAN ASSESSMENTS

NWE:		Propane SPOT USD/MT		Butane SPOT USD/MT		
FOB SEAGOING	+x.00	PMABB00-PMABB00	+x.00	+x.00	PMAAL00-PMAAL00	+x.00
FOB ARA	+x.00	PMAAS00-PMAAS00	+x.00	+x.00	PMAAC00-PMAAC00	+x.00
FCA ARA*	+x.00	PMABH00-PMABH00	+x.00	+x.00	PMABIO0-PMABIO0	+x.00
CIF 1-3000MT	+x.00	PMAAZ00-PMAAZ00	+x.00	+x.00	PMAAJ00-PMAAJ00	+x.00
CIF 3000+MT	+x.00	PMAAC00-PMAAC00	+x.00			
CIF 7000+MT	+x.00	PMABA00-PMABA00	+x.00			
Monthly rolling average						
FOB SEAGOING		PMUDI00-PMUDI00				
CIF 7000+MT		PMUDK00-PMUDK00				
Propane swaps (basis CIF NWE)						
Aug	+x.00	AAHIK00-AAHIK00	+x.00			
Sep	+x.00	AAHIM00-AAHIM00	+x.00			
Oct	+x.00	AAHIO00-AAHIO00	+x.00			
Q4	+x.00	AAHIL00-AAHIL00	+x.00			
W MED:						
FOB EX-REF/STOR	+x.00	PMABC00-PMABC00	+x.00	+x.00	PMAAM00-PMAAM00	+x.00
FCA EX-REF/STOR	+x.00	PMABJ00-PMABJ00	+x.00			
CIF 7000+MT	+x.00	PMABE00-PMABE00	+x.00			
NOTE:* FCA ARA refers to sales onto railcars and trucks in the Amsterdam-Rotterdam-Antwerp region						

Platts takes into account prevailing freight rates in establishing both FOB and CIF values. Where a market has become illiquid, Platts may routinely determine the FOB value from the CIF value. Where there is limited local demand but longer range arbitrage opportunities emerge, the FOB value may rise relative to the CIF value.

Platts typically reflects good quality modern tonnage in its assessments, and excludes from its CIF assessments any vessels which are outside the normal parameters of acceptability

full cargoes between 1,000-3,600mt, although smaller full cargoes or split cargoes may be included at the discretion of the editor after consultation with the market.

Location: The assessment covers an area represented by a triangle, with Wilhelmshaven (Germany), Teesside (UK) and Le Havre (France) as its three corners, and also including Milford Haven, Fawley and Grangemouth. Product from ports on the French Atlantic coast, as well as Portugal and the Spanish Atlantic coast, are not included in assessments.

Timing: Loading 5-15 days from date of publication

Other: N/A

DATA CODES

Each Platts assessment is identified in the electronic databases by a 7-character data code. The following table provides the data codes for each European LPG assessment carried in Platts LPGaswire. The table layout is that carried in the telex/newsletter version of LPGaswire; when assessments are carried in related publications such as Platts Petrochemical Alert, the actual layout may vary.

Dispatch Category	LI
12 Char. Symbol	PRPPN\$NWECVD
9 Char. Symbol(s)	PPPRNESGH · PPPRNESGL
7 Char. Symbol	PMABB00
Earliest Date	02-JUL-1982
Vendors	BLM CQI DRI EMS FTP FUT KR RTR SAR
Description	Propane FOB NWE Seagoing Hi

PMABB00 PROPANE FOB SEAGOING

Quality: Pressurized vessels including both field-grade and refinery material with a minimum of 93% C3s and a maximum of 30% olefinic content. A slight premium may be given for product with a higher c3 content.

Size: The assessment refers to coasters ex-refinery/storage with

PMAAS00 PROPANE FOB ARA

Quality: Pressurized vessels including both field-grade and refinery material with a minimum of 93% C3s and a maximum of 30% olefinic content.

Size: Refers to sales onto barges of full cargoes between 420-1,100mt.

Location: FOB Amsterdam-Rotterdam-Antwerp.

Timing: Barges loading ex-refinery/storage between 3-10 days from date of publication.

Other: N/A

Dispatch Category	LI
12 Char. Symbol	PRPPN\$ARACUP
9 Char. Symbol(s)	PPPRAASCH · PPPRAASCL
7 Char. Symbol	PMAAS00
Earliest Date	05-APR-1985
Vendors	BLM CQI DRI EMS FTP FUT KR RTR SAR
Description	Propane FOB ARA

PMABH00 PROPANE FCA ARA

Quality: Pressurized vessels including both field-grade and refinery material with a minimum of 93% C3s and a maximum of 30% olefinic content.

Size: Parcels of 20-500mt.

Location: FCA ARA refers to sales onto railcars and trucks in the Amsterdam-Rotterdam-Antwerp region

Timing: Loadings ex-refinery/storage between 3-10 days from date of publication.

Dispatch Category	LI
12 Char. Symbol	PRPPN\$ARACUQ
9 Char. Symbol(s)	PPPRAASQH · PPPRAASQL
7 Char. Symbol	PMABH00
Earliest Date	22-JUL-1994
Vendors	BLM CQI DRI EMS FTP FUT KR RTR SAR
Description	Propane FCA ARA

PMAAZ00 PROPANE CIF 1-3,000MT

Quality: Pressurized vessels including both field-grade and refinery material with a minimum of 93% C3s and a maximum of 30% olefinic content. A slight premium may be given for product with a higher c3 content.

Size: Full cargoes of between 1,000-3,600mt sold on a CIF basis are reflected. Slightly smaller CIF cargoes may be included at the discretion of the editor, while CIF cargoes of more than 3,600mt may occasionally be sold at prices that correspond most to the 1-3,600mt market, and therefore may also be included in the 1-3,600mt assessment.

Location: The assessment covers an area represented by a triangle, with Wilhelmshaven (Germany), Teesside (UK) and Le Havre (France) as its three corners, and also including Milford

Haven, Fawley and Grangemouth. Product from ports on the French Atlantic coast, as well as Portugal and the Spanish Atlantic coast, are not included in assessments. Sales into the port of Brest on the French Atlantic coast may be included in the assessment.

Timing: Vessels loading 5-15 days from date of publication.

Other: Please note that Platts has not formally renamed this assessment even though volumes larger than 3,000 mt are currently considered.

Dispatch Category	LI
12 Char. Symbol	PRPPN\$NWEVCB
9 Char. Symbol(s)	PPPRNEGCH · PPPRNEGCL
7 Char. Symbol	PMAAZ00
Earliest Date	05-APR-1985
Vendors	BLM CQI DRI EMS FTP FUT KR RTR SAR
Description	Propane CIF NWE 1-3kt

PMABA00 PROPANE CIF LARGE CARGOES

Quality: Refrigerated commercial propane meeting Braefoot Bay specification.

Size: Typically reflects full-cargoes of between 8.5-20 kt

Location: The assessment covers an area represented by a triangle, with Wilhelmshaven (Germany), Teesside (UK) and Le Havre (France) as its three corners, and also including Milford Haven, Fawley and Grangemouth. Product from ports on the French Atlantic coast, as well as Portugal and the Spanish Atlantic coast, are not included in assessments. Sales into the port of Brest on the French Atlantic coast may be included in the assessment. Sales made into selected western Scandinavian ports - Stenungsund, Rafnes, Porvoo and Karsto - are included, but will be normalized to Flushing.

Timing: Large cargo assessments refer to vessels delivery 10-25 days from the date of publication.

Other: Please note that Platts has not formally renamed this assessment even though volumes larger than 7,000 mt are now typically considered.

Dispatch Category	LI
12 Char. Symbol	PRPPN\$NWEVCV
9 Char. Symbol(s)	PPPRNEHCH · PPPRNEHCL
7 Char. Symbol	PMABA00
Earliest Date	05-APR-1985
Vendors	BLM CQI DRI EMS FTP FUT KR RTR SAR
Description	Propane CIF NWE 7000+MT

PMAAL00 BUTANE FOB SEAGOING

Quality: Both field-grade and refinery grade butane is included in the assessment with a maximum of 30% olefins, 85% normal butane and 49% isobutane. For the CIF quote, product will be normalized to a specification of 70:30 split with a maximum olefin content of 10%. Isobutane is considered to be any product with over 50% isobutane content, and such product is not assessed by Platts, except in the US Gulf.

Size: The assessment refers to coasters ex-refinery/storage with full cargoes between 1,000-3,600mt, although smaller full cargoes or split cargoes may be included at the discretion of the editor after consultation with the market.

Location: The assessment covers an area represented by a triangle, with Wilhelmshaven (Germany), Teesside (UK) and Le Havre (France) as its three corners, and also including Milford Haven, Fawley and Grangemouth. Product from ports on the French Atlantic coast, as well as Portugal and the Spanish Atlantic coast, are not included in assessments.

Timing: Vessels loading 5-15 days from date of publication.

Other: N/A

Dispatch Category	LI
12 Char. Symbol	PRPBTNNWEBHR
9 Char. Symbol(s)	PPBNNESGH · PPBNNESGL
7 Char. Symbol	PMAAL00
Earliest Date	05-APR-1985
Vendors	BLM CQI DRI EMS FTP FUT KR RTR SAR
Description	Butane FOB NEW

PMAAC00 BUTANE FOB ARA

Quality: Both field-grade and refinery grade butane is included in the assessment with a maximum of 10% olefins, 85% normal butane and 49% isobutane. Isobutane is considered to be any product with over 50% isobutane content, and such product is not assessed by Platts, except in the US Gulf.

Size: Sales onto barges of full cargoes between 420-1,100mt.

Location: FOB Amsterdam-Rotterdam-Antwerp.

Timing: Barges loading between 3-10 days from date of publication.

Other: N/A

Dispatch Category	LI
12 Char. Symbol	PRPBTNARABHD
9 Char. Symbol(s)	PPBNAASCH · PPBNAASCL
7 Char. Symbol	PMAAC00
Earliest Date	05-APR-1985
Vendors	BLM CQI DRI EMS FTP FUT KR RTR SAR
Description	Butane FOB ARA

PMAB100 BUTANE FCA ARA

Quality: Both field-grade and refinery grade butane is included in the assessment with a maximum of 10% olefins, 85% normal butane and 49% isobutane. Isobutane is considered to be any product with over 50% isobutane content, and such product is not assessed by Platts, except in the US Gulf.

Size: Parcels of 20-500mt.

Location: FCA ARA refers to sales onto railcars and trucks in the Amsterdam-Rotterdam-Antwerp region

Timing: Loadings ex-refinery/storage between 3-10 days from date of publication.

Other: N/A

Dispatch Category	LI
12 Char. Symbol	PRPBTNARABHE
9 Char. Symbol(s)	PPBNAASQH · PPBNAASQL
7 Char. Symbol	PMAB100
Earliest Date	22-JUL-1994
Vendors	BLM CQI DRI EMS FTP FUT KR RTR SAR
Description	Butane FCA ARA

PMAAJ00 BUTANE CIF 1-3,000MT

Quality: Both field-grade and refinery grade butane is included in the assessment with a maximum of 30% olefins, 85% normal butane and 49% isobutane. For the CIF quote, product will be normalized to a specification of 70:30 split with a maximum olefin content of 10%. Isobutane is considered to be any product with over 50% isobutane content, and such product is not assessed by Platts, except in the US Gulf.

Size: Full cargoes of between 1,000-3,600mt sold on a CIF basis. Slightly smaller CIF cargoes may be included at the discretion of the editor, while CIF cargoes slightly over 3,600mt may occasionally be sold at prices that correspond most to the 1-3,600mt market, and therefore may also be included in the 1-3,600mt assessment.

Location: The assessment covers an area represented by a triangle, with Wilhelmshaven (Germany), Teesside (UK) and Le Havre (France) as its three corners, and also including Milford Haven, Fawley and Grangemouth. Product from ports on the French Atlantic coast, as well as Portugal and the Spanish Atlantic coast, are not included in assessments. Sales into the port of Brest on the French Atlantic coast may be included in the assessment.

Timing: Vessels loading 5-15 days from date of publication.

Other: Please note that Platts has not formally renamed this assessment even though volumes larger than 3,000 mt are

currently considered.

Dispatch Category	LI
12 Char. Symbol	PRPBTNNWEBHP
9 Char. Symbol(s)	PPBNNEGCH · PPBNNEGCL
7 Char. Symbol	PMAAJ00
Earliest Date	05-APR-1985
Vendors	BLM CQI DRI EMS FTP FUT KR RTR SAR
Description	Butane CIF NWE 1-3kt

PMAAK00 BUTANE CIF LARGE CARGOES

Quality: Refers to Braefoot Bay mixed butane with a typical split of 70% normal and 30% isobutane. Pure normal butane and isobutane is not assessed by Platts, although pure normal prices may be used as guidance at the editor's discretion following consultation with the market.

Size: Cargoes of over 4,000mt sold into NWE on a CIF basis. Occasionally, part-cargoes of less than 4,000mt from large shipments may be sold at prices which reflect the 4,000mt+ market, and these prices may be included in the assessment.

Location: The assessment covers an area represented by a triangle, with Wilhelmshaven (Germany), Teesside (UK) and Le Havre (France) as its three corners, and also including Milford Haven, Fawley and Grangemouth. Product from ports on the French Atlantic coast, as well as Portugal and the Spanish Atlantic coast, are not included in assessments. Sales into the port of Brest on the French Atlantic coast may be included in the assessment.

Timing: Vessels delivery 10-25 days from the date of publication.

Other: Please note that Platts has not formally renamed this assessment even though volumes larger than 3,000 mt are now typically considered.

Dispatch Category	LI
12 Char. Symbol	PRPBTNNWEBHQ
9 Char. Symbol(s)	PPBNNEHCH · PPBNNEHCL
7 Char. Symbol	PMAAK00
Earliest Date	05-APR-1985
Vendors	BLM CQI DRI EMS FTP FUT KR RTR SAR
Description	Butane CIF NWE 3kt+

PMUDI00 PROPANE FOB SEAGOING MONTHLY ROLLING AVG

The average is of the daily Propane FOB Seagoing assessments. The average takes each of the daily data points, and divides by the number of working days there have been during the month.

Dispatch Category	LI
12 Char. Symbol	PRPPN\$NWEDBH
9 Char. Symbol(s)	PPPRNE5GH · PPPRNE5GL

7 Char. Symbol	PMUDI00
Earliest Date	24-JUN-1998
Vendors	BLM CQI DRI EMS FTP FUT KR RTR SAR
Description	Propane NWE Sea FOB RollAvg

PMUDK00 PROPANE CIF LARGE CARGOES MONTHLY ROLLING AVG

The average is of the daily Propane CIF Large Cargo assessments. The average takes each of the daily data points, and divides by the number of working days there have been during the month.

Dispatch Category	LI
12 Char. Symbol	PRPPN\$NWEDBJ
9 Char. Symbol(s)	PPPRNEDUH · PPPRNEDUL
7 Char. Symbol	PMUDK00
Earliest Date	24-JUN-1998
Vendors	BLM CQI DRI EMS FTP FUT KR RTR SAR
Description	Propane NWE 7kMT+ CIF RollAvg

PROPANE SWAPS BASIS CIF NWE

Platts assesses the forward swap market for CIF NW E 7000+mt cargoes for three months and one quarter forward. The swaps are settled against the monthly average of daily assessments for propane CIF NWE 7000+mt. The swap months quoted roll forward on the first day of the month, and the swap quarter quoted rolls on the first day of the quarter. Thus on July 1, 2006 the monthly swap assessments would roll forward to reflect Aug, Sep and Oct 2006. On July 1, 2006 the quarter published would roll from Q3 2006 (Jul, Aug, Sep) to Q4 2006 (Oct, Nov, Dec).

AAHIK00/PMABU00

Dispatch Category	LI
12 Char. Symbol	PRPPN\$NWEDBC
9 Char. Symbol(s)	PPPRNE1AH · PPPRNE1AL
7 Char. Symbol	PMABU00
Earliest Date	01-DEC-1995
Vendors	BLM CQI DRI EMS FTP FUT KR RTR SAR
Description	Propane NWE swaps 1st month

Dispatch Category	DR
12 Char. Symbol	AAHIK0000000
9 Char. Symbol(s)	.
7 Char. Symbol	AAHIK00
Earliest Date	28-MAR-2001
Vendors	BLM CQI DRI EMS FTP FUT KR PL12 TR SAR
Description	Propane CIF ARA Lg 1-Mo

AAHIM00/PMUDH00

Dispatch Category LI
 12 Char. Symbol PRPPN\$NWEDBE
 9 Char. Symbol(s) PPRNE2AH · PPRNE2AL
 7 Char. Symbol PMUDH00
 Earliest Date 01-DEC-1995
 Vendors BLM CQI DRI EMS FTP FUT KR RTR SAR
 Description Propane NWE swaps 2nd month

Dispatch Category DR
 12 Char. Symbol AAHIM0000000
 9 Char. Symbol(s) ·
 7 Char. Symbol AAHIM00
 Earliest Date 28-MAR-2001
 Vendors BLM CQI DRI EMS FTP FUT KR PL12
 TR SAR
 Description Propane CIF ARA Lg 2-Mo

AAHIO00

Dispatch Category DR
 12 Char. Symbol AAHIO0000000
 9 Char. Symbol(s) ·
 7 Char. Symbol AAHIO00
 Earliest Date 28-MAR-2001
 Vendors BLM CQI DRI EMS FTP FUT KR PL12 TR SAR
 Description Propane CIF ARA Lg 3-Mo

AAHIL00/PMUDE00

Dispatch Category DR
 12 Char. Symbol AAHIL0000000
 9 Char. Symbol(s) ·
 7 Char. Symbol AAHIL00
 Earliest Date 28-MAR-2001
 Vendors BLM CQI DRI EMS FTP FUT KR PL12 TR SAR
 Description Propane CIF ARA Lg 1-Qr

Dispatch Category LI
 12 Char. Symbol PRPPN\$NWEDBF
 9 Char. Symbol(s) PPRNEVAH · PPRNEVAL
 7 Char. Symbol PMUDE00
 Earliest Date 02-JAN-1997
 Vendors BLM CQI DRI EMS FTP FUT KR RTR SAR
 Description Propane NWE swaps 1st quarter

PMABC00 PROPANE W MED FOB EX-REF/STOR

Quality: Pressurized vessels including both field-grade and refinery material with a minimum of 93% C3s and a maximum

of 30% olefinic content.

Size: Sales of up to 3,000mt basis FOB Lavera.

Location: The assessment is FOB basis Lavera, but includes the area west of Italy - including Algeria, Tunisia and Morocco. To the north, Italy and France are included, as well as the east and south coasts of Spain.

Timing: Vessels loading 5-15 days from date of publication.

Dispatch Category LI
 12 Char. Symbol PRPPN\$WMDCVE
 9 Char. Symbol(s) ·
 7 Char. Symbol PMABC00
 Earliest Date 05-APR-1985
 Vendors BLM CQI DRI EMS FTP FUT KR RTR SAR
 Description Propane FOB W Med Ex-Ref/Stor Hi

PMABJ00 PROPANE W MED FCA EX-REF/STOR

Quality: Pressurized vessels including both field-grade and refinery material with a minimum of 93% C3s and a maximum of 30% olefinic content.

Size: Parcels of 20-500mt

Location: FCA ex-refinery storage refers to sales of auto, trucks, and railcars of 20-500mt basis Lavera. The assessment includes the area west of Italy - including Algeria, Tunisia and Morocco. To the north, Italy and France are included, as well as the east and south coasts of Spain.

Timing: Loading between 3-10 days from date of publication.

Other: N/A

Dispatch Category LI
 12 Char. Symbol PRPPN\$WMDCVH
 9 Char. Symbol(s) ·
 7 Char. Symbol PMABJ00
 Earliest Date 22-JUL-1994
 Vendors BLM CQI DRI EMS FTP FUT KR RTR SAR
 Description Propane FCA W Med Ex-Ref/Stor Hi

PMABE00 PROPANE W MED CIF 7000+MT

Quality: Refrigerated commercial propane meeting Sonatrach specification.

Size: Full cargoes of 7,000 mt and greater

Location: Refers to trades in the west Mediterranean region, although prices will be normalized to Lavera. The assessment includes the area west of Italy - including Algeria, Tunisia and Morocco. To the north, Italy and France are included, as well as the east and south coasts of Spain.

Timing: Delivery 10-25 days from the date of publication.

Other: N/A

Dispatch Category	LI
12 Char. Symbol	PRPPN\$WMDCVG
9 Char. Symbol(s)	PPPRWMHCH · PPPRWMHCL
7 Char. Symbol	PMABE00
Earliest Date	05-APR-1985
Vendors	BLM CQI DRI EMS FTP FUT KR RTR SAR
Description	Propane CIF W Med 7kt+

PMAAM00 BUTANE W MED FOB EX-REF/STOR

Quality: Both field-grade and refinery grade butane is included in the assessment with a maximum of 30% olefins, 85% normal

butane and 49% isobutane.

Size: FOB butane refers to sales of parcels of a minimum of 2,500mt on an FOB basis Lavera.

Location: FOB basis Lavera ex-refinery storage including the area west of Italy - including Algeria, Tunisia and Morocco. To the north, Italy and France are included, as well as the east and south coasts of Spain.

Timing: Loading 5-15 days from date of publication.

Other: N/A

Dispatch Category	LI
12 Char. Symbol	PRPBTNWMDBHS
9 Char. Symbol(s)	PPBNWMAUH · PPBNWMAUL
7 Char. Symbol	PMAAM00
Earliest Date	05-APR-1985
Vendors	BLM CQI DRI EMS FTP FUT KR RTR SAR
Description	Butane WstMed FOB XRef/Str Hi

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APPENDIX I EXAMPLE OF EN228 DEFINITION (2002)

EUROPEAN STANDARD

EN 228: 2002

NORME EUROPÉENNE

EUROPÄISCHE NORM

ICS 75.160.20

Supersedes EN 228:1999

Descriptors : petroleum products, road vehicles, mineral oils, automotive fuels, gasoline, unleaded gasoline, specifications, testing, petroleum, fuels, liquid fuels, petroleum technology, petroleum industry

English version

**Automotive fuels - Unleaded petrol -
Requirements and test methods**

Carburants pour automobiles - Essence sans
plomb - Exigences et méthodes d'essai

Kraftstoffe für Kraftfahrzeuge - Unverbleite
Ottokraftstoffe - Anforderungen und
Prüfverfahren

This draft European Standard is submitted to CEN members for Unique Acceptance Procedure.
It has been drawn up by Technical Committee CEN/TC 19.

If this draft becomes a European Standard, CEN members are bound to comply with the CEN/CENELEC Internal Regulations which stipulate the conditions for giving this European Standard the status of national standard without any alteration.

This draft European Standard was established by CEN in three official versions (English, French, German). A version in any other language made by translation under the responsibility of a CEN member into its own language and notified to the Central Secretariat has the same status as the official versions

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CEN

European Committee for Standardization
Comité Européen de Normalisation
Europäisches Komitee für Normung
Central Secretariat: rue de Stassart 36, B-1050 Brussels

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Ref. No. EN 228:2002 E

Foreword

This document has been prepared by CEN /TC 19, "Petroleum products, lubricants and related products".

This document is currently submitted to the Unique Acceptance Procedure.

This standard has been prepared under a Mandate given to CEN by the European Commission and the European Free Trade Association, and supports essential requirements of EU Directive(s).

This European Standard cancels and replaces EN 228:1999 in whole. In this 5th edition of EN 228 all relevant characteristics, requirements and test methods are specified.

Significant technical changes between this European Standard and the previous edition are:

- This version supports early national introduction of further reduced sulfur and aromatics contents anticipated by the European Union. Requirements of the modified European Fuels Directive 98/70/EC [1] are taken into account, including a maximum 10 mg/kg sulphur grade to be available in EU countries as from 1-1-2005 and is intended to replace all higher sulfur grades as from 1-1-2009.
- Test method dates are fully included in 2. Normative References.
Dates have been removed from test method references in the text and in the tables.
The modified European Fuels Directive 98/70/EC [1] refers to the test methods in EN 228, with the requirement that updated analytical methods must be shown to give at least the same accuracy and at least the same precision as the methods they replace.
- several new or revised test methods have been introduced
- Table 1, Table 2 and Table 3 explicitly differentiate between requirements included in the modified European Fuels Directive 98/70/EC [1] and other requirements.
- From 1-1-2005 regular grade unleaded petrol may be specified in a National Annex to this standard.
- Annex A has been updated and has become the Bibliography.

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1 Scope

This European Standard specifies requirements and test methods for marketed and delivered unleaded petrol. It is applicable to unleaded petrol for use in petrol engine vehicles designed to run on unleaded petrol.

NOTE For the purposes of this European Standard, the terms "% (m/m)" and "% (V/V)" are used to represent respectively the mass fraction and the volume fraction.

2 Normative references

This European Standard incorporates by dated reference, provisions from other publications. These normative references are cited at the appropriate places in the text and the publications are listed hereafter. For dated references, subsequent amendments to or revisions of any of these publications apply to this European Standard only when incorporated in it by amendment or revision.

prEN 237:2002, *Liquid petroleum products - Petrol - Determination of low lead concentrations by atomic absorption spectrometry*.

EN 238:1996, *Liquid petroleum products - Petrol - Determination of the benzene content by infrared spectrometry*.

EN 1601:1997, *Liquid petroleum products - Unleaded petrol - Determination of organic oxygenate compounds and total oxygen content by gas chromatography (O-FID)*.

EN 12177:1998, *Liquid petroleum products - Petrol - Determination of benzene content by gas chromatography*.

EN 13016-1:2000, *Liquid petroleum products - Vapour pressure - Part 1: Determination of air saturated vapour pressure (ASVP)*.

EN 13132:2000, *Liquid petroleum products - Unleaded petrol - Determination of organic oxygenate compounds and total organically bound oxygen content by gas chromatography using column switching*.

prEN 14517:2002, *Liquid petroleum products — Determination of hydrocarbon types and oxygenates in petrol — Multidimensional gas chromatography method*.

EN ISO 2160:1998, *Petroleum products - Corrosiveness to copper - Copper strip test (ISO 2160:1998)*.

prEN ISO/DIS 3170:2002, *Petroleum liquids – Manual sampling (ISO/DIS 3170:2002)*.

EN ISO 3171:1988, *Petroleum liquids – Automatic pipeline sampling (ISO 3171:1988)*.

EN ISO 3405:2000, *Petroleum products - Determination of distillation characteristics (ISO 3405:2000)*.

EN ISO 3675:1998, *Crude petroleum and liquid petroleum products - Laboratory determination of density or relative density - Hydrometer method (ISO 3675:1998)*.

EN ISO 4259:1995, *Petroleum products - Determination and application of precision data in relation to methods of test (ISO 4259:1992, including Cor. 1: 1993)*.

prEN ISO/DIS 5163:2002, *Motor and aviation-type fuels - Determination of knock characteristics - Motor method (ISO/DIS 5163:2002)*.

prEN ISO/DIS 5164:2002, *Motor fuels - Determination of knock characteristics - Research method (ISO/DIS 5164:2002)*.

EN ISO 6246: 1997, *Petroleum products - Gum content of light and middle distillate fuels - Jet*

evaporation method (ISO 6246:1995).

EN ISO 7536: 1996, Gasoline - Determination of oxidation stability of gasoline - Induction period method (ISO 7536:1994).

EN ISO 12185:1996/C1:2001, Crude petroleum and petroleum products - Determination of density - Oscillating U-tube method (ISO 12185:1996, including Cor.1:2001).

prEN ISO/DIS 20846:2002, Petroleum products – Determination of total sulfur content of liquid petroleum products – Ultraviolet Fluorescence Method (ISO/DIS 20846:2002)

prEN ISO/DIS 20847:2002, Petroleum products – Determination of total sulfur content of liquid petroleum products – Energy-dispersive X-ray fluorescence method (ISO/DIS 20847:2002).

prEN ISO/DIS 20884:2002, Petroleum products – Determination of low sulfur content of automotive fuels – Wavelength-dispersive X-ray fluorescence spectroscopy (ISO/DIS 20884:2002).

ASTM D 1319:2002, Hydrocarbon types in liquid petroleum products by Fluorescent Indicator Adsorption.

ASTM D 1613:1996, Standard test method for acidity in volatile solvents and chemical intermediates used in paint, varnish, lacquer, and related products

3 Sampling

Samples shall be taken as described in prEN ISO/DIS 3170 or EN ISO 3171 and/or in accordance with the requirements of national standards or regulations for the sampling of unleaded petrol. The national requirements shall be set out in detail or shall be referred to by reference in a national annex to this European Standard.

In view of the sensitivity of some of the test methods referred to in this European Standard, particular attention shall be paid to compliance with any guidance on sampling containers which is included in the test method standard.

It is essential that for sampling of unleaded petrol the containers used to take and store the samples before test are not contaminated with lead and/or sulfur.

4 Pump marking

Information to be marked on dispensing pumps used for delivering unleaded petrol, and the dimensions of the mark shall be in accordance with the requirements of national standards or regulations for the marking of pumps for unleaded petrol. Such requirements shall be set out in detail or shall be referred to by reference in a national annex to this European Standard.

NOTE It is recommended to set marking for sulfur and aromatics in a national annex to this European Standard. The recommended designation for 10 mg/kg sulfur content is the letter S striped out with a slash forward, eventually accompanied with the wording "sulfur-free" in national language. An example is given in Figure 1.



Figure 1 - Example of marking of 10 mg/kg sulfur

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5 Requirements and test methods

5.1 Dyes and markers

The use of dyes and markers is allowed.

5.2 Additives

In order to improve the performance quality the use of additives is allowed. Suitable fuel additives without known harmful side-effects are recommended in the appropriate amount, to help to avoid deterioration of driveability and emissions control durability. Other technical means with equivalent effect may also be used.

NOTE Deposit forming tendency test methods suitable for routine control purposes have not yet been identified and developed.

5.3 Phosphorus

In order to protect automotive catalyst systems, phosphorus containing compounds shall not be included in unleaded petrol.

5.4 Acidity

To adequately limit the acidity of the petrol, the acidity of fuel ethanol used as a blendstock shall not exceed 0,007 % (m/m) (as acetic acid) when tested in accordance with ASTM D 1613.

5.5 Generally applicable requirements and test methods

When tested by the methods indicated in Tables 1, 2 and 3, premium grade unleaded petrol and regular grade unleaded petrol shall be in accordance with the limits specified in Tables 1, 2 and 3.

As from 1-1-2005 regular grade petrol (Table 2) is not longer included in EN 228 (see Foreword).

Methods of test included as normative references in EN 228, when updated, shall give at least the same accuracy and at least the same level of precision as the methods they replace.

Table 1 - Requirements and test methods for premium grade unleaded petrol
requirements in bold refer to the modified European Directive 98/70/EC [1]

Property	Units	Limits		Test Method ^a (See 2. Normative references)
		Min.	Max.	
Research octane number, RON		95,0	—	prEN ISO/DIS 5164 ^b
Motor octane number, MON		85,0	—	prEN ISO/DIS 5163 ^b
Lead content	mg/l	—	5	prEN 237
Density (at 15 °C) ^c	kg/m ³	720	775	EN ISO 3675 EN ISO 12185
Sulfur content ^e	mg/kg	—	150 (until 31-12-2004) or 50,0	prEN ISO/DIS 20646 prEN ISO/DIS 20647 prEN ISO/DIS 20684
		—	10,0	prEN ISO/DIS 20646 prEN ISO/DIS 20684
Oxidation stability	minutes	360	—	EN ISO 7536
Existent gum content (solvent washed)	mg/100 ml	—	5	EN ISO 6246
Copper strip corrosion (3 h at 50 °C)	rating	class 1		EN ISO 2160
Appearance		clear and bright		visual inspection
Hydrocarbon type content ^f	% (V/V)			ASTM D 1319 ^{g,h,i} prEN 14517
- olefins		—	18,0	
- aromatics		—	42,0 (until 31-12-2004) or 35,0	
Benzene content ^e	% (V/V)	—	1,00	EN 12177 EN 238 prEN 14517
Oxygen content ^e	% (m/m)	—	2,7	EN 1601 EN 13132
Oxygenates content ^e	% (V/V)			EN 1601 EN 13132
- methanol ^h		—	3,0	
- ethanol ^h		—	5,0	
- iso-propyl alcohol		—	10,0	
- iso-butyl alcohol		—	10,0	
- tert-butyl alcohol		—	7,0	
- ethers (5 or more C atoms)		—	15,0	
- other oxygenates ⁱ		—	10,0	

^a See also 5.7.1
^b A correction factor of 0.2 for MON and RON shall be subtracted for the calculation of the final result before reporting accordance to the requirements of the modified European Directive 98/70/EC [1]
^c See also 5.7.2
^d The content of oxygenate compounds shall be determined as prescribed in Table 1 in order to make the corrections when necessary according to clause 13.2 of ASTM D 1319.
^e When Ethyl-tert-butyl ether (ETBE) is present in the sample, the aromatic zone shall be determined from the pink brown ring downstream of the red ring normally used in the absence of ETBE. The presence or absence of ETBE can be concluded from the analysis as required in footnote d.
^f For the purpose of this standard ASTM D 1319 shall be applied without the optional deparaffinisation step. Therefore clauses 6.1, 10.1 and 14.1.1 shall not be applied.
^g Stabilising agents shall be added.
^h Stabilising agents may be necessary.
ⁱ Other mono-alcohols and ethers with a final boiling point no higher than prescribed in Table 3.

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**Table 2 - Requirements and test methods for regular grade unleaded petrol
until 31-12-2004 (see clause 5.5)**
requirements in bold refer to the modified European Directive 98/70/EC [1]

Property	Units	Limits		Test Method ^a (See 2. Normative references)
		Min.	Max.	
Research octane number, RON		95	—	prEN ISO/DIS 5164 ^b
Motor octane number, MON		90	—	prEN ISO/DIS 5163 ^b
Lead content	mg/l	—	5	prEN 237
Density (at 15 °C) ^c	kg/m ³	720	775	EN ISO 3675 EN ISO 12185
Sulfur content ^e	mg/kg	—	150 or 50	prEN ISO/DIS 20846 prEN ISO/DIS 20847 prEN ISO/DIS 20884
		—	10,0	prEN ISO/DIS 20846 prEN ISO/DIS 20884
Oxidation stability	minutes	360	—	EN ISO 7536
Existent gum content (solvent washed)	mg/100 ml	—	5	EN ISO 6246
Copper strip corrosion (3 h at 50 °C)	rating	class 1		EN ISO 2160
Appearance		clear and bright		visual inspection
Hydrocarbon type content ^g	% (V/V)			ASTM D 1319 ^{h,k,l} prEN 14517
- olefins		—	21,0	
- aromatics		—	42,0 or 35,0	
Benzene content ^g	% (V/V)	—	1,00	EN 12177 EN 238 prEN 14517
Oxygen content ^g	% (m/m)	—	2,7	EN 1601 EN 13132
Oxygenates content ^g	% (V/V)			EN 1601 EN 13132
- methanol ^g		—	3,0	
- ethanol ^h		—	5,0	
- iso-propyl alcohol		—	10,0	
- iso-butyl alcohol		—	10,0	
- tert-butyl alcohol		—	7,0	
- ethers (5 or more C atoms)		—	15,0	
- other oxygenates ⁱ		—	10,0	

^a See also 5.7.1
^b A correction factor of 0.2 for MON and RON shall be subtracted for the calculation of the final result before reporting accordance to the requirements of the modified European Directive 98/70/EC [1]
^c See also 5.7.2
^d The content of oxygenate compounds shall be determined as prescribed in Table 1 in order to make the corrections when necessary according to clause 13.2 of ASTM D 1319
^e When Ethyl-tert-butyl ether (ETBE) is present in the sample, the aromatic zone shall be determined from the pink brown ring downstream of the red ring normally used in the absence of ETBE. The presence or absence of ETBE can be concluded from the analysis as required in footnote d
^f For the purpose of this standard ASTM D 1319 shall be applied without the optional deparaffinisation step. Therefore clauses 6.1, 10.1 and 14.1.1 shall not be applied
^g Stabilising agents shall be added
^h Stabilising agents may be necessary
ⁱ Other mono-alcohols and ethers with a final boiling point no higher than prescribed in Table 3
^j When regular grade is marketed, RON and MON shall be specified in a national annex to this European Standard, but not lower than 91.0 MON and 91.0 RON

5.6 Climatically dependent requirements and test methods

5.6.1 Water tolerance

Given the known potential for some motor gasolines to absorb water, suppliers shall ensure that no water segregation occurs under the range of climatic conditions experienced in the country concerned. When there is a risk of water separation, anti-corrosion additives shall be incorporated.

5.6.2 Volatility requirements

To meet hot and cold vehicle driveability requirements under the European seasonal and geographical conditions, 10 volatility classes are defined as given in Table 3 and illustrated in Figure 1. Each country shall, in a national annex to this European Standard, specify which of these 10 volatility classes apply during which period of the year for defined regions of the country.

Class A shall apply during summer, starting not later than 1 May and ending not before 30 September. In countries with arctic or severe winter conditions, class B shall apply during summer, starting not later than 1 June and ending not before 31 August.

Each country shall apply one or more volatility classes with VLI (class C1, D1, E1, or F1) for the transition periods on either side of summer. Each transition period shall be a minimum of 4 weeks. When transition periods are deemed critical, the critical transition period(s) shall be a minimum of 8 weeks. During the remaining period one or more winter classes shall apply with or without VLI (class C, C1, D, D1, E, E1, F or F1).

Table 3 - Volatility classes
requirements in bold refer to the modified European Directive 98/70/EC [1]

Property	Units	Limits						Test method ^a See also 2. Normative references
		class A	class B	class C/C1	class D/D1	class E/E1	class F/F1	
Vapour pressure	kPa, min. kPa, max.	45,0 60,0	45,0 70,0	50,0 80,0	60,0 90,0	65,0 95,0	70,0 100,0	EN 13016-1 ^a
% evaporated at 70°C, E70	% (V/V), min. % (V/V), max.	20,0 48,0	20,0 48,0	22,0 50,0	22,0 50,0	22,0 50,0	22,0 50,0	EN ISO 3405
% evaporated at 100°C, E100	% (V/V), min. % (V/V), max.	46,0 71,0	46,0 71,0	46,0 71,0	46,0 71,0	46,0 71,0	46,0 71,0	EN ISO 3405
% evaporated at 150°C, E150	% (V/V), min.	75,0	75,0	75,0	75,0	75,0	75,0	EN ISO 3405
Final Boiling Point FBP ^b	°C, max.	210	210	210	210	210	210	EN ISO 3405
Distillation residue	% (V/V), max.	2	2	2	2	2	2	EN ISO 3405
VLI (10 VP + 7 E70)	index, max.	—	—	C	D	E	F	
VLI (10 VP + 7 E70)	index, max.			C1	D1	E1	F1	
				1050	1150	1200	1250	

^a See also 5.7.1

^b DVPE shall be reported

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No change anticipated in figure 1

Figure 1 - Relation between VP, E70 and VLI for the ten different volatility classes

5.7 Precision and dispute

5.7.1 All test methods referred to in this European Standard include a precision statement. In cases of dispute, the procedures described in EN ISO 4259 for resolving the dispute, and interpretation of the results based on test method precision shall be used.

5.7.2.

In cases of dispute concerning sulfur prEN ISO/DIS 20847 is unsuitable as an arbitration method.

In cases of dispute concerning benzene content, EN 12177 shall be used.

In cases of dispute concerning oxygen and oxygenates content, EN 1601 shall be used.

In cases of dispute on hydrocarbon type content, ASTM D 1319 shall be used.

In cases of dispute concerning density, EN-ISO 3675 shall be used.

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Bibliography

- [1] Directive 2002/XX/EC of the European Parliament and of the Council on the quality of petrol and diesel fuels and amending Directive 98/70/EC *(to be published, proposal by the Council known as 5117/02)*.

APPENDIX II EXAMPLE OF DEFINITION OF EN590 DEFINITION (2002)

EUROPEAN STANDARD

prEN 590: 2002

NORME EUROPÉENNE

EUROPÄISCHE NORM

ICS 75.160.20

Supersedes EN 590: 1999

Descriptors : petroleum products, road vehicles, diesel fuels, specifications, testing,
 automotive fuels, petroleum, fuels, liquid fuels, petroleum technology, petroleum industry

English version

Automotive fuels - Diesel - Requirements and test methods

Carburants pour automobiles - Combustibles
 pour moteurs diesel (gazole) - Exigences et
 méthodes d'essai

Kraftstoffe für Kraftfahrzeuge - Dieselmotorkraftstoff -
 Anforderungen und Prüfverfahren

This draft European Standard is submitted to CEN members for the Unique
 Acceptance Procedure.
 It has been drawn up by Technical Committee CEN/TC 19.

If this draft becomes a European Standard, CEN members are bound to comply
 with the CEN/CENELEC Internal Regulations which stipulate the conditions for
 giving this European Standard the status of national standard without any
 alteration.

This draft European Standard was established in three official versions
 (English, French, German). A version in any other language made by translation
 under the responsibility of a CEN member into its own language and notified to
 the Central Secretariat has the same status as the official versions.

CEN members are the national standards bodies of Austria, Belgium, Czech
 Republic, Denmark, Finland, France, Germany, Greece, Iceland, Ireland, Italy,
 Luxembourg, Netherlands, Norway, Portugal, Spain, Sweden, Switzerland and
 United Kingdom.

CEN

European Committee for Standardization
 Comité Européen de Normalisation
 Europäisches Komitee für Normung

Central Secretariat: rue de Stassart 36, B-1050 Brussels

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Foreword

This document has been prepared by CEN /TC 19, "Petroleum products, lubricants and related products".

This document is currently submitted to the Unique Acceptance Procedure.

This European Standard has been prepared under a Mandate given to CEN by the European Commission and the European Free Trade Association, and supports essential requirements of EU Directive(s).

This European Standard replaces EN 590:1999 in whole. In this fourth edition of EN 590 all relevant characteristics, requirements and test methods are specified.

Significant technical changes between this European Standard and the previous edition are:

- The requirements of the modified European Fuels Directive 98/70/EC [1] have been included, supporting early national introduction of zero sulfur automotive diesel fuel.
- Provision is made for a maximum of 5% (V/V) of fatty acid methyl esters (FAME) to be included in automotive diesel fuel.
- Dates have been included with all normative test method references in order to comply with the requirements of the European Commission, with the accompanying assurance that updated versions will always give similar accuracy and the same or better precision.
- Table 1 explicitly differentiates between requirements included in the modified European Fuels Directive 98/70/EC [1] and other requirements.
- Many of the test methods included in this standard were the subject of inter-laboratory testing to determine the applicability of the method and its precision in relation to blends of automotive diesel fuel containing 5% (V/V) of different sources of fatty acid methyl esters (FAME). These fatty acid methyl esters were produced from rapeseed and sunflower oil.

Annex A is normative and contains the precision data generated on the test methods which are the result of the inter-laboratory testing as mentioned above, carried out by working groups of CEN/TC19.

1 Scope

This European Standard specifies requirements and test methods for marketed and delivered automotive diesel fuel. It is applicable to automotive diesel fuel for use in diesel engine vehicles designed to run on automotive diesel fuel.

NOTE For the purposes of this European Standard, the terms "% (m/m)" and "% (V/V)" are used to represent respectively the mass fraction and the volume fraction.

2 Normative references

This European Standard incorporates by dated reference, provisions from other publications. These normative references are cited at the appropriate places in the text and the publications are listed hereafter. For dated references, subsequent amendments to or revisions of any of these publications apply to this European Standard only when incorporated in it by amendment or revision.

EN 116:1997, *Diesel and domestic heating fuels - Determination of cold filter plugging point*.

EN 12662:1998, *Liquid petroleum products – Determination of contamination in middle distillates*.

EN 12916:2000, *Petroleum products – Determination of aromatic hydrocarbon types in middle distillates – High performance liquid chromatography method with refractive index detection*.

prEN 14078:2002, *Liquid petroleum products – Determination of fatty acid methyl ester (FAME) content in middle distillates – Infrared spectrometry method*.

prEN 14214:2002, *Automotive fuels – Fatty acid methyl esters (FAME) for diesel engines – Requirements and test methods*

EN ISO 2160:1998, *Petroleum products - Corrosiveness to copper - Copper strip test. (ISO 2160:1998)*

prEN ISO/FDIS 2719:2002, *Petroleum products and lubricants - Determination of flash point - Pensky-Martens closed cup method. (ISO/FDIS 2719:2002)*

EN ISO 3104:1996, *Petroleum products - Transparent and opaque liquids - Determination of kinematic viscosity and calculation of dynamic viscosity. (ISO 3104:1994)*

prEN ISO/DIS 3170:2002, *Petroleum liquids – Manual sampling. (ISO/DIS 3170:2002)*

EN ISO 3171:1988, *Petroleum liquids – Automatic pipeline sampling. (ISO 3171:1988)*

EN ISO 3405:2000, *Petroleum products - Determination of distillation characteristics. (ISO 3405:2000)*

EN ISO 3675:1998, *Crude petroleum and liquid petroleum products - Laboratory determination of density or relative density - Hydrometer method. (ISO 3675:1998)*

EN ISO 4259:1995, *Petroleum products - Determination and application of precision data in relation to methods of test. (ISO 4259:1992, including Cor. 1: 1993)*

EN ISO 4264: 1996, *Petroleum products - Distillate fuels - Calculation of cetane index*.

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(ISO 4264: 1995)

EN ISO 5165:1998, *Diesel fuels - Determination of ignition quality - Cetane method.*
(ISO 5165:1998)

prEN ISO/DIS 6245:2002, *Petroleum products - Determination of ash.* (ISO/DIS 6245:2001)

EN ISO 10370:1995, *Petroleum products - Determination of carbon residue (micro method).*
(ISO 10370:1993).

EN ISO 12185:1996/C1:2001, *Crude petroleum and petroleum products - Determination of density - Oscillating U-tube method* (ISO 12185:1996, including Cor.1:2001).

EN ISO 12205:1996, *Petroleum products - Determination of the oxidation stability of distillate fuels.* (ISO 12205:1995)

EN ISO 12937:2000, *Petroleum products - Determination of water - Coulometric Karl Fisher titration method.* (ISO 12937:2000)

EN ISO 13759:1996, *Petroleum products - Determination of alkyl nitrate in diesel fuels - Spectrometric method.* (ISO 13759:1996)

prEN-ISO/DIS 20846:2002, *Petroleum products – Determination of total sulfur content of liquid petroleum products – Ultraviolet Fluorescence Method* (ISO/DIS 20846:2002)

prEN-ISO/DIS 20847:2002, *Petroleum products – Determination of total sulfur content of liquid petroleum products – Energy-dispersive X-ray fluorescence method* (ISO/DIS 20847:2002).

prEN-ISO/DIS 20884:2002, *Petroleum products – Determination of low sulfur content of automotive fuels – Wavelength-dispersive X-ray fluorescence spectroscopy* (ISO/DIS 20884:2002).

EN 23015:1994, *Petroleum products - Determination of cloud point.* (ISO 3015:1992)

ISO 12156-1:1997, *Diesel fuels - Assessment of lubricity by HFRR.* (including Cor.1:1998)

3 Sampling

Samples shall be taken as described in prEN ISO/DIS 3170 or EN ISO 3171 and/or in accordance with the requirements of national standards or regulations for the sampling of automotive diesel fuel. The national requirements shall be set out in detail or shall be referred to by reference in a national annex to this European Standard.

In view of the sensitivity of some of the test methods referred to in this European Standard, particular attention shall be paid to compliance with any guidance on sampling containers which is included in the test method standard.

4 Pump marking

Information to be marked on dispensing pumps used for delivering automotive diesel fuel, and the dimensions of the mark shall be in accordance with the requirements of national standards or regulations for the marking of pumps for automotive diesel fuel. Such requirements shall be set out in detail or shall be referred to by reference in a national annex to this European

Standard.

NOTE It is recommended to set marking for sulfur and aromatics in a national annex to this European Standard. The recommended designation for 10 mg/kg sulfur content is the letter S striped out with a slash, eventually accompanied with the wording "sulfur-free" in national language.

5 Requirements and test methods

5.1 Dyes and markers

The use of dyes or markers is allowed.

5.2 Additives

In order to improve the performance quality, the use of additives is allowed. Suitable fuel additives without known harmful side-effects are recommended in the appropriate amount, to help to avoid deterioration of driveability and emissions control durability. Other technical means with equivalent effect may also be used.

NOTE Deposit forming tendency test methods suitable for routine control purposes have not yet been identified and developed.

5.3 Fatty acid methyl ester (FAME)

Diesel fuel may contain up to 5% (V/V) of FAME complying with prEN 14214.

NOTE A suitable method for the separation and identification of FAME is given in EN 14331 [2].

5.4 Generally applicable requirements and related test methods

5.4.1 When tested by the methods indicated in Table 1, automotive diesel fuel shall be in accordance with the limits specified in Table 1.

5.4.2 The limiting value for the carbon residue given in Table 1 is based on product prior to addition of ignition improver, if used. If a value exceeding the limit is obtained on finished fuel in the market, EN ISO 13759 shall be used as an indicator of the presence of a nitrate-containing compound. If an ignition improver is thus proved present, the limit value for the carbon residue of the product under test cannot be applied. The use of additives does not exempt the manufacturer from meeting the requirement of maximum 0,30 % (m/m) of carbon residue prior to addition of additives.

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Table 1 - Generally applicable requirements and test methods
requirements in bold refer to the modified European Directive 98/70/EC [1]

Property	Unit	Limits		Test method ^a (See 2. Normative references)
		minimum	maximum	
Cetane number ^b		51,0	—	EN ISO 5165
Cetane index		46,0	—	EN ISO 4264
Density at 15 °C ^c	kg/m ³	820	845	EN ISO 3675 EN ISO 12185
Polycyclic aromatic hydrocarbons ^{d, e}	% (m/m)	—	11	EN 12916
Sulfur content ^f	mg/kg	—	350 (until 31-12-2004) or 50,0 10,0	prEN ISO/DIS 20846 prEN ISO/DIS 20847 prEN ISO/DIS 20884 prEN ISO/DIS 20846 prEN ISO/DIS 20884
Flash point	°C	Above 55	—	prEN ISO/FDIS 2719
Carbon residue ^g (on 10 % distillation residue)	% (m/m)	—	0,30	EN ISO 10370
Ash content	% (m/m)	—	0,01	prEN ISO/DIS 6245
Water content	mg/kg	—	200	EN ISO 12937
Total contamination	mg/kg	—	24	EN 12662
Copper strip corrosion (3 h at 50 °C)	rating	class 1		EN ISO 2160
Oxidation stability	g/m ³	—	25	EN ISO 12205
Lubricity, corrected wear scar diameter (wcd 1,4) at 60 °C	µm	—	460	ISO 12156-1
Viscosity at 40 °C	mm ² /s	2,00	4,50	EN ISO 3104
Distillation ^{h, i}				EN ISO 3405
% (V/V) recovered at 250 °C	% (V/V)	85	< 65	prEN 14078
% (V/V) recovered at 350 °C	% (V/V)			
95 % (V/V) recovered at	°C		360	
Fatty acid methyl ester (FAME) content ^k	% (V/V)	—	5	

^a See also 5.6.1
^b See also 5.6.4
^c See also 5.6.2
^d For the purposes of this European Standard, polycyclic aromatic hydrocarbons are defined as the total aromatic hydrocarbon content less the mono-aromatic hydrocarbon content, both as determined by EN 12916.
^e EN 12916 is not able to distinguish between polycyclic aromatic hydrocarbons and fatty acid methyl esters (FAME). FAME, if present in diesel fuels, will give a bias which will increase the value for polycyclic aromatic hydrocarbons. An improved method for the determination of polycyclic aromatic hydrocarbons is under development by CEN/TC 19.
^f See also 5.6.3
^g See also 5.4.2
^h For the calculation of the cetane index the 10 %, 50 % and 90 % (V/V) recovery points are also needed.
ⁱ The limits for distillation at 250 °C and 350 °C are included for diesel fuel in line with EU Common Customs tariff.
^k FAME shall meet the requirements of prEN 14214

5.5 Climate dependent requirements and related test methods

5.5.1 For climate-dependent requirements options are given to allow for seasonal grades to

be set nationally. The options are for temperate climates six CFPP (cold filter plugging point) grades and for arctic or severe winter climates five different classes. Climate-dependent requirements are given in Table 2. Table 2 is divided into two sections, one for temperate climates (Table 2a) and one for arctic or severe winter climates (Table 2b). When tested by the methods given in Tables 2a and 2b, automotive diesel fuel shall be in accordance with the limits specified in these tables.

5.5.2 The cetane number limits for arctic or severe winter grades in Table 2b are lower than for the temperate grade (Table 1), reflecting the correlation between ignition quality and density, and the low density of arctic or severe winter grades. The values for cetane number given in Table 2b do not meet the requirements of the modified European Directive 98/70/EC [1], and are included for use in countries where the modified European Directive 98/70/EC [1] does not apply or for countries where cetane number exceptions have been granted for arctic or severe winter grades.

5.5.3 In a national annex to this European Standard each country shall detail requirements for a summer and a winter grade and may include (an) intermediate and/or regional grade(s) which shall be justified by national meteorological data.

Table 2 - Climate-related requirements and test methods

Table 2a - Temperate climates

Property	Unit	Limits						Test method ^a (See 2. Normative references)
		Grade A	Grade B	Grade C	Grade D	Grade E	Grade F	
CFPP	°C, max.	+5	0	-5	-10	-15	-20	EN 116

^a See also 5.6.1

Table 2b - Arctic or severe winter climates

Property	Units	Limits					Test method ^a (See 2. Normative references)
		class 0	class 1	class 2	class 3	class 4	
CFPP	°C, max.	-20	-26	-32	-38	-44	EN 116
Cloud point	°C, max.	-10	-16	-22	-28	-34	EN 23015
Density at 15 °C ^b	kg/m ³ , min.	800	800	800	800	800	EN ISO 3675
	kg/m ³ , max.	845	845	840	840	840	EN ISO 12185
Viscosity at 40 °C	mm ² /s, min.	1,50	1,50	1,50	1,40	1,20	EN ISO 3104
	mm ² /s, max.	4,00	4,00	4,00	4,00	4,00	
Cetane number ^c	minimum	49,0	49,0	48,0	47,0	47,0	EN ISO 5165
Cetane index	minimum	46,0	46,0	46,0	43,0	43,0	EN ISO 4264
Distillation ^{d,e}							
% (V/V) recovered at 180 °C	% (V/V), max.	10	10	10	10	10	EN ISO 3405
% (V/V) recovered at 340 °C	% (V/V), min.	95	95	95	95	95	

^a See also 5.6.1

^b See also 5.6.2

^c See also 5.6.4

^d EU Common Customs Tariff definition of gas oil may not apply to the grades defined for use in arctic or severe winter climates.

^e For the calculation of the cetane index the 10 %, 50 % and 90 % (V/V) recovery points are also needed

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5.6 Precision and dispute

5.6.1 All test methods referred to in this European Standard include a precision statement. In cases of dispute, the procedures described in EN ISO 4259 for resolving the dispute, and interpretation of the results based on the test method precision, shall be used.

5.6.2 In cases of dispute concerning density, EN ISO 3675 shall be used.

5.6.3 In cases of dispute concerning sulfur content, prEN ISO/DIS 20847 is unsuitable as an arbitration method.

5.6.4 For the determination of cetane number alternative methods may also be used in cases of dispute, provided that these methods originate from a recognised method series, and have a valid precision statement, derived in accordance with EN ISO 4259, which demonstrates precision at least equal to that of the referenced method. The test result, when using an alternative method, shall also have a demonstrable relationship to the result obtained when using the referenced method.

Annex A
(Normative)
Details of inter-laboratory test programme

**Table A.1 - Precision data from inter-laboratory test programme for requirements
where precision differs from ISO/TC28 precision data**

Property	Test method	Unit	CEN/TC19 data for 5% (V/V) FAME blend
Viscosity at 40 °C	EN ISO 3104	mm ² /s	r 0,11% R 1,6%
Flash point	EN 22719	deg C	r 2,0 R 3,5
Ash content	prEN ISO/DIS 6245	% (m/m)	not available
Total contamination	EN 12662	mg/kg	not available
Oxidation stability	EN ISO 12205	g/m ³	not available
Distillation	EN ISO 3405	deg C	not available
CFPP	EN 116	deg C	not available
where: r is repeatability (EN ISO 4259) R is reproducibility (EN ISO 4259)			

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Bibliography

- [1] Directive 2002/XX/EC of the European Parliament and of the Council on the quality of petrol and diesel fuels and amending Directive 98/70/EC (to be published, proposal known as COM(2001) 241 final).
- [2] EN 14331:2002, Liquid petroleum products – Separation and characterization of fatty acid methyl esters (FAME) by liquid chromatography/ gas chromatography (LC/GC).

APPENDIX III TYPICAL MIDDLE DISTILLATE QUALITIES

These specifications represent a guideline, but are not Platts specifications. Platts assesses the typical grades in the market.

DIESEL						
PROPERTY	UNITS	50 ULSD cargoes NWE and Med	EN590 cargoes NWE and MED	ULSD cargoes NWE	10 cargoes and barges	ULSD barges ARA
SULFUR	Parts per Million	50 max	350 max	50 max	10 max	50 max
DENSITY At 15 deg C	Kg/m3	0.820-0.845	0.820-0.845	0.820-0.835	0.820-0.845	0.820-0.845
CETANE INDEX NUMBER		46 min	46 min	46 min	46 min	46 min
CLOUD						
Winter	Deg C	-5 max	-5 max	-5 max	-7 max	-7 max (*1)
Intermediate				-3 max	0 max	
Summer		5 max	5 max	3 max	5 max	4 max
CFFP POINT						
Winter	Deg C	-15 max	-15 max	-15 max	-22 max	-20 max
Intermediate					-13 max	-11 max
Summer		0 max	0 max	-5 max	-2	-5 max
DISTILLATION						
Recovered at	% Vol					
250 deg C		65 max	65 max	65 max	64 max	64 max
345 deg C				95 min		
350 deg C		85 min	85 min		85 min	85 min
360 deg C			95 min		95 min	95 min
370 deg C						
FLASH POINT	Deg C	55 min 120 max	55 min 120 max	60 min (*1)	56 min (*3)	56 min
VISCOSITY	At 40 deg C	2 to 4.5	2 to 4.5	2 to 4.5	2 to 4.5	2 to 4.5
(*1)-5 cloud is often traded, if effective WASA available, minimum 150ppm, as part of an industry agreement						
(*2) 55 min is the standard flash, but tends to be 60 flash min in practice.						
(*3) 10ppm barges can reflect 59 min flash point for pipeline grade, but not barge						

GASOIL				
PROPERTY	UNITS	GERMAN Cargo DIN and barge	FRENCH FOD	RUSSIAN
SULFUR	Parts per million	2000	2000	2000
DENSITY	Kg/m3	Assessed basis 0.845	Assessed basis 0.845	Assessed basis 0.845
CETANE INDEX		Standard calorific value 42.6 MJ/KG	40 min	45 min, but typically tends to be more than 50
CLOUD	Deg C	1 max (a) 2 max (b) 3 max (c)	2 max	-5 max
CFPP POINT	Deg C	-10 max (a) -11 max (b) -12 max ©	- 5 max	-7 typical
DISTILLATION	% Vol			
Recovered at				
280 deg C		65 max	65 max	50 max
360 deg C		85 min	85 min	96 min
FLASH POINT	Deg C	55 min	(*4)	55 min
62 min				
VISCOSITY				
At 20 deg C				3 to 6
At 40 deg C		2 to 6	2 to 4.5	
(*4) German DIN official is 55 min flash, but the requirements is sometimes higher in the cargo market, 57 min flash.				
TEST METHOD				
French FOD and German DIN test method is based on standard European test methods.				
Russian gasoil test method is GOST				

APPENDIX IV ASSESSMENT LIST WITH DATA CODES

DATA CODES

Each Platts assessment is identified in the electronic databases by a 7-character data code. The following tables provides the data codes for each European oil product assessment carried in Platts European Marketscan and each LPG assessment carried in LPGaswire. The table layout is that carried in the telex/newsletter version of these publications; when assessments are carried in related publications such as Platts Oilgram Price Report, Platts Global Alert, or the regional marketscans, the actual layout may vary.

EUROPEAN MARKETSCAN ASSESSMENTS

		FOB Med (Italy)			CIF Med(Genova/Lavera)		
Premium Gasoline 50ppm	+X.00	AAOPW00-AAOPW00	+X.00	+X.00	AAOPX00-AAOPX00	+X.00	
Naphtha	+X.00	PAAAI00-PAAAI00	+X.00	+X.00	PAAAH00-PAAAH00	+X.00	
JetI	+X.00	AAIDL00-AAIDL00	+X.00				
50ppm ULSD	+X.00	AAOQC00-AAOQC00	+X.00	+X.00	AAOQD00-AAOQD00	+X.00	
GasoiI.2	+X.00	POAAB00-POAAB00	+X.00	+X.00	POAAA00-POAAA00	+X.00	
Fuel Oil 1%	+X.00	PUAAK00-PUAAK00	+X.00	+X.00	PUAAJ00-PUAAJ00	+X.00	
Fuel Oil 3.5%	+X.00	PUAAZ00-PUAAZ00	+X.00	+X.00	PUAAY00-PUAAY00	+X.00	
Jet FOB Med premium	Prem	AAIDN00-AAIDN00					
		Cargoes CIF NWE/Basis ARA			Cargoes FOB NWE		
Premium Gasoline 50 ppm	+X.00	AAIJJ00-AAIJJ00	+X.00	+X.00	AAIJH00-AAIJH00	+X.00	
Premium gasoline 10 ppm	+X.00	AAOPZ00-AAOPZ00	+X.00	+X.00	AAOPY00-AAOPY00	+X.00	
Regular gasoline 10 ppm	+X.00	AAIJN00-AAIJN00	+X.00	+X.00	AAIJL00-AAIJL00	+X.00	
Naphtha (Month)	+X.00	PAAAJ00-PAAAJ00	+X.00				
Naphtha	+X.00	PAAAL00-PAAAL00	+X.00				
Jet	+X.00	PJAAU00-PJAAU00	+X.00	+X.00	PJAAV00-PJAAV00	+X.00	
Diesel 10 ppm	+X.00	AAKWP00-AAKWP00	+X.00	+X.00	AAKWR00-AAKWR00	+X.00	
Diesel 50 ppm UK	+X.00	AAIKO00-AAIKO00	+X.00	+X.00	AAIKM00-AAIKM00	+X.00	
Diesel 50 ppm	+X.00	AAQBB00-AAQBB00	+X.00	+X.00	AAQBA00-AAQBA00	+X.00	
Russian gasoil 0.2%	+X.00	AAQZ00-AAQZ00	+X.00				
GasoiI 0.2%	+X.00	POAAC00-POAAC00	+X.00	+X.00	POAAD00-POAAD00	+X.00	
Fuel Oil 1%		PUAAL00-PUAAL00		+X.00	PUAAM00-PUAAM00	+X.00	
Fuel Oil 3.5%	+X.00	PUABA00-PUABA00	+X.00	+X.00	PUABB00-PUABB00	+X.00	
Straight run 0.5-0.7%.				+X.00	PKABA00-PKABA00	+X.00	
VGO 0.5-0.6%	+X.00	AAHMZ00-AAHMZ00	+X.00	+X.00	AAHMX00-AAHMX00	+X.00	
VGO 2% max	+X.00	AAHND00-AAHND00	+X.00	+X.00	AAHNB00-AAHNB00	+X.00	
		Barges FOB Rotterdam			Barge differential - 50ppm		
98 RON gasoline 10 ppm	+X.00	AAKOD00-AAKOD00	+X.00		AALBJ00/AALBJ00		
Premium gasoline 10 ppm	+X.00	PGABM00-PGABM00	+X.00				
Premium gasoline 50ppm	+X.00	AANWY00-AANWY00	+X.00				
Regular gasoline 10 ppm	+X.00	AAKOF00-AAKOF00	+X.00				
MTBE	+X.00	PHAKZ00-PHAKZ00	+X.00				
Naphtha	+X.00	PAAAM00-PAAAM00	+X.00				
Jet	+X.00	PJABA00-PJABA00	+X.00				
Diesel 10 ppm	+X.00	AAJUS00-AAJUS00	+X.00				
Diesel 50 ppm	+X.00	AAGMK00-AAGMK00	+X.00				
GasoiI 0.2%	+X.00	POAAG00-POAAG00	+X.00				
Fuel oil 1%	+X.00	PUAAP00-PUAAP00	+X.00				
Fuel oil 1.5%	+X.00	AASXR00-AASXR00	+X.00				
Fuel Oil 3.5%	+X.00	PUABC00-PUABC00	+X.00				
					International Petroleum Exchange		
					Gasoil Settlements		
					M01	n/a M04	n/a
					M02	n/a M05	n/a
					M03	n/a M06	n/a
					IPE gasoil GWAVE		
					M01	PXAAJ00 M01	n/a
					M02	PXAAK00 M02	n/a
					Platts Gasoil Futures		
					Prevailing gasoil futures 1630 London time		

LPGASWIRE EUROPEAN ASSESSMENTS

NWE:		Propane SPOT USD/MT		Butane SPOT USD/MT		
FOB SEAGOING	+x.00	PMABB00-PMABB00	+x.00	+x.00	PMAAL00-PMAAL00	+x.00
FOB ARA	+x.00	PMAAS00-PMAAS00	+x.00	+x.00	PMAAC00-PMAAC00	+x.00
FCA ARA*	+x.00	PMABH00-PMABH00	+x.00	+x.00	PMABIO0-PMABIO0	+x.00
CIF 1-3000MT	+x.00	PMAAZ00-PMAAZ00	+x.00	+x.00	PMAAJ00-PMAAJ00	+x.00
CIF 3000+MT	+x.00	PMAAC00-PMAAC00	+x.00			
CIF 7000+MT	+x.00	PMABA00-PMABA00	+x.00			
Monthly rolling average						
FOB SEAGOING		PMUDIO0-PMUDIO0				
CIF 7000+MT		PMUDK00-PMUDK00				
Propane swaps (basis CIF NWE)						
Aug	+x.00	AAHIK00-AAHIK00	+x.00			
Sep	+x.00	AAHIM00-AAHIM00	+x.00			
Oct	+x.00	AAHIO00-AAHIO00	+x.00			
Q4	+x.00	AAHIL00-AAHIL00	+x.00			
W MED:						
FOB EX-REF/STOR	+x.00	PMABC00-PMABC00	+x.00	+x.00	PMAAM00-PMAAM00	+x.00
FCA EX-REF/STOR	+x.00	PMABJ00-PMABJ00	+x.00			
CIF 7000+MT	+x.00	PMABE00-PMABE00	+x.00			

NOTE: * FCA ARA refers to sales onto railcars and trucks in the Amsterdam-Rotterdam-Antwerp region

APPENDIX V SUBSCRIBER NOTES ISSUED 2005 ONWARDS

SUBSCRIBER NOTES

Following is a listing of key Subscriber notes and Clarification notes issued by Platts in 2004:

04-Jan-05 Effective Jan 4, 2005 the Worldscale flat rate Augusta-Rotterdam used to calculate the netback formula for FOB Med jet and jet av fuel becomes \$6.43 per metric tonne. Harbor dues at Rotterdam are calculated at \$0.61/mt based on 1.07/GT of vessel, converted to an mt basis.

04-Jan-05 Effective Jan 4, 2005, the Worldscale basket flat rate used to calculate FOB Med naphtha will become \$8.12. FOB Med naphtha is assessed as a freight differential to the CIF NWE. The actual freight applied to the netback will fluctuate daily based on changes in Platts UKC-Med assessments for 27,500mt naphtha cargoes, applied against the \$8.12/mt rate. The worldscale flat rate used to calculate the CIF MED Naphtha assessment will become \$5.17 based on published freight values between Alexandria and Lavera using Platts cross-Med clean tanker naphtha assessments.

05-Jan-05 The latest issue of Platts guide to specifications for European oil products is available on Platts' Web site
<http://platts.com/Oil/Resources/Methodology%20&%20Specifacat>

ions/ europeanoilproductspecs.pdf

28-Jan-05 Platts plans to begin publishing euro-denominated assessments for a selection of its key crude oil and European and US product benchmarks as a supplement to the existing US dollar-denominated values. Because decision-making in international oil markets is inherently exposed to foreign exchange currency fluctuations, Platts is providing this additional information to allow subscribers to compare prices more efficiently across regions. The selected euro-denominated assessments will be launched on Feb 14 and will reflect values prevailing at 1730 local London time. (Cont PGA 711).

04-Feb-05 Platts plans to begin publishing euro-denominated assessments for a selection of its key crude oil and European and US product benchmarks as a supplement to the existing US dollar-denominated values. Because decision-making in international oil markets is inherently exposed to foreign exchange currency fluctuations, Platts is providing this additional information to allow subscribers to compare prices more efficiently across regions. The selected euro-denominated assessments will be launched on February 14th, 2005, and will reflect values prevailing at 1730 local London time. They will include Dated Brent, Urals (Mediterranean), 1st month WTI, 1st month Mars, Premium Unleaded Cargoes CIF NWE/Basis ARA, Naphtha Physical Cargoes CIF NWE/Basis ARA, Jet Cargoes CIF NWE/Basis ARA, 1 Pct Cargoes FOB NWE, Premium Unleaded

Barges FOB Rotterdam, 10 PPM Barges FOB Rotterdam, Gasoil 0.2 Pct Sulfur Barges FOB Rotterdam, 3.5 Pct Barges FOB Rotterdam,

17-Feb-05 Following industry feedback Platts is considering increasing the minimum assessable barge volume for gasoil and ULSD barges in the ARA area. Platts is planning to increase the minimum volume from 1,000mt to a range of 1,000-2,000mt where the buyer has the option to choose the actual volume. However, the buyer has the obligation to specify the actual volume at the time of the deal. Platts will continue to include in the assessment process transactions of up to 5,000mt. Subscriber feedback should be sent by Mar 4, 2004 to: patrick_gourlay@platts.com, annalisa_jeffries@platts.com and with a CC to peter_stewart@platts.com and Jorge_montepeque@platts.com

07-Mar-05 As previously announced Platts will discontinue the Prem 0.15 FOB Med assessment from April 1, 2005. Until then, Platts will continue to assess Prem 0.15 at a fixed \$6/mt premium to the Prem Unl FOB Med assessment, which reflects 150 ppm sulfur material. Any comments please to annalisa_jeffries@platts.com and john_mckay@platts.com, with a cc to Jorge_montepeque@platts.com or Peter_stewart@platts.com.

07-Mar-05 As previously announced Platts will discontinue FOB and CIF Med EN590 diesel assessments (350 ppm) March 31 2005. For comments please email annalisa_jeffries@platts.com, patrick_gourlay@platts.com, with a cc to Jorge_montepeque@platts.com or Peter_stewart@platts.com.

07-Mar-05 With immediate effect and following industry feedback Platts will increase the minimum assessable barge volume for gasoil and ULSD barges in the ARA area. Platts will increase the minimum assessable volume from 1kt only to a range within 1-2kt where the buyer has the option to choose the actual volume. The buyer has the obligation to specify the actual volume at the time of the deal. Platts will continue to include in the assessment process transactions of up to 5kt. Any further comments to patrick_gourlay@platts.com, annalisa_jeffries@platts.com and with a CC to peter_stewart@platts.com and Jorge_montepeque@platts.com

07-Mar-05 Following industry feedback Platts is considering changing the naphtha ship nomination procedure from 5 days prior to the first day of the laycan to 3days. In the meantime the existing delivery nomination procedures will remain the same. Platts takes into consideration transactions where the seller has the right to narrow to a 3 day delivery window, five calendar days prior to the first day of the three day delivery laycan. Any comments by March 18 to daniel_booth@platts.com and annalisa_jeffries@platts.com. with a cc to Jorge_montepeque@platts.com or Peter_stewart@platts.com.

07-Mar-05 Following subscriber feedback Platts is considering changing the shipping nomination procedures acceptable for assessment purposes for deliveries of

Mediterranean gasoil, gasoline and fuel oil. Currently Platts includes in its assessments process ship nominations 5 calendar days prior to 1st delivery laycan day. Platts is considering switching to 7 calendar days prior to 1st delivery laycan day. Any subscriber feedback to annalisa_jeffries@platts.com and peter_stewart@platts.com with a cc to Jorge_montepeque@platts.com.

16-Mar-05 In line with seasonal changes in recent years European 50ppm ULSD cargo assessments will reflect summer specification only from March 22 2005. Any comments please to daniel_booth@platts.com and annalisa_jeffries@platts.com, with CC to peter_stewart@platts.com and Jorge_montepeque@platts.com

29-Mar-05 The UK Ministry of Defence has updated Defstan 91-91, the defining standard for Jet A1 in Europe, with the release Feb 8 of issue 5. Since Feb 8, Platts jet NWE and Mediterranean assessments have reflected issue 5 spec, having previously Platts reflected Defstan 91-91 issue 4 specification. For any comments please email simon_thorne@platts.com and annalisa_jeffries@platts.com.

13-Apr-05 Due to the increasing number of bids and offers on middle distillates market information in Europe, Platts has set up two separate Yahoo instant messenger accounts: one for diesel and one for gasoil. Platts has set up two account names as follows: plattsgasoil and plattsdiesel. Effective April 18, Platts requests all diesel bids and offers to be sent to plattsdiesel and all gasoil bids and offers to be sent to plattsgasoil. Any comments should be sent to annalisa_jeffries@platts.com, with a cc to Jorge_montepeque@platts.com

05-May-05 Clarification note, European products: Bids/offers for derivative instruments are subject to the same incrementability and repeatability standards applicable to the physical markets. Bids/offers should move up or down in increments not exceeding \$1.00/mt. Bids or offers submitted on a firm basis should be open for execution to the first credit worthy party of record. Bids and offers for paper instruments should be submitted no later than 17:15 London time. Changes to the bids and offers will be recognized up to 17:28 London time. Firm bids and offers automatically expire at 17:30 London time.

20-May-05 With immediate effect, Platts proposes to extend the time cutoff allowed for price changes on gasoline barges on PGA page 5 to 1728 London time. The time cutoff for price changes on cargoes remains 1725 London time. Please note that all other standards regarding bids/offers on PGA005 remain unchanged, including the 17:00 time cutoff for making new bids and offers on barges.

27-May-05 Bids and offers for derivative instruments on Platts Global Alert 005 are subject to the same incrementability and repeatability standards applicable to the physical markets. Bids/offers should move up or down in increments not exceeding \$1/mt. Bids or offers submitted on a

firm basis should be open for execution to the first creditworthy party of record. Bids and offers for paper instruments should be submitted no later than 1715 London time. Changes to the bids and offers will be recognized up to 1728 London time. Firm bids and offers automatically expire at 1730 London time. Please note that the purpose of these time cut-offs and standards of incrementability and repeatability are primarily logistical, and designed to ensure orderly price discovery. As such, they may be changed at short notice if evolving market conditions require.

02-Jun-05 Effective immediately and based on subscriber feedback Platts will assess the differential between 50 ppm and 150 ppm Premium Unleaded gasoline FOB Mediterranean at prevailing spot market sulfur differentials until the assessment for 150 ppm gasoline (Prem Unl) is discontinued on July 1, 2005. Send comments to Annalisa_Jeffries@platts.com, Peter_Stewart@platts.com, or Jorge_Montepeque@platts.com.

09-Jun-05 Effective June 15th Platts will change its naphtha CIF NWE cargo assessment process to consider bids, offers and transaction where seller has the obligation to nominate vessel three days prior to the first day of the delivery laycan. The editorial standard up to June 14th has been to reflect the ship nomination 5 calendar days prior to the first day of the laycan. Platts will continue to reflect bids, offers and transactions made on a five day delivery window where the seller has the obligation to narrow down to a three day delivery window five days prior to the first day of the laycan. In addition, Platts will consider transactions where the expected quality and quantity of the cargo is disclosed 3 days prior to the first day of the delivery laycan with final quality and quantity is disclosed as soon as possible. Any comments should be made by to: Annalisa_Jeffries@platts.com, asif_ali@platts.com with a cc to Peter_Stewart@platts.com and Jorge_Montepeque@platts.com.

27-Jun-05 Effective immediately, and based on subscriber feedback, Platts will bring the gasoline cargo MOC in line with the gasoline barge MOC by extending the deadline for improving cargo bids and offers to 1728 London time (1628 GMT during the summer months). Any comments please to: Annalisa_Jeffries@platts.com, and Simon_Thorne@platts.com with a cc to Peter_Stewart@platts.com and Jorge_Montepeque@platts.com

28-Jun-05 Platts has had overwhelming support from the products traders for a move to a 1630pm close London time. However there is still mixed feedback from some of the crude oil traders, and Platts is working on some of the issues raised. Following industry feedback Platts is keen to align its closing assessment procedures to an earlier close, in line with market requirements. Any further comments please email Annalisa_jeffries@platts.com, peter_stewart@platts.com and Jorge_montepeque@platts.com.

28-Jun-05 Any bid or offer done on a floating basis using Platts as the underlying, the standard is five day pricing around bill of lading, unless stated otherwise. Any comments to annalisa_jeffries@platts.com with a cc to

peter_stewart@platts.com and Jorge_montepeque@platts.com.

28-Jun-05 Premium unleaded 150ppm FOB Med assessment: As was previously announced, the premium unleaded 150ppm FOB Med assessment will be discontinued July 1. Any comments please to annalisa_jeffries@platts.com and simon_thorne@platts.com

28-Jun-05 Platts will start to assess prevailing gasoil futures values for the front three months at exactly at 1630 London time, effective July 1 2005. Any comments to annalisa_jeffries@platts.com, with a cc to peter_stewart@platts.com and Jorge_montepeque@platts.com.

05-Jul-05 Platts to conduct oil barge review for NW Europe: Platts is conducting a review of fuel oil barge transactions in North West Europe. Market participants have raised several concerns including barge loading delays at supply terminals in the region. Platts assessments process aims to reflect transactions that fully meet the obligations of buyer and sellers. Platts will review current practices to ensure that only transactions meeting the performance standards required by Platts are reflected. Any comments to annalisa_jeffries@platts.com and vanessa_ronsisvalle@platts.com with a cc to peter_stewart@platts.com and jorge_montepeque@platts.com.

11-Jul-05 Separate European gasoil, diesel commentaries: Effective Jul 12, 2005, there will be an additional PGA page to allow European gasoil and diesel commentary to be run on separate pages. The two pages will be as follows: Diesel PGA321 Gasoil PGA733

09-Aug-05 European MOC to move to 1630 from Oct 1 : Effective Oct 1, 2005, Platts proposes to advance by one hour the timings for its European market-on-close assessment processes. From that date, Platts will reflect values at 1630 London time, rather than 1730 London time currently, in its assessments for crude oil, European oil products, oil derivatives and the main petrochemical products. Editorial processes and protocols preceding the MOC assessment, including time cutoffs for submission of new bids and offers and for making incremental price changes, will also be advanced by one hour. For comments or questions please contact peter_stewart@platts.com, annalisa_jeffries@platts.com and jorge_montepeque@platts.com.

30-Aug-05 Review of NWE fuel oil barge market: Platts has conducted a review of the fuel oil barge market in North West Europe with a view to identifying logistical or operational issues that may result in delayed or faulty performance. While some issues may be unavoidable, Platts' editorial guidelines governing its assessment process require it must consider only those transactions, bids or offers where market participants perform under typical contractual terms. Furthermore, participants intending to sell barges should not offer when there is a known and distinct possibility that loading may be delayed. If congestion or delays prevent performance under the

contractual terms, the seller should make reasonable and timely efforts to supply from an alternative source, or the seller should engage in other measures to alleviate the buyers' exposure. Equally, a buyer should not over-commit and then aggregate nominations in a way that makes it logistically impossible for the seller to perform. Platts will take appropriate steps to ensure the integrity of its assessments if issues of non-performance should arise. Please send any comments to annalisa_jeffries@platts.com, Vanessa_ronsisvalle@platts.com, CC_peter_stewart@platts.com, and Jorge_montepeque@platts.com.

30-Aug-05 Proposed change to NWE barge loading windows: Following industry feedback, Platts proposes to reflect in its North West European barge assessments bids and offers in the 3-15 days forward loading window on Monday through Wednesday, and in the 5-15 days forward loading window Thursday and Friday. This is to reflect better the two full working days nomination procedure required in the NWE barge market. The change would be effective Oct 1, 2005. Any comments to annalisa_jeffries@platts.com, with a cc to peter_stewart@platts.com, and Jorge_montepeque@platts.com.

31-Aug-05 Platts to change European MOC timings from Oct 1: Effective October 1, 2005, Platts will advance by one hour the timings for its European market-on-close assessment processes. From that date, Platts will reflect values at 16:30 London time, rather than 17:30 London time currently, in its assessments for crude oil, European oil products, oil derivatives and the main petrochemical products. Editorial processes and protocols preceding the MOC assessment, including time cutoffs for submission of new bids and offers and for making incremental price changes, will also be advanced by one hour. For comments or questions please contact Peter_stewart@platts.com, annalisa_jeffries@platts.com and jorge_montepeque@platts.com.

07-Sep-05 European Marketscan adding assessments Oct 1: Effective Oct 1, Platts European Marketscan will add a series of new assessments reflecting the prevailing market value precisely at 1630 London time for several futures contracts on NYMEX. These include the front-two months for the NYMEX futures WTI crude contract, the front-two months for the heating oil and the front-two months for the unleaded gasoline contracts, all at 1630 London time.

07-Sep-05 European products cargo bids, offers deadline: Effective Sep 15, 2005, Platts plans to extend the deadline to modify the price for all cargo and barge bids and offers in the European diesel, gasoil, naphtha and jet markets to 17:28 London time. The extension from 17:25 to 17:28 will bring these products in line with fuel oil and gasoline in Europe. Any comments please to: Annalisa_Jeffries@platts.com, Peter_Stewart@platts.com and Jorge_Montepeque@platts.com.

08-Sep-05 Update on European Marketscan changes: Several of you may have noticed that effective Tuesday, your e-mail containing the European Marketscan contained two versions of the publication: the text version that you are reading

now, and an Adobe Acrobat version. Both are attachments to the e-mail you are sent every day. We are proud of the new Acrobat version, and believe its clearer presentation will help its readers to more easily use the vast array of information available in the Marketscan. To help ease the transition, e-mail subscribers to European Marketscan will continue to receive the text version of the European Marketscan along with this Adobe Acrobat pdf version. Both will be on attachment in your daily e-mail from Platts. However, after the issue of Friday, December 30, only the Acrobat version will be sent to our readers. The text-only version will continue to be available on Platts EMIS information gateway, and to some real-time customers. One important improvement we have done in order to help smooth the transition is to provide a glossary (found on page 2 of the Acrobat file) that matches the text-version abbreviations for the products with the new, clearer terms. Platts wants to make clear that no specifications for these products have been changed. The only thing we are doing is using our greater space and appearance to spell out in more detail what each of the products are, and doing away with often-confusing abbreviations. However, we know that people have become used to those abbreviations, and they are often written into contracts. The text-version will continue to use those abbreviations while it is being delivered during the remainder of this year. This will give subscribers time, if they need it, to clarify with their counter parties the product descriptions carried in any commercial agreements. We know that Platts' European refined product information will now be easier to access and understand with our new design. We would be glad to hear from you at support@platts.com with any further comments or questions. Please also feel free to contact our editorial staff in Europe for any comments regarding the design or nomenclature used in the new format.

09-Sep-05 Proposed changes NWE European gasoline assessments: Following industry feedback, Platts proposes effective November 1 to standardize cargo sizes reflected in its northwest European gasoline cargo assessments as follows: Premium gasoline 10ppm CIF cargo assessment to reflect 10,000 metric tonnes +/- 10% operational tolerance, basis North Sea with normal NWE charter party options; Premium gasoline 50 ppm CIF cargo assessment to reflect 10,000 metric tonnes +/- 10% operational tolerance, basis Thames with normal NWE charter party options; Premium gasoline 10ppm and 50 ppm FOB NWE assessments to reflect 30,000 metric tonnes +/- 10% operational tolerance, NWE basis Rotterdam, with material from other locations considered at differentials. The existing standards encompass a range of cargo sizes from 10,000-30,000 metric tonnes on both FOB and CIF. Any comments please to annalisa_jeffries@platts.com, simon_thorne@platts.com, peter_stewart@platts.com and jorge_montepeque@platts.com.

09-Sep-05 Review of European cargo operational tolerance: Platts is reviewing the standards used in Platts European oil products cargo assessments relating to operational tolerance, in light of continuing extreme price volatility in the market. Market participants have raised several concerns over the potential cost and distortions associated with the current

operational plus or minus 10% tolerance. Platts requests subscriber feedback on the current volume tolerances and comments on potential mechanisms that could be implemented to lower the operational tolerance or lower the financial risk associated with volume tolerances. Platts will address this issue in coming weeks and welcomes comments, which should be addressed to annalisa_jeffries@platts.com; peter_stewart@platts.com; jorge_montepeque@platts.com.

12-Sep-05 Mediterranean products ship nomination procedure: Following subscriber feedback, Platts will change the ship nomination procedures acceptable for assessment purposes for deliveries of Mediterranean gasoil, gasoline and fuel oil. Currently, Platts includes in its assessments process ship nominations five calendar days prior to first delivery laycan day. Platts will switch to seven calendar days prior to first delivery laycan day, effective Sep 21. Any comments to annalisa_jeffries@platts.com and peter_stewart@platts.com with a cc to jorge_montepeque@platts.com

21-Sep-05 Spot price assessments during hurricane season: In the context of potential oil production, transportation and trading disruptions related to the hurricane season, Platts clarifies that all spot price assessments will be published as usual as long as the related infrastructure and trading environment for a specific commodity remain operational. This policy will stay in place even if a particular Platts office (e.g. Houston) has to temporarily close for safety reasons. Platts discloses publicly days of publication of its price assessments and indices, and times during each trading day in which Platts considers transactions in determining its assessments and index levels. Publication dates 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--network outages, power failures, acts of terrorism, natural disasters and other situations resulting in interruption in Platts' operations at one or more of its worldwide offices. Platts will endeavor, whenever feasible, to communicate publicly changes to its publication schedule and assessment periods, with as much advance notice as possible. For questions/comments contact Gerald_Bueshel@platts.com or jorge_montepeque@platts.com.

26-Sep-05 Sep 26 IPE technical problems re: gasoil: Due to technical problems at the IPE, gasoil futures did not trade around 17:30 London time (16:30 GMT) Monday, the time usually reflected in the IPE gasoil settlement. Platts' assessments reflect prevailing values at 17:30 London time. As a result, the outright distillate prices for cargoes and barges will be calculated using Platts' assessments of fixed price values at 17:30 London time as usual. Platts typically tracks both fixed price as well as inter-product and crude-to-product relationships prevailing at 17:30 London time. This is in line with Platts' published methodology regarding the time stamp for its assessments as well as the use of an alternative system to respond to any anomalous events. For any questions call Peter Stewart 00 44 207 176 6130 or Annalisa Jeffries 00 44 207 176 6115

03-Oct-05 Platts European MOC timings changes:

Effective Oct 1, 2005, Platts will advance by one hour the timings for its European market-on-close assessment processes. From that date, Platts will reflect values at 16:30 London time, rather than 17:30 London time currently, in its assessments for crude oil, European oil products, oil derivatives and the main petrochemical products. Editorial processes and protocols preceding the MOC assessment, including time cutoffs for submission of new bids and offers and for making incremental price changes, will also be advanced by one hour. For comments or questions please contact peter_stewart@platts.com and annalisa_jeffries@platts.com.

03-Oct-05 Platts seeks feedback on NWE jet specs: Following industry feedback, Platts is conducting a review of NWE jet fuel standard specifications. Currently Platts assessments require that any jet fuel traded in NWE meet the Defstan 91 91 5 specification as issued by the UK Ministry of Defence on Feb 8 2005. Platts requests further industry feedback on whether Platts assessments parameters should be tightened to reflect jet fuel that meets both the Defstan 91 91 5 and the Joint Fueling System Checklist. Platts understands that cargoes traded within Europe typically meet both standards. The Joint Fueling System Checklist requires jet fuel to meet the more stringent requirements of Defstan 91 91 5 and the American Society for Testing & Materials', Standard Specification D 1655-04a. Comments by October 7 should be addressed to Annalisa_jeffries@platts.com and alan_hayes@platts.com, with a cc to Peter_stewart@platts.com, and jorge_montepeque@platts.com.

03-Oct-05 Platts new MOC European oil products timings: Following the switch to 16:30pm MOC Monday Oct 3, the new time parameters for all European oil products are as follows: The cut off for any new cargo bids and offers is 15:45:00pm (London time). The cut off for all new barge bids and offers is 16.00.00pm (London time). The cut off for any incremental price changes for barges and cargoes is 16.28.00pm (London time). Further details are available on the following link. <http://www.platts.com/Oil/Resources/Market%20Issues/window>. Any questions please contact Annalisa Jeffries on 00 44 207 176 6115.

07-Nov-05 New Instant Messenger names for LSFO and HSFO: Due to the increasing number of bids/offers and trade on fuel oil, Platts has set up two separate Yahoo Instant Messenger names to enhance communication: one for LSFO and one for HSFO. Platts has set up two names as follows: [Plattsfueloil](#) and [Plattslsfo](#). Effective Wednesday Nov 9, Platts requests all LSFO bids and offers to be sent to [Plattslsfo](#) and all HSFO bids and offers to be sent to [Plattsfueloil](#). Any comments to annalisa_jeffries@platts.com, and peter_stewart@platts.com with a cc to jorge_montepeque@platts.com

25-Nov-05 ARA 50 ppm ULSD barge assessment clarification: Platts 50 ppm sulfur ULSD FOB barges in the ARA region are assessed basis Antwerp. Earlier in the year, the Netherlands' consumption switched from 50 ppm sulfur to 10

ppm sulfur. This switch prompted a change in the typical pattern of barge trade from basis Rotterdam to basis Antwerp. Please submit comments to andrew_bonnington@platts.com, annalisa_jeffries@platts.com, peter_stewart@platts.com and jorge_montepeque@platts.com

29-Nov-05 Platts tightens NWE jet assessment parameters: Following industry feedback regarding NWE jet fuel standard specifications, Platts assessment parameters have been tightened. Platts now reflects jet fuel that meets the Defstan 91 91 5 specification as issued by the UK Ministry of Defence and the Joint Fueling System Checklist. The Joint Fueling System Checklist requires jet fuel to meet the more stringent requirements of Defstan 91 91 5 and the American Society for Testing & Materials', Standard Specification D 1655-04a. Any comments should be addressed to Annalisa_jeffries@platts.com and alan_hayes@platts.com, with a cc to Peter_stewart@platts.com, and jorge_montepeque@platts.com.

12-Dec-05 E-mails of European Marketscan text files to end: Subscriber Note: With the end of the year, Platts is nearing the end of dual e-mail delivery of European Marketscan as both a PDF file and a text-only file. When Platts introduced the redesigned European Marketscan in September, we informed subscribers at that time that long-running text-only version would be delivered through end-2005. The email European Marketscan subscribers have been receiving every day since then have contained a PDF file and a text file of the publication. This text file will no longer be sent to e-mail subscribers after Dec 30. Customers who receive the text file through third-party distributors such as Reuters, or from Platts EMIS service, will continue to receive it. Please contact Platts at support@platts.com with any further comments or questions. Please also feel free to contact Platts' editorial staff in Europe for any comments regarding the design or nomenclature used in the new format. A glossary of these changes can be found in the PDF version of the European Marketscan.

15-Dec-05 Platts invites views on Med gasoil assessment: SUBSCRIBER NOTE: Platts invites industry views on whether any changes are required in the parameters for its gasoil 0.2% assessments in the Mediterranean, given that Russian material which forms the bulk of supply in the region may at times hold a premium to regular grades for heating oil use only. Platts is not making any formal proposal at this stage. Comments/feedback should be addressed by Dec 31 to Annalisa_Jeffries@platts.com with a CC to Peter_Stewart@platts.com and jorge_Montepeque@platts.com

29-Dec-05 Worldscale rates for Med naphtha calculations: Effective Jan 3, 2006 the Worldscale basket flat rate used to calculate FOB Mediterranean naphtha will become \$9.25. FOB Med naphtha is assessed as a freight differential to the CIF Northwest Europe assessment. The actual rate applied to the netback will fluctuate daily based on changes in Platts UKC-Med freight assessments for 27.5kt naphtha cargoes, applied against the \$9.25/mt rate. The Worldscale flat rate used to calculate the CIF MED Naphtha assessment will become \$5.67 based on

published freight values between Alexandria and Lavera using Platts cross-Med clean tanker naphtha assessments.

03-Jan-06 New worldscale rate for Med ULSD assessments: Effective Jan 3, 2006 the Worldscale basket flat rate used to calculate FOB Med ULSD assessment will become \$7.86. FOB Med gasoil 0.2% is assessed as a freight differential to the CIF Med gasoil 0.2% assessment. The actual freight applied to the netback will fluctuate daily based on changes in Platts BSea-Med assessments in the clean tanker wire for 30kt cargoes, applied against the \$7.86/mt rate. Please note that the actual routes used in the calculation are unchanged from 2005, the rate change simply reflects the new Worldscale flat rates that became effective in the New Year. Please email lzbietarabalaska@platts.com, with cc to Annalisa_jeffries@platts.com for further details if required.

03-Jan-06 New worldscale rate for Med diesel assessments: Effective Jan 3, 2006 the Worldscale basket flat rate used to calculate FOB Med diesel 50ppm assessment will become \$5.20. FOB Med ULSD is assessed as a freight differential to the CIF Med diesel 50ppm. The actual freight applied to the netback will fluctuate daily based on changes in Platts Med-Med assessments in the clean tanker wire for 30kt cargoes, applied against the \$5.20/mt rate. Please note that the actual routes used in the calculation are unchanged from 2005, the rate change simply reflects the new Worldscale flat rates that became effective in the New Year. Please email Andrew_bonnington@platts.com, with cc to Annalisa_jeffries@platts.com for further details if required.

03-Jan-06 New worldscale rate for NWE diesel assessments: Effective Jan 3, 2006 the Worldscale basket flat rate used to calculate FOB NWE diesel 50ppm will be \$5.75/mt, FOB NWE gasoil 0.2% \$5.57/mt, FOB NWE diesel 50ppm UK \$5.10/mt, and FOB NWE diesel 10ppm \$4.69/mt. All diesel and gasoil FOB NWE assessments are assessed as a freight differential to the CIF NWE assessments. The actual freights applied to the netback will fluctuate daily based on changes in Platts cross UKC-UKC assessments in the clean tanker wire, applied against the respective 2006 flat rates. Further details are available on request. Please note that the actual routes used in the calculation are unchanged from 2005, the rate change simply reflects the new Worldscale flat rates that became effective in the New Year. Please email Andrew_bonnington@platts.com, and Elzbietarabalaska@platts.com with cc to Annalisa_jeffries@platts.com for further details if required.

03-Jan-2006 Effective Jan 3, 2006 the Worldscale basket flat rate used to calculate FOB Med ULSD assessment will become \$7.86. FOB Med gasoil 0.2% is assessed as a freight differential to the CIF Med gasoil 0.2% assessment. The actual freight applied to the netback will fluctuate daily based on changes in Platts BSea-Med assessments in the clean tanker wire for 30kt cargoes, applied against the \$7.86/mt rate. Please note that the actual routes used in the calculation are unchanged from 2005, the rate change simply reflects the new Worldscale flat rates that became effective in the New Year. Please email

elzbieta_rabalaska@platts.com, with cc to Annalisa_jeffries@platts.com for further details if required.

03-Jan-2006 Effective Jan 3, 2006 the Worldscale basket flat rate used to calculate FOB Med diesel 50ppm assessment will become \$5.20. FOB Med ULSD is assessed as a freight differential to the CIF Med diesel 50ppm. The actual freight applied to the netback will fluctuate daily based on changes in Platts Med-Med assessments in the clean tanker wire for 30kt cargoes, applied against the \$5.20/mt rate. Please note that the actual routes used in the calculation are unchanged from 2005, the rate change simply reflects the new Worldscale flat rates that became effective in the New Year. Please email Andrew_bonnington@platts.com, with cc to Annalisa_jeffries@platts.com for further details if required.

03-Jan-2006 Effective Jan 3, 2006 the Worldscale basket flat rate used to calculate FOB NWE diesel 50ppm will be \$5.75/mt, FOB NWE gasoil 0.2% \$5.57/mt, FOB NWE diesel 50ppm UK \$5.10/mt, and FOB NWE diesel 10ppm \$4.69/mt. All diesel and gasoil FOB NWE assessments are assessed as a freight differential to the CIF NWE assessments. The actual freights applied to the netback will fluctuate daily based on changes in Platts cross UKC-UKC assessments in the clean tanker wire, applied against the respective 2006 flat rates. Further details are available on request. Please note that the actual routes used in the calculation are unchanged from 2005, the rate change simply reflects the new Worldscale flat rates that became effective in the New Year. Please email Andrew_bonnington@platts.com, and Elzbieta_rabalaska@platts.com with cc to Annalisa_jeffries@platts.com for further details if required.

04-Jan-06 Worldscale rate for European fuel oil freight: Effective Jan 3, the Worldscale basket flat rate used to calculate cross NWE high sulfur fuel oil freight will be \$5.40/mt, cross Med high and low sulfur fuel oil freight will be \$5.00/mt, cross NWE low sulfur fuel oil \$4.80/mt, and NWE-Med low sulfur fuel oil \$8.25/mt. Respective rates used in 2005 were cross NWE high sulfur fuel oil freight \$5.0/mt, cross Med high and low sulphur fuel oil freight \$4.60/mt, cross NWE low sulfur fuel oil \$4.45/mt, and NWE-Med low sulfur fuel oil \$7.40/mt. Please note on both high and low sulfur FOB/CIF differentials reflect actual market conditions and are not set according to a fixed freight netback. As such the differentials may be affected by arbitrage openings and other market factors. Any comments please email Vanessa_ronsivalle@platts.com with cc to Annalisa_jeffries@platts.com

04-Jan-2006 Effective Jan 3, the Worldscale basket flat rate used to calculate cross NWE high sulfur fuel oil freight will be \$5.40/mt, cross Med high and low sulfur fuel oil freight will be \$5.00/mt, cross NWE low sulfur fuel oil \$4.80/mt, and NWE-Med low sulfur fuel oil \$8.25/mt. Respective rates used in 2005 were cross NWE high sulfur fuel oil freight \$5.0/mt, cross Med high and low sulphur fuel oil freight \$4.60/mt, cross NWE low sulfur fuel oil \$4.45/mt, and NWE-Med low sulfur fuel oil \$7.40/mt. Please note on both high and low sulfur FOB/CIF

differentials reflect actual market conditions and are not set according to a fixed freight netback. As such the differentials may be affected by arbitrage openings and other market factors. Any comments please email Vanessa_ronsivalle@platts.com with cc to Annalisa_jeffries@platts.com

11-Jan-06 Proposed changes to NWE gasoline assessments: GASOLINE SUBSCRIBER NOTE: In response to industry feedback, Platts proposes adjusting the existing methodology for assessing regular unleaded gasoline cargoes in Northwest Europe. Effective April 3, 2006 Platts proposes assessing FOB NWE Regular unleaded gasoline cargoes with the US netback acting as floor to the assessment. The netback will be calculated using differentials to M-grade gasoline in New York harbor. CIF NWE regular unleaded gasoline cargo assessments will be fixed as a freight differential using the cross-NWE freight assessments, published in Platts clean tanker wire. Effective Jan 1 2007 Platts proposes discontinuing the CIF assessments. Currently FOB and CIF NWE regular unleaded cargo assessments are calculated as a differential to 50ppm unleaded gasoline assessments. The methodology for assessing CIF and FOB premium unleaded cargoes in NWE will not be adjusted. Full details of the proposed netback calculation are available on request. Comments please to simon_thorne@platts.com, annalisa_jeffries@platts.com, peter_stewart@platts.com and jorge_montepeque@platts.com

11-Jan-2006 In response to industry feedback, Platts proposes adjusting the existing methodology for assessing regular unleaded gasoline cargoes in Northwest Europe. Effective April 3, 2006 Platts proposes assessing FOB NWE Regular unleaded gasoline cargoes with the US netback acting as floor to the assessment. The netback will be calculated using differentials to M-grade gasoline in New York harbor. CIF NWE regular unleaded gasoline cargo assessments will be fixed as a freight differential using the cross-NWE freight assessments, published in Platts clean tanker wire. Effective Jan 1 2007 Platts proposes discontinuing the CIF assessments. Currently FOB and CIF NWE regular unleaded cargo assessments are calculated as a differential to 50ppm unleaded gasoline assessments. The methodology for assessing CIF and FOB premium unleaded cargoes in NWE will not be adjusted. Full details of the proposed netback calculation are available on request. Comments please to simon_thorne@platts.com, annalisa_jeffries@platts.com, peter_stewart@platts.com and jorge_montepeque@platts.com

23-Jan-06 Specifications for Europe fuel oil assessments: Following industry feedback, Platts will reflect in its North West European low sulfur straight-run fuel oil assessments the following specifications: Sulfur 0.5-0.7%, normalized to 0.6% CCR max 7 Density 0.935-0.95 at 15 degrees, Viscosity 200cst max at 50 degrees Vanadium 10ppm Sodium 10ppm Nickel 10ppm The parcel size will remain as 25,000-30,000mt. Cargoes up to 50,000mt maybe taken into account when arbitrage opportunities occur.

23-Jan-2006 Following industry feedback, Platts will reflect in its North West European low sulfur straight-run fuel oil assessments the following specifications: Sulfur 0.5-0.7%, normalized to 0.6% CCR max 7 Density 0.935-0.95 at 15 degrees, Viscosity 200cst max at 50 degrees Vanadium 10ppm Sodium 10ppm Nickel 10ppm The parcel size will remain as 25,000-30,000mt. Cargoes up to 50,000mt maybe taken into account when arbitrage opportunities occur.

03-Feb-06 Changes to ARA barge bids, offers assessments: Effective Wednesday February 8 and following industry feedback regarding barge nomination procedures in the ARA oil products market, Platts will start to reflect barge bids and offers on a Wednesday 5-15 days forward. This is to better reflect the two full working days nomination procedure required in the NWE barge market. Monday and Tuesday loading dates will remain 3-15 days forward, and Thursday and Friday 5-15 days forward. Platts is considering adapting the same standard of 5-15 days throughout the whole week. Please send any comments please to annalisa_jeffries@platts.com, cc peter_stewart@platts.com and jorge_montepeque@platts.com.

03-Feb-2006 Effective Wednesday February 8 and following industry feedback regarding barge nomination procedures in the ARA oil products market, Platts will start to reflect barge bids and offers on a Wednesday 5-15 days forward. This is to better reflect the two full working days nomination procedure required in the NWE barge market. Monday and Tuesday loading dates will remain 3-15 days forward, and Thursday and Friday 5-15 days forward. Platts is considering adapting the same standard of 5-15 days throughout the whole week. Please send any comments please to annalisa_jeffries@platts.com, cc peter_stewart@platts.com and jorge_montepeque@platts.com.

07-Feb-06 1.5% SFO Rotterdam basis assess proposal on Apr 3: In light of new regulations by the International Convention for the Prevention of Pollution from ships (Marpol), Platts proposes to start assessing 1.5% sulphur fuel oil FOB barge assessment basis Rotterdam Apr 3 , 2006. The Marpol regulations limit sulphur in fuel oil used in bunkers to a maximum of 1.5% in certain designated areas including the Baltic Sea. Platts invites comments to this proposal to be submitted no later than Feb 28, 2006. Please send any comments to vanessa_ronsisvalle@platts.com and annalisa_jeffries@platts.com with a cc to Peter_stewart@platts.com, and jorge_montepeque@platts.com

07-Feb-2006 In light of new regulations by the International Convention for the Prevention of Pollution from ships (Marpol), Platts proposes to start assessing 1.5% sulphur fuel oil FOB barge assessment basis Rotterdam Apr 3 , 2006. The Marpol regulations limit sulphur in fuel oil used in bunkers to a maximum of 1.5% in certain designated areas including the Baltic Sea. Platts invites comments to this proposal to be submitted no later than Feb 28, 2006. Please send any comments

to vanessa_ronsisvalle@platts.com and annalisa_jeffries@platts.com with a cc to Peter_stewart@platts.com, and jorge_montepeque@platts.com

08-Feb-06 Clarification of European products assessments: European products assessment methodologies, including those for fuel oil, gasoline, naphtha and middle distillates such as jet fuel remain unchanged. These assessments are transparently derived from fixed-price and floating-price bids, offers and transactions. For instance, Platts considers in the assessment process both futures and Platts-related transactions. Platts has been using these methodologies without interruption since 2002. For further details please download the methodology documents available at www.platts.com.

08-Feb-2006 Platts European products assessment methodologies, including those for fuel oil, gasoline, naphtha and middle distillates such as jet fuel remain unchanged. These assessments are transparently derived from fixed-price and floating-price bids, offers and transactions. For instance, Platts considers in the assessment process both futures and Platts-related transactions. Platts has been using these methodologies without interruption since 2002. For further details please download the methodology documents available at www.platts.com.

10-Mar-06 New 1.5% sulfur fuel oil Rotterdam bunkers London(Platts): Following subscriber feedback and in light of new regulations by the International Convention for the Prevention of Pollution from ships (Marpol), Platts will start 1.5PCT sulphur fuel oil bunkers delivered basis Rotterdam May 22 2006, for both 380cst and 180cst. May 22. The Marpol regulations limit sulfur in fuel oil used in bunkers to a maximum of 1.5% in certain designated areas including the Baltic Sea.

2-Mar-06 Protocols on bids/offers deemed frivolous: CLARIFICATION NOTE: Platts reserves the right not to publish any bids or offers considered frivolous, such a low bids or a high offers that does not represent market value. Platts reflects incremental changes in bid/offer levels that give a counterparty ample time to execute. In practice, improvements in bid/offer levels in excess of \$1.00/mt per minute may be seen as excessive. Platts may vary these parameters without notice, depending on market conditions. Buyers and sellers can retreat at any point on a non-incremental basis but any subsequent improvements in bids/offers must be made incrementally from the level to which the buyer or seller retreated. If a buyer or seller retreats to a level considered frivolous, such a bid or offer will be excluded from the assessment process.

31-Mar-2006 Effective March 31, in the light of industry feedback Platts will revert to reflecting only intermediate specification diesel in the 10ppm barge market assessment. Effective April 3 Platts will reflect both intermediate and summer grades of 10ppm diesel with summer specification having an increasing weighting until April 11. From April 12 summer specification will be full reflected.

31-May-2006 Effective June 1, Platts will add a 1630 London time \$/rouble exchange rate to the foreign exchange rates carried in Platts European Marketscan and Platts Global Alert page 317. For comments/feedback please contact: jorge_montepeque@platts.com, CC annalisa_jeffries@platts.com

02-Jun-2006 In recognition of the growing maturity and liquidity surrounding global trade in freight derivatives, Platts will launch a series of new forward freight assessments, effective 12 June. Platts Forward Curve-Freight service will include assessments for 18 crude, refined product and dry bulk tanker swap or FFA markets for swap periods as far as two calendar years forward. These will reflect transactable values on an End-of Day, Market-on Close basis as at 1530 London time, and will be published daily at 1630 London time. If you have any queries or need further information please contact mike_davis@platts.com, magnus_berge@platts.com, paul_hailey@platts.com, or paul_wightman@platts.com

16-Jun-2006 In recent months, Platts has been tracking price developments in the domestic Russian crude market and presented the results of this market coverage at a recent forum in Moscow. Platts will provide daily coverage of this market on Platts Global Alert from June 19. Platts market coverage has been focusing on Urals pipeline crude grades on a free in pipeline basis Ufa, Bashkortostan. The crude market values reflect 1630 Moscow time as traded for typical traded pipeline qualities and quantities. Market information will be published on PGA page 3. For comment and market information please contact yahoo ID plattsruscrude or +44 207 176 6166, Corneliu_Tataru@platts.com, Elza_Turner@platts.com, Annalisa_Jeffries@platts.com, Jorge_Montepeque@platts.com, Peter_Stewart@platts.com, Gerald_Bueshel@platts.com. Platts has also been tracking price developments in the domestic Russian products market. Platts will provide daily coverage of this market on Platts Global Alert from June 19. Platts market coverage has been focusing on Normal Unleaded, Regular Unleaded, Premium Unleaded, Diesel 0.2, Low Sulfur Fuel Oil and Fuel oil 3.5% M-100 on FCA PFD (Privolzhsky Federal District)/Ufa basis and FCA CFD (Central Federal District)/Moscow basis. The products market values reflect 1630 Moscow time as traded for typical traded qualities and quantities. Market information will be published on PGA page 5. For comment and market information please contact yahoo ID plattsrusproducts or +44 207 176 6166, Corneliu_Tataru@platts.com, Simon_Thorne@platts.com, Annalisa_Jeffries@platts.com, Jorge_Montepeque@platts.com, Peter_Stewart@platts.com.

30-Jun-2006 Platts gasoline, fuel oil and gasoil CIF Mediterranean product assessments reflect bids and offers which specify load port and vessel nomination 7 calendar days prior to the 1st day of the laycan. For assessment purposes Platts reflects bids and offers where the seller has the obligation to narrow the delivery range to a 3 day laycan, 5 calendar days prior to the 1st day of the laycan. Platts gasoline, fuel oil and gasoil CIF Northwest European assessments reflect bids and offers which specify load port and vessel nomination 5 calendar days prior to the first day of the laycan. For assessment purposes Platts reflects

bids and offers where the seller has the obligation to narrow the delivery range to a 3 day laycan, 5 calendar days prior to the 1st day of the laycan. Comments please to vanessa_ronsisvalle@platts.com; simon_thorne@platts.com; annalisa_jeffries@platts.com

30-Jun-2006 Following industry feedback, and in light of changes to the RMG 35 bunker grade specifications, as updated by the International Standards Organization, Platts is inviting feedback on whether to change the current bunker fuel specification required for the Northwest European and Mediterranean fuel oil assessments. Comments please to vanessa_ronsisvalle@platts.com; simon_thorne@platts.com; annalisa_jeffries@platts.com

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APPENDIX VI: DISCONTINUED ASSESSMENTS

The following assessments have been discontinued since the European Oil Products Specifications guide was last issued:

PGAMN00 PREMIUM UNLEADED CARGOES CIF MED

Quality: The assessment represents EN 228 meeting Italian, French, and Spanish specifications with a maximum sulfur content of 150 ppm. The RON is 95 and the MON is 85. The specific gravity is 0.755 g/ml.

Size: The CIF assessment typically reflects parcels of 25,000-30,000mt each.

Location: The assessment is CIF basis Genoa/Lavera with normal CP options.

Timing: Reflects material for delivery 10-25 days from date of publication, with prices normalized to the mid-point of this delivery window.

Other: N/A

Background: Effective 2 January 2003, when grades in NWE move to 50 ppm, the Mediterranean cargo assessments remained unchanged and continued to reflect 150ppm sulphur specification only. Platts introduced new 50 ppm gasoline assessments FOB and CIF Med on July 1, 2004 to run concurrently with the existing 150 ppm assessments until the end of 2004. Assuming no change in the EU's implementation schedule for tightening sulfur standards in European gasoline, on the first trading day of January 2005, Platts plans to drop its Prem Unl 150 ppm assessments.

Dispatch Category	EB
12 Char. Symbol	PRPPRUGNACEK
9 Char. Symbol(s)	PPGMMGDCH · PPGMMGDCL
7 Char. Symbol	PGAMN00
Earliest Date	03-OCT-1994
Vendors	BLM CQI DRI EMS FTP FUT KR RTR SAR
Description	Prem Unl CIF Med Cargoes

PGAMP00 PREMIUM UNLEADED CARGOES FOB MED

Quality: The assessment represents EN 228 material meeting Italian, French, and Spanish specifications with a maximum sulfur content of 150 ppm. The RON is 95 and the MON is 85. The specific gravity is 0.755 g/ml. .

Size: The assessment typically reflects parcels of 25,000-30,000mt each, though FOB cargoes of up to 33,000 mt may be considered when arbitrage openings mean these shipments are a significant market factor.

Location: FOB basis Italy but with other origins considered in the assessment on the basis that neither buyer nor seller is disadvantaged by any additional costs incurred if the material is non-Italian origin.

Timing: Reflects material for loading 10-25 days from date of publication, with prices normalized to the mid-point of this delivery window.

Other: The netback value from the US acts as a floor for the FOB Med assessment. To establish this floor, Platts calculates the freight netback to basis Augusta from New York Harbour using the Med-USAC Worldscale freight rate published in Platts clean tankerwire. Platts current practice is to calculate this value as the netback for oxygenated cargoes for delivery into the US Atlantic Coast. Platts uses the 37 kt assessment pro-rated to 33 kt.

Background: Effective 2 January 2003, when grades in NWE move to 50 ppm, the Mediterranean cargo assessments remained unchanged and continued to reflect 150ppm sulphur specification only. Platts introduced new 50 ppm gasoline assessments FOB and CIF Med on July 1, 2004 to run concurrently with the existing 150 ppm assessments until the end of 2004. Assuming no change in the EU's implementation schedule for tightening sulfur standards in European gasoline, on the first trading day of January 2005, Platts plans to drop its Prem Unl 150 ppm assessment.

Dispatch Category	EB
12 Char. Symbol	PRPPRUMEDCEM
9 Char. Symbol(s)	PPGMMISCH · PPGMMISCL
7 Char. Symbol	PGAMP00
Earliest Date	03-OCT-1994
Vendors	BLM CQI DRI EMS FTP FUT KR RTR SAR
Description	Prem Unl FOB Med Cargoes

PGABV00 PREMIUM 0.15 CARGOES FOB MED

Platts dropped its Premium 0.15 (leaded gasoline) CIF assessment in 2002 because of changes in European Union regulations which made the use of lead in gasoline illegal. Platts maintained its Premium 0.15 g/l FOB Med assessment at the industry's request. This assessment is determined using a fixed premium of \$6/mt against the FOB Med Premium Unleaded gasoline assessment, the prevailing differential that was used before the change in EU regulations. Platts has proposed to drop the Premium 0.15 Fob Med assessment several times, but has continued the assessment at the request of market participants. Platts intends to drop the assessment from April 1, 2005.

Dispatch Category	EB
12 Char. Symbol	PRPPR1MEDCF5
9 Char. Symbol(s)	PPGPMISCH · PPGPMISCL
7 Char. Symbol	PGABV00
Earliest Date	01-MAY-1991
Vendors	BLM CQI DRI EMS FTP FUT KR RTR SAR
Description	Prem 0.15 FOB Med Cargoes

AAJP00 GASOLINE BARGE QUALITY DIFFERENTIAL

Quality: The assessment reflects the differential between 50 ppm and 150 ppm material

Size: 1,000-5,000 mt parcels

Location: FOB ARA basis Rotterdam

Timing: 2-15 days from date of publication

Other: N/A

Background: Platts introduced its assessment of the differential between prem unl 150ppm barges and prem unl 50ppm barges on Jan 2, 2002. Platts discontinued this differential assessment Oct 1 2004.

PJAAT00 JET FOB MED

(assessment discontinued May 1, 2003)

Platts introduced a formula to calculate FOB Med jet as a netback from NWE CIF cargo assessment on Oct 1, 1998.

The formula for FOB Med jet took the Worldscale flat rate from Augusta to Rotterdam plus harbor dues at Rotterdam based on cts/mt of vessel converted to metric tonnes basis. The flat rate was then multiplied by Platts clean tanker rate assessment for Med-NWE cargoes. The spot tanker rate assessment was first prorated from 30,000mt to 25,000mt and then multiplied by 1.3 to reflect the added cost for superior tonnage. Adjustments to the formula were made on the first working day of January each year to reflect updated Worldscale flat rates as published by Worldscale.

Platts extended its original January 2, 2003 deadline for dropping its Jet FOB Med assessment. Platts continued to publish an assessment for Jet FOB MED until April 30, 2003, simultaneously with the Jet Av Fuel FOB Med assessment which it had published since November 2002.

PPAQH00 EN590 CARGO ASSESSMENTS CIF NWE

Quality: The EN590 assessment CIF NWE reflects finished French Gasoil Moteur (GOM) grade meeting EU directive number EN590 with a maximum sulfur of 350 ppm. The density is basis 0.845 g/l.

Size: Cargo assessments reflect parcels of 20,000 mt each.

Location: CIF NWE assessments reflect cargoes basis Le Havre, and delivered in a Le Havre/Hamburg port range.

Timing: Reflects material for delivery 10-25 days from date of publication, with prices normalized to the mid-point of this delivery window.

Other: N/A

Background: Platts has made a number of changes in recent years in the maximum sulphur content in line with EU regulations. Effective Sep 2, 1996, sulfur content in EN590 was reduced from 0.2% to 0.05% in line with European Union legislation. Effective Jan 1, 2000 sulfur content was reduced further to 0.035%. The new quality was reflected from Dec 1, 1999. Effective Jan 1, 2000, the standard density range for EN590 cargoes became 0.82 to 0.845 g/ml maximum to reflect changes to EU regulations. Platts' assessments continued to reflect a reference density of 0.845 in line with industry practice. From Feb 1, 1997, Platts no longer included the additive WASA used for finished German grades in its assessments for EN590 gasoil cargoes and barges in Northwest Europe.

Dispatch Category	EB
12 Char. Symbol	PRPGS9NWEBJA
9 Char. Symbol(s)	PPD7NEDCH · PPD7NEDCL
7 Char. Symbol	PPAQH00
Earliest Date	01-JUL-1994
Vendors	BLM CQI DRI EMS FTP FUT KR RTR SAR
Description	Gasoil EN590 CIF NWE Cargo

PPAQF00 EN590 CARGO ASSESSMENTS FOB NWE

Quality: The EN590 assessment FOB NWE reflects finished French Gasoil Moteur (GOM) grade meeting EU directive number EN590 with a maximum sulfur of 350 ppm. The density is basis 0.845 g/l.

Size: Cargo assessments reflect parcels of 20,000 mt each.

Location: FOB NWE.

Timing: Reflects material for delivery 10-25 days from date of publication, with prices normalized to the mid-point of this delivery window.

Other: Typically the FOB assessment is derived at a freight differential to the CIF assessment. Recently, a flat rate of 5.11 based on handy size freight between origin ports including Amsterdam, Rotterdam, Antwerp, Klaipeda, Wilhelmshaven and Ventpils and destination ports in northern France.

Background: Platts has made a number of changes in recent years in the maximum sulphur content in line with EU regulations. Effective Sep 2, 1996, sulfur content in EN590 was reduced from 0.2% to 0.05% in line with European Union legislation. Effective Jan 1, 2000 sulfur content was reduced further to 0.035%. The new quality was reflected from Dec 1, 1999. Effective Jan 1, 2000, the standard density range for EN590

cargoes became 0.82 to 0.845 g/ml maximum to reflect changes to EU regulations. Platts' assessments continued to reflect a reference density of 0.845 in line with industry practice. From Feb 1, 1997, Platts no longer included the additive WASA used for finished German grades in its assessments for EN590 gasoil cargoes and barges in Northwest Europe.

Dispatch Category	EB
12 Char. Symbol	PRPGS9NWEBJC
9 Char. Symbol(s)	PPD7NESCH · PPD7NESCL
7 Char. Symbol	PPAQF00
Earliest Date	01-JUL-1994
Vendors	BLM CQI DRI EMS FTP FUT KR RTR SAR
Description	Gasoil EN590 FOB NWE Cargo

PPAQD00 EN590 MEDITERRANEAN CIF CARGOES

Quality: Mediterranean En590 CIF assessment typically reflects French spec diesel fuel for automotive use but other grades such as Italian and Spanish may be considered.

Size: Cargo assessments reflect parcels of 25,000-30,000mt each.

Location: CIF assessment is calculated basis Lavera, with normal CP options within the Med considered.

Timing: Reflects material for delivery 10-25 days from date of publication, with prices normalized to the mid-point of this delivery window.

Other: N/A

Background: Platts has made a number of changes in recent years in the maximum sulphur content in line with EU regulations. Effective Sep 2, 1996, sulfur content in EN590 was reduced from 0.2% to 0.05% in line with European Union legislation. Effective Jan 1, 2000 sulfur content was reduced further to 0.035%. The new quality was reflected from Dec 1, 1999.

Dispatch Category	EB
12 Char. Symbol	PRPGS9GNABIW
9 Char. Symbol(s)	PPD7MGDCH · PPD7MGDCL
7 Char. Symbol	PPAQD00
Earliest Date	01-JUL-1994
Vendors	BLM CQI DRI EMS FTP FUT KR RTR SAR
Description	Gasoil EN590 CIF Med Cargo

PPAQB00 EN590 MEDITERRANEAN FOB CARGOES

Quality: Mediterranean En590 FOB assessment typically reflects French spec diesel fuel for automotive use but other grades such as Italian and Spanish may be considered.

Size: Cargo assessments reflect parcels of 25,000-30,000mt each.

Location: FOB Med (see freight calculation below).

Timing: Reflects material for loading 10-25 days from date of publication, with prices normalized to the mid-point of this delivery window.

Other: The FOB assessment is calculated as a freight netback from the CIF value, using a worldscale rate published in Platts Clean Tankerwire and a basket of flat rates including typical routes in the Mediterranean from Genoa and Lavrea. Recently a flat rate of 4.5 has been applied representing freight between origin ports including Santa Panagia, Constantza and Skikda and destination ports Genoa and Lavera.

Background: Platts has made a number of changes in recent years in the maximum sulphur content in line with EU regulations. Effective Sep 2, 1996, sulfur content in EN590 was reduced from 0.2% to 0.05% in line with European Union legislation. Effective Jan 1, 2000 sulfur content was reduced further to 0.035%. The new quality was reflected from Dec 1, 1999.

Dispatch Category	EB
12 Char. Symbol	PRPGS9MEDBIY
9 Char. Symbol(s)	PPD7MISCH · PPD7MISCL
7 Char. Symbol	PPAQB00
Earliest Date	01-JUL-1994
Vendors	BLM CQI DRI EMS FTP FUT KR RTR SAR
Description	Gasoil EN590 FOB Med Cargo

Methodology and Specifications Guide

North American Natural Gas

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LATEST UPDATE: OCTOBER 2007

INTRODUCTION

This statement of methodology for Platts' North American natural gas price indexes and assessments reflects core principles that long have provided the foundation for Platts' price reporting in North American gas 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 natural gas markets change. The revisions in this update reflect that Platts now incorporates forward gas trading activity from IntercontinentalExchange in formulating its daily forward assessments for natural gas.

The statement continues to incorporate price reporting standards that went into effect July 1, 2003, and also takes into consideration standards for price reporting stated in the Federal Energy Regulatory Commission's July 24, 2003, policy statement on US natural gas and electricity price indexes (PL03-3).

If you have questions concerning reporting to Platts or our statement of methodology, or would like to discuss any gas price reporting issues, please call or e-mail one of our editors: Brian Jordan, editorial director for North American natural gas and electricity markets, 202-383-2181 (brian_jordan@platts.com); Tom Castleman, daily markets editor, 713-658-3263 (tom_castleman@platts.com); Kelley Doolan, monthly bidweek markets editor, 202-383-2145 (kelly_doolan@platts.com); and Mike Wilczek, forward markets editor, 202-383-2246 (mike_wilczek@platts.com).

Platts also has a compliance staff independent of the editorial group. For more information, contact Senior Director of Compliance Nina Antony, 212-512-4565 (nina_antony@mcgraw-hill.com).

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

HOW THIS METHODOLOGY STATEMENT IS ORGANIZED

This description of methodology for natural gas indexes in North America is divided into five sections (I-V) that parallel the entire process of producing the benchmarks. A separate appendix is a list of definitions of the trading locations for which Platts publishes daily, monthly bidweek and/or forward indexes and assessments.

- Part I describes what data goes into Platts' natural gas indexes and assessments, 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.
- Part III is a detailed account of what Platts does with the data to formulate its daily, monthly bidweek and forward natural gas indexes and assessments, and includes descriptions of the statistical and editorial tools Platts uses to convert raw data into indexes and assessments. This section also describes the process for screening outliers.
- 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 I: DATA QUALITY AND 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' standards call for formalized reporting relationships with market participants in which data is submitted from a central point in the mid- or back office (a segment of the reporting entity that does not have a commercial interest in the reported prices). The reporting entity 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. The entity also is obligated to make reasonable efforts to inform Platts in the case of any errors or omissions.

Daily and monthly bidweek price indexes are based on original reporting and do not incorporate publicly available price surveys. Prices for those indexes are collected firsthand by Platts from actual buyers and sellers.

Data submitted to Platts must be detailed, transaction-level data. Below is a summary of what should be reported. (A Data Submission Guide that explains minimum and preferred information to report to Platts is also available upon request.)

Platts strongly encourages companies to surpass minimum reporting requirements and to report transactions in addition to those required to create existing daily and bidweek indexes. As long as companies clearly define transactions by key attributes, including trade date, flow date(s), and whether a transaction is physical or financial, Platts is able to sort transactional data and include the applicable deals in the relevant indexes and assessments.

For example, Platts encourages companies to report on a daily basis all their forward deals, both financial and physical, beginning with balance-of-month transactions and extending out the forward curve. Platts also encourages companies to report daily and monthly bidweek transactions at locations for which Platts does not currently publish indexes or assessments.

Following are the minimum reporting requirements for the day-ahead and monthly bidweek indexes, plus information on the data Platts seeks for balance-of-month and forward markets.

WHAT TO REPORT

- For the daily price survey, report each business day all fixed-price physical deals completed prior to the NAESB nomination deadline (11:30 am Central Prevailing Time) for next-day delivery in North America. Transactions done on Friday usually are for flow on Saturday, Sunday and Monday inclusive. Trading patterns may vary in the case of holidays or the end of a month that occurs on a weekend.
- For the monthly bidweek price survey, bidweek is defined as the last five business days of each month. For each day of bidweek, report all fixed-price physical deals negotiated that day for delivery throughout the next month. Also report all 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. Platts' current policy is to use physical basis deals for points east of the Rocky Mountains, except in the Permian Basin region at Waha, El Paso Natural Gas Co., Permian Basin and Transwestern Pipeline Co., Permian Basin.
- For the balance-of-month and forward markets, Platts requests that companies report each business day all financial and physical forward transactions completed that day at all locations. Those transactions should be included along with daily transactions in the report sent each day to gasprice_daily@platts.com.
- Platts expects reported data for the daily and monthly bidweek indexes to include all transactions done by the entity at **all** locations reported by Platts, not a selective subset of those locations.
- Price reports should be for deliveries into the pipeline, on a dry basis, and should specify the point of delivery. For market center locations, see point descriptions in the appendix. For daily and monthly bidweek transactions, Platts also requests reports for points where it does not currently publish indexes or assessments. For those locations, use either the point's common name or the meter designation. If sufficient trading develops at a location and is sustained, Platts would consider adding that pricing point to its list of reported points. In addition, information on deals at those points adds to Platts' understanding of the market.
- All transactions should be listed individually. In addition to the delivery point, specify the price (\$/MMBtu or, inside Canada, C\$/gigajoule), volume (MMBtu/day or gigajoule/day), source (company name), buy/sell indicator, trade date, start flow date, end flow date, counterparty name and intermediary name (broker or trading platform). For forward transactions, also include whether a transaction is financial or physical. Because the gas industry currently lacks consensus on the issue of counterparties, Platts for now will accept and use data that does not include counterparty information. However, Platts firmly believes that counterparty data is the best single way to verify reported transactions, and Platts encourages market participants that are not already reporting counterparties to initiate changes to agreements that may currently prevent them from doing so. Platts reserves its right to refuse in the future to use data that lacks counterparties.
- For the daily and monthly bidweek price surveys, financial deals should be clearly marked as such.
- For the daily and monthly bidweek surveys, Platts' policy is not to include so-called linked or prearranged spread trades between two parties. These trades are concluded as one leg of a transaction linked to a similar trade in another location. They are excluded because the two counterparties are transacting based on the difference between the two linked transactions rather than on the outright values at the locations. Again, Platts encourages companies to report these transactions, provided they are clearly labeled as one arm of a linked, spread transaction, in order for market editors to better understand market-value relationships, as well as to consider new benchmarks for the marketplace.
- Platts requests daily time stamps indicating when a transaction was made because they provide a clearer picture of the movement of prices through the trading period and provide another tool for evaluating data quality. However, 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.

- In the event that a data provider has no trade information to submit, a blank notification stating that fact should be sent in.

HOW TO REPORT

- Reports should be compiled and sent to Platts by a noncommercial department of the company. 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 reported transactions.
- Reports should be sent electronically in either Excel or CSV (comma separated values) formats. Platts can provide reporting entities with a sample Excel sheet showing the preferred format and the information needed for each transaction.
- While electronic submission of data is the standard, Platts will accept faxed reports in circumstances where e-mail transmission fails or is unavailable. Reporting entities should be prepared in the rare cases of e-mail malfunctions to fax submissions to Platts. The fax numbers are 713-658-3290 for the daily price survey and 202-383-2109 for the monthly price survey.
- Because of the fundamentally different nature of the gas forward daily price assessments, which are market-on-close assessments rather than traditional indexes (*see Part III*), market editors producing Platts' forward assessments may collect information on forwards prices and discuss market dynamics with market participants over the telephone.
- Reports for the daily price survey should be sent to gasprice_daily@platts.com each day by 3:00 pm Central Prevailing Time. Reports for the monthly price survey should be sent to gasprice_monthly@platts.com by 6:00 pm EPT on each of the first four days of bidweek and by 2 pm EPT on the final day of bidweek.
- If reporting entities are unable to compile the needed information by the Platts deadline on a given day, they 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 ensuring the security and confidentiality of price data, through both its information technology systems and its policies on access to the data. Following is a description of Platts' processes.

- Price data is e-mailed to specific Platts e-mail addresses. E-mails to those addresses enter a secure network and are accessible only by market editors and designated administrators. Encryption is available upon request of the reporting company. In the case of faxes, accepted only in unusual circumstances where e-mail fails or is unavailable, documents are stored and saved in compliance with Platts' record retention policies.
- Data is entered into a proprietary software system designed specifically to store and analyze trade data and into customized Excel spreadsheets accessible only by designated market editors.
- Data is stored in a secure network, and under internal procedures audited and enforced by the Platts compliance staff, 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 work. All North American natural gas market reporters undergo compliance reviews at least twice a year.
- Price data is used only for constructing indexes and assessments. Platts has a strict internal policy of never using price data from an individual source for news reporting purposes. Platts news reporters do not 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

For North American gas, Platts publishes prices in three discrete markets: the day-ahead, monthly bidweek and forward markets. Prices are published in several ways, ranging from a daily data feed to a biweekly newsletter. Platts' prices are available to any party who subscribes to the publication or news service in which those prices are published. Platts' prices are copyrighted and may not be distributed or used for commercial gain by any third party without an explicit agreement with Platts.

For the daily market, Platts publishes three price components: the midpoint (the volume-weighted average), the common range and the absolute range. The daily midpoint, commonly called the GDA (*Gas Daily* average), is the volume-weighted average of all the deals reported to Platts for each point, excepting any outliers that are not used. The absolute range shows the absolute low and high of deals reported, excluding outliers that are not used. The common range is 50% of the absolute range and is built around the volume-weighted average, also known as the midpoint.

Midpoints (volume-weighted averages) for points for which no new data is received are not carried over from the previous day; when no data is received, the survey shows only dashes in the columns for midpoint, absolute and common range, volume, and deals. The daily survey relies solely on a volume-weighted average of reported transactions; no assessments using other factors are included.

Platts for years published electronically the daily volume at each reported point and since May 2003 has published those volumes in the newsletter version of *Gas Daily*. In August 2004 Platts also began publishing daily the number of transactions at each point to increase transparency on the amount of trading activity.

A monthly average of the daily midpoints for each location is published in the next month's *Gas Daily Price Guide*, a monthly supplement to *Gas Daily*.

For the monthly bidweek market, Platts publishes a range of reported prices, excluding outliers, and either an index or an assessment, as explained below. Prices are published on the first business day of the month in which the gas will flow.

Platts relies on straightforward quantitative analysis of the data in calculating indexes. For low-liquidity points where few or, in some cases, no transactions are reported, Platts may perform assessments. Those prices are clearly marked with an asterisk (*) to make clear an assessment process has been used. If insufficient market information is available at a point, Platts does not publish a price (N.A.).

In July 2003, Platts adopted a three-tier system grouping points in its monthly survey by the reported volumes and number of trades. The top tier includes points with volumes of at least 100,000 MMBtu/day and at least 10 trades; the second tier includes points with volumes of 25,000 to 99,999 MMBtu/day and at least five trades; and the third tier includes points with volumes below 25,000 MMBtu/day and/or fewer than five trades.

In August 2004, Platts began publishing volumes and the number of transactions for points in tiers 1 and 2. Because of increased liquidity and data reporting by market participants, effective February 2007 Platts added volumes and transactions for tier 3 points as well.

To provide more transparency on the formation of monthly bidweek indexes, Platts in February 2005 began publishing a table in *Inside FERC's Gas Market Report* that provided physical

basis prices for points where physical basis deals were used and regularly reported. Beginning in February 2007, Platts expanded the table to include all points for which physical basis transactions are used (even if none are reported that month) and also began publishing the table in the *Gas Daily Price Guide*, a monthly supplement to *Gas Daily*, as well as on its electronic news service, *Natural Gas Alert*. The physical basis price table shows the volume, deal count, low price, high price, average price, and cash equivalent price for each point for which physical basis deals are used.

For the daily forward market, Platts publishes a daily market-on-close assessment and an associated range. The market-on-close assessments reflect values in the financial basis-swap market at various North American locations at the 2:30 pm EPT close of open outcry trading of the New York Mercantile Exchange Henry Hub gas futures contract, which allows the assessments to line up and be compared with the NYMEX Henry Hub settlement prices.

The daily forward assessments are fundamentally different from the daily and monthly bidweek indexes. They represent a value at the close of the market rather than a mathematically derived price representing market activity over a defined period of time, like the daily and monthly bidweek indexes. The purpose of the daily forward assessments is to increase transparency in forward markets and to provide the market with independently derived values as a tool for mark-to-market and general valuation purposes.

DAILY MARKET

A formula is used to calculate the common range. In most markets, the formula establishes the common range at 50% of the absolute range and builds the range around the volume-weighted average price (the midpoint). In the case of a point where a single price is reported and therefore there is no absolute range, a common range is not constructed. A volume-weighted price located more toward either end of the range may narrow the range further, as explained below.

An example of a common range calculation: On a given day, the lowest price, or absolute low, reported at a point was \$5.70 and the high was \$5.92. The actual volume-weighted average was \$5.843. The calculation follows this sequence:

— The volume-weighted average is rounded to the nearest half-cent, so \$5.843 becomes \$5.845 (the midpoint).

— The width of the absolute range is calculated, so $\$5.92 - \$5.70 = \$0.22$; that figure is divided by 4, which produces an increment of .055.

— That increment is subtracted and added to the rounded volume-weighted average to produce a common low and high; so, $\$5.845 - \$0.055 = \$5.79$, and $\$5.845 + \$0.055 = \$5.90$.

This procedure can be further refined by Platts editors to prevent calculations that in rare circumstances might place the common low or high below or above the absolute range.

MONTHLY MARKET

The current format for the monthly survey has been in place since March 1986. Platts has reported monthly index prices since January 1988. The monthly bidweek index is a single benchmark price designed to represent a central or average value for dealmaking during the bidweek period.

A number of data sorts, statistical calculations and tests are performed on the collected transactional data. These typically include an analysis of the quality and completeness of each pricing point's survey sample, the identification and consideration of anomalous or outlying deals, a comparison of volume-weighted average prices for each data submitter and the calculation of a number of overall measures of central tendency, including the volume-weighted average, the median, the simple average, the mode and the midpoint.

Other statistical and analytical tools are also used to examine the reported data, including identification and consideration of the price series' skew, its standard deviation and distribution, the relationship between series data and that of related trading points, and the track record of the survey participants reporting prices at the point.

In limited instances, when points are too thinly traded to permit use of the traditional index method, Platts uses an assessment methodology. In those cases, in the absence of sufficient trade data to calculate a representative monthly index, Platts will examine other market information to determine whether it can publish an assessment. If that is not possible, Platts will publish no index price for the month, designated as "N.A." Except in the case of corrections (*see Part IV*), Platts does not revise prices after the fact — once an N.A. is published for a month, no price will be published even if additional information is subsequently provided.

To derive the index, Platts editors use volume-weighted averages as the foundation. At pricing points with robust dealmaking and a generally normal distribution curve, the index is the simple volume-weighted average. This applies to the large majority of bidweek indexes.

Because survey samples of reported trading at any individual pricing point can vary under different market conditions, the volume-weighted average alone is not always an adequate indicator of average dealmaking over the five-day bidweek period. Survey samples can vary with participation levels and the completeness of data elements reported. In a thinner and/or very volatile market, a single party with one or two large-volume deals reported at an extreme end of the market's price range can significantly move a volume-weighted average away from the average value at which most parties traded. In these situations,

Platts editors also consider the median of the price series, which tends to represent the centerpoint of trading better than the volume-weighted average.

At points where trading is robust and the distribution of reported transactions is generally normal, the volume-weighted average and the median are usually aligned with each other. When the two measures significantly diverge, an analysis of the data set typically is performed to determine why. If the analysis finds that the characteristics of the survey sample are creating an unrepresentative skew of the volume-weighted average, either the median is used as the index or the average of the median and the volume-weighted average is used.

In the limited instances of thin, illiquid markets, the use of volume-weighted indexes may not be possible. Platts believes that price assessments using available information other than reported transactions help provide market transparency. At such thinly traded or thinly reported points, defined as those with volumes below 25,000 MMBtu/day and/or fewer than five trades, Platts editors make a determination whether the reported transactions reflect a representative central value for the bidweek time period based on current market conditions at the trading point and a comparison with other related and more deeply traded locations. If the reported data for such a point produces an average that substantially correlates with those of other related and more deeply traded points, Platts will establish its index using just the reported data.

If, however, the reported transactions at the illiquid point do not produce an average that substantially correlates with those at more liquid related points, then Platts will make an assessment if adequate alternative market information is available on which to base an assessment. If insufficient other market information is available, Platts editors may elect to publish no price for that point.

Assessments, which are clearly designated by asterisks in price tables, may incorporate any transactional data reported or may be based solely on other information, including an analysis of bid/ask spreads, basis relationships to values at related liquid pricing points, implied physical values derived from financial swaps and derivative index deals, and daily market trading at the point during bidweek. Assessments are based on objective factual information in addition to actual transactions, not on editors' subjective judgments of where markets would have traded or industry participants' opinions on prices.

FORWARDS MARKET

Platts gas forwards prices provide the market with a daily assessment of values in the financial basis market at major pricing points in North America. Trading generally is done by the month, for nearby months, and by the season. Standard products traded are for two seasons — summer (April through October) and winter (November through March). Trades also are done for the balance of the current season.

Forward markets are commonly traded as a basis differential to the corresponding NYMEX Henry Hub futures contract — *i.e.*, the closing price of that month's futures contract for a specified month, or the average of the months that comprise a seasonal strip of futures contracts. Depending on the location, the differential price may be a plus or minus to Henry Hub. Prices are reported in US cents/MMBtu. In addition to a market-on-close assessment, Platts also publishes a range and a full-value equivalent price (the corresponding NYMEX Henry Hub gas futures contract price plus or minus the basis differential).

Editors use forward transactions and bids and offers as well as differentials to other trading locations. 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 are in agreement. For example, the daily assessments for individual months should be consistent with and reflected in the balance-of-season assessment that includes those months.

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

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

OUTLIERS

To identify non-applicable outliers, transactions greater than two and three standard deviations from the data series' mean are routinely flagged by Platts' data analysis systems. (Standard deviation is a statistic that describes how tightly all data points are clustered around the mean in a set of data.) Transactions that are outside what the editor has otherwise seen as the established range of trading also are flagged for additional examination.

Transactions at prices more than two standard deviations from the mean are not necessarily out-of-market, distressed or inaccurately reported deals. Platts often works with sets of data that are not normally distributed around the mean. This so-called "skew" of the normal distribution can reflect normal market activity in any given market, and prices of more than two standard deviations are not automatically discarded. When a transaction falls outside of three standard deviations from the price series' mean, it receives greater scrutiny. When such a deal has a significant impact on the volume-weighted average, or when it reflects a value significantly outside the range of values seen in related markets (*e.g.*, trading at nearby points or NYMEX values plus reported basis), Platts editors routinely attempt to contact the reporting party for more specifics on the transaction, as described below. If a satisfactory answer cannot be obtained,

editors may elect not to include the price in calculations.

Among the tests used by Platts editors to determine whether to use an outlying price when calculating prices to be published are:

- The direction and magnitude of the skew for the set of data, compared with how far beyond two standard deviations the transaction is.
- The completeness of transaction-specific information reported for the deal, including time stamp, buy/sell indicator and counterparty name.
- Information from another party that verifies the deal, for example the reporting of the transaction by a named counterparty.
- An explanation by the data provider of the market fundamentals accounting for the "outlier" nature of the deal. The explanation must also hold for transactions other than the potential outlier.
- Information, or lack of information, demonstrating that the deal was distressed, such as credit issues for either counterparty, or completion of the deal after the expiration of daily options.
- The record of the entity submitting the data. The most credible data providers are those that: have contacts designated to answer questions and inquiries on data submissions who are readily accessible and responsive to inquiries by Platts editors; report every day or month 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; and submit reports that include few outliers, and provide explanations for the outliers at the time when the outliers are reported.

PART IV: VERIFICATION AND CORRECTIONS

Platts editors make their best efforts to verify the accuracy of prices based on information they have in hand when they must meet daily or monthly price reporting deadlines. As described in Part III, Platts editors routinely contact data providers about transactions that raise questions 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, they may choose to take their concerns to the entity's chief risk officer or comparable senior official. If editors 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 full and 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' reported prices provide certainty, after-the-fact revisions are not made 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 found in a data submission should be brought to the attention of the appropriate Platts editor — listed in the introduction of this methodology — as soon as possible.

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 also will 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 by the published price; the volume represented by the published price and the volume affected by the error; and the number of transactions represented by the published price and the number of transactions 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.

APPENDIX: DEFINITIONS OF TRADING LOCATIONS

Platts recognizes the need for stability in the description and definition of its pricing point locations. At the same time, market dynamics warrant the periodic addition, deletion or change in pricing points. Platts generally will not delete or change the description of a pricing point with less than 60 days' notice, although it will consider adding or changing a point on shorter notice in special circumstances if market conditions require faster action.

Platts combined the *Gas Daily* and *Inside FERC's Gas Market Report* daily and monthly price surveys in July 2002. The most recent changes to the surveys took effect in August 2007, when three monthly price points were added. Price points common to both surveys and any differences in daily and monthly pricing methodology are noted in the descriptions.

Points are arranged within three overall geographic regions – East, Central and West – and are alphabetical within each region and subregion.

EAST

NORTHEAST

Algonquin, receipts (daily survey only)

Deliveries into Algonquin Gas Transmission from Texas Eastern Transmission at the Lambertville and Hanover, N.J., interconnects; from Transcontinental Gas Pipe Line at the Centerville, N.J., interconnect; from Columbia Gas Transmission at the Hanover, N.J., and Ramapo, N.Y., interconnects; from Tennessee Gas Pipeline at the Mahwah, N.J., Cheshire, Conn., and Mendon, Mass., interconnects; from Iroquois Gas Transmission System at the Brookfield, Conn., interconnect; and from Maritimes & Northeast Pipeline at the Beverly, Mass., interconnect.

Algonquin, city-gates (daily and monthly survey)

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

Columbia Gas, Appalachia (daily and monthly survey)

Deliveries into Columbia Gas Transmission in eastern Kentucky, eastern Ohio, West Virginia, Pennsylvania, northern Virginia and western New York. The Appalachian pool for deliveries into Columbia begins downstream of the Leach, Ky., interconnection with Columbia Gulf Transmission; deliveries at Leach are not included. Columbia Gas operates supply pool and market-area storage facilities within this northern Appalachia region, which also has local production. Prices include deliveries systemwide at pools, interconnects and on-system points.

Columbia Gas, delivered (daily survey only)

Deliveries from Columbia Gas Transmission to Mid-Atlantic city-gates in zones 1, 4 and 10, which extend from the southern tip of New York south to the Virginia/North Carolina border and encompass the western half of Pennsylvania, Maryland, New Jersey and the eastern two-thirds of Virginia. Zone 1 includes the eastern third of Virginia and southern Maryland; zone 4 includes eastern Pennsylvania, New Jersey, Delaware and the southern tip of New York (including New York City); and zone 10 includes central Virginia and northern Maryland. This point was discontinued on Aug. 1, 2004.

Dominion, North Point (daily survey only)

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 North Point has major interconnects with Columbia Gas Transmission, National Fuel Gas Supply, Texas Eastern Transmission, Transcontinental Gas Pipe Line and Tennessee Gas Pipeline. Major compressor stations in the North Point system include Punxsutawney, Ardell, Finnefrock, Leidy, Greenlick, Ellisburg and Sabinsville, Pa.; and Harrison, Woodhall, Borger and Utica, N.Y.

Dominion, South Point (Dominion, Appalachia in monthly survey)(daily and monthly survey)

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.

Dominion, delivered (daily survey only)

Deliveries from Dominion Transmission to Mid-Atlantic city-gates located in east-central New York (Schenectady, Troy, Albany); southwestern Pennsylvania (Pittsburgh); and the Virginia suburbs outside Washington, D.C. This point was discontinued on Aug. 1, 2004.

Dracut, Mass. (daily survey only)

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 (daily survey only)

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

Iroquois, zone 2 (daily and monthly survey)

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. This point was added to the monthly survey in August 2007.

Leidy Hub

Deliveries into and from Dominion Transmission, National Fuel Gas Supply, Columbia Gas Transmission, Texas Eastern Transmission and Transcontinental Gas Pipe Line in the vicinity of the Leidy storage facility in Clinton County, Pa.

Niagara (daily and monthly survey)

Deliveries into the Niagara Spur Loop Line from TransCanada PipeLines, a border-crossing point between eastern Canada and the northeastern United States, north of Niagara Falls, N.Y. Interconnects are with Tennessee Gas Pipeline, National Fuel Gas Supply, Dominion Transmission and Texas Eastern Transmission.

Tennessee, zone 5 delivered (daily survey only)

Deliveries from Tennessee Gas Pipeline on the 200 Leg in New York state and the 300 Leg in New Jersey. This point was discontinued on Aug. 1, 2004.

Tennessee, zone 6 delivered (daily and monthly survey)

Deliveries from Tennessee Gas Pipeline on the 200 and 300 Legs in Connecticut, Massachusetts, Rhode Island and New Hampshire.

Texas Eastern, M-3 (daily and monthly survey)

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, zone 6 non-N.Y. (daily and monthly survey)

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 N.Y. (daily and monthly survey)

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 – KeySpan Energy Delivery and Consolidated Edison Co. of New York — as well as Public Service Electric and Gas of New Jersey.

GULF COAST

Columbia Gulf, La. (daily and monthly survey)

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 (daily and monthly survey)

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 Gas, zone 1 (daily and monthly survey)

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 (daily and monthly survey)

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 (daily and monthly survey)

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' monthly bidweek survey for zone 3 includes deliveries between stations 8 and 12, including Mobile Bay deals into Florida Gas. However, Mobile Bay prices are tracked separately in the daily survey (see Mobile Bay listing).

Florida Gas, Mobile Bay (daily survey only)

Deliveries into Florida Gas Transmission from Transcontinental Gas Pipe Line's Mobile Bay Lateral at the Citronelle interconnection in northern Mobile County, Ala., just upstream of station 11. This point was discontinued on June 7, 2006.

Florida city-gates (daily survey only)

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.

Southern Natural, La. (daily and monthly survey)

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.

Tennessee, zone 0 (daily and monthly survey)

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

Tennessee, Louisiana, 500 Leg (daily and monthly survey)

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 the market area at station 542 in eastern Mississippi.

Tennessee, Louisiana, 800 Leg (daily and monthly survey)

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.

Texas Eastern, East Texas (daily and monthly survey)

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, South Texas (daily and monthly survey)

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 Louisiana (daily and monthly survey)

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 Eastern, East Louisiana (daily and monthly survey)

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, M-1 (Kosi) (daily and monthly survey)

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. This point was added to the monthly survey in August 2007.

Transco, zone 1 (daily and monthly survey)

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 (daily and monthly survey)

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 (daily and monthly survey)

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 (daily and monthly survey)

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.

Transco, zone 5 delivered (daily survey only)

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.

CENTRAL**UPPER MIDWEST****Alliance, into interstates (daily survey only)**

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 (daily and monthly survey)

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-gates (daily and monthly survey)

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.

Consumers Energy city-gate (daily and monthly survey)

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

Dawn, Ontario (daily and monthly survey)

Deliveries from Union Gas' Dawn Hub, a gathering point for 15 adjacent storage pools in Ontario near Port Huron, Mich., on the

U.S./Canadian border. Included are deliveries into TransCanada PipeLines 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, Viking GL (daily survey only)

Deliveries into Great Lakes Gas Transmission from TransCanada PipeLines at the Emerson 2 compressor station at the U.S./Canadian border at Emerson, Manitoba, and deliveries into Viking Gas Transmission from TransCanada at the Emerson 1 station.

MichCon city-gate (daily and monthly survey)

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 Pipe Line 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.

GULF COAST**Agua Dulce Hub (daily only)**

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, TransTexas Gas and EPGT Texas at the Agua Dulce Hub in Nueces County, Texas, about 20 miles west-southwest of Corpus Christi. Deliveries from the ExxonMobil King Ranch plant are included.

ANR, La. (daily and monthly survey)

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 (daily only)

Deliveries into Reliant Energy Gas Transmission, 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.

EPGT, Texas (daily and monthly survey)

Deliveries into EPGT Texas' gathering system east and south of Bandera County, Texas. Points in the West Texas portion of EPGT

Texas, including the Waha header, are not included. In the past, the system was known as PG&E Gas Transmission-Texas and Valero Natural Gas. This point was discontinued on Aug. 1, 2004.

Gulf South, S. La./East Side (daily and monthly survey)

Deliveries into Gulf South Pipeline in capacity allocation area 2, which includes Santa Rosa County, Fla., southern Alabama and southeastern Mississippi; area 3, which includes southern Louisiana's Mississippi River Delta region; area 4, which covers the Baton Rouge, La., region; area 5, which includes south-central and central Louisiana; and area 6 in southwestern Louisiana. In the past, the system was known as Koch Gateway Pipeline and United Gas Pipe Line. This point was discontinued on Aug. 1, 2004.

Henry Hub (daily and monthly survey)

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 Pipe Line (daily only)

Deliveries into Houston Pipe Line's gathering system in South Texas starting at Falfurrios in Brooks County on the 8-inch lateral and at the Thompsonville compressor station in Jim Hogg County. The gathering system is generally demarcated by its Nueces compressor station near the Three Rivers plant in Live Oak County, and by the Refugio station in central Refugio County. This point was discontinued on Aug. 1, 2004.

Houston Ship Channel (daily and monthly survey)

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 (daily and monthly survey)

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.

Lone Star (daily only)

Deliveries into Lone Star Pipeline's S2 Lateral starting in Henderson County, Texas, east to the Carthage plant in Panola County, Texas. This point was discontinued on Aug. 1, 2004.

MRT, mainline (daily and monthly survey)

Deliveries into Mississippi River Transmission's mainline from the Perryville, La., compressor station north through Arkansas

and Missouri to the St. Louis area. This point was discontinued on Aug. 1, 2004.

MRT, West Leg (daily and monthly survey)

Deliveries into Mississippi River Transmission's West Leg west of the Perryville, La., station to the terminus of the line at an inter-connection with Natural Gas Pipeline Co. of America in Harrison County, Texas. This point was discontinued on Aug. 1, 2004.

NGPL, South Texas (daily and monthly survey)

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, Texok zone (daily and monthly survey)

Deliveries into Natural Gas Pipeline Co. of America from (and including) compressor station 302 in Montgomery County, Texas, east to station 344 in Jefferson County, Texas; north to Cass County, Texas; and west to station 801 in Carter County, Okla.

NGPL, La. (daily and monthly survey)

Deliveries into Natural Gas Pipeline Co. of America from compressor station 344 in Jefferson County, Texas, to the terminus of the line in Vermilion Parish, La., at Erath and Henry Hub.

Texas Gas, zone 1 (daily and monthly survey)

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

Texas Gas, zone SL (daily and monthly survey)

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.

Trunkline, Texas (daily and monthly survey)

Deliveries into Trunkline Gas in the Texas field zone starting at the Beeville compressor station in Bee County, Texas, north to the Longville, La., station in Beauregard Parish, La. This point was discontinued on Aug. 1, 2004.

Trunkline, W. La. (daily survey only)

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, E. La. (daily survey only)

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, La. (monthly survey only)

Deliveries into Trunkline Gas at points upstream of the Longville compressor station on the lines that do not extend to Texas.

MIDCONTINENT**ANR, Okla. (daily and monthly survey)**

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.

CenterPoint, East (daily and monthly survey)

Deliveries into CenterPoint Energy 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, prior to Aug. 1, 2004, Reliant Energy Gas Transmission.

NGPL, Amarillo receipt (daily survey only)

Deliveries into Natural Gas Pipeline Co. of America starting at the Trailblazer Pipeline interconnection in Gage County, Neb., on the Amarillo mainline at compressor station 106 east to NGPL's interconnection with Northern Border Pipeline at station 109 in Keokuk County, Iowa.

NGPL, Midcontinent (daily and monthly survey)

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.

NGPL, Iowa-Ill. receipt (daily survey only)

Deliveries into Natural Gas Pipeline Co. of America on the Amarillo mainline from the interconnection with Northern Border Pipeline at station 109 in Keokuk County, Iowa, east to the interconnection with Wisconsin Gas in Lake County, Ill. Also, deliveries into NGPL on the Gulf Coast mainline from the

Missouri/Illinois border to compressor station 113 in Will County, Ill. This point was discontinued on Aug. 1, 2004.

Northern, MIDS 1-6 (daily survey only)

Deliveries into Northern Natural Gas' mileage indicator districts on the southern end of the system, in the Permian Basin from the El Dorado compressor station in MID 1 in Schleicher County, Texas, north to the Brownfield station in MID 6 in Terry County, Texas. This point was discontinued on Aug. 1, 2004.

Northern, Tx.-Okla.-Kan. (daily and monthly survey)

Deliveries into Northern Natural Gas' mileage indicator districts 7 through 16, from the Plainview compressor station in MID 7 in Hale County, Texas, north to the demarcation point between Northern Natural's production and market zones at the Clifton station in Clay County, Kan. Deliveries at the demarcation point are not included. This point was discontinued on Aug. 1, 2004.

Northern, demarcation (daily and monthly survey)

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 (daily and monthly survey)

Deliveries into Northern Natural Gas from Northern Border Pipeline at the Ventura interconnection in Hancock County, Iowa.

Oneok, Okla. (daily and monthly survey)

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.-Okla. (daily and monthly survey)

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.

Reliant, West (daily and monthly survey)

Deliveries into Reliant Energy 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, Okla., compressor station to Cowley County, Kan. Reliant is now named CenterPoint Energy Gas Transmission. In the past, the system was known as NorAm Gas Transmission and Arkla Energy Resources. This point was discontinued on Aug. 1, 2004.

Southern Star, Tx.-Okla.-Kan. (daily and monthly survey)

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, prior to Aug. 1, 2004, Williams Gas Pipelines Central.

WEST**CALIFORNIA****PG&E, Malin (daily and monthly survey)**

Deliveries into Pacific Gas and Electric's Lines 400 and 401 from Gas Transmission Northwest (formerly PG&E Gas Transmission, Northwest) at the Oregon/California border at Malin, Ore.

PG&E, South (daily and monthly survey)

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.

PG&E, city-gate (daily and monthly survey)

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

SoCal Gas (daily and monthly survey)

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 out of SoCal Gas' storage facilities; deliveries from Pacific Gas and Electric at several points, including Kern River station and Pisgah/Daggett; and in-state production.

ROCKIES/NORTHWEST/CANADA**Cheyenne Hub (daily and monthly survey)**

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 (daily and monthly survey)

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 (daily survey only)

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, Colo., south of the Ignacio plant on Northwest Pipeline and north of the Blanco plant on El Paso.

El Paso, San Juan Basin (daily and monthly survey)

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.

GTN, Kingsgate (daily survey only)

Deliveries into Gas Transmission Northwest from Foothills Pipeline at the Kingsgate interconnection at the U.S./Canadian border in Boundary County, Idaho. Prior to Aug. 1, 2004, the system was known as PG&E Gas Transmission, Northwest.

Kern River, delivered (daily survey only)

Deliveries from Kern River Gas Transmission upstream of the Southern California Gas system in the Las Vegas, Nevada 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 plant (daily survey only)

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.

Kern River, Wyoming (monthly survey only)

Deliveries into Kern River Gas Transmission anywhere in Wyoming. Transactions done at Opal, Wyo., and the Muddy Creek compressor station — where Kern River interconnects with Northwest Pipeline, Questar Pipeline and Colorado Interstate Gas — are used in both the Kern River, Wyoming, and Northwest Pipeline, Rocky Mountain, monthly postings because gas traded at those points often isn't for nomination into a specific pipeline.

Northwest, Wyoming pool (daily survey only)

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, Anchutz, Muddy Creek, Granger, Shute Creek and Whitney stations.

Northwest, S. of Green River (daily survey only)

Deliveries into Northwest Pipeline from the Green River, Wyo., compressor station south to the La Plata interconnection with El Paso Natural Gas in the San Juan Basin in La Plata County, Colo. Included are deliveries from Clay Basin storage, the Piceance Basin and the Ignacio plant.

Northwest, Rocky Mountains (monthly survey only)

Deliveries into Northwest Pipeline's mainline in Wyoming, Utah and Colorado between the Kemmerer and Moab stations. Deliveries at Ignacio, Colo., and elsewhere in zone MO are excluded. Transactions done at Opal, Wyo., and the Muddy Creek compressor station — where Northwest interconnects with Kern River Gas Transmission, Questar Pipeline and Colorado Interstate Gas — are used in both the Kern River, Wyoming, and Northwest Pipeline, Rocky Mountain, monthly postings because gas traded at those points often isn't for nomination into a specific pipeline.

Northwest, Canadian border (Sumas) (daily and monthly survey)

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

Northwest, all city-gates (daily survey only)

Deliveries from Northwest Pipeline into city-gates northwest of the Kemmerer, Wyo., compressor station in Idaho, Nevada, Oregon and Washington. This point was discontinued on Aug. 1, 2004.

Nova, same-day (daily survey only)

Deliveries for same-day flow into Nova Gas Transmission at the AECO-C, NIT hub in southeastern Alberta. AECO-C is the principal storage facility and hub on Nova; 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 Canadian dollars per gigajoule. This point was discontinued on Aug. 1, 2004.

PSCo city-gate (daily survey only)

Deliveries into Public Service Co. of Colorado from Front Range points, primarily from Denver-Julesburg Basin production. Excluded is gas entering the system from the Chalk Bluffs Hub, which is priced at Cheyenne Hub, and gas entering the system at Fort Lupton, where gas competes with long-haul supply on Colorado Interstate Gas. This point was discontinued on Aug. 1, 2004.

Questar, Rocky Mountains (daily and monthly survey)

Deliveries into Questar Pipeline on its North system, which runs from northeastern Colorado through southern Wyoming to Salt

Lake City, and on its South system, which runs from western Colorado to Payson, Utah, east of the Fidler compressor station. A 20-inch line running parallel to the Utah/Colorado border connects the two systems.

Stanfield, Ore. (daily and monthly survey)

Deliveries into Northwest Pipeline from PG&E Gas Transmission, Northwest (now named Gas Transmission Northwest) at the Stanfield compressor station in Umatilla County, Ore., on the Oregon/Washington border.

TCPL Alberta, AECO-C (daily and monthly survey)

Deliveries into TransCanada's Alberta System at the AECO-C, NIT Hub in southeastern Alberta. 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 Canadian dollars per gigajoule. Prior to Aug. 1, 2004, the system was known as Nova.

Westcoast, station 2 (daily survey only)

Deliveries into Westcoast Energy at compressor station 2 in north-central British Columbia, where much of northern British Columbia and Alberta production is pooled for shipment south and east. The price is reported in Canadian dollars per gigajoule.

WEST TEXAS

El Paso, Permian Basin (daily and monthly survey)

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).

Transwestern, Permian Basin (daily and monthly survey)

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 (daily and monthly survey)

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, EPGT Texas and Lone Star Pipeline.

European Power Daily

UK-France connector cut for up to 10 days

Flows on the UK-France 2,000 MW interconnector were cut on Monday to 1,500 MW in both directions for seven to ten days "due to a fault," the UK's National Grid said.

According to National Grid, "one of the four 500 MW poles on the UK-France interconnector has been switched out of service" and "the resulting available capacity is 1,500 MW in each direction." National Grid did not say what caused the fault, but the grid operator said "investigations are ongoing on the repair" and that "this restriction may be in place for approximately seven to ten days."

Power failures hit SW England, Wales

Around 10,000 distribution customers were without power this morning as winds up to 82 mph (130 km/hr) swept through Southwest England and Southeast Wales, network operator Western Power Distribution told Platts Monday.

Some 7,000 customers were cut off in Devon, Cornwall and Somerset as of 08:00 GMT, a spokeswoman for the Southwest region said. "Some will be back on, others will be cut off by now, but we have not had an update and the picture is changing all the time," she said. "We are expecting more winds this afternoon and evening. Coastal areas have been hit the worst. Trees are falling on lines, and lines are knocking together and shorting out." In southeast Wales, the distribution company reported 3,000 customers affected as of 11:00 GMT, but again a spokesman warned that conditions were forecast to worsen this afternoon and evening.

Severe gales to hit UK later this week

Meanwhile, UK national weather forecaster, the Met Office, is expecting unsettled conditions to continue this week, with more severe gales set to affect the UK later this week, it said Monday. The warning follows very windy conditions across the south of the UK Monday.

The Met Office has issued an early warning of severe gales, with potentially damaging gusts, for late Tuesday and into Wednesday.

There could be gusts of 60 to 70 miles per hour, and perhaps 80 mph over exposed coasts and hills, it said.

Areas most at risk of this spell of severe weather are likely to be north Wales, the Midlands, Northern Ireland and northern England, it added.

"With this spell of strong winds the Met Office is predicting further disruption to transport and power supplies, as well as the potential of damage to buildings and trees," the Met Office said.

Investors to raise commodity exposure

Investors worldwide are looking to increase their commodity exposure, despite difficult economic conditions, Kevin Norrish, director of commodities research at Barclay's Capital, said Monday.

Investors view that shift as a long-term strategy, he added, with many looking for exposures lasting three years or more.

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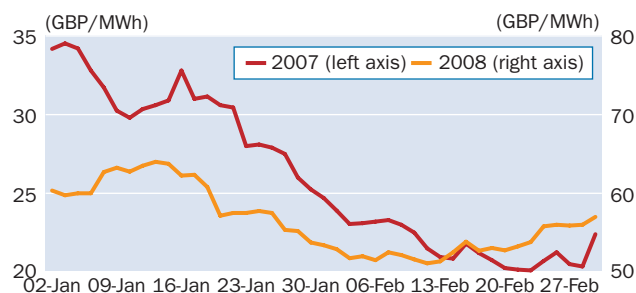
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Email the editors at European Power Daily with your comments, news or queries at power@platts.com

UK GTMA month-ahead base



Source: Platts

Platts European Power Assessments

At-A-Glance Day-Ahead Baseload Comparisons

March 10, 2008	(Eur/MWh)	Change (%)
Platts UK Power Index	70.2500	-2.01%
Platts Mid Germany	55.0000	-5.17%
Platts Mid Austria	55.0000	-5.17%
Platts Mid Switzerland	72.0000	-2.70%
Platts Mid France	69.0000	11.29%
Platts Mid Netherlands	64.0000	8.47%
Platts Mid Belgium	67.7500	3.75%
Platts Mid Spain	59.0000	-3.20%
Platts PEP Index	63.4040	2.32%
Platts Conti Index	62.2476	2.58%

Platts UK Forward Baseload Indexes

March 10, 2008	First	High	Low	Last	Index	Volume
Daily indices						
Day-ahead (GBP/MWh)	54.20	54.25	52.75	54.25	53.53	27.60
Day-ahead (Eur/MWh)	71.13	71.19	69.23	71.19	70.25	27.60
April (GBP/MWh)	57.00	57.25	57.00	57.05	57.13	200.00
April (Eur/MWh)	74.80	75.13	74.80	74.87	74.97	200.00
Cumulative indices						
April (GBP/MWh)	56.00	57.25	55.70	57.05	56.29	833.28
April (Eur/MWh)	73.49	75.13	73.10	74.87	73.87	833.28

Prices are based on trade in baseload GTMA schedule 5 Off contracts, Volumes in GWh.

Reviewing input from attendees at the UK bank's 4th Annual Commodities Investor Conference, Norrish said the main driver for the trend among investors was a search for diversification away from traditional asset classes. But they were also concerned about rising commodity prices and so were looking for exposure to that.

Roger Jones, co-head of commodities at Barclay's Capital, said the bank had raised its own forecast for the "long-term" average oil price from \$95/barrel to \$137/b. Increasing costs were the main reason for the bullish trend in oil, he added. "Costs can only go in one direction," he said.

Jones said the rise was "fundamentally based," despite the fact that it coincided with increasing investment. "Clearly speculation has an effect, maybe pushing the price from \$95/b to \$100/b, or back, because it works both ways," he added. But that was not driving the overall trend, he said.

There was also a shift under way in the strategy of investors, Norrish said, with many moving away from passive index investment, although that was still being used as the benchmark. Many investors were now looking for a mixture of passive and active investment, with some going for a fully active approach, he added.

And the climate change debate was filtering through to investment strategies too, Norrish said. Investors were looking for exposure to the "climate change theme" through carbon emissions trading and alternative energy equities, with very few reporting that they would not need to adjust their portfolios.

"You can't have exposure to emissions without exposure to policy risk, but there is a strong case to be made for having that in your portfolio," Norrish said.

Jones said that the notion of a strong exposure to policy risk was new for many investors, but that they took the view that it was necessary.

"Unequivocally, the view is that it's not something that's going away, so the issue is how it's going to evolve," he added.

CCS readiness to be mandatory for UK plants

Clean coal-fired power plants with carbon capture equipment must play a role in the UK's future energy mix, Secretary of State for Business John Hutton said Monday in London.

"Shortly we'll set out proposals for making carbon capture readiness a mandatory requirement for all future fossil fuel power stations," the minister said in a speech at the Adam Smith Institute's Future of Utilities conference.

"Fossil fuels will continue to play an important role in ensuring the flexibility of the electricity generation system," the minister said.

"Electricity demand fluctuates continually, but the fluctuations can be very pronounced during winter, requiring rapid short-term increases in production.

Neither wind nor nuclear can fulfill this role. We therefore will continue to need this back up from fossil fuels, with coal a key source of that flexibility, as we increase the proportion of renewable energy in our electricity mix."

Hutton said that within seven years "one of the world's first commercial scale demonstrator plants will be up and running in the UK, generating electricity from coal with up to 90% less carbon emitted. Through our competition [for a single state-backed post-combustion CCS project in the UK], the government is intervening to help develop this breakthrough technology."

Hutton said clauses were before parliament on the regulatory regime for carbon capture and storage.

Platts UK Assessments (GTMA, GBP/MWh)

March 10, 2008	Baseload		Peak		Euro Equivalents	
					Baseload	Peak
Day-ahead	54.00	54.50	58.00	59.00	70.87-71.52	76.12-77.43
Week-Ahead	53.25	54.25	60.50	61.50	69.88-71.19	79.40-80.71
April	56.80	57.20	65.50	67.50	74.54-75.07	85.96-88.58
May	55.65	56.05	64.50	65.00	73.03-73.56	84.65-85.30
June	55.60	56.00	66.00	69.00	72.97-73.49	86.61-90.55
Q2 08	56.00	56.40	65.75	66.25	73.49-74.02	86.29-86.94
Q3 08	55.50	56.00	68.00	68.50	72.83-73.49	89.24-89.90
Summer 08	55.75	56.25	66.60	67.60	73.16-73.82	87.40-88.71
Winter 08/09	63.20	63.60	76.60	77.00	82.94-83.46	100.52-101.05
Summer 09	53.25	53.75	63.00	65.00	69.88-70.54	82.68-85.30
Winter 09/10	61.00	61.40	72.70	74.70	80.05-80.58	95.41-98.03
Apr 08 Annual	59.40	59.85	71.50	72.20	77.95-78.54	93.83-94.75

Day ahead=2300-2300, Peak=0700-1900

Platts Central European Spot Assessments (Eur/MWh)

March 10, 2008	Baseload	Peak
Day-Ahead (Germany)	54.75-55.25	67.75-68.25
Day-Ahead (Austria)	54.75-55.25	67.75-68.25
Day-Ahead (Switzerland)	71.75-72.25	80.75-81.25
Swiss Franc equivalent	112.93-113.72	127.10-127.89
Swiss Franc equivalent	---	---
Week-Ahead	55.75-56.25	68.75-69.25
Weekend	49.25-49.75	---

Baseload = 000-2400, Peak = 0800-2000

Platts German Forward Assessments (Eur/MWh)

March 10, 2008	Baseload	Peak
April	59.40 59.90	75.85 76.35
May	55.25 55.75	70.45 70.95
June	61.20 61.70	84.60 85.10
July	66.75 67.25	95.00 96.00
August	61.25 61.75	85.50 86.00
September	64.00 64.50	89.80 90.80
Q2 08	58.60 59.10	74.40 76.40
Q3 08	63.50 64.00	90.40 91.40
Q4 08	68.50 69.00	94.25 95.25
Q1 09	71.50 72.50	100.25 101.25
Cal 09	63.60 64.10	87.70 88.20
Cal 10	62.15 62.65	86.95 87.35
Cal 11	62.70 63.20	87.25 88.25

Platts Belgian Assessments (Eur/MWh)

March 10, 2008	Baseload
D/A	67.25 - 68.25
April	61.75 - 62.75
May	55.50 - 56.50
June	61.40 - 62.40
Q2 08	60.95 - 61.95
Q3 08	64.15 - 65.15
Cal 09	65.20 - 66.00
Cal 10	63.05 - 63.85
Cal 11	63.10 - 63.90

Belpex Spot Prices (Eur/MWh)

	11-Mar-08	10-Mar-08
Average Base	66.70	73.32
Average Peak	77.96	80.90
Average Off-Peak	55.45	65.74
Base Volume (MWh)	52337.30	45343.30
Peak Volume (MWh)	29167.80	25263.30
Off-Peak Volume (MWh)	23169.50	20080.00

Base = 01:00-24:00, Peak = 09:00-20:00, Off-peak = 01:00-08:00, 21:00-2400

Government steer on Kingsnorth?

The statement was "a clear indication" that the government is close to approving E.ON UK's proposed 1,600 MW coal-fired power plant project at Kingsnorth, Kent, environmental group Greenpeace told Platts.

"Kingsnorth has cleared local approval and now needs approval by the Department of Business, Enterprise and Regulatory Reform," a spokesman told Platts. "We expect an announcement in April, so this looks like the warm-up act. We will be arguing for a public inquiry."

Greenpeace argues that carbon capture and storage is no more than a "promise of a possible solution some time in the future". It is being used to justify large coal-fired plant additions before the technology is proven, the group says.

In January this year, local councilors in the district of Medway, Kent, gave backing to the project. If the plant is given permission, it would be the first new coal-fired plant to be built in the UK for 24 years. The existing four units at the site are to be demolished on completion of new units, scheduled for 2012. Investment cost is put at GBP1 billion (\$2 billion) by E.ON UK.

BKW to split business into two sectors

Swiss utility BKW FMB Energie is to split its energy section into two business sectors from April 1, the company said late Friday.

From next month, it will operate two sections, Energy Switzerland and Energy and Trade International. BKW FMB Energie said its restructuring process also meant all requirements for market opening—on unbundling of energy generation and grids—would be realized by the end of the year. Further, the planned structure was an adjustment to the new challenges of securing safety of supply in the deregulated energy markets.

Switzerland's energy market is being liberalized from 2009 for industrial users with an annual demand of over 100,000 kWh. Private consumers are scheduled to take part in liberalization from 2012 unless the Swiss population votes against full deregulation in a referendum.

Romanian nuclear deal is 'Finnish model'

The seven-party investor agreement to construct and operate the Cernovoda 3 and 4 nuclear reactors in Romania was built on the "Finnish model," Marius Condu of Romanian utility Nuclearelectrica, said Monday—meaning the project structure was similar to the consortium of companies currently constructing the Olkiluoto-3 reactor in Finland.

Condu, the project director, said that although some of the investors were willing to take much larger shares, Nuclearelectrica sees the seven-party project team as a good way of spreading the project's risk and ensuring project financing.

Condu told Platts on the sidelines of the Adam Smith Institute's European nuclear forum in Brussels, that the project structure was similar to the consortium of companies currently constructing the Olkiluoto-3 reactor in Finland.

The project team for Cernovoda 3 and 4, and their respective shares, are Nuclearelectrica (20%), Enel (15%), Suez (15%), RWE (15%), CEZ (15%), Iberdrola (10%) and steelmaker Arcelor Mittal (10%). Condu said each of the parties would provide a proportional part of the financing and take a proportional share of the power.

Separately, a source at one of the utility partners involved said

Platts Dutch Assessments (Eur/MWh)

March 10, 2008	Baseload	Peak
D/A	63.50-64.50	72.50-76.50
Week Ahead	62.00-63.00	73.50-77.50
March	64.75-65.75	79.00-81.00
April	59.25-60.25	69.70-71.70
May	65.15-66.15	83.35-85.35
Q2 08	63.05-64.05	78.60-80.60
Q3 08	67.75-68.75	87.90-89.90
Q4 08	73.20-74.20	93.60-95.60
Q1 09	76.90-77.90	100.00-102.00
Balance 08	68.00-69.00	86.70-88.70
Cal 09	67.50-68.10	87.70-88.70
Cal 10	64.70-65.30	83.85-84.85
Cal 11	63.85-64.45	84.40-85.40

APX Spot Prices (Eur/MWh)

	11-Mar-08	10-Mar-08	12-Mar-07
Average Baseload	65.65	64.07	29.61
Average Peak	74.56	75.52	32.40
Average Super-Peak	77.96	80.71	
Average Off-Peak	47.82	41.18	24.04
Total Volume (MWh)	52259.0	65211.0	56707.0
Peak Volume (MWh)	34003.0	43334.0	38836.0
Super-Peak Volume (MWh)	24166.0	31447.0	
Off-Peak Volume (MWh)	18256.0	21877.0	17871.0

Base = 000-2400, Peak = 0700-2300, Off-peak = 2300-0700, Super-Peak=0900-2000

Platts French Assessments (Eur/MWh)

March 10, 2008	Baseload	Peak
D/A	66.25-66.75	75.50-76.00
Weekend	57.00-58.00	---
Week Ahead	59.50-60.00	71.00-72.00
April	61.00-61.50	76.00-76.50
May	52.90-53.90	68.00-69.00
June	59.20-60.20	81.40-82.40
Q2 08	58.15-58.65	75.00-75.50
Q3 08	61.40-62.40	87.75-88.75
Cal 09	65.30-65.80	90.50-91.50
Cal 10	62.30-63.30	89.75-90.75
Cal 11	62.35-63.35	88.50-89.50

Endex Dutch futures (Eur/MWh)

March 10, 2008	Baseload		Peak		
Product	Settle	Change	Volume	Settle	Change
Apr 08	65.13	+0.88	46800	80.01	+1.06
May 08	59.78	+0.02	3720	74.42	+0.17
Jun 08	66.47	+0.83	-	84.77	+1.31
Jul 08	69.41	+0.14	-	91.70	-0.04
Aug 08	66.21	+0.04	-	86.33	+0.14
Sep 08	68.58	+0.10	-	88.13	+0.19
Q2 2008	63.75	+0.57	43680	79.82	+0.86
Q3 2008	68.06	+0.09	33120	88.80	+0.09
Q4 2008	73.72	-0.13	-	94.61	-0.05
Q1 2009	77.03	-0.25	-	100.70	-0.28
Q2 2009	61.47	-0.35	-	77.83	-0.24
Q3 2009	63.82	-0.24	-	82.31	-0.21
Cal-09	67.80	-0.37	148920	88.01	-0.20
Cal-10	64.93	-0.15	-	84.27	-0.08
Cal-11	64.08	+0.00	-	84.99	-0.08
Cal-12	63.51	+0.02	-	84.29	-0.01
Cal-13	65.85	+0.00	-	88.83	+0.04
Total Volume			276240		

Italian Exchange

	11-Mar-08	10-Mar-08	12-Mar-07
Average Hourly Price	76.73	74.08	61.83
IPEX Traded Volume (MWh)	675,301.0	650,225.0	563,541.0

Source: IPEX

approval by the boards of directors for the investor agreement was expected to be a routine matter, and that as soon as that was cleared, a project company would be set up for an initial period of 18 months to finalize project work and financing arrangements. At the end of that development period, a final decision to proceed would have to be made by all parties and it is possible that between now and then the current investor shares could change.

Condu said the 18-month period would be used to review what work has already been done on the two reactors—which would use Canada's Candu 6 technology—what yet needs to be done, and to prepare bids for that work.

UK divided over energy price caps

Divisions were opening up in the UK Monday over whether state-imposed price caps on energy prices are an appropriate way to tackle fuel poverty.

The Treasury is considering announcing price caps on pre-pay meter gas and power bills in Wednesday's Budget speech, a source said, confirming a report in the Financial Times newspaper.

That would seem to be an admission that—at least in this segment of the market—allowing customers to switch their supplier in a competitive market is insufficient to keep a lid on end user prices.

But at the same time, the Secretary of State for Business, Enterprise and Regulatory Reform made a speech Monday in favor of switching, and stating that he would require energy regulator Ofgem to encourage further switching in low income groups as a way of tackling fuel poverty.

And Centrica, the largest supplier of energy to British homes, through its British Gas Residential Energy subsidiary, said that the free market should be allowed to act.

Switching encouraged

Secretary of State for Business, Enterprise and Regulatory Reform John Hutton told the Adam Smith utilities conference Monday that the government backed switching.

He said, according to a text of his speech, that he would consult on new guidance for Ofgem that would require the regulator to: "take a strong lead in co-ordinating activity to help low income and vulnerable consumers benefit from competitive markets, and particularly to facilitate switching among low income and vulnerable consumers, and so help tackle fuel poverty."

Switching, Hutton told the conference, "is a vital mechanism." He noted research from pollsters IPSOS/MORI that found 47% of customers who pay by direct debit have switched supplier, but only 24% of the most disadvantaged, 35% of over-65s and 33% of customers that use pre-payment meters. But he said that even though some customers do not switch supplier, the fact that they could helps control prices.

Treasury set to impose caps

But while Hutton was backing competition, a Financial Times report Monday seemed to suggest that Chancellor Alistair Darling had given up switching as too slow to take effect. The paper said that he was planning to impose price caps, or a similar mechanism, to limit power and gas prices charged to pre-pay meter customers.

Pre-pay meter customers pay for their gas and power before they consume it through coin or token operated meters. Such meters are commonly used by poorer customers or those with bad credit records, and often have higher per unit energy costs than other tariffs, such as for direct debit customers.

The FT reported that "in a highly unusual intervention in the mar-

Platts Spanish Assessments (Eur/MWh)

March 10, 2008	Baseload	
D/A	58.90	59.10
Week Ahead	59.10	61.00
BOM	59.90	60.10
Apr 08	59.10	60.00
May 08	58.10	59.00
Q2 2008	59.90	60.30
Q3 2008	61.50	62.20
Q4 2008	60.00	60.80
Balance 2007	60.50	61.50
Cal 2009	59.40	60.30

Spain Pool Average Spot Prices (Euro cents/kWh)

	11-Mar-08	10-Mar-08	12-Mar-07
Systemwide	5.880	6.044	3.110
Volume Matched (MWh)	702,343.0	712,170.4	579,959.0
Source: OMEL, Daily Turnover in MWh, prices Eur cts/kWh			

ket, the Chancellor will announce in the Budget his plan to control the tariffs paid by 3.8 million electricity customers and 2.8 million gas customers who use prepayment meters."

Ofgem against intervention?

Such a market intervention could upset energy regulator Ofgem, which is understood to favor controlling prices through competition and to be wary of re-regulating a large section of the market.

A spokeswoman for Ofgem declined to comment Monday, however, saying that the regulator did not wish to comment on speculation.

But Ofgem research has previously shown that 80% of pre-pay meter customers are not fuel poor, so blanket price caps on pre-pay meter tariffs may be a scatter-gun approach to targeting fuel poverty. And Ofgem warned in a fact-sheet last year that it could be unfair to push costs up for non pre-pay meter customers by offering lower costs for pre-pay meter customers, which it said would see energy bills rise for fuel poor customers not on pre-pay meters. Ofgem noted it costs a supplier GBP85/year more to serve a pre-pay meter customer than a direct debit customer.

Centrica warns against intervention

Centrica, which is the largest supplier of energy to British households through its British Gas subsidiary, said it already has a tariff, called Essentials, which can enable pre-pay meter customers to access its cheaper direct debit prices.

The company said it was against re-regulation of the market. Centrica's CEO Sam Laidlaw, told the Adam Smith conference, according to a text of his speech, that "there is a worrying tendency towards short term fiscal interventions, or now from some quarters, even price controls for some groups of customers." "Such intervention is contrary to the operation of competitive markets," he said, "threatens to destabilize investor confidence and risks jeopardizing construction of the critical power generation and gas supply infrastructure we need."

Laidlaw added that the real issue was with rising wholesale energy costs. "The government needs to deal with the long term causes of price volatility, the wholesale price, rather than seeking to intervene in the highly competitive retail market in a misguided attempt to curb the symptoms of rising retail prices," he said.

In very approximate terms, UK household energy bills have increased from about GBP500 to GBP1,000/year since around 2000, due to soaring wholesale costs, while switching supplier might only save GBP100/year or so.

Asked about an apparent contradiction between price caps and switching, a spokesman for Hutton's Department of Business, Enterprise and Regulatory Reform said there was no contradiction in making the widest range of efforts possible to help those on the lowest incomes. "Many vulnerable households (who are not on pre-payment meters) have never benefited from switching, hence why we want Ofgem to have an active role in this," he said.

Fuel poverty: the background

Fuel poverty is the condition in which households struggle to find enough money to cook their food and keep warm, at possible threat to health. It is defined as spending more than 10% of take-home income on energy bills.

The government has a target to remove all vulnerable homes from fuel poverty by 2010, but earlier this year its Fuel Poverty Advisory Group said the statutory target would probably be missed as rising energy prices plunge 100s of thousands more homes into fuel poverty each year.

Energy retailers raised gas and power prices by an inflation-busting 15% earlier this year, in reaction to higher wholesale costs.

Iberdrola buys 4.6% more in Gamesa

Spain's Iberdrola has acquired another 4.625% of Spanish renewables company Gamesa Corp, raising its direct ownership to 23.953%, the power producer announced late Friday.

The stake purchase, from Iberdrola affiliate IBV Corp, entailed 11.3 million shares and cost Eur321 million (\$494 million).

Iberdrola has been steadily turning its indirect interest in Gamesa, a leading Spanish turbine manufacturer and wind-farm developer, into direct ownership since December 2004, when it bought 6%.

IBV Corp is an investment company owned 50% by Iberdrola and 50% by Spanish financial institution Banco Bilbao Vizcaya Argentaria. At one time it held 37.8% of Gamesa, but the stake has now been reduced to zero.

Takeover interest could reignite

Meanwhile, interest in a possible takeover of Spanish power company Iberdrola by Electricite de France could re-ignite following the conclusion of Spain's elections, which saw Socialist Prime Minister Jose Luis Rodriguez Zapatero return to power.

Earlier this year there was speculation that EDF was looking to acquire Iberdrola, possibly in an attempt to acquire Iberdrola's UK asset—Scottish Power. Such a deal would take the number of UK energy retailers down from six to five, by combining EDF's UK offshoot EDF Energy with Scottish Power.

But nothing definite was expected to happen until after the elections, when it would be more certain which government would decide upon the matter.

Queen Elizabeth II calls for climate action

Queen Elizabeth II, the UK sovereign who is head of the Commonwealth association of 53 countries with 2 billion citizens, called Monday for action to tackle climate change, noting that it could affect the poorest hardest.

Speaking on Commonwealth Day 2008, the Queen said that "the impact of pollution falls unequally: it is often those who pollute the least—notably in the world's least-developed nations—who are closest to the razor's edge." She said those who polluted the least could be

Polish Power Exchange Spot (Zloty/MWh)

	(Zloty/MWh)		(Eur/MWh)	
	11-Mar-08	10-Mar-08	11-Mar-08	10-Mar-08
Total Trade (MWh)	4403	4236	4403	4236
Max per hour	264	264	264	264
Min per hour	98	75	98	75
Weighted average price	196.34	197.21	55.24	55.51
Simple average price	183.88	178.78	51.74	50.32
Maximum price	263.83	265.00	74.23	74.58
Minimum price	98.01	75.09	27.58	21.13

Platts Spanish Assessments (Eur/MWh)

March 10, 2008	Baseload
D/A	58.90 - 59.10
Week Ahead	59.10 - 61.00
BOM	59.90 - 60.10
Apr 08	59.10 - 60.00
May 08	58.10 - 59.00
Q2 2008	59.90 - 60.30
Q3 2008	61.50 - 62.20
Q4 2008	60.00 - 60.80
Balance 2007	60.50 - 61.50

Prague Energy Exchange Futures Prices (Eur/MWh)

March 10, 2008				Base			Peak		
Day	Settle	Change	Volume	Settle	Change	Volume	Settle	Change	Volume
D/A	61.14	+1.59	0	71.50	+0.00	0			
D/A +1	59.23	-0.44	0	71.50	+0.00	0			
Saturday	NA	NA	NA						
Sunday	NA	NA	NA						
Bank Holiday	NA	NA	NA	NA	NA	NA			
Bank Holiday +1	NA	NA	NA	NA	NA	NA			
RoM	55.75	+0.00	0	71.50	+0.00	0			
Month	Settle	Change	Volume	Settle	Change	Volume			
Apr 2008	57.60	+0.00	0	75.00	+0.00	0			
May 2008	53.50	+0.00	0	65.00	+0.00	0			
Jun 2008	56.00	+0.00	0	78.70	+0.00	0			
Jul 2008	56.50	+0.00	0	90.50	+0.00	0			
Aug 2008	58.50	+0.00	0	87.30	+0.00	0			
Sep 2008	63.00	+0.00	0	85.00	+0.00	0			
Total			0			0			
Quarter	Settle	Change	Volume	Settle	Change	Volume			
Q2 2008	56.75	+0.00	0	76.50	+0.00	0			
Q3 2008	63.00	-0.15	5	89.00	+0.00	0			
Q4 2008	67.75	+0.00	0	94.50	+0.00	0			
Q1 2009	66.40	+0.00	0	86.00	+0.00	0			
Q2 2009	54.00	+0.00	0	73.00	+0.00	0			
Total			5			0			
Year	Settle	Change	Volume	Settle	Change	Volume			
2009	62.30	+0.00	0	88.00	+0.00	0			
2010	62.00	+0.00	0	84.50	+0.00	0			
Total			0			0			

RoM: rest of month cascades into daily products

Czech OTE Market Operator Daily Indices

March 11, 2008	CZK	Euro	Change
IDP simple price index base	1437.00	57.39	36.00
ISP simple price index peak	1667.00	66.57	73.00
IDV weighted price index base	1443.00	57.63	61.00
ISV weighted price index peak	1684.00	67.25	92.00

The ISP and IDP calculation does not include marginal prices for hours when no volume of electricity was traded. Euro Rate: 25.04

Platts Indices: Platts "Pan-European Power (PEP) Index" and the "Continental Power (Conti) Index" are demand-weighted, baseload indices to indicate trends in the free European electricity market as a whole. The Conti Index is based upon assessments in Germany, Switzerland, Austria, France, Belgium and the Netherlands. The PEP Index is based on these six assessments plus the UK's GTMA day-ahead market and Spanish bilateral week-ahead assessment.

the "most affected by the impact of climate change and least equipped to cope with it."

Environmental choices available in some countries may not be an option for others, she said. "In some parts of the world, for example, fossil fuels can be used more sparingly and buildings can be made of more efficient, sustainable materials; but it is far harder to expect someone to adapt if he or she relies on the trees of a local forest for fuel, shelter and livelihood." She called for action across the Commonwealth. "Governments, businesses, communities and individuals should each strive to match words and good intentions with deeds," she said. "Whatever we do, wherever we live, our actions in defense of the environment can have a real and positive effect upon the lives of others, today and into the future."

High energy prices, inflation hit Ukraine

High energy prices in Ukraine and rising inflation threaten to slow economic growth in the country in 2008, Ukraine's first deputy minister of economy, Anatoliy Maksiuta, said Monday.

Speaking at a conference in London, Maksiuta forecast a slow-down in economic growth this year.

"The price of energy brought into Ukraine from outside has risen in 2008.

As a result, we expect a slowing of economic growth in 2008," he said.

But he said the economy would continue to grow and would be able to cope with the rise in natural gas import prices, as it was aware of the extent of the gas price hike this year.

Ukraine is paying \$179.50/1,000 cubic meters for gas this year, a 38% increase from 2007.

Maksiuta said this year's gas price increase had been agreed late last year, making it easier to adjust to than a previous increase in 2006, which was only agreed in January of that year following a dispute with Russia.

"In 2006, we couldn't anticipate how the economy would react," he said, adding that the economy this year had had time to adjust.

Rising inflation is also a threat to economic growth in 2008,

Platts Spark Spread Assessments, March 10, 2008

	50% Efficiency	60% Efficiency
UK (GBP/MWh)		
Day-Ahead	17.7279	23.8150
Month-Ahead	20.1740	26.3119
Month-Ahead +1	19.2672	25.3644
Month-Ahead +2	19.3167	25.3975
Quarter-Ahead	19.5796	25.6832
Quarter-Ahead +1	19.1948	25.2870
Season-Ahead	19.4158	25.5130
Season-Ahead +1	15.8267	23.7553
Season-Ahead +2	15.8191	22.0993
Season-Ahead +3	14.7866	22.5222
UK (Eur/MWh)		
Day-Ahead	23.2650	31.2533
Month-Ahead	26.4750	34.5300
Month-Ahead +1	25.2850	33.2867
Month-Ahead +2	25.3500	33.3300
Quarter-Ahead	25.6950	33.7050
Quarter-Ahead +1	25.1900	33.1850
Season-Ahead	25.4800	33.4817
Season-Ahead +1	20.7700	31.1750
Season-Ahead +2	20.7600	29.0017
Season-Ahead +3	19.4050	29.5567
German (Eur/MWh)		
Day-Ahead	7.7000	15.5833
Month-Ahead	12.4500	20.3167
Month-Ahead +1	8.6000	16.4167
Quarter-Ahead	12.0500	19.8500
Quarter-Ahead +1	16.5500	24.4167
Cal+1	9.2500	18.3500
Dutch (Eur/MWh)		
Day-Ahead	16.7000	24.5833
Month-Ahead	18.0500	25.9167
Month-Ahead +1	12.8500	20.6667
Quarter-Ahead	16.7500	24.5500
Quarter-Ahead +1	21.0500	28.9167
Cal+1	13.2000	22.3000
Belgian (Eur/MWh)		
Day-Ahead	19.8200	27.8083
Month-Ahead	13.5200	21.6417
Month-Ahead +1	7.6700	15.7250
Month-Ahead +2	13.6000	21.6500
Quarter-Ahead	12.9400	21.0250
Quarter-Ahead +1	15.2900	23.5167

Note: Power and gas contracts used are midpoints of Platts' assessments for those commodities. Details of methodology at www.platts.com

Clean Spark Spread Assessments, March 10, 2008

	50% Efficiency	60% Efficiency
UK (GBP/MWh)		
Day-Ahead	11.5073	18.6312
Month-Ahead	13.9533	21.1280
Month-Ahead +1	13.0466	20.1806
Month-Ahead +2	13.0961	20.2136
Quarter-Ahead	13.3590	20.4994
Quarter-Ahead +1	12.9742	20.1031
Season-Ahead	13.1951	20.3292
Season-Ahead +1	9.5273	18.5058
Season-Ahead +2	9.4408	16.7840
Season-Ahead +3	8.3008	17.1174
UK (Eur/MWh)		
Day-Ahead	15.1015	24.4504
Month-Ahead	18.3115	27.7271
Month-Ahead +1	17.1215	26.4837
Month-Ahead +2	17.1865	26.5270
Quarter-Ahead	17.5315	26.9020
Quarter-Ahead +1	17.0265	26.3820
Season-Ahead	17.3165	26.6787
Season-Ahead +1	12.5030	24.2858
Season-Ahead +2	12.3896	22.0263
Season-Ahead +3	10.8935	22.4637
German (Eur/MWh)		
Day-Ahead	-0.4635	8.7804
Month-Ahead	4.2865	13.5137
Month-Ahead +1	0.4365	9.6137
Quarter-Ahead	3.8865	13.0471
Quarter-Ahead +1	8.3865	17.6137
Cal+1	0.8795	11.3746
Dutch (Eur/MWh)		
Day-Ahead	8.5365	17.7804
Month-Ahead	9.8865	19.1137
Month-Ahead +1	4.6865	13.8637
Quarter-Ahead	8.5865	17.7470
Quarter-Ahead +1	12.8865	22.1137
Cal+1	4.8295	15.3246
Belgian (Eur/MWh)		
Day-Ahead	11.6565	21.0054
Month-Ahead	5.3565	14.8387
Month-Ahead +1	-0.4935	8.9221
Month-Ahead +2	5.4365	14.8471
Quarter-Ahead	4.7765	14.2221
Quarter-Ahead +1	7.1265	16.7137

Note: Based on typical kg CO₂/mmBtu rates of 55 for natural gas. Power and gas contracts used are midpoints of Platts' assessments for those commodities. Details of methodology at www.platts.com

Pan-European Power (PEP) Index: Eur63.4040/MWh -1.0134

Continental Power (Conti) Index: Eur62.2476 /MWh -1.2609

Ukraine's deputy finance minister Volodymyr Lytvyn said. Inflation hit 16% in 2007 and has started 2008 in double figures. However, Lytvyn said he was optimistic that inflation could fall to single digits this year.

Kostyantyn Zhevago of Ukraine-based Ferrexpo added that the twin problem of rising energy prices and inflation was a threat to economic growth this year. "There is a problem of absorbing high energy prices—the price cannot keep being absorbed," he said.

The European Bank for Reconstruction and Development agreed. Its first vice president Varel Freeman said high energy and food prices would impact on economic growth. "Energy prices are rising, so adjustments need to be made and improvements in energy efficiency," he said.

German utility ENBW loses CFO Holzherr

German utility ENBW's chief financial officer Christian Holzherr is to leave the company on April 30, ENBW said Monday.

According to ENBW, it was Holzherr's own decision to leave the company and Claus Dieter Hoffmann, ENBW's chief of the supervisory board said Holzherr contributed significantly to the development of ENBW during his three years as CFO. Holzherr joined ENBW in 2000.

CEO Hans-Peter Villis said the company will "lose an esteemed manager in Holzherr." Villis is to act as CFO until a replacement has been found, ENBW said.

UK climate levy has had little effect

The UK's climate change levy policy—a tax on energy—produced significant savings of carbon, according to a report from parliament's Environmental Audit Committee Monday. But the savings were "strongly front-end loaded and have eased off since soon after its introduction," the report said.

The levy will reduce annual UK CO2 emissions by 12.8 million metric tonnes by 2010. But, said the report, these savings have come mainly from the effect its announcement had on raising awareness of the potential for energy savings; most of these savings were therefore the result of actions taken before the tax actually came into operation.

The levy itself "has had relatively little effect on business emissions," the report said, especially in the case of small and medium enterprises and large but non-energy intensive organizations.

The government believes that climate change agreements—under which companies agree to cut their emissions in a negotiated deal as an alternative to paying the levy—will cut about 7 million mt/year by 2010. But the EAC report said that it was "extremely difficult" to evaluate the effectiveness of these agreements.

The exemptions from the climate change levy for green electricity and combined heat and power have had minimal effect on the construction of new renewables and CHP capacity, essentially because they are worth too little money, the EAC said.

The climate change levy package does not impose a damaging economic burden on UK business overall, and may in many cases be positive, through encouraging greater resource productivity and stimulating energy efficient industries, it added.

"The CCL has not worked quite as expected," it concludes. "According to economic theory, businesses should have acted rationally by seeking to reduce their costs through increased energy efficiency. In practice, they appear to have needed an extra stimulus to change their approach to energy use."

Platts Cross Fuel Comparisons, Mar 10, 2008

	Euro cents/kWh	US cts/kWh
UK gas prices at NBP ¹		
Balance month	4.4200	6.7800
April	4.3900	6.7500
May	4.3500	6.6800
Q2 2008	4.3600	6.6900
Fuel Oil ³ (NW Europe)		
April 1%	8.8100	13.5400
May 1%	8.8600	13.6100
Q2 2008 1%	8.8600	13.6100
April 3.5%	8.3300	12.8000
May 3.5%	8.4100	12.9100
Q2 2008 3.5%	8.4000	12.9100
Gasoil ³ (NWE 0.1% cargoes)		
Spot	16.3400	25.0900
April	16.0000	24.5700
May	15.6800	24.0900
Q2 2008	15.7100	24.1400
Coal ⁴ (CIF ARA)		
Month Ahead	4.0200	6.1700
90-Days	4.0200	6.1700
Exchange rate = 1.536		
Note: Prices in this table show the cost of electricity generated from each fuel, taking into account power plant efficiencies. Conversions assume the following efficiencies: Gas 55%, Fuel oil 32%, Gas oil 32%, Coal 34%. They are indications only.		
1) Source: Platts European Natural Gas Report		
2) Source: Platts Global Alert. 1%: Spot = 10-25 days ahead of publication. Forward swaps prices. Assumed calorific value 17,800 Btu/lb. 3.5%: Spot = 2-15 days ahead of publication. Forward swaps prices.		
3) Source: Platts Global Alert. Spot = 10-25 days ahead of publication. IPE prices based on volumetric average. Assumed calorific value: 18,500 Btu/lb.		
4) Source: International Coal Report, Europe, 10,800Btu/lb		

Forex Indicators, Mar 10, 2008

	NOK	SKr	DKr	SFr	GBP	US \$	Zloty
Euro	7.932	9.385	7.455	1.574	0.762	1.536	3.554
US \$	5.166	6.112	4.855	1.025	0.497	1.000	

Weather Summary, March 10, 2008

Week normal high/low temps (C) and projected deviations from normal								
Celsius	Normal	10	11	12	13	14	15	16
BENELUX								
Amsterdam	7/2	+2	+2	0	+2	+4	+1	+2
Brussels	10/2	-2	-1	-1	0	+1	-1	0
CENTRAL EUROPE								
Berlin	7/0	+6	+4	+2	+1	+2	+3	+1
Frankfurt-am-Main	9/1	+1	0	+1	-1	+5	0	-1
Prague	7/0	+6	+2	+2	0	+2	+3	0
Vienna	8/-2	+8	+6	+6	+4	+9	+7	+3
Warsaw	5/-3	+6	+5	+5	+2	+1	+5	+2
IBERIA								
Lisbon	16/9	+1	+2	+2	+4	+3	+4	+4
Madrid	14/4	0	+2	+3	+6	+7	+3	+4
SCANDINAVIA								
Copenhagen	4/-1	+6	+4	+5	+4	+4	+4	+2
Helsinki	0/-7	+9	+7	+6	+5	+4	+3	0
Oslo	3/-4	+5	+4	+2	+2	+3	0	-2
Stockholm	2/-4	+6	+6	+5	+5	+4	+4	+1
UK								
London	9/3	+2	+2	0	+1	+2	0	+1
FRANCE								
Paris	12/3	-1	3	1	2	3	-2	0
Source: AccuWeather, 10Mar08/6:15 AM EDT/1015 GMT								

Conservative attack

The opposition Conservative party attacked the success of the levy.

Commenting on the EAC report, Shadow Secretary of State for the Environment, Food and Rural Affairs, Peter Ainsworth said: "This report reinforces [Prime Minister] Gordon Brown's attempts to portray the climate change levy as the solution to all our environmental problems as a sham. The climate change levy may be a great brand name but it is not fit for purpose. What we need is a carbon levy that will properly address industries' carbon emissions."

The climate change levy is a tax on energy use, not specifically on carbon dioxide emissions, which the Conservatives favor.

The EAC said that "while it might have been preferable for the government to have introduced an economy-wide carbon tax, once it implemented the levy as a 'downstream' tax, the scope for basing it on carbon rather than energy was greatly restricted, and its benefits made questionable." "Climate change agreements, on the other hand, should be reformed so that their targets are in the form of absolute reductions in carbon emissions, rather than relative improvements in energy efficiency," the EAC said.

The EAC is a committee made up of a cross-party group of members of parliament.

German emissions drop 2.4% in 2007

German CO2 emissions in 2007 dropped by 24 million mt from 2006 to 981 mt, the federal environment office (Bundesumweltamt) said Monday.

According to the office, this 2.4% drop came as a result of mild winter temperatures which caused lower demand for oil and gas, especially in the heating sector.

The environment office said this means that Germany—with a reduction of 20.40% in emissions compared with 1990 levels—is close to reaching its Kyoto-agreement target of reducing its emissions by 21% until 2012.

However, the office warned that further reductions would only be possible if the German government "consequently implements its climate protection measures" as the main reasons for the emissions reduction "were lower oil and gas demand due to increased prices for these fuels and mild winter temperatures."

The environment office added that a renewables increase of 15% in the total generation of German power also contributed to the emissions reduction.

One German utility source noted that since the traditional 90 day winter has been so mild, "we [Germany] are saving 1 million mt of CO2," and that "the fuel switch due to rising coal and falling gas is also partly responsible" for lower emissions in Germany.

According to the environment office, CO2 represents an 87% share of all greenhouse gases and it "therefore is the biggest single climate killer."

Market Comment

UK prompt power prices Monday weakened slightly compared with prices for Monday delivery on forecasts of further storms to hit Britain in days to come, traders said. The UK MET office Monday said that strong winds could bring gale force winds throughout most of the week, which initially brought the day-ahead base contract

down from a start of GBP54.20 to a low of GBP52.75/MWh, but the contract then firmed to a close of GBP54.25/MWh. One participant, however, said the system was "healthy enough to cope with the effects of stormy and cold weather" although late news on the UK-French interconnector being cut to 1,500 MW for up to ten days may have an effect Tuesday. Further out on the curve, prices remained high on the continued bullishness of oil prices. April crude futures hit a high of \$107/b for the first time ever early Monday as the front of the crude curve strengthened on a lack of inventories at Cushing, Oklahoma—home of the NYMEX delivery point. UK Q2 base closed around GBP56.20/MWh, and Summer 08 base finished at GBP56.00/MWh.

Dutch baseload curve power prices on Monday were somewhat bullish, following oil. However, Cal 09, the most traded contract in the session, lost 50 euro cent day-on-day to Eur67.80/MWh, against the general trend. The premium to German power rose to Eur4.00/MWh, despite the slide in the Cal 09. "We are now seeing spreads (between Dutch and German prices) that I would not dare not to bet one week ago," a trader said. The contract started the session at Eur68.30/MWh, trading down to Eur67.55/MWh before bouncing back to Eur67.80/MWh. On the near curve, April gained Eur1.25/MWh to Eur65.25/MWh while May remained virtually flat at Eur59.75/MWh. The front quarter added 40 euro cent to Eur63.55/MWh and Q3 gained 75 euro cent to 68.25. No trades were heard on the peaks. In Belgium, April traded at Eur62.25/MWh, losing Eur1.75/MWh. The front quarter added Eur1.3/MWh though no trades were heard. Cal 09 chipped off 55 euro cent, but no trades were heard either.

German day-ahead power prices softened Monday on forecasts of a 20,000 MW average peak wind power capacity for the next three days. The German base contract dipped Eur2.50/MWh compared with the previous trading day's close and was last heard at Eur55/MWh. The French product was unchanged at Eur69/MWh. One trader noted the difference in German day-ahead peak in the OTC and EEX markets: Eur68/MWh and Eur71/MWh respectively. The rest of the curve was more volatile, with some players selling French April and buying German April power. "There was a financial spread up for grabs there," one trader said. The calendar contracts were prey to bullish movement in crude oil, gas and coal markets. German Cal 09 base opened at Eur64.25/MWh, dipped briefly as low as Eur63.50/MWh and last traded at Eur64.70/MWh. But closing levels were still down on the previous session: 40 euro cent at Eur64.85/MWh. The French contract dipped by 35 euro cent to Eur65.15/MWh.

Spanish power prices focused on the prompt market Monday, with ten day-ahead trades heard throughout the day. The contract dipped from Eur59.25/MWh to Eur58.65/MWh but recovered quickly to Eur59.00/MWh before mid-day. Wednesday firmed from Eur61.00/MWh to Eur61.90/MWh, with seven deals reported. According to a broker, "one pretty active player is back from holiday." At the Omel exchange day-ahead came out at Eur57.537/MWh for base and at Eur63.311/MWh for peak. Wind supplies are set to drop significantly around Barcelona, Bilbao and Madrid, while temperatures are set to rise all over Spain. On the curve, April was the only traded contract, changing hands twice at Eur60.00/MWh.

Polish market summary, February 2008

Plentiful imports suppress Polish prices

Polish power prices continued their recent bearish trend into week 11, with weaker day ahead prices feeding through into the front month, responding to mild temperatures and limited export opportunities.

Polish day ahead baseload power was averaging Zloty 185-188/MWh across weeks in February, but has slipped to Zloty 177-176 in the first two weeks of March. Polish month ahead baseload power prices came off from highs close to ZL 200/MWh seen in late January, trading down to Zloty 184 /MWh by late February. As of March 7, month ahead was quoted bid/offer at Zloty 179-183/MWh by broker TFS.

"Available cross-border capacity throughout February was low and irregular and so many companies could not export as much as they had expected. Moreover the lack of a monthly auction for March capacity and the announcement of zero capacity in the April auction in both directions meant that traders and those who held small positions hoping for export possibilities had to sell their positions on the Polish market, driving prices down," one trader said.

Another trader told Platts March 10: "Poland is a net importer at the moment, which is very unusual. Around 600-MW daily is being used to bring in cheap power from Sweden. With only around 300-MW available in daily auctions for exports to Germany, Czech Republic and Slovakia, there is not much incentive to trade."

March temperatures have been 6-7 degrees Celsius above seasonal averages, the trader said, adding to the bearish signal.

"We believe prices are more likely to go down than up once CO2 allocations are finalized," another market participant said, referring to recent statements by generators claiming to be holding back output because of carbon uncertainty. The power sector has lobbied against tough allocations proposed in December by the environment ministry, and "it is clear that power will get more than first thought," the trader said.

Another disagreed, believing instead that allocations would not be significantly improved on December proposals. "We should see some news this week," a third said. "But it is not necessarily important. There has been lots of noise, lots of lobbying, but in the end if generators exceed their plans, they will generate if the market price justifies it. That will have more to do with the weather in May and June. For April, we continue to be bearish."

Another unknown is the impact of dissolution in April of long term generation contracts, releasing in the region of 30 TWh. "That could increase competition, with the market power of the LTC buyer PSE dissipated somewhat," a participant said. "However, as many of the power stations in question are now owned by vertically integrated utilities, a lot of the output could be netted out by own-supply needs, so it is not easy to predict the impact."

Polish forward prices, Feb 2008 (Zloty/MWh)

	Baseload	Peak	Off-peak
March	182.00-184.00	233.00-235.00	146.00-148.00
April	183.00-185.00	234.00-236.00	147.00-149.00
May	184.00-186.00	234.00-238.00	145.00-150.00
Q2	186.00-188.00	NA-NA	NA-NA
Cal 09	182.00-184.00	NA-NA	NA-NA

All prices are based on trades in the previous month and/or prevailing bids and offers in the last week of the month. Prices are for physical delivery to the Polish high voltage electricity grid.

Note: Prices are indicative only. Includes Zloty 20/MWh excise duty

Polish forward prices, Feb 2008 (Eur/MWh)

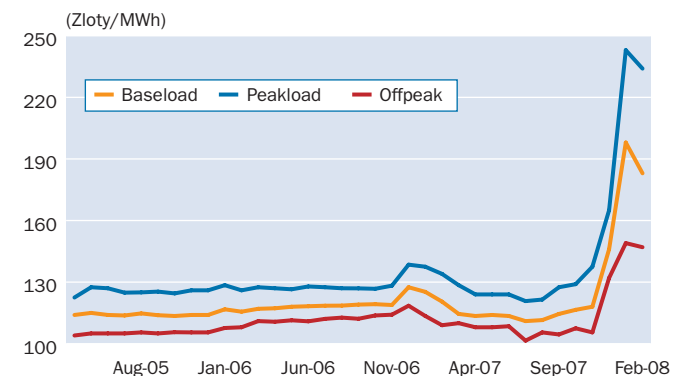
	Baseload	Peak	Off-peak
March	51.21-51.77	65.56-66.12	41.08-41.64
April	51.49-52.05	65.84-66.40	41.36-41.92
May	51.77-52.34	65.84-66.97	40.80-42.21
Q2	52.34-52.90	NA-NA	NA-NA
Cal 09	51.21-51.77	NA-NA	NA-NA

Zloty 3.554 = Eur 1

Note: Prices are indicative only.

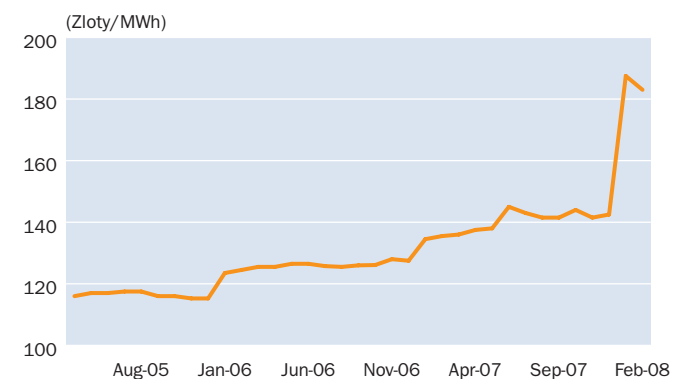
Includes Zloty 20/MWh excise duty (about Eur5/MWh)

Polish month-ahead power price evolution



Source: Platts

Polish year-ahead power price evolution



Source: Platts

Exchange Summary, March 10, 2008

Powernext® Day-Ahead (Eur/MWh)

	11-Mar-08	10-Mar-08	12-Mar-07
Minimum Hourly Price	31.97	42.92	20.27
Maximum Hourly Price	84.92	89.95	40.01
Average Base Price	66.70	73.32	29.28
Average Peak Price	77.96	80.90	31.21
Total Volume (MWh)	137,377.0	149,351.0	172,104.0

Powernext® Futures Prices (Eur/MWh)

March 10, 2008		Base		Peak		
Month	Settle	Change	Volume	Settle	Change	Volume
Apr 2008	63.24	1.76	36000	76.88	1.20	0
May 2008	54.65	0.56	18600	68.75	0.48	0
Jun 2008	60.39	0.50	0	82.42	0.70	6300
Q2 2008	59.37	0.93	2184	75.92	0.80	0
Q3 2008	62.50	0.40	110400	89.50	0.45	39600
Q4 2008	75.41	-0.55	77315	100.10	-1.21	39600
Q1 2009	79.44	-0.77	0	108.25	-0.78	0
2009	65.11	-0.44	0	90.00	-0.15	0
2010	62.77	-0.13	87600	89.75	-0.26	0
2011	62.75	-0.23	0	90.25	1.25	0

APX Power UK Spot Summary (GBP/MWh)

Total Spot Market Volume for	09-Mar-08
The trading day runs from 00.15 on the previous day to 23.45 on the relevant day for all listed spot contracts	35,542

Vital Statistics for 10-Mar-08

Half Hour Contracts (The data includes trades done between 00.15 yesterday and 18.00 today for all listed Half Hour contracts)		
Trading Volume by 6.00PM	contracts	17,349
	MWh	8,675
High	HH080310-38	£140.00
Low	HH080310-08	£38.00

Nord Pool Average Spot Prices (Eur/MWh)

	11Mar08	10Mar08	11Mar07
Oslo	27.54	27.67	22.12
Bergen	27.54	27.67	22.12
Molde	29.79	30.54	22.12
Trondheim	29.79	30.54	22.12
Tromso	29.79	30.54	22.12
Kristiansand	27.54	27.67	22.12
Sweden	29.73	29.38	22.12
Finland	29.73	29.38	22.12
West Denmark	35.63	30.13	22.04
East Denmark	30.49	29.38	22.12
Kontek	57.72	44.62	17.92
Systemwide	28.79	28.69	22.10

Nord Pool Futures

Contract	Close	Change	High	Low	Volume
Day ahead (EUR/MWh)	29.50	-1.50	29.50	29.25	300
First Week (€/MWh)	28.54	-0.76	29.00	28.35	153
Second Week (€/MWh)	30.50	—	30.50	28.50	75
Third Week (€/MWh)	30.50	+2.00	31.00	28.50	87
First Month (€/MWh)	30.90	+0.65	30.90	29.90	77
Second Month (€/MWh)	30.25	+0.77	29.75	29.50	37
Third Month (€/MWh)	32.70	—	32.50	32.25	10
Fourth Month (€/MWh)	31.88	+0.15	32.25	32.25	6
Fifth Month (€/MWh)	37.55	+0.07	—	—	—
Sixth Month (€/MWh)	40.80	+0.30	—	—	—
First Quarter (€/MWh)	31.20	+0.35	31.20	30.15	1118
Second Quarter (€/MWh)	36.70	+0.30	36.75	35.90	86
Third Quarter (€/MWh)	50.60	+0.30	50.75	50.00	33
Fourth Quarter (€/MWh)	54.85	+0.25	54.45	54.40	2
First Year (€/MWh)	51.50	+0.10	51.60	51.15	107
Second Year (€/MWh)	51.50	-0.10	51.60	51.40	9
Third Year (€/MWh)	51.80	—	51.80	51.80	3

European Energy Exchange (Eur/MWh)

	11-Mar-08	10-Mar-08	12-Mar-07
Phelix base	59.39	58.62	27.81
Phelix peak	71.20	68.10	32.37
Total Volume (MWh)	448,365.5	465,547.2	328,344.0

Base = 0000-2400, Peak = 0800-2000

Source: EEX

EEX Futures Prices (Eur/MWh)

<u>March 10, 2008</u>		Base		Peak		
Month	Settle	Change	Volume	Settle	Change	Volume
Apr 2008	59.50	0.00	66240	75.70	0.52	264
May 2008	56.09	0.69	0	70.75	-0.32	0
Jun 2008	61.50	-0.07	39600	85.25	0.25	6300
Jul 2008	66.01	-0.89	0	96.00	-0.31	6900
Aug 2008	60.68	-0.57	0	85.63	-0.87	6300
Sep 2008	64.00	-0.31	3600	90.00	0.25	2112
Total			109,440			21,876
Quarter	Settle	Change	Volume	Settle	Change	Volume
Q2 2008	59.00	0.21	98280	77.11	0.15	19500
Q3 2008	63.56	-0.59	333408	90.70	-0.30	55440
Q4 2008	68.45	-0.55	154630	95.26	-0.26	0
Q1 2009	71.87	-0.66	38862	100.79	-0.77	19200
Total			625,180			94,140
Year	Settle	Change	Volume	Settle	Change	Volume
2009	63.81	-0.39	2733120	87.73	-0.79	178524
2010	62.30	-0.20	481800	87.10	-0.33	62640
2011	62.85	-0.04	0	88.20	-0.05	0
2012	63.15	0.00	0	88.00	-0.25	0
2013	65.50	0.00	0	89.00	-0.25	0
2014	66.00	0.00	0	89.50	0.00	0
Total			3,214,920			241,164

Austria EXAA Power Exchange (Eur/MWh)

	11-Mar-08	10-Mar-08	12-Mar-07
Minimum Hourly Price	30.49	34.18	16.51
Maximum Hourly Price	74.01	79.11	47.67
Baseload	55.20	56.50	31.00
Peakload	64.41	66.49	37.24
Total Volume (MWh)	7,681.3	4606.4	12,947.9

Elexon UK Balancing Prices (GBP/MWh)

Sell-Buy		Sell-Buy		Sell-Buy		Sell-Buy	
P1	39.07-44.54	P13	38.41-40.05	P25	41.54-56.59	P37	71.83-101.36
P2	39.21-46.66	P13	38.25-40.06	P25	41.62-56.12	P37	82.92-130.30
P3	41.22-43.24	P13	38.44-41.51	P25	41.55-52.86	P37	119.98-131.62
P4	40.95-40.95	P13	38.15-41.10	P25	41.39-51.91	P37	69.69-121.04
P5	41.37-41.37	P13	40.90-41.76	P25	41.73-51.38	P37	42.24-68.17
P6	40.37-52.00	P13	41.00-42.27	P25	42.11-51.07	P37	42.17-62.79
P7	44.92-44.92	P13	40.45-44.03	P25	42.02-47.21	P37	41.74-55.82
P8	42.27-42.27	P13	40.38-46.35	P25	41.79-49.62	P37	41.63-50.78
P9	38.98-39.85	P13	42.04-45.73	P25	41.35-45.75	P37	40.97-49.21
P10	38.77-39.85	P13	41.46-46.65	P25	41.43-45.89	P37	39.87-47.30
P11	38.50-39.85	P13	39.96-56.68	P25	41.73-60.12	P37	40.38-46.53
P12	38.44-39.86	P13	40.67-56.20	P25	41.61-62.55	P37	37.97-46.59

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Source: Elexon, BM Reporting

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Continental Power (Conti) Index: Eur62.2476 /MWh -1.2609

European Gas Daily

Volume 13 / Issue 54 / March 17, 2008

EU-27 '07 consumption falls by 1.5%

The 2007 gas consumption of the 27 European Union member states was 19,710 petajoules (505 billion cubic meters), down 1.5% from the year before, according to preliminary figures published by gas association Eurogas Friday.

The total number of gas customers connected to the gas network rose by 1% to reach 110,171,000 customers.

Most of the big gas-using countries saw gas use decrease, except the UK, Spain and Italy, where gas use increased in 2007.

Consumption down on mild weather

Eurogas said the most important factor behind the decrease was the weather, with the start of the year having been mild in 2007, meaning less gas was used for heating. High energy prices and increased efficiency were also factors.

EU 27 gas production fell by 7% to 7,739 PJ (198 Bcm) in 2007. The decrease was mainly made up for by increased imports from Norway, which is not an EU member state. The UK saw production fall 9.9%, Germany 8.3%, Denmark 11.4% and Italy 11.5%.

The EU met 38% of its 2007 consumption with indigenous production. The main external sources of supply are Russia with 23%, Norway with 18% and Algeria 10%.

NBP gas slips back on long system

UK gas prices at the National Balancing Point slipped back a touch Friday as the system looked a touch long throughout the session, traders said. Within-day closed down 0.7 p at 54.1 p/therm, while day-ahead was up 0.3 p at 54.6 p/th, in line with an expected increase in demand in the following week. National Grid data showed demand at 323 million cubic meters/day by close, only 1 million cu m/d above seasonal norms and considerably lower than earlier in the week.

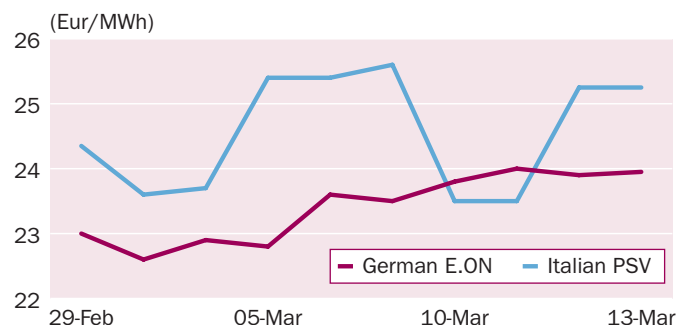
The system was on the whole a touch long throughout the session although it moved a touch short just before the close, by 1.3 million cu m. That late shift may have been due to a drop in flows into Bacton Shell and Bacton SEAL at around 16:00 GMT. Flows into both terminals dropped suddenly at that time, with SEAL flows falling all the way to zero before rapidly returning to their previous level, and Shell flows dropping to about 5 million cu m/d and maintaining that level.

One trader said the SEAL drop looked like a power cut at the terminal given the swift return of flows, and that the Shell drop may have been related to it. However, he added, the Shell fall may also have been due to the terminal operator taking the terminal offline for repairs, after the fire at the terminal two weeks' ago. But several traders said the market largely ignored the drop in supplies, and that contracts did not move in response.

The UK-Belgium Interconnector had flipped to UK import mode overnight, bringing a smidgen of gas from the continent, but was

(continued on page seven)

German and Italian Month-ahead



Source: Platts

Platts European Gas Midpoints, 14 March, 2008

	p/th	\$/MMBtu	eur/MWh	% change D-1
UK NBP				
Day-Ahead	54.60	11.10	24.30	+0.54 ▲
April	54.25	11.03	24.14	-0.64 ▼
Dutch TTF				
Day-Ahead	53.28	10.82	23.70	-0.21 ▼
April	53.05	10.78	23.60	-0.21 ▼
Belgian Zeebrugge				
Day-Ahead	54.85	11.15	24.41	+0.06 ▲
April	54.68	11.11	24.33	-0.59 ▼
French PEG Nord				
Day-Ahead	54.74	11.12	24.35	-0.81 ▼
April	55.30	11.24	24.60	+0.00 —
German BEB				
Day-Ahead	52.83	10.73	23.50	-0.21 ▼
April	51.59	10.48	22.95	+0.00 —
German E.ON				
Day-Ahead	53.05	10.83	23.70	-0.84 ▼
April	53.62	10.89	23.85	-0.42 ▼
Italian PSV				
Day-Ahead	56.31	11.44	25.05	+0.60 ▲
April	56.20	11.42	25.00	-0.99 ▼

UK day-ahead assessed at 1630 London time, continental day-ahead assessed at 1200 London time. UK month-ahead assessed at 1700 London time, continental month-ahead assessed at 1600 London time.

Contact us

Email the editors at *European Gas Daily* with your comments, news or queries at power@platts.com

TAQA in asset talks with Shell, Exxon

The Abu Dhabi National Energy Company (TAQA), majority owned by the cash-rich capital of the UAE, said Friday it was in exclusive negotiations with Shell and ExxonMobil unit Esso Exploration for the purchase of their equity interests and operatorships in the Tern, Eider, Cormorant North, South Cormorant fields and related subsea satellite fields and infrastructure in the North Sea.

The fields, in the far north of the UK sector, are close to the Brent export system, said TAQA spokeswoman Geesje van Niejenhuis. She said the fields were producing oil providing a good balance with the gas production that TAQA holds in the Netherlands.

"These fields were on the market and give the opportunity to be developed, further generating potential upside. These fields are part of a very important infrastructure in that area and with this acquisition TAQA will become an operator in the UKCS, enabling further growth in Europe," said Niejenhuis.

"This arrangement does not constitute a purchase agreement at this stage and any purchase by TAQA will be subject to satisfactory completion of due diligence and the negotiation of a sale and purchase agreement with the sellers, Shell and Esso," TAQA said in a statement. The negotiations are being conducted through its UK subsidiary TAQA Bratani.

TAQA, a public joint stock company in which the state of Abu Dhabi is a majority shareholder, was established less than two years ago and already has a presence in 10 countries, acting as an investment vehicle in energy projects globally for the oil-producing emirate.

Last year it took over management of BP's gas exploration and production assets in the Netherlands and bought Canadian Talisman's Brae assets in the UK North Sea.

The company's CEO, Peter Barker-Homek, told Platts in an interview late last year that the company will be in acquisition mode until 2012 and that he plans to turn it into what he terms a "tier two" multi-utility company worth \$40-60 billion.

Total production worldwide is running at 165,000 b/d of oil equivalent and its reserves are 600 million boe.

ANALYSIS

Dollar fall eases Europe's oil cost rise

The falling value of the US dollar compared with the euro has insulated European power and gas consumers from around 35% of the past year's rise in crude oil prices, an analysis of Platts data shows. And the euro's strength against the US currency has had a similar effect in the coal market.

Crude oil prices feed through to European gas prices via long-term contracts that are indexed to oil products, generally including a six-month delay. And European power prices are feeling the effect of movements in crude oil both indirectly through the gas price and also more directly through oil products, since many countries have power plants running on gas, and some have plants running on fuel oil.

But European consumers buy their fuel and electricity in euros, or in local currencies that tend to follow the euro more closely than the dollar, while crude oil is priced purely in dollars. And the dollar has fallen some 17.5% in the past year, from \$1.319/Eur March 13, 2007, to \$1.56/Eur Friday. The dollar has fallen less against the British pound, by only 4.7% from

Platts UK Market Assessments, 14 March, 2008

	p/th	change D-1 (p/th)	\$/MMBtu	eur/MWh
UK NBP Market				
Within-Day	54.00 - 54.20	-0.70	10.98 - 11.02	24.03 - 24.12
DA Midday	54.80 - 55.00	0.25	11.14 - 11.18	24.38 - 24.47
Day-Ahead	54.50 - 54.70	0.30	11.08 - 11.12	24.25 - 24.34
Weekend	53.60 - 53.80	-0.50	10.89 - 10.93	23.85 - 23.94
Working week+1	54.50 - 54.70	-0.10	11.08 - 11.12	24.25 - 24.34
Bal Month Mar	54.20 - 54.60	-0.20	11.02 - 11.10	24.12 - 24.30
April	54.15 - 54.35	-0.35	11.01 - 11.05	24.10 - 24.18
May	53.70 - 53.90	-0.10	10.91 - 10.96	23.90 - 23.98
June	53.30 - 53.50	-0.10	10.83 - 10.87	23.72 - 23.81
July	53.80 - 54.00	0.35	10.93 - 10.98	23.94 - 24.03
Q2 2008	53.60 - 54.00	-0.20	10.89 - 10.98	23.85 - 24.03
Q3 2008	54.10 - 54.50	0.20	11.00 - 11.08	24.07 - 24.25
Q4 2008	66.50 - 66.90	-0.30	13.52 - 13.60	29.59 - 29.77
Q1 2009	72.10 - 72.50	-0.30	14.65 - 14.74	32.08 - 32.26
Summer 08	53.95 - 54.15	0.00	10.97 - 11.01	24.01 - 24.10
Winter 08	69.40 - 69.60	-0.30	14.11 - 14.15	30.88 - 30.97
Summer 09	55.00 - 55.20	-0.20	11.18 - 11.22	24.47 - 24.56
Winter 09	68.00 - 68.20	-0.10	13.82 - 13.86	30.26 - 30.35
Summer 10	54.20 - 54.40	0.00	11.02 - 11.06	24.12 - 24.21
Winter 10	64.50 - 64.70	-0.25	13.11 - 13.15	28.70 - 28.79
Oct 2008 1 yr	62.20 - 62.40	-0.25	12.64 - 12.68	27.68 - 27.77

UK Bacton Market				
Within-Day	54.10 - 54.30		11.00 - 11.04	
Day-Ahead	54.60 - 54.80		11.10 - 11.14	
Weekend	53.70 - 53.90		10.91 - 10.96	
Working week+1	54.60 - 54.80		11.10 - 11.14	
Bal Month	54.30 - 54.70		11.04 - 11.12	

UK St Fergus Market				
Within-Day	53.99 - 54.19		10.97 - 11.01	
Day-Ahead	54.49 - 54.69		11.08 - 11.12	
Weekend	53.59 - 53.79		10.89 - 10.93	
Working week+1	54.49 - 54.69		11.08 - 11.12	
Bal Month	54.19 - 54.59		11.01 - 11.10	

Platts UK Capacity Prices, (p/th), 14 March, 2008

Terminal	14-Mar-08	13-Mar-08
Bacton	0.050 - 0.150	0.050 - 0.150
St Fergus	0.000 - 0.010	0.000 - 0.010
Teesside	0.000 - 0.010	0.000 - 0.010

All price are for day-ahead capacity in pence/therm, as assessed by Platts.

Platts Dutch TTF Assessments (Hi-cal gas), 14 Mar, 08

	p/th	\$/MMBtu	eur/MWh	Change D-1 (eur/MWh)
Day-Ahead	53.16 - 53.39	10.80 - 10.84	23.65 - 23.75	-0.05
Week+1	52.71 - 52.94	10.71 - 10.75	23.45 - 23.55	-0.20
April	52.94 - 53.16	10.75 - 10.80	23.55 - 23.65	-0.05
May	52.71 - 52.94	10.71 - 10.75	23.45 - 23.55	-0.10
Q2 2008	52.83 - 53.28	10.73 - 10.82	23.50 - 23.70	0.15
Q3 2008	53.05 - 53.50	10.78 - 10.87	23.60 - 23.80	0.15
Q4 2008	65.08 - 65.53	13.22 - 13.31	28.95 - 29.15	-0.05
Q1 2009	69.46 - 69.91	14.11 - 14.20	30.90 - 31.10	-0.10
Q2 2009	55.64 - 56.09	11.30 - 11.39	24.75 - 24.95	-0.05
Q3 2009	54.06 - 54.51	10.98 - 11.07	24.05 - 24.25	-0.05
Gas year 2008	61.03 - 61.48	12.40 - 12.49	27.15 - 27.35	-0.10
Cal 2009	61.14 - 61.37	12.42 - 12.47	27.20 - 27.30	0.08

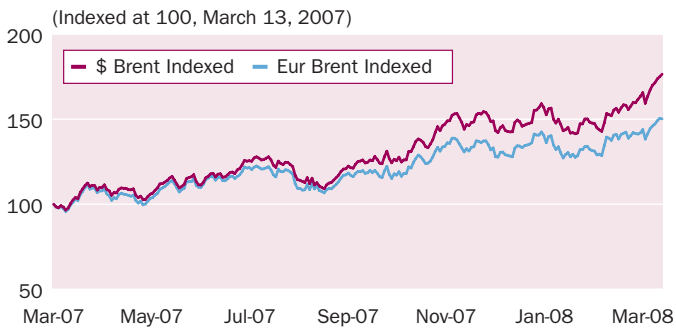
Platts Zeebrugge Assessments, 14 March, 2008

	p/th	change D-1 (p/th)	\$/MMBtu	eur/MWh
Day-Ahead	54.74 - 54.96	0.03	11.12 - 11.17	24.36 - 24.46
Weekend	53.30 - 54.40	-0.63	10.83 - 11.05	23.72 - 24.21
Working week+1	54.30 - 54.70	-0.15	11.03 - 11.11	24.16 - 24.34
Bal of month	53.70 - 55.25	-0.20	10.91 - 11.23	23.90 - 24.58
Apr 08	54.50 - 54.85	-0.33	11.07 - 11.14	24.25 - 24.41
May 08	54.10 - 54.40	-0.03	10.99 - 11.05	24.07 - 24.21
Jun 08	53.75 - 54.25	-0.03	10.92 - 11.02	23.92 - 24.14
Q2 2008	53.90 - 54.90	-0.05	10.95 - 11.15	23.98 - 24.43
Q3 2008	55.10 - 56.25	0.03	11.20 - 11.43	24.52 - 25.03
Q4 2008	66.30 - 67.95	-0.30	13.47 - 13.81	29.50 - 30.24
Winter 08	69.05 - 69.80	-0.30	14.03 - 14.18	30.73 - 31.06
Summer 09	55.70 - 56.15	-0.20	11.32 - 11.41	24.79 - 24.99
Winter 09	68.30 - 68.70	-0.10	13.88 - 13.96	30.39 - 30.57
Gas Year 2008	62.40 - 63.00	-0.25	12.68 - 12.80	27.77 - 28.03

Platts day-ahead NBP index set at 54.6 p/th

Total reported volume 475,000 th

Dollar- and Euro-denominated Dated Brent, indexed to March 07



\$1.93/GBP to \$2.02/GBP, but still enough to ease the burden of crude bullishness.

On March 13, 2007, Dated Brent was assessed by Platts at \$61.79/b, or Eur46.8/b. A year later, the contract had risen 76.5% in dollar terms, to \$109.09/b. But in euro terms, the rise was only 50.4%, up to Eur70.38/b.

That has meant that the feed-through from crude oil prices to wholesale energy prices in Europe has been dampened, insulating consumers somewhat from the remarkable bullishness in global oil.

The difference is clearly seen when the two pricing terms are indexed to 100 as of March 13, 2007. Using that analysis, dollar-denominated oil rose to an indexed level of 176.5 a year later, while euro-denominated oil only rose to 150.2. That means that the dollar-denominated commodity had risen by 34.4% more than the euro-denominated version.

One German power trader said Wednesday that his market was also largely ignoring the further rises seen in oil. And several UK gas traders have echoed that statement in recent weeks. "Oil is up but the exchange rate is bouncing around, and that's giving mixed signals," said one trader. Another said that the UK gas market had "given up on oil."

The decline of the US currency has also benefited coal-consumers, since that commodity is also globally priced in dollars. CIF ARA coal, the benchmark European coal contract, was \$70.75/mt on March 13, 2007, or Eur53.64/mt. A year later the contract had risen just over 100% in dollar terms, to \$142/mt, but by only 70.8% in euro terms, to Eur91.61/mt.

A fairly large portion of European power generation is fired by coal, and so power generators have benefitted doubly from the dollar fall, once through protection from the crude oil rise and once from the coal price rise.

For gas, the effect has diminished demand pressure. Rising coal prices can mean greater demand for gas, which can sometimes replace the solid fuel. With the coal strength held back by the dollar fall, the move towards gas has smaller than it might otherwise have been.

Gazprom to sell 157 Bcm to Europe

Russian gas giant Gazprom expects to supply a total of 157 billion cubic meters of gas to the European Union in 2008, nearly 4% more than it exported to these markets last year, the company's CEO Alexei Miller said Friday.

"Gazprom delivered 151 Bcm of gas to EU countries in 2007

On The Day Commodity Market, 13 March, 2008

	No. trades	WAP (p/th)	Energy (therms)	Values (£)
NBP Location	0	-	-	-
NBP Physical	0	-	-	-
NBP Title	93	54.6400	5,225,000	2,855,198
Total	93	54.6400	5,225,000	2,855,198

ICE Natural Gas Summary, March 14, 2008 (p/th)

Month	Close	Previous	Change	Low	High	Volume
Apr-08	54.21	54.56	-0.35	54.15	54.60	1730
May-08	53.69	53.85	-0.16	53.65	54.05	575
Jun-08	53.35	53.50	-0.15	53.35	53.60	125
Jul-08	53.95	54.00	-0.05			25
Aug-08	54.50	54.50	0.00	54.75	54.80	35
Q2 08	53.75	53.97	-0.22			175
Q3 08	54.25	54.33	-0.08			175
Q4 08	66.86	67.19	-0.33			
Q1 09	72.33	72.89	-0.56			
Q2 09	55.95	56.00	-0.05			
Q3 09	54.38	54.50	-0.12			
Q4 09	65.40	65.25	0.15			
Q1 10	71.13	71.15	-0.02			
W 08	69.60	70.04	-0.44	69.50	69.60	15
S 09	55.17	55.25	-0.08			10
W 09	68.27	68.20	0.07			

Index Dutch TTF gas futures (Eur/MWh)

Mar 14, 2008		Baseload	
Product	Settle	Change	Volume
WDNW	23.621	-0.084	—
Apr 08	23.612	-0.073	21600
May 08	23.607	+0.003	89280
Jun 08	23.682	+0.109	—
Q2 2008	23.633	+0.013	21840
Q3 2008	23.764	+0.155	—
Q4 2008	29.114	+0.012	—
Q1 2009	31.050	-0.006	—
Summer 08	23.699	+0.085	—
Winter 08	30.071	+0.003	—
Cal-09	27.271	+0.069	—
Cal-10	26.767	+0.086	—
Cal-11	26.644	+0.083	—
Total Volume			132720.00

Platts German Assessments, 14 March, 08

	p/th	\$/MMBtu	eur/MWh	change D-1 (eur/MWh)
BEB Market				
Day-Ahead	52.60 - 53.05	10.68 - 10.78	23.40 - 23.60	-0.05
April	50.24 - 52.94	10.21 - 10.75	22.35 - 23.55	0.00
E.ON Market				
Day-Ahead	53.05 - 53.50	10.78 - 10.87	23.60 - 23.80	-0.20
April	53.28 - 53.95	10.82 - 10.96	23.70 - 24.00	-0.10

Platts French PEG Nord Assessments, 14 March, 08

	p/th	\$/MMBtu	eur/MWh	change D-1 (eur/MWh)
Day-Ahead	54.51 - 54.96	11.07 - 11.16	24.25 - 24.45	-0.20
April	55.07 - 55.52	11.19 - 11.28	24.50 - 24.70	0.00

Platts Italian PSV Assessments, 14 March, 08

	p/th	\$/MMBtu	eur/MWh	change D-1 (eur/MWh)
Day-Ahead	54.96 - 57.66	11.16 - 11.71	24.45 - 25.65	0.15
April	55.07 - 57.32	11.19 - 11.64	24.50 - 25.50	-0.25

Platts day-ahead NBP index set at 54.6 p/th

Total reported volume 475,000 th

and expects [to export] 157 Bcm in 2008," Miller told Russian President Vladimir Putin in televised comments.

Difference in figuring

Figures produced by Brussels-based industry association Eurogas the same day said that Russia accounted for 23% of the EU's 505 Bcm consumed in 2007, a total of 116 Bcm.

The difference in the two sets of figures is believed to come from Russia's including Turkey, the former Yugoslav states and other countries in its definition of the European Union area, said Eurogas. That would add another 25 Bcm/year to Russia's exports, accounting for a significant proportion of the difference.

Other factors could be down to using different temperatures for measuring the gas, gas exported to Europe that is stored but not consumed, and new entrants in Europe that are not members of Eurogas.

Europe could pay \$400/1,000cu m

Miller said an average price for gas on the European markets could reach \$400/1,000 cubic meters this year, given the current trend in gas prices.

"We forecast the average price for 2008 at \$310/1,000 cu m, but the price in Europe has already reached and even exceeded \$370/1,000 cu m. We believe that the average price for gas in Europe may be at \$378/1,000 cu m or reach \$400/1,000 cu m," Miller said.

Miller agreed with Putin's remark that the increase in gas prices was partially due to a decline in the dollar rate against other currencies but said that the increase still outstripped the changes in dollar rate. This did not, however, rule out an increase in demand for gas on the European market, Miller said.

Miller also told Putin that the recent decision by Central Asian countries to raise the price for their gas to international level from 2009 "came just in time" and was "final and not to be revised."

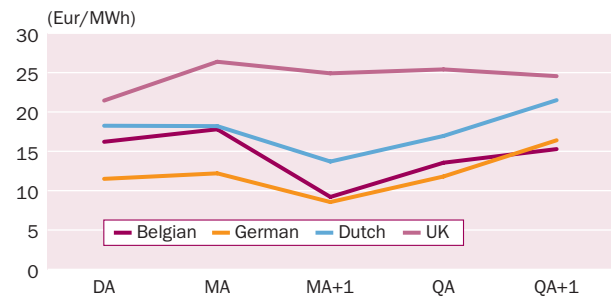
On Tuesday, Gazprom said that Turkmenistan, Uzbekistan and Kazakhstan would sell their gas at international prices starting from 2009, following the meeting of the heads of the three national companies with Miller in Moscow.

Currently, Gazprom pays \$130/1,000 cu m for supplies from Turkmenistan, compared with \$100/1,000 cu m for Turkmen gas last year. In the second half of 2008, the price is to rise to \$150/1,000 cu m.

The same price and scheme was agreed with Uzbekistan for gas supplies in 2008. The move is likely to impact Gazprom's talks with Ukraine over the gas price for that country, as the company buys gas in Turkmenistan and Uzbekistan for eventual supply to Ukraine.

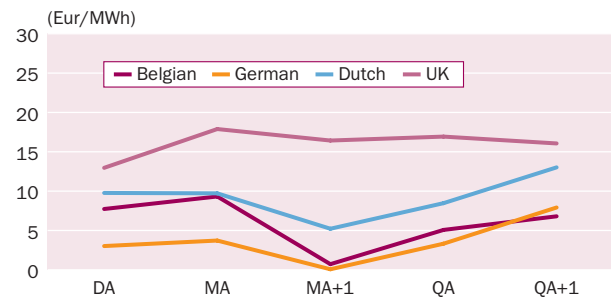
"Consumers [of Central Asian gas] should take into account the dynamic in European prices, while forming their budgets for the next year," Miller said.

Spark Spread, March 13, 2008 (50% efficient)



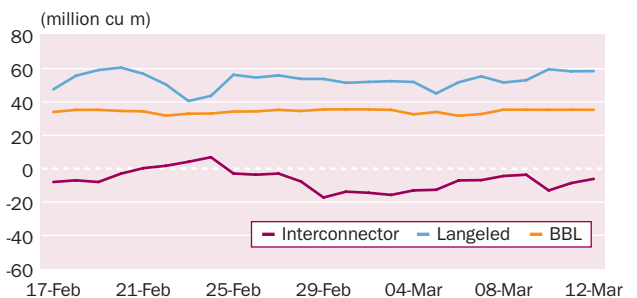
Source: Platts

Clean Spark Spread, March 13, 2008 (50% efficient)



Source: Platts

Cross-border flows into the UK



Source: IUK / National Grid (Negative volumes are UK to Belgium)

National Grid's Demand Forecast

Date	Demand (mcm)	
13-Mar	341.90	(Actual demand)
14-Mar	327.36	(Forecast)
15-Mar	320.13	(Forecast)

The demand throughput was met by a combination of beach and storage gas.

Platts European Gas Assessments, 14 March, 2008

		p/th	Volume Weighted Index			Value on Close			
			Eur/MWh	Change (%)	Vol (th/d)	Trades	p/th	Eur/MWh	Change (%)
Day-Ahead	Platts D/A NBP index	54.6000	24.2957	0.55	475,000	3	54.6000	24.3000	0.55
Month-Ahead (Daily)	Platts M/A NBP Index	54.2500	24.1400	-0.64	150,000	6	54.2500	24.1400	-0.64
Month-Ahead (Cumulative)	Platts M/A NBP Index	53.3014	23.7179	0.16	2,250,000	85			
Rolling Indices	Platts BoM NBP Index	52.4575	23.3424	0.47					
	Platts M/A TTF	53.6235	23.8544	0.30					
Basis Differentials	Platts D/A NBP-Zeebrugge basis	-0.05	-0.02	-120.00					
	Platts M/A NBP-Zeebrugge basis	0.45	0.20	18.42					

Index definitions are published in the Platts methodology guide available on the Platts website.

Platts day-ahead NBP index set at 54.6 p/th

Total reported volume 475,000 th

When asked by Putin about the timeframes for the negotiations with the Central Asian gas consumer on new prices, Miller said that Gazprom expected to start the talks "immediately."

On Thursday, Gazprom and Ukraine's national oil and gas company Naftogaz Ukrayiny settled a long-lasting dispute over gas prices and supplies in 2008. The two companies agreed that starting this month, Naftogaz would buy at least 49.8 Bcm of Central Asian gas through to the end of the year at a price of \$179.50/1,000 cu m.

Total output to reach 561 Bcm

Speaking at a separate event in St Petersburg, Gazprom deputy CEO Aleksander Ananenko said the gas giant expected to increase gas output to 561 Bcm of gas in 2008, as reported by Russia's Prime-Tass news agency. The company pumped 548.5 Bcm in 2007, down 1.4% year-on-year.

Russian inspector wants flaring fines

Russia's industrial inspectorate Rostekhnadzor is set to submit to the government a draft resolution for a near five-fold increase in fines for associated gas flaring, in a move to tighten control over associated gas use from January 2009, the service said Friday.

"The draft resolution is currently being agreed by all relevant ministries and governmental bodies and will be submitted to the government within a month," a Rostekhnadzor spokesman said.

The service has suggested using a 4.5 multiplier for gas flaring above 15% of the total associated gas output starting from January 2009 and until the end of 2010.

A new limit of 5% for gas flaring is to come in force starting from 2011. Russia's current limit for gas flaring is 25% of total associated gas output, while penalties are negligible, at some Rb 50/1,000 mt (\$2.10/1,000mt). Gas flaring within the limits is not subject to payments, the spokesman said.

Total payments for gas flaring may see a more than 100-fold increase from the Rb 50/1,000 mt level, the spokesman said, as Russia implements a complicated scheme of different payments for gas flaring for different fields.

Russia aims to reduce flaring of associated gas to 5% by 2011 and hopes increasing fines would set up conditions under which it would be unprofitable for oil companies to flare gas.

Official statistics show that Russia produces some 60 billion cubic meters of associated gas annually, of which some 25% is flared. Experts, however, believe the actual figures might be higher.

Recent checks by Rostekhnadzor showed that the majority of oil companies in Russia submit unreliable data on gas flaring to the service, with "volumes of associated gas pumped being calculated with a significant inaccuracy."

Insufficient accuracy

Rostekhnadzor has found that the majority of oil fields lack any gas metering systems, the service said late February, commenting on the results of checks carried out in the second half of 2007 and in early 2008.

"In their reports, subsoil developers underestimate volumes of produced and flared associated gas," the service then said. "Given the lack of gas metering systems, it is hard to estimate correctly these volumes, but it is obvious that the real volumes are higher than those being declared."

Platts Cross Fuel Comparisons, 14 March, 2008

	Euro/Gigajoule	pence/therm
UK gas prices at NBP ¹		
Balance month	12.2674	99.2727
April	12.2674	99.2727
May	12.1101	98.0000
Q2 2008	12.1326	98.1818
Electricity ² (UK baseload)		
April	20.8189	168.4750
May	20.2395	163.7870
Q2 2008	20.4025	165.1055
Fuel Oil ³ (NW Europe cargoes)		
April 1%	24.4136	197.5656
May 1%	24.4863	198.1533
Q2 2008	24.4984	198.2512
April 3.5%	22.9612	185.8115
May 3.5%	23.1790	187.5746
Q2 2008	23.1669	187.4767
Gasoil ³ (0.1% cargoes)		
Spot	45.2795	366.4206
April	45.5473	368.5882
May	44.6389	361.2372
Q2 2008	44.7088	361.8026
Coal ⁴ (Northwest Europe)		
Month-Ahead	10.6645	86.3020
90 Days	3.8302	30.9958

Exchange rate = 1.558

Note: Prices in this table show the cost of electricity generated from each fuel, taking into account power plant efficiencies. The comparisons use these efficiencies: gas 55%, fuel/gas oil 32%, coal 34%. The prices are indications, not NBP assessments (for which see p1)

1) Source: Platts European Natural Gas Report

2) Source: Platts European Power Daily

3) Source: Platts Global Alert. Spot = 10-25 days ahead of publication for 1%, 2-15 days for 3.5%. Fuel oil forward prices are swaps prices. Gasoil spot = 10-25 days ahead of publication. Gasoil forwards are IPE prices based on volumetric average. Assumed calorific value: Gasoil 18,500 Btu/lb, Fuel oil 17,800 Btu/lb.

4) Source: International Coal Report, Europe, 10,800Btu/lb

Forex Indicators, March 14, 2008

	NOK	SKr	DKr	SFr	GBP	US \$	Zloty
Euro	7.961	9.443	7.457	1.577	0.767	1.558	3.541
US \$	5.109	6.060	4.786	1.012	0.492	1.000	

Weather Summary, March 14, 2008

Week normal high/low temps (C) and projected deviations from normal								
Celsius	Normal	14	15	16	17	18	19	20
BENELUX								
Amsterdam	8/3	0	2	1	1	-1	-1	-1
Brussels	11/2	3	2	0	0	-3	-3	-3
CENTRAL EUROPE								
Berlin	8/1	0	2	1	-1	-3	-2	-2
Frankfurt-am-Main	9/2	2	3	2	0	-2	-4	-2
Prague	9/2	0	3	4	-1	-5	-5	-1
Vienna	8/-1	5	8	8	5	2	1	3
Warsaw	6/-2	3	1	4	0	-3	-6	-1
IBERIA								
Lisbon	16/9	2	1	1	0	1	-1	-1
Madrid	15/5	4	0	0	2	-2	-1	-3
SCANDINAVIA								
Copenhagen	5/-1	3	4	3	1	1	3	3
Helsinki	0/-6	4	4	4	2	0	-2	-2
Oslo	4/-4	0	1	-1	-2	-3	-2	-5
Stockholm	3/-3	3	2	2	1	-2	-3	4
UK								
London	10/3	2	3	-1	-2	-3	-2	-2
FRANCE								
Paris	12/04	2	5	1	-2	-4	-2	-2

Source: AccuWeather, 14Mar08/4:56 AM EDT/0856 GMT

Platts day-ahead NBP index set at 54.6 p/th

Total reported volume 475,000 th

The service believes oil producers must revise significantly their gas programs. In particular, oil companies set up unreasonably long periods for the start of construction of gas processing units at their fields—after 2015—while associated gas metering systems are not envisaged at all, it said.

At the same time, all Russia's oil majors have said they expect to meet the goal to process 95% of associated gas by 2011.

Scots urge Moray Firth E&P delay

The Scottish government urged the UK government on Friday not to make a decision on oil and gas exploration in the Moray Firth until more work had been done to study the effects on the local bottlenose dolphin population.

The Scottish Cabinet secretary for rural affairs and the environment, Richard Lochhead, wrote to the UK's secretary of state for business, John Hutton, to ask him to delay the decision.

"I appreciate that oil and gas exploration and exploitation is critically important to the Scottish and UK economies, but this needs to be balanced with our environmental responsibilities," Lochhead said in a statement.

"I strongly support the recommendations for further work made by Scottish Natural Heritage and would urge the UK government to address them before making a final decision on oil and gas activities in the inner Moray Firth," he said.

Scottish Natural Heritage has recommended further work on the appropriate assessment of block 17/3 in the Moray Firth and the possible impact on the local dolphin population, the Scottish government said.

The UK has two resident bottlenose dolphin populations, one in Cardigan Bay, off Wales, and one in Scotland's Moray Firth. In December 2007 the UK government published consultation documents regarding whether to allow oil and gas exploration in these environmentally sensitive areas. The consultations close Friday (March 14).

The December 2007 consultation documents seem to rule out oil and gas exploration in Cardigan Bay, but as for the Moray Firth, the government said in December that it was possible to take mitigation measures supporting licensing of exploration in the area.

Market commentaries

Major 'swamps' France's PEG Nord

Prices on France's PEG hubs were said to be strongly influenced by one French major, which swamped the market with its supplies, traders said, and causing prices to slip on the eve of a cold spell expected for week 12.

"We've had one utility swamp the market with its gas from storage and prices crumbled as soon as it came on the market," one French trader said. A key factor behind this could be the arrival of an LNG tanker at the Montoir terminal earlier this week.

Prices for the day-ahead contract opened "relatively high" at Eur24.40/MWh, going through Eur24.50/MWh before slipping back to 24.40/MWh early in the afternoon. The contract closed just before 16.00GMT at Eur24.35/MWh. Summer 08 was heard traded once at Eur24.25/MWh on the back of rising fuel and the weak dollar.

While activity was low on France's PEG hubs, the day-ahead

contract was heard traded once at Eur24/MWh on the PEG Sud. However the front month contract, though attracting a couple of offers at around Eur24.60/MWh, failed to trade for the tenth day in a row.

EGT day-ahead gas up on weather

German day-ahead gas at E.ON's EGT hub saw an intra-day high of Eur23.90/MWh Friday on the back of a forecast drop in temperatures Monday. "The week-end is set to remain mild but it should get colder on Monday, so day-ahead prices are likely to firm at the start of next week," one German trader said.

Before market close, EGT day-ahead dipped to Eur23.70/MWh triggered by "a sort of slide on the TTF prompt in late trading," a second trader said. At the BEB hub, day-ahead was heard trading once at Eur23.20/MWh in early morning and once at Eur23.50/MWh at the end of the day. On the curve, April hovered around Eur23.85/MWh on the EGT, while the front month was reported changing hands twice at the BEB hub at Eur23.45/MWh.

Winter 08 gas dropping at Dutch TTF

The seasons continued to see more action than the quarters at the Dutch Title Transfer Facility Friday. Winter 08, which had broken through the Eur30.00/MWh mark Thursday, slid back below it again, closing around Eur29.85/MWh.

In contrast, Summer 08, trading around Eur23.65/MWh, gained about 15 euro cent on the previous day. One trader remarked on the fact that the TTF curve was quick to rise on firming oil, but did not fall to the same extent when oil softened, as it did at one point Friday. On the prompt.

The differential between day ahead and the front month, flat Thursday, had reversed to an April premium of about 15 euro cent, as day ahead shed 25 euro cent day on day to settle about Eur23.45/MWh. Traders said that April's relative strength stemmed from a fear of gas shortage in the coming storage injection season. Apart from the summer quarters, the movement in the market was generally slightly downward.

Zeebrugge takes slide from UK NBP

The Zeebrugge gas market was in a slightly bearish mood Friday, taking its cue from the much larger UK NBP. The action was more on the outright than the basis, with many of the prompt basis contracts unchanged from Thursday. Day ahead basis, on the other hand, turned just negative as outright prices fell away, reaching a level of -0.05 at midday (GMT) and holding it.

The basis for the months of April, May and June all tightened slightly, and the outright contracts for those months bucked the general trend by broadly holding their value. One trader said this was down to uncertainty over the availability of gas on the Continent at the beginning of the gas storage injection season. Day ahead outright traded at 54.50 pence per therm at close while the front month traded at 54.60 p/th, having slid a touch in the final minutes.

PSV summer could dip on market length

The Italian summer gas contract at the PSV Friday stayed at a Eur4.2 discount to the Eni gas release formula, up from the sell-off to a Eur5.00/MWh discount earlier this week. "There was too much nervousness and fear in the market on the additional 3

billion cu m/year inflow from Algeria starting from April," one Italian trader said, adding the contract had been oversold.

"With the ongoing length in the prompt, players were frightened that the system would get even longer in the summer period," he added. In the trader's view, a Eur4.2/MWh discount is a fair value for the summer contract so far, but prices are likely to dip to a Eur4.4/MWh discount. "At that level, the summer contract would be priced pretty flat to the 15% take-or-pay penalty of Eni's long-term contracts," the trader said.

Selling interest for the gas year 08/09 was heard at a premium of Eur0.4 to the Eni gas release. A second trader gave a fair value for April at Eur25.00/MWh. However, no deal was heard as the front month has been pretty illiquid over the last few weeks on the length in the Italian system due to the mild winter and the ongoing 95% maximization of gas imports.

Day-ahead was quoted by an Italian broker between Eur24.45/MWh and Eur25.65/MWh, up from Thursday's levels between Eur24.30/MWh and Eur25.50/MWh.

Balance of the month was quoted fairly wide between Eur24.15/MWh and Eur25.75/MWh. Snam showed volumes into and out of the Italian gas grid Thursday March 13 –the most recent data available – totaled 0.276 billion cubic meters.

NBP gas slips back on long system

(continued from page one)

due to switch yet again to UK export mode at 14:00 GMT Friday. The pipeline has been changing direction for several days as the price difference between the two markets has come close to zero. The UK warmed up a little Friday, explaining the drop in demand, but colder weather was expected from Monday through the following week.

There remained the possibility that that would continue through to the front month, traders said, which was holding prices relatively firm. But there was "no concern" over the higher demand expected, one trader said, given reasonable levels of storage reserves.

The front month eased back through the day and closed down 0.35 p at 54.25 p/th, with May down 0.1 p at 53.8 p/th. Summer 08 as a whole closed flat on Thursday's level, at 54.05 p/th, although it had traded a little higher during the day. On the far curve, a drop in crude oil prices was largely ignored by the market with only slight declines in seasonal gas prices. Winter 08 closed down 0.3 p at 69.5 p/th and summer 09 was down 0.2 p at 55.1 p/th.

UK OCM Notes: This data is prepared by APX Group for the purposes of operating its on the day commodity market in gas and is derived from participants in the market. Whilst care is taken to ensure accuracy in the preparation of the data, you should make your own independent assessment of the data and APX Group accepts no liability for any loss arising from reliance on the data. In addition the data should not be passed to any person(s) without prior written agreement from APX Group. Further information on market data is provided by APX Group. Anyone wishing to receive market data or further information on it should telephone APX's 24-hour support line on 0115 921 7400 or fax 0115 921 7420. © APX Group

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Platts day-ahead NBP index set at 54.6 p/th

Total reported volume 475,000 th

European Marketscan

Volume 40 / No 53 / March 14, 2008

European products

\$/mt

Mediterranean cargoes

	Data code	FOB Med (Italy)			Data code	CIF Med (Genova/Lavera)		
Premium gasoline 50 ppm	AAOPW00	-8.75	879.00 - 880.00	-8.75	AAOPX00	-8.75	889.75 - 890.75	-8.75
Naphtha (1)	PAAAI00	+2.25	854.50 - 855.00	+2.25	PAAAH00	+2.25	872.50 - 873.00	+2.25
Jet	AAIDL00	+22.25	1095.00 - 1096.00	+22.25				
Diesel 50 ppm (2)	AAOQC00	+14.00	1060.00 - 1061.00	+14.00	AAOQD00	+14.00	1073.00 - 1074.00	+14.00
Gasoiil 0.2%	POAAB00	+19.25	1010.75 - 1011.75	+19.25	POAAA00	+19.25	1029.50 - 1030.50	+19.25
Gasoiil 0.1%	AAVJI00	+19.00	1020.00 - 1021.00	+19.00	AAVJJ00	+19.00	1035.50 - 1036.50	+19.00
Fuel oil 1.0%	PUAAK00	+2.50	521.75 - 522.75	+2.50	PUAAJ00	+2.50	532.50 - 533.50	+2.50
Fuel oil 3.5%	PUAAZ00	-4.50	467.25 - 468.25	-4.50	PUAAY00	-4.50	478.00 - 479.00	-4.50
Jet FOB Med premium	AAIDN00		16.50 - 17.50					

Northwest Europe cargoes

		FOB NWE				CIF NWE/Basis ARA		
Premium gasoline 50 ppm	AAIJH00	-10.25	874.75 - 875.75	-10.25	AAIJJ00	-10.25	894.50 - 895.50	-10.25
Premium gasoline Non Oxy	AAVJE00	-10.25	892.00 - 893.00	-10.25				
Premium gasoline 10 ppm	AAOPY00	-10.25	876.75 - 877.75	-10.25	AAOPZ00	-10.25	895.50 - 896.50	-10.25
Fuel Grade Ethanol					AAYS00		579.00 - 580.00	
Regular gasoline 50 ppm	AAJL00	-10.25	857.00 - 858.00	-10.25				
Naphtha (Apr)					PAAAJ00	-0.75	877.25 - 877.75	-0.75
Naphtha					PAAAL00	+2.25	879.75 - 880.25	+2.25
Jet	PJAAV00	+22.25	1102.75 - 1103.75	+22.25	PJAAU00	+22.25	1115.00 - 1116.00	+22.25
ULSD 10 ppm					AAVBG00	+15.50	1082.00 - 1083.00	+15.50
Diesel 10 ppm	AAKWR00	+15.50	1071.75 - 1072.75	+15.50	AAKWP00	+15.50	1085.50 - 1086.50	+15.50
Diesel 10 ppm UK					AAVBH00	+15.50	1086.50 - 1087.50	+15.50
Diesel 50 ppm UK	AAIKM00	+13.75	1031.75 - 1032.75	+13.75	AAIKQ00	+13.75	1046.50 - 1047.50	+13.75
Diesel 50 ppm	AAOQA00	+14.25	1026.75 - 1027.75	+14.25	AAOQB00	+14.25	1043.50 - 1044.50	+14.25
Russian gasoil 0.2%					AAOQZ00	+21.00	997.00 - 998.00	+21.00
Gasoiil 0.2%	POAAD00	+23.50	977.50 - 978.50	+23.50	POAAC00	+23.50	995.00 - 996.00	+23.50
Gasoiil 0.1%	AAVWR00	+14.00	999.25 - 1000.25	+14.00	AAVWS00	+14.00	1016.75 - 1017.75	+14.00
Fuel oil 1.0%	PUAAM00	-0.50	508.50 - 509.50	-0.50	PUAAL00	+1.25	521.00 - 522.00	+1.25
Fuel oil 3.5%	PUABB00	-2.50	452.75 - 453.75	-2.50	PUABA00	-2.50	467.00 - 468.00	-2.50
Straight run 0.5-0.7%	PKABA00	+1.00	684.00 - 686.00	+1.00				
VGO 0.5-0.6%	AAHMX00	+1.50	753.00 - 755.00	+1.50	AAHMZ00	+1.50	763.00 - 765.00	+1.50
VGO 2% max	AAHNB00	+1.00	751.00 - 753.00	+1.00	AAHND00	+1.00	761.00 - 763.00	+1.00

Northwest Europe barges

		FOB Rotterdam		
98 RON gasoline 10 ppm	AAKOD00	-11.00	903.00 - 904.00	-11.00
Premium gasoline 10 ppm	PGABM00	-11.00	870.00 - 871.00	-11.00
Regular gasoline 10 ppm	AAKOF00	-7.00	880.50 - 881.50	-7.00
Fuel Grade Ethanol	AAYDT00		569.50 - 570.50	
MTBE	PHAKZ00	-6.75	996.00 - 997.00	-6.25
Naphtha	PAAAM00	+2.25	875.75 - 876.25	+2.25
Jet	PJABA00	+11.00	1115.75 - 1116.75	+11.00
Diesel 10 ppm	AAJUS00	+20.75	1074.25 - 1074.75	+20.75
Gasoiil 0.2%	POAAG00	+16.75	995.75 - 996.25	+16.25
Gasoiil 0.1%	AAVWT00	+15.75	1006.25 - 1006.75	+15.75
Biodiesel	AAWGY00		1460.00 - 1470.00	
FAME 0	AAXL00		1310.00 - 1320.00	
Fuel oil 1.0%	PUAAP00	+5.50	519.50 - 520.50	+5.50
Fuel oil 1.5%	AASXR00	-0.50	495.00 - 495.50	-0.50
Fuel oil 3.5%	PUABC00	-2.50	470.00 - 470.50	-2.50
Rotterdam bunker 380 CST	PUAYW00	+3.00	479.00 - 481.00	+2.00
VGO 0.5-0.6%	AAHNF00	+1.50	763.00 - 765.00	+1.50
VGO 2% max	AAHNI00	+1.00	761.00 - 763.00	+1.00

ICE futures

Platts ICE gasoil assessments*

(16:30 London time)

Apr	AARIN00	997.00
May	AARIO00	974.00
Jun	AARIP00	956.25

ICE gasoil settlements

Apr	997.75	Jul	946.75
May	974.75	Aug	942.25
Jun	957.00	Sep	940.50

ICE gasoil GWAVE (Previous day s values)

Apr	971.25
May	951.75

ICE Brent

Apr	AAYES00	107.32
May	AAYET00	106.47

1) Naphtha FOB MED is basis East Med. 2) 50 ppm ULSD FOB and CIF Med reflect diesel (EN590) with max 50 ppm sulfur, in line with EU regulations in effect from Jan 1, 2005. 3) Cargoes CIF NWE Fuel Grade Ethanol in \$/CM 4)Barges FOB Rotterdam Fuel Grade Ethanol in Eur/CM

* Platts ICE gasoil assessments reflect the closing value of the ICE gasoil contracts at precisely 16.30 London time.

Prevailing NYMEX futures (16:30 London time)**\$/bbl**

Front month WTI crude	AASCR00	110.22
Second month WTI crude	AASCS00	108.81

cents/gal

Front month heating oil	AASCT00	318.77
Second month heating oil	AASCU00	308.11
Front month unleaded gasoline	AASCV00	268.10
Second month unleaded gasoline	AASCW00	270.23

European clean product barge freight rates (\$/mt)**ARA**

Rotterdam - Rotterdam	TCAEI00	2.25
Rotterdam - Flushing	TCAEJ00	4.00
Rotterdam - Ghent	TCAEK00	4.25
Rotterdam - Antwerp	TCAELO0	3.50

Germany

Rotterdam - Duisburg	TCAEM00	8.50
Rotterdam - Cologne	TCAEN00	15.50
Rotterdam - Karlsruhe	TCAEQ00	23.75
Antwerp - Duisburg	TCAEP00	9.00

Switzerland

Rotterdam - Basel	TCAEQ00	28.25
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Euro-denominated assessments Euro/mt**Cargoes CIF NWE/Basis ARA**

Premium gasoline	AAQCD00	572.59 - 573.23
Naphtha	AAQCE00	563.15 - 563.47
Jet	AAQCF00	713.74 - 714.38

Barges FOB Rotterdam

Premium gasoline	AAQCH00	556.91 - 557.55
Diesel 10 PPM	AAQCI00	687.65 - 687.97
Gasoil 0.2%	AAQCJ00	637.40 - 637.72
Gasoil 0.1%	AAYWY00	644.12 - 644.44
Fuel oil 3.5%	AAQCK00	300.86 - 301.18

Cargoes FOB NWE

Fuel oil 1.0%	AAQCG00	325.50 - 326.14
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Conventional cargoes NY harbor (Euro/gallon)

Unleaded 87	AAPYV00	162.66 - 163.30
Unleaded 89	AAPYW00	168.80 - 169.44
Unleaded 93	AAPYX00	178.02 - 178.66
No. 2	AAPYY00	205.33 - 205.97

Euro/US\$ forex rate: 1.5622. Platts Euro denominated European & US product assessments are based on market values and a Euro/US\$ forex rate at 4:30 PM local London time.

Foreign exchange rates: March 14

Dollar/Swiss franc	1.0061
GB pound/dollar	2.0279
Dollar/yen	100.14
Euro/dollar	1.5622
Dollar/Ruble	23.6330

Source: Comstock

Correction

CORRECTION: On March 12, 2008, the incorrect Northwest European LSFO FOB and CIF cargo assessments were published. The correct assessments are as follows:

	Cargoes CIF NWE/ Basis ARA	Cargoes FOB NWE
1 PCT	+4.25 510.25-511.25 +4.25	+3.75 499.75-500.75 +3.75

Trader notes

TRADER NOTE: Peter Hendry has joined the trading desk of Optima Energy S.A. Tel: +41 22 596 0606, e-mail. peter.hendry@oeg.mail.com Yahoo: hendry_2004

Market Update

April NYMEX crude futures opened 53 cents lower at \$109.80/barrel Friday, after crude tracked lower overnight as the US dollar rebounded. The Dollar Index on ICE was trading 56 points higher at 72.128 as of 9:30 EDT (13:30 GMT). "Developments over the past week in the crude oil market have done little to dispel our view that tight fundamentals remain the dominant force underpinning prices," Kevin Norrish, energy analyst at Barclays Capital, said in a report. Distillates continued to pace the energy complex, with April heating oil opening 8 points lower at \$3.124/gal before rallying up to a fresh record high at \$3.1590/gal. "While yesterday's [Thursday] 10 cent pop in heating oil futures would appear incongruent with the tail end of the heating oil season at hand, heating oil being a 'cousin' within the distillate family has managed to share in the price advance," energy consultant Jim Ritterbusch said in a report. Gasoline continued to lag the complex, with April RBOB opening 2.93 cents lower at \$2.6535/gal.

Gasoline

Sulfur-free barges in ARA were assessed at \$870.50/mt Friday, down \$10.25/mt from the previous day, as the whole gasoline complex came off. The decline was due to selling pressure in light of the changeover from winter to summer grade. The move to summer grade saw people trying to sell out their winter grade stocks, while reduced demand for winter grade gasoline was also weighing on the prices. "It's just absolutely crazy," said one trader. "There is too much winter grade around." Traders said the near-term outlook for gasoline was weak, adding that the demand erosion from recessionary factors was combining with an increasing use of ethanol. The state of California was expected to allow up to 10% of ethanol in their gasoline, rather than the current 2%. "This is a really weak market now," one trader said. "Fundamentally everything points to that continuing." In Europe the continuing move to diesel was pressuring values with physical cracks plumbing new lows of over minus \$4/barrel during early trading. Strong gasoline prices in Asia were drawing product from the Mediterranean with both trading and shipping sources reporting increased activity over the past few days. "The east is very strong versus the west," a

trader said. "It was pricing the highest I have seen all year." On Thursday, benchmark grade 92 octane gasoline in Singapore was assessed at \$113.13/b, compared with the benchmark 10 ppm barges in Northwest Europe assessment at \$105.80/b, Platts data showed. The nearly \$8/b spread opened the arbitrage especially from the Mediterranean as the journey from there to the East of Suez can be quicker. Shipping sources said at least two vessels have been conditionally fixed. "Lot of gasoline is moving right now," a shipping source said, adding that many vessels leaving the Black Sea or the Mediterranean could go to Asia.

Gasoline transactions

Gasoline MOC barge deals: Cargill-Total, 10ppm, 1kt, FOB AR, FW, \$869/mt; StatoilHydro-Gunvor, 10ppm, 1kt, FOB AR, fw, \$871/mt; StatoilHydro-Vitol, 10ppm, 1kt, FOB AR, fw, \$872/mt; StatoilHydro-Vitol, 10ppm, 1kt, FOB AR, fw, \$872/mt; Gunvor-Vitol, reg, 1kt, FOB AR, fw, \$876/mt; Gunvor-Vitol, reg, 1kt, FOB AR, fw, \$877/mt; Gunvor-Vitol, reg, 1kt, FOB AR, fw, \$878/mt; Gunvor-Vitol, reg, 1kt, FOB AR, fw, \$879/mt. Gasoline NON-MOC barge deals: Shell-VDS, 10ppm, 1kt, FOB AR, fw, \$860/mt; Shell-Mabanaft, 10ppm, 1kt, FOB AR, fw, \$860/mt; Shell-Vitol, 10ppm, 1kt, FOB AR, fw, \$860/mt; Shell-Statoil, 10ppm, 1kt, FOB AR, fw, \$857/mt; Shell-Statoil, 10ppm 1kt, FOB AR, fw, \$857/mt; Shell-Vitol, 10ppm, 1kt, FOB AR, fw, \$854/mt; Chevron-Statoil, 10ppm 1kt, FOB AR, fw, \$856/mt.

Naphtha

With naphtha product moving to the East, the market was beginning to receive some support Friday. The April crack rebounded later in the day to minus \$7.50/barrel from as low as minus \$8.20 in the morning, sources said. A number of players were sending product to Asia, among them Koch and Statoil, though others were also set to be exploiting the arbitrage, traders said. Opinion ranged on how much product was leaving Europe bound for the East, with some suggestions that the volume may be close to 500,000 mt though April volumes were also already under discussion. "The eastern material is sold," a trader said dismissing speculation that some of the product may not have found buyers yet. The movement to the East was supporting the discount for open spec around minus \$1/mt with one source noting that it could have been "worse". "A lot of volume is moving out of the region," the source added. Paraffinic naphtha was seen attracting a small premium, while N+A was talked at a discount at minus \$20/mt due to weak gasoline. With rumors that refineries are cutting runs traders expected naphtha to gradually rebound. During the Platts Market on Close assessment process, Morgan sold to Koch one cargo for Mar 24-28 delivery at \$883/mt. Gunvor offered Apr 4-8 down to \$878/mt while Cargill bid Mar28-Apr1 up to \$875/mt.

Naphtha transactions

Naphtha MOC cargo deals: Morgan-Koch \$883/mt for 1 cargo of 12.5kt +/-10% of open spec Naphtha C+F basis Rotterdam full or part cargo, for delivery Mar 24-28 Mar, 5 PPB Max mercury (mercury to be tested as per AAS method), \$1/mt max freight diff within ARA, ISPS clause) GT&Cs as per last deal with seller. If no precedent Koch GT&Cs.

Jet

The Northwest European jet fuel market was described by one trader as a "perfect storm" Friday, as a confluence of factors continued to support the strong NWE jet prices. Front-month Brent on ICE hit \$108/barrel, while April ICE gasoil futures on ICE hit the \$1,000/mt mark for the first time. "The market is also very strong and very tight - there is nothing in-tank," said the trader, adding that all players, big and small, were looking for oil, but the market remained desperately short of material. He added the only available oil was largely at the back-end of the window: "[We] are all trying to get oil...and paying premiums at significant levels to Platts," he added. Supplies of jet fuel to the Mediterranean market remained tight, domestic demand in the Persian Gulf was on the increase Friday, a number of refineries remained down for maintenance, and demand for fuel appeared healthy in many regions. Sources reported buying interest in Latin America, India, West Africa, East Asia and NWE. Low levels of inventories in tank meant that companies taking delivery of barrels were feeding oil straight into their systems, said a second source. In the Platts Market On Close assessment process for FOB, just one offer from KLM was seen, which did not trade, while BP and Vitol were again the only two companies seen in the CIF window. Unsurprisingly, jet bounded upwards to new highs again Friday, punching through the \$1,110/mt level, and was assessed at \$1,115.25/mt.

Jet transactions

Jet MOC cargo deal: VITOL-BP AT CIF NWE MEAN + \$3/mt, Mar 29-April 2 CIF BSS ROTTERDAM.

Gasoil

There remained a great deal of uncertainty Friday over the true value of 0.2% gasoil in the Mediterranean, with numerous traders stating that the premiums being paid were over-cooked while other traders said it was very short, drawing attention to the spread between 0.2% and 50ppm French diesel. A scarcity of diesel in the Med had led to all capacity available for desulfurization being utilized, with uncovered demand still in evidence in Greece, Tunisia and Syria with some barrels also needed in Austria via Adriatic ports. In Rotterdam, the 0.1% barge market was once again described as extremely tight with companies saying that there was an irresistible urge to purge oil from tanks as storage finance bit deep in a backwardated market. Morgan Stanley sold a raft of barges to StatoilHydro, AIC and Mercuria with Shell and Hetco also getting in on the selling action.

Gas Oil transactions

Gasoil MOC 0.1% barge deals: Shell-Mercuria, April ICE gasoil plus \$13/mt, 2kt, FOB Antwerp/Rotterdam, March 22/26; Glencore-Mercuria, April ICE gasoil plus \$12/mt, 2kt, FOB Antwerp/Rotterdam, March 22/26; Shell-Mercuria, April ICE gasoil plus \$11/mt, 2kt, FOB Antwerp/Rotterdam, March 22/26; Morgan Stanley-Mercuria, April ICE gasoil plus \$11/mt, 2kt, FOB Antwerp/Rotterdam, March 22/26; Morgan Stanley-AIC LTD, April ICE gasoil plus \$11/mt, FOB Amsterdam/Rotterdam, 3kt, any 5 day in window;

Asia products

\$/bbl

Singapore

	FOB Singapore	Apr	Paper	May
Gasoline 97 unleaded	-116.47 - 116.51-			
Gasoline 95 unleaded	-112.90 - 112.94-			
Gasoline 92 unleaded	-112.19 - 112.23-			
Naphtha	-97.57 - 97.61-	-96.68 - 96.72-		-96.58 - 96.62-
Kerosene	+130.39 - 130.43+	+129.28 - 129.32+		+128.08 - 128.12+
Gasoil 0.05% sulfur	+134.72 - 134.76+			
Gasoil 0.25% sulfur		+133.32 - 133.36+		
Gasoil Reg 0.5% sulfur	+131.62 - 131.66+	+128.69 - 128.73+		+126.04 - 126.08+
MTBE (\$/mt)	1009.00 - 1011.00			
Fuel oil 180 CST 2% (\$/mt)	+523.45 - 523.49+			
HSFO 180 CST (\$/mt)	+511.45 - 511.49+	+512.58 - 512.62+		+514.08 - 514.12+
HSFO 380 CST (\$/mt)	+499.18 - 499.22+			
LSWR Mixed/Cracked *	+92.53 - 92.57+			

* FOB Indonesia

Arab Gulf / Japan

	FOB Arab Gulf	C+F Japan
Gasoline unleaded		-114.78 - 114.82-
Naphtha LR2 (\$/mt)	-869.36 - 870.61-	
Naphtha (\$/mt)	-860.81 - 862.06-	-899.00 - 900.25-
Naphtha 2nd 1/2 Apr (\$/mt)		-900.50 - 901.00-
Naphtha 1st 1/2 May (\$/mt)		-899.75 - 900.25-
Naphtha 2nd 1/2 May (\$/mt)		-899.00 - 899.50-
Kerosene	+127.71 - 127.75+	+132.25 - 132.29+
Gasoil 0.05% sulfur	+132.53 - 132.57+	
Gasoil 0.25% sulfur	+129.88 - 129.92+	
Gasoil	+128.78 - 128.82+	+137.41 - 137.45+
HSFO 180 CST (\$/mt)	+495.21 - 495.25+	+526.62 - 526.66+

* FOB Jebel Ali

US products effective March 13

cts/gal

New York spot CIF cargoes

Unleaded-87 0.3% 13.5 RVP	-254.28 - 255.28-
Unleaded-89 0.3% 13.5 RVP	-263.88 - 264.88-
Unleaded-93 0.3% 13.5 RVP	-278.28 - 279.28-
Jet	+342.73 - 343.73+
Low sulfur jet	+342.48 - 343.48+
ULS Kero	+342.48 - 343.48+
No. 2	+314.98 - 315.48+
Low sulfur No. 2	+328.98 - 329.48+
No. 6 0.3% HP (\$/bbl)	+85.75 - 85.95+
No. 6 0.3% LP (\$/bbl)	+92.65 - 92.85+
No. 6 0.7% (\$/bbl)	+74.75 - 74.95+
No. 6 1.0% (\$/bbl)	+73.25 - 73.45+
No. 6 2.2% (\$/bbl)	+74.25 - 74.45+
No. 6 3.0% (\$/bbl)	+74.25 - 74.45+
No. 6 1.0% paper 1st month (\$/bbl)	+74.05 - 74.15+
No. 6 1.0% paper 2nd month (\$/bbl)	+75.20 - 75.30+
No. 6 1.0% paper next quarter (\$/bbl)	+75.15 - 75.25+

Boston cargoes

Low sulfur jet	+344.48 - 345.48+
ULS Kero	+344.48 - 345.48+
No. 2	+318.48 - 319.48+
Low sulfur No. 2	+332.23 - 332.73+
No. 6 2.2% (\$/bbl)	+74.50 - 74.70+

NY/Boston numbers include duty

Gas Oil transactions (continued)

Morgan Stanley-AIC LTD, April ICE gasoil plus \$9/mt, FOB Amsterdam/Rotterdam, 3kt, any 5 day in window; Hetco-AIC, April ICE plus \$15/mt, 1-3kt, FOB Amsterdam/Rotterdam/Antwerp, March 23-27; Hetco-AIC, April ICE plus \$14/mt, 1-3kt, FOB Amsterdam/Rotterdam/Antwerp, March 23-27; Hetco-StatoilHydro, April ICE gasoil plus \$14/mt, 3kt, FOB ARA, 19-23 March; NSP-StatoilHydro, April ICE gasoil plus \$12/mt, 1-3kt, FOB ARA, 22-26 March; NSP-StatoilHydro, April ICE gasoil plus \$11/mt, 1-3kt, FOB ARA (red dyed option on buyers account) 25-29 March; Morgan Stanley-VDS, April ICE gasoil plus \$11/mt, 19/03-23/03, 2kt, FOB ARA; Morgan Stanley-StatoilHydro, April ICE gasoil plus \$8/mt, 2kt, FOB ARA, (red dyed option on buyers account) 25-29 March; Morgan Stanley-Cargill, April ICE gasoil plus \$13/mt, FOB ARA, 1.1kt, 19-23mch (red dyed option at buyers' cost); Morgan Stanley-StatoilHydro, April ICE gasoil plus \$11/mt, 2kt, FOB ARA, March 19-23

Diesel

"The market is under-supplied and over-demanded," a trader said Friday, as a familiar picture continued to dominate proceedings with steep backwardation, building prompt demand and burgeoning maintenance programs making the market difficult to predict. During the day, front-month ICE gasoil futures stepped over the \$1,000/mt mark briefly, before settling back to end just below. However the gathering strength of crude had eaten into refining margins, sources said, with some seeing complex margins as "extremely negative." Others still saw very mildly positive margins, but Europe's main diesel producing centers remained a long way off their full capacities. "Most of Northwest Europe's diesel-producing refineries are either in turnaround or run cuts," a trader noted. "Yes, the market seems really tight," another source said, echoing the prevailing sentiment of the last several weeks, although on 10ppm, the source succinctly stated: "People are screaming after barrels." The Mediterranean continued to see strength, with the \$30/mt spread between NWE and Med 50ppm facilitating the movement of material from NWE, with sources seeing up to 100,000 mt of Russian product on its way to the region. Strength was seen as persisting in the region into April, as refinery programs suggested a fall in exports as domestic demand picked up. "Russia is the only reliable source of ULSD at the moment," the trader said. The Platts Market on Close assessment process saw trading activity return, with Shell the only buyer. The major bought a barge from Glencore at April plus \$80/mt, and two cargoes, Spanish summer spec,

US products

cts/gal

FOB Gulf Coast

Unleaded 87 7.8 RVP	-258.28 - 258.78-
Unleaded 89 7.8 RVP	-265.48 - 265.98-
Unleaded 93 7.8 RVP	-276.78 - 277.28-
MTBE	292.50 - 293.00
Alkylate *	30.50 - 31.50
Naphtha	-248.28 - 248.78-
Jet 54	+331.23 - 331.98+
Jet 55	+332.23 - 332.98+
ULS Kero	+332.73 - 333.48+

basis Genoa on April 1-5 dates from Vitol at April plus \$72/mt, and 10ppm Shell UK spec, basis Thames for prompt dates from BP at April plus \$96/mt.

Diesel transactions

ULSD MOC barge deals: Glencore-Shell ULSD 10ppm: ara, 22-26, 1-3kt Apr + \$80/mt

ULSD MOC cargo deals: BP-Stasco 10kt+/-10% 10ppm ulsd shell uk spec, cif basis thames 24-28 march delivery, gns/gbs/ara/ecuk/wcuk/scuk/dis options, vessel acceptable to shell/chevtex/exxon, full cargo, stasco gt&c's, April + \$96/mt; Vitol-Stasco 25-30kt full cargo spanish summer spec ulsd 50ppm Cif basis Genoa on dates 1-5 Apr (non-Romanian origin). VssI Shell/Repsol/ENI acceptable. Euromed NEOBIG+other c/p options available. Shell GT&C. Nomination as per Platts, Apr + \$72/mt

Fuel oil

Northwest European and Mediterranean fuel oil levels generally dipped Friday, with high sulfur barge values edging lower to be assessed at \$470.25/mt, according to Platts data. This largely followed a move lower in crude oil futures as the high sulfur crack remained close to historically low levels in excess of minus \$30/barrel. "There is absolutely no way that fuel oil can or will keep up with crude," one trader said. "There isn't the demand at all, not with the level of resupply we are seeing from Russia," the trader added. Even the promise of VLCCs loading in Rotterdam for Singapore did little to improve sentiment or the crack, sources said. During the Platts Market on Close assessment process for high sulfur barges, around 40kt of material changed hand with Total and Gunvor proving to be the big sellers on the day. The weakness of oil in Northwest Europe and relative strength in the Mediterranean was still seeing oil move from North to South. "There is not too much bunker grade oil that I can see in the Mediterranean right now," one

Fuel Oil transactions

Fuel oil high sulfur barge deals: Gunvor-Frisol 2 kt at 469 BE; Gunvor-Frisol 2 kt 468 FE; Total-Frisol 2 kt fe 468; Gunvor-OW 2 kt 469 FE; Total-OW 2 kt 469 FE; Gunvor-Litasco 2 kt 470 BE; Gunvor-OW 2 kt fe 470 fe; Gunvor-OW 2 kt 471 BE; Gunvor-Frisol 2kt 471 be; Total-STR 2 kt 470 FE; Gunvor-STR 2 kt 471 be; Gunvor-Litasco 2 kt 471 be; Total-OW 2 kt fe 470; Gunvor-Litasco 2 kt 471 be; Totsa-Argos 2 kt 470 fe; Total-Wiljo 2 kt 470 FE; Gunvor-Frisol 2 kt be 471; Totsa-Frisol 2 kt 470 FE; Gunvor-Petroned 2 kt 471 be; Total-BP 2 kt 470 FE

No. 2	+312.48 - 313.48+
Low sulfur No. 2	+329.23 - 329.73+
No. 6 1.0% 8°API (\$/bbl)	+67.50 - 67.70+
No. 6 1.0% 6°API (\$/bbl)	+75.00 - 75.20+
No. 6 3.0% (\$/bbl)	+72.50 - 72.70+
No. 6 3.0% paper 1st month (\$/bbl)	+73.45 - 73.55+
No. 6 3.0% paper 2nd month (\$/bbl)	+74.10 - 74.20+
No. 6 3.0% paper next quarter (\$/bbl)	+74.10 - 74.20+

*Premium to US Gulf Coast pipeline gasoline

trader said. "It is no real surprise to see a pretty big bid on prompt dates." Traders said that even at these levels the bid in the Med was not strong enough to bring any extra oil to bear. Lia returned to bidding for HSFO in the Mediterranean in the MOC, bidding to high CIF mean flat and barges plus \$11/mt. "I still think they have to bid more to get done," one trader said.

VGO

VGO: The low sulfur VGO market was still perceived to be weak Friday, though in the absence of active trading the values were difficult to pin down. Sources noted that the spread between low and high sulfur had narrowed to between \$1-\$4/barrel, though many in the market dismissed recent rumors that high sulfur was trading at a stronger number than low sulfur due to its better quality. With the spread being so narrow, traders noted that low sulfur VGO was becoming more competitive in Europe.

VGO transactions

No deals reported.

North Sea crude

Having reached record highs each day this week, Dated Brent/BFOE finally relented Friday, falling back \$0.195/barrel to \$108.895/b, as refining margins began to appear vulnerable and buyers seemed to take a break. The April/May cash BFOE spread fell to \$0.83/b Friday from Thursday's \$1.02/b, as the prompt market was seen to ease. Nevertheless, the gradual decline in refining margins through the week was expected to be short lived with the CFD market marking the May 17-20 period at May plus \$1.25/b, well below the May plus \$2.29/b assessed for Dated Brent/BFOE Friday. Subsequently, with an expectation of a recovery in refining margins, demand was expected to remain firm. "Demand will outstrip supply this month," a trader said. "The only thing that will take the steam out of the market is margins." Meanwhile, the dominance of the middle distillate crack spread in the strength of margins was set to maintain demand concentrated on light sweet grades. "When refineries run at high rates and desulfurization capacity is full - the incremental crude oil barrel must be fairly sweet," a trader said. StatoilHydro showed several cargoes for the third day in a row. The Norwegian major offered the April 8 Gullfaks at Dated Brent plus \$4.75/b and the April 4 and

April 7 Oseberg at \$3.30/b and \$3.40/b respectively to Dated Brent. No trades were reported prior to the close of business. Several market sources said that some Ekofisk cargoes had been shown through the day although no levels nor trades were reported.

LSSR

With refineries shunning crude oil in favor of feedstocks, low sulfur straight run was finding again support Friday. Some saw top-

ping margins as negative whereas others saw them as slightly positive albeit worse than last week. "Topping margins are very negative since three to four days," a trader said. Availability on LSSR was resultedly getting tight both in Northwest Europe and the Mediterranean. "I see the market pretty tight for March and also for April," a source said.

LSSR transactions

No deals reported.

Subscriber notes

DIESEL SUBSCRIBER NOTE: Platts has reflected summer grade of 10ppm UK spec diesel on a pro-rated basis in the Northwest European cargo assessments since February 19. Summer grades had increasing weighting in the assessment up until March 6, and winter grade was taken into account until March 5, since which date only summer spec has been reflected. In addition, since February 20, Platts has reflected intermediate grades of 10ppm German specification diesel in Northwest European cargo assessments. Summer grade will start to be reflected on March 21 and will have increasing weighting in the assessment towards April 5. Intermediate grade will continue to be taken into account until April 4 after which only summer spec will be reflected. Comments please to tim_worledge@platts.com with a CC to simon_thorne@platts.com and methodologyissues@platts.com

DIESEL SUBSCRIBER NOTE: Effective February 27, Platts has reflected 10ppm German intermediate specification in the ARA barge market. 10ppm German summer grade will start to be reflected on March 31 and increase in weighting up until April 10. Intermediate spec will continue to be taken into account until April 9, after which only summer spec will be taken into account. Comments please to tim_worledge@platts.com with a CC to simon_thorne@platts.com and methodologyissues@platts.com

GASOLINE SUBSCRIBER NOTE: Effective March 7, Platts has reflected summer grades of gasoline on a pro-rated basis in the Northwest Europe and Mediterranean cargo assessments, with summer spec having an increasing weighting in the assessment toward March 22. Winter grades will continue to be taken into account until March 21, after which only summer spec will be reflected. Platts proposes, effective March 17, to start reflecting summer grades of gasoline on a pro-rated basis in the ARA barge market, with summer spec having an increasing weighting until March 28. From March 29, summer spec will be fully reflected. For further details regarding the pro-rating system or any comments regarding the proposal please contact andrew_bonnington@platts.com with CC to simon_thorne@platts.com, jorge_montepeque@platts.com and methodologyissues@platts.com

DIESEL SUBSCRIBER NOTE: Effective March 7, Platts has reflected summer French grade 50ppm diesel on a pro-rated basis in the Northwest European and Mediterranean cargo assessments. Summer spec will have an increasing weighting in the assessment towards March 22. Winter grades will continue to be taken into account until March 21, after which only summer spec will be reflected. Comments please to tim_worledge@platts.com with a CC to simon_thorne@platts.com and methodologyissues@platts.com

FUEL OIL SUBSCRIBER NOTE: Effective April 2, 2008 and in line with changing market conditions and industry feedback, Platts will modify the specifications that it reflects in the 1% fuel oil ARA barge market assessments. A maximum specific gravity of 0.998 mg/kg, a maximum water content of 0.5%, a maximum aluminum and silicon content of 120ppm, and a total sediment potential of 0.10 will be reflected. Platts currently normalizes its assessment to 1.005 mg/kg density and 1% water. There are currently no limitations on aluminum and silicon content and total sediment potential. Platts will continue to consider in its assessment process typical 1% market activity normalized to the new specifications. Comments please to andrew_bonnington@platts.com with a CC to simon_thorne@platts.com, jorge_montepeque@platts.com and methodologyissues@platts.com

GASOLINE SUBSCRIBER NOTE: Effective July 1, 2008 and due to changes in the flows of European regular gasoline, Platts proposes to discontinue the regular gasoline barge assessment. The existing 10ppm premium FOB gasoline barge will continue to be assessed. Comments please to andrew_bonnington@platts.com with a CC to simon_thorne@platts.com, jorge_montepeque@platts.com and methodologyissues@platts.com

GASOIL SUBSCRIBER NOTE: Effective January 2, 2009 and following EU regulations severely restricting the consumption of 0.2% sulfur gasoil, Platts proposes to discontinue the 0.2% sulfur gasoil barge assessments, basis ARA and the Northwest European and Mediterranean FOB and CIF cargo assessments. The existing 0.1% sulfur FOB barge assessment and the Northwest European and Mediterranean FOB and CIF cargo assessments will continue to be published. Comments please to jonathen_davies@platts.com with a CC to simon_thorne@platts.com, jorge_montepeque@platts.com and methodologyissues@platts.com

Gas Daily

Monday, March 17, 2008

NYMEX tumbles 36.2 cents, settles below \$10

THE MARKET

Pre-weekend profit-taking sent the April NYMEX gas futures contract tumbling 36.2 cents, or 3.5%, to settle Friday at \$9.868/MMBtu. But cash prices generally moved higher.

The contract started the day at \$10.20 and traded as high as \$10.285 in open outcry before reversing course and sliding as low as \$9.85.

"We've come up a long way" over the past several weeks, IAF Advisors analyst Kyle Cooper said. "I don't care how bullish you are. It's got to pull back once in a while."

(continued on page 2)

Bear Energy denies reports of gas book selloff

Bear Stearns on Friday afternoon denied reports that its Bear Energy trading unit was liquidating all or part of its inventory of natural gas futures contracts and physical gas holdings to raise cash for the troubled investment bank.

Monica Orbe, a spokesman for the New York bank, said reports from traders and investment community sources that Bear Energy was unloading its gas book were not true.

Rumors of the selloff came after Bear Stearns announced a 28-day loan facility with JP Morgan Chase to correct what has been described

(continued on page 6)

INGAA wants FERC to scrap flow-data proposal

The gas pipeline industry is urging the Federal Energy Regulatory Commission to abandon a proposed rule requiring pipelines to post pipeline flow data, rejecting outright FERC's assertion that the data is needed to increase gas market transparency.

The proposed reporting mandate (GD 12/21) could impose on the industry hundreds of millions of dollars in costs for metering and information technology, the Interstate Natural Gas Association of America said in comments to FERC filed Thursday. Also, the pipeline group said, the proposal is impractical and the commission doesn't have the legal

(continued on page 5)

Fayetteville Shale benefit pegged at \$17.9 billion

Gas production from Arkansas' Fayetteville Shale will inject \$17.9 billion into the region's economy over the next five years, according to a study released last week.

The report by the Center for Business and Economic Research in the Sam M. Walton College of Business at the University of Arkansas said the "thriving natural gas industry concentrated in the north-central region of Arkansas" will create more than 11,000 new jobs, \$1.8 billion in state taxes and more than \$150 million in local sales and property taxes through 2012.

(continued on page 4)

Daily price survey (\$/MMBtu)

NATIONAL AVERAGE PRICE: 9.580

Trans. date: 3/14

Flow date(s): 3/15 -17

	Midpoint	Absolute	Common	Volume	Deals
Permian Basin Area					
El Paso, Permian Basin	8.615	8.43-8.90	8.50-8.73	810	134
Waha	8.730	8.60-9.05	8.62-8.84	854	113
Transwestern, Permian Basin	8.570	8.57-8.80	8.57-8.63	5	3

East Texas-North Louisiana Area

Carthage Hub	9.695	9.60-9.79	9.65-9.74	195	29
NGPL, Texok zone	9.570	8.55-9.72	9.28-9.72	1076	154
Texas Eastern, ETX	9.585	9.55-9.60	9.57-9.60	32	9
Texas Gas, zone 1	9.815	9.77-9.94	9.77-9.86	178	38

East-Houston-Katy

Houston Ship Channel	9.505	9.44-9.77	9.44-9.59	1412	157
Katy	9.575	9.44-9.71	9.51-9.64	1223	174

South-Corpus Christi

Agua Dulce Hub	9.605	9.56-9.65	9.58-9.63	203	13
NGPL, STX	9.595	9.56-9.62	9.58-9.61	166	27
Tennessee, zone 0	9.585	9.55-9.65	9.56-9.61	89	22
Texas Eastern, STX	9.570	9.53-9.65	9.54-9.60	151	19
Transco, zone 1	9.620	9.55-9.68	9.59-9.65	81	19

Louisiana-Onshore South

ANR, La.	9.820	9.79-9.94	9.79-9.86	302	66
Columbia Gulf, La.	9.795	9.77-9.86	9.77-9.82	372	55
Columbia Gulf, mainline	9.825	9.79-9.93	9.79-9.86	464	97
Florida Gas, zone 1	9.765	9.68-9.90	9.71-9.82	113	21
Florida Gas, zone 2	9.865	9.83-9.90	9.85-9.88	87	10
Florida Gas, zone 3	9.890	9.87-9.95	9.87-9.91	162	12
Henry Hub	9.845	9.79-10.05	9.79-9.91	972	114
NGPL, La.	9.600	9.60-9.60	9.60-9.60	3	3
Southern Natural, La.	9.820	9.77-9.94	9.78-9.86	564	95
Tennessee, La., 500 Leg	9.795	9.73-9.95	9.74-9.85	906	138
Tennessee, La., 800 Leg	9.755	9.70-9.90	9.71-9.81	375	75
Texas Eastern, WLA	9.725	9.69-9.86	9.69-9.77	128	28
Texas Eastern, ELA	9.800	9.74-9.89	9.76-9.84	211	43
Texas Gas, zone SL	9.825	9.78-9.94	9.79-9.87	89	16
Transco, zone 2	9.830	9.81-9.87	9.82-9.85	147	21
Transco, zone 3	9.890	9.83-9.97	9.86-9.93	601	83
Trunkline, WLA	9.815	9.77-9.90	9.78-9.85	48	11
Trunkline, ELA	9.790	9.75-9.86	9.76-9.82	63	17

Oklahoma

ANR, Okla.	8.630	8.56-8.80	8.57-8.69	162	36
CenterPoint, East	8.495	8.40-8.55	8.46-8.53	100	24
NGPL, Midcontinent	8.570	8.45-8.72	8.50-8.64	853	138
Oneok, Okla.	8.765	8.75-8.77	8.76-8.77	30	6
Panhandle, Tx.-Okla.	8.615	8.52-8.76	8.56-8.68	587	106
Southern Star, Tx.-Okla.-Kan.	8.590	8.55-8.67	8.56-8.62	31	8

New Mexico-San Juan Basin

El Paso, Bondad	8.415	8.27-8.68	8.31-8.52	222	32
El Paso, San Juan Basin	8.440	8.32-8.70	8.35-8.54	653	98

April NYMEX settles beneath \$10 ... from page 1

Mike Fitzpatrick, a broker with MF Global, said the contract posted an "outside day" — a technical term to describe a session in which the contract's high and low exceed that of the previous session — with a lower close. That, he said, could be a significant bearish signal going forward.

Additionally, Fitzpatrick said the contract came relatively close to the 10-day moving average of \$9.758, another potentially bearish indicator.

In the spot market, most Northeast prices gained ground following Thursday's 21.9-cent NYMEX gain. Light market interest was reflected as ranges remained relatively tight across the board and activity fizzled out early in the session.

Transcontinental Gas Pipe Line's zone 6-New York shot up more than a quarter, while Dawn, Ontario, and Tennessee Gas Pipeline's Niagara point climbed about 20 cents each.

Late prices at the Algonquin Gas Transmission city-gates inched close to the \$11 mark, but light volumes transacted at those levels had little effect on the day's midpoint, which came in about 25 cents above Thursday's.

Along the Gulf Coast, "everything started off a dime higher just on the NYMEX," one trader said, even though weather-related demand was generally weak across the Southeast. Most points started the day at their highs and pulled back before rallying late in the morning.

Henry Hub and the Houston Ship Channel gained 10 cents each, while Transco zone 3 added nearly 15 cents. Activity was especially light in Florida as demand waned in Florida Gas Transmission zone 3, where prices climbed more than 10 cents.

CenterPoint issues critical notice to shippers

Despite forecasts for mild weekend weather, Midcontinent prices climbed on the back of Thursday's NYMEX gains, sources said. Natural Gas Pipeline Co. of America's Midcontinent zone rose about 5 cents, while CenterPoint East prices added slightly more than that.

CenterPoint Energy Gas Transmission issued a critical notice to alert shippers that it is performing unscheduled maintenance at its Sterlington station in the south pooling area. While the pipeline does not anticipate any impact to firm services into Perryville Hub, interruptible service could be affected, the company said.

Upper Midwest prices moved higher as unseasonably cold weather moved in for the weekend near the Great Lakes. Michigan Consolidated Gas peaked roughly 30 cents above its Thursday average and gained about 15 cents on the day, while the Chicago city-gates rose about 10 cents.

Western Canadian prices traded up as much as 25 cents as wintry weather moved into Alberta.

"Prices are strong but the NYMEX was falling so things tumbled a bit late," one trader said. "But we're supposed to see snow [Friday] afternoon so I think that's reminding people that winter isn't over yet."

Westcoast Energy station 2 prices ended the session on their highs because the point was not as liquid as others, according to a trader. "It trades in a frenzy — there's about a half-hour of activity and then it's done. But there was a time [Friday] when there were all bids standing out there and no offers, and usually it's the reverse. People were definitely looking for gas."

In contrast, Rocky Mountain markets seem to offer traders few surprises as prices traded within just a few cents of the previous day's levels amid generally seasonal temperatures.

Kern River Gas Transmission at the Opal, Wyoming, plant ended

Daily price survey (\$/MMBtu)

Trans. date:	3/14				
Flow date(s):	3/15 -17				
	Midpoint	Absolute	Common	Volume	Deals
Rockies					
CIG, Rocky Mountains	8.315	8.25-8.40	8.28-8.35	60	15
Kern River, Opal plant	8.315	8.26-8.52	8.26-8.38	799	114
Stanfield, Ore.	9.315	9.28-9.36	9.30-9.34	104	18
Questar, Rocky Mountains	8.160	8.15-8.18	8.15-8.17	2	3
Cheyenne Hub	8.375	8.34-8.49	8.34-8.41	48	13
Northwest, Wyo. Pool	8.290	8.25-8.35	8.27-8.32	86	12
Northwest, s. of Green River	8.345	8.25-8.40	8.31-8.38	41	14

Canadian Gas					
Iroquois, receipts	10.600	10.52-10.70	10.56-10.65	509	58
Niagara	10.575	10.51-10.64	10.54-10.61	226	28
Northwest, Can. bdr. (Sumas)	9.300	9.27-9.37	9.28-9.33	258	42
TCPL Alberta, AECO-C*	C8.535	C8.43-8.58	C8.50-8.57	1296	150
Emerson, Viking GL	8.760	9.70-9.81	9.73-9.79	440	37
Dawn, Ontario	10.455	10.38-10.55	10.41-10.50	1098	113
GTN, Kingsgate	9.225	9.20-9.25	9.21-9.24	223	16
Westcoast, station 2*	C8.465	C8.40-8.54	C8.43-8.50	118	26

Appalachia					
Dominion, North Point	—	—	—	—	—
Dominion, South Point	10.445	10.30-10.65	10.36-10.53	448	77
Ledy Hub	—	—	—	—	—
Columbia Gas, Appalachia	10.480	10.22-10.59	10.39-10.57	941	158

Mississippi-Alabama					
Texas Eastern, M-1 (Kosi)	9.970	9.89-10.09	9.92-10.02	151	34
Transco, zone 4	9.910	9.87-10.05	9.87-9.96	303	32

Others					
Algonquin, receipts	10.600	10.60-10.60	10.60-10.60	25	2
SoCal Gas	8.910	8.72-9.34	8.76-9.07	1123	141
PG&E, South	8.875	8.60-9.07	8.76-8.99	239	32
PG&E, Malin	9.405	9.33-9.48	9.37-9.44	810	107
Alliance, into interstates	10.090	10.01-10.14	10.06-10.12	330	47
ANR, ML 7	10.270	10.20-10.46	10.21-10.34	71	14
NGPL, Amarillo receipt	8.750	8.63-8.80	8.71-8.79	83	14
Northern, Ventura	9.820	9.75-9.88	9.79-9.85	395	55
Northern, demarc	9.165	9.08-9.22	9.13-9.20	402	74
Dracut, Mass.	10.815	10.55-10.95	10.72-10.92	10	6

Citygates					
Chicago city-gates	10.070	9.95-10.15	10.02-10.12	1886	267
Consumers Energy city-gate	10.080	10.05-10.17	10.05-10.11	243	52
Mich Con city-gate	10.190	10.13-10.37	10.13-10.25	630	107
PG&E city-gate	9.880	9.82-9.95	9.85-9.91	1378	198
Florida city-gates	10.190	10.12-10.33	10.14-10.24	102	7
Algonquin, city-gates	10.770	10.65-10.95	10.70-10.85	185	38
Tennessee, zone 6 delivered	10.725	10.65-11.00	10.65-10.81	178	51
Iroquois, zone 2	10.780	10.70-10.85	10.74-10.82	114	20
Texas Eastern, M-3	10.595	10.52-10.77	10.53-10.66	478	96
Transco, zone 5 delivered	10.390	10.30-10.58	10.32-10.46	151	19
Transco, zone 6 non-N.Y.	10.600	10.50-10.80	10.53-10.68	301	54
Transco, zone 6 N.Y.	10.705	10.55-11.00	10.59-10.82	285	68
Kern River, delivered	8.875	8.83-8.90	8.86-8.89	125	18

*NOTE: Price in C\$ per g; C\$1=US\$1.0132
Volume in 000 MMBtu/day

Market coverage

More information about Platts natural gas market coverage, including explanations of methodology and descriptions of delivery points, is available at [www.platts.com/Natural Gas/Resources/Methodology & Specifications/](http://www.platts.com/NaturalGas/Resources/Methodology%20and%20Specifications/).

Questions may also be directed to our market editors: Tom Castleman, (713) 658-3263, tom_castleman@platts.com and Liane Kucher, (202) 383-2147, liane_kucher@platts.com.

the day nearly flat, but there was heavy buyer interest at the point, which could be a result of widening spreads between Opal and key points in the Midcontinent.

In the Southwest, fewer market players subdued trading at the Pacific Gas and Electric city-gate Friday even as prices there climbed more than 15 cents. Spreads to the point from the production basins continued to offer a healthy profit, but "some people may have been pulling out their stops" and shipping gas south to north, one trader said, noting that utility demand for the weekend had dropped significantly.

Prices at El Paso Natural Gas in the San Juan Basin moved in a 40-cent range, with higher-priced deals executed late in the session. The bulk of volume traded about 5 cents below Thursday's average.

Volumes at Southern California Gas were slightly higher than Thursday, and the point hit its intraday highs early, gaining 5 cents overall. — *Market Staff Reports*

Enstar, Anadarko mulling Alaska intrastate pipeline

Enstar Natural Gas officials told Alaska legislators last week that the utility is in talks with Anadarko Petroleum about building a gas pipeline from south-central Alaska to the southern North Slope, where Anadarko is currently drilling gas exploration wells.

Enstar, a unit of Michigan-based Semco Energy, is the gas utility serving south-central Alaska, home to half of the state's population.

Scoping studies indicate that a 660-mile pipeline capable of carrying 500,000 Mcf/d could be built for about \$3.3 billion, Gene DuBay, Semco senior vice president for continental energy systems, told the state Senate Resources Committee in a briefing session late Wednesday.

"We don't have a choice" in securing access to new gas supplies, DuBay testified, because the company is not confident that agreements will come together soon on a 4 Bcf/d mega-pipeline from the North Slope to the Lower-48 states (*GD 1/17*).

In the meantime, south-central Alaskan gas fields are being depleted, with about eight years of reserves remaining, DuBay said. Deliverability from producing wells is already insufficient on the coldest winter days, he added.

The pipeline will be designed so throughput can be expanded to 750,000 Mcf/d, he told the lawmakers, noting that the initial project would take an estimated five years to permit and construct.

Curtis Thayer, Enstar's external affairs manager, said the scoping studies indicated a possible tariff of \$2/Mcf or slightly less for gas delivered from the North Slope to Enstar's pipeline system in the Matanuska Susitna Borough north of Anchorage. But much depends on whether one or more large industrial customers will purchase gas, sharing the cost with gas and electric utilities. — *Tim Bradner*

Report: Canada gas play growing, albeit unevenly

The Montney tight gas trend in the Western Canada Sedimentary Basin is "evolving into a timeless unconventional resource play that continues to improve with age," analysts with Tristone Capital said Friday.

In a note to investors, Tristone said the Montney trend holds a risked unbooked recoverable resource potential of roughly 17.4 Tcf. Current production of roughly 600,000 Mcf/d could reach 1 Bcf/d by 2010, the analysts said, as producers there apply completion technology used in US tight gas reservoirs such as the Barnett Shale and the Deep Bossier.

However, the trend is more than 200 miles long and 175 miles wide, with varying reservoir characteristics and quality. As a result, different plays within the trend can have different production type curves, recoveries and costs per well. "It is dangerous to assume that all Montney is created equal," the analysts said.

Over the next two years in particular, "those companies that have lands over the higher quality, unconventional rock are potentially poised to outperform"

Weekly weighted average prices

	03/01-07 2008	03/08-14 2008	-/+
Permian Basin Area			
El Paso, Permian Basin	8.55	8.99	+44
Waha	8.60	9.08	+48
Transwestern, Permian Basin	8.51	8.94	+43
East Texas-North Louisiana Area			
Carthage Hub	9.16	9.60	+45
NGPL, Texok zone	8.94	9.43	+49
Texas Eastern, ETX	9.10	9.40	+30
Texas Gas, zone 1	9.23	9.72	+50
East-Houston-Katy			
Houston Ship Channel	8.95	9.48	+53
Katy	9.03	9.47	+45
South-Corpus Christi			
Agua Dulce Hub	9.01	9.50	+49
NGPL, STX	8.96	9.48	+51
Tennessee, zone 0	9.08	9.49	+41
Texas Eastern, STX	8.96	9.47	+50
Transco, zone 1	8.96	9.48	+52
Louisiana-Onshore South			
ANR, La.	9.24	9.75	+51
Columbia Gulf, La.	9.19	9.69	+50
Columbia Gulf, mainline	9.17	9.71	+54
Florida Gas, zone 1	9.26	9.69	+43
Florida Gas, zone 2	9.36	9.83	+47
Florida Gas, zone 3	9.37	9.85	+48
Henry Hub	9.23	9.76	+53
NGPL, La.	9.09	9.60	+51
Southern Natural, La.	9.26	9.76	+51
Tennessee, La., 500 Leg	9.19	9.65	+46
Tennessee, La., 800 Leg	9.13	9.64	+51
Texas Eastern, WLA	9.08	9.61	+53
Texas Eastern, ELA	9.19	9.73	+54
Texas Gas, zone SL	9.18	9.75	+57
Transco, zone 2	9.18	9.70	+52
Transco, zone 3	9.28	9.76	+49
Trunkline, WLA	9.17	9.70	+53
Trunkline, ELA	9.19	9.74	+54
Oklahoma			
ANR, Okla.	8.43	8.75	+31
CenterPoint, East	8.30	8.72	+42
NGPL, Midcontinent	8.33	8.77	+44
Oneok, Okla.	8.60	8.69	+9
Panhandle, Tx.-Okla.	8.33	8.78	+46
Southern Star, Tx.-Okla.-Kan.	8.22	8.70	+47
New Mexico-San Juan Basin			
El Paso, Bondad	8.33	8.80	+46
El Paso, San Juan Basin	8.46	8.90	+44
Rockies			
CIG, Rocky Mountains	8.23	8.54	+32
Kern River, Opal plant	8.16	8.68	+53
Stanfield, Ore.	8.69	9.11	+42
Questar, Rocky Mountains	8.38	8.67	+29
Cheyenne Hub	8.31	8.74	+44
Northwest, Wyo. Pool	8.05	8.61	+56
Northwest, s. of Green River	8.02	8.58	+56
Canadian Gas			
Iroquois, receipts	9.99	10.42	+43
Niagara	9.88	10.37	+49
Northwest, Can. bdr. (Sumas)	8.63	9.07	+44
TCPL Alberta, AECO-C*	C7.89	C8.29	C+40
Emerson, Viking GL	9.09	9.54	+46
Dawn, Ontario	9.74	10.17	+43
GTN, Kingsgate	8.62	9.03	+41
Westcoast, station 2*	C7.72	C8.14	C+42
Appalachia			

their competitors, according to the report.

Larger players such as EnCana and Talisman Energy “naturally dominate the land picture,” although other notable players — particularly on the British Columbia side of the fairway — include ARC Energy Trust, Duvernay Oil, Terra Energy, Murphy Oil and Storm Exploration.

The analysts said that they “have a high degree of confidence” in EnCana’s land position, particularly given the Calgary-based producer’s database of well control on the trend.

Producers are expected to drill between 15,000 and 20,000 wells each year in the WCSB for the next several years. Of that, Montney wells should peak at about 380 wells in 2010, up from about 76 wells last year, with the average drilling and completion cost per well averaging C\$3.9 million, according to the report.

Horizontal wells should cost around C\$4.8 million, while vertical wells are estimated at C\$2.4 million at a ratio of 4 horizontal wells for each vertical well.

That outlay, which is roughly 5.5 times what is spent on the average WSCB well, “will provide a needed boost to Canadian service activity,” though benefits to service providers can vary depending on their relative efficiencies, the analysts stressed. “This play alone is not a game changer for the Canadian service market.” — *Melanie Tatum*

Fayetteville Shale to generate billions ... from page 1

“This new industry is providing a much-needed boost to the state’s economy,” said Kathy Deck, the center’s director. “As the Fayetteville Shale project grows, it is generating jobs for individuals, business opportunities and income for new and established businesses in a wide variety of sectors, and tax revenues for local and state governments.”

The \$17.9 billion impact is more than three times the estimated \$5.5 billion the center projected would occur between 2005 and 2008 when it conducted an initial study of the Fayetteville Shale two years ago, when gas development was just getting under way.

Deck said the initial estimate has turned out to be conservative due to the accelerated pace of drilling in the play.

According to the study, Fayetteville Shale operators produced a total 88.8 Bcf of gas in 2007 with a market value of about \$651 million. That activity resulted in \$2.6 billion in total economic impact, including: 9,533 new jobs; nearly \$40 million in state income tax including more than \$11 million in state sales taxes; more than \$7 million in local sales taxes; and more than \$5 million in total property taxes.

“The industry’s increasing impact comes at a time when the state has seen continued declines in the manufacturing sector,” Deck said. “The jobs already created through 2007 from the Fayetteville Shale project are helping to offset some of the continuing employment losses we are seeing otherwise.”

The study’s results were based on a survey administered to more than 80 companies operating in the Fayetteville. The survey included questions about planned expenditures and employment, risk factors and the perceived economic impact of gas production.

Respondents said the two biggest risks to the continued growth of Fayetteville gas production are a decline in the price of gas and an increase in the state’s severance tax to a level that would cause the operating companies to reduce the size or slow the timing of their investments.

According to the survey respondents, an average gas price of \$6.21/MMBtu is necessary for them to make their forecasted investments. A sustained decrease of \$1/MMBtu from that level could cause a 47% drop in investment, while a sustained \$1/MMBtu increase from that price could cause investments to rise an average of 10%.

Fayetteville Shale operators said that if the severance tax were increased to 5%, the industry would respond with a 13% decline in investment in Fayetteville gas

Weekly weighted average prices

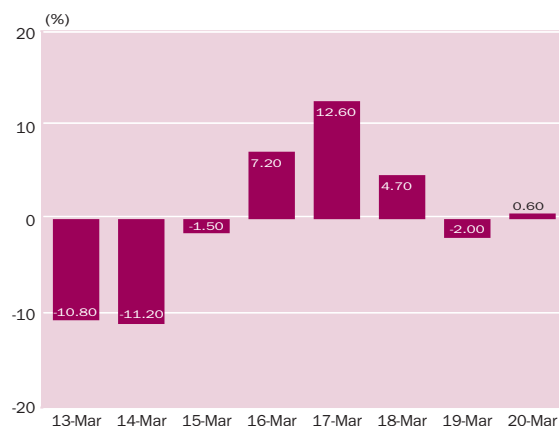
	03/01-07 2008	03/08-14 2008	-/+
Dominion, North Point	9.51	10.14	+63
Dominion, South Point	9.64	10.20	+56
Leidy Hub	9.96	10.55	+60
Columbia Gas, Appalachia	9.70	10.22	+52
Mississippi-Alabama			
Texas Eastern, M-1 (Kosi)	9.39	9.89	+51
Transco, zone 4	9.27	9.82	+55
Others			
Algonquin, receipts	10.20	10.90	+70
SoCal Gas	8.75	9.24	+50
PG&E, South	8.75	9.19	+44
PG&E, Malin	8.82	9.23	+41
Alliance, into interstates	9.53	9.96	+43
ANR, ML 7	9.63	10.06	+43
NGPL, Amarillo receipt	8.41	8.76	+35
Northern, Ventura	9.52	9.72	+20
Northern, demarc	8.91	9.20	+28
Dracut, Mass.	9.97	10.45	+48
Citygates			
Chicago city-gates	9.58	9.94	+36
Consumers Energy city-gate	9.50	10.00	+49
Mich Con city-gate	9.51	10.00	+49
PG&E city-gate	9.25	9.68	+44
Florida city-gates	9.66	10.09	+44
Algonquin, city-gates	10.33	10.94	+61
Tennessee, zone 6 delivered	10.08	10.62	+54
Iroquois, zone 2	10.35	10.84	+49
Texas Eastern, M-3	9.98	10.62	+64
Transco, zone 5 delivered	9.66	10.36	+69
Transco, zone 6 non-N.Y.	9.97	10.56	+59
Transco, zone 6 N.Y.	10.13	10.88	+75
Kern River, delivered	8.88	9.24	+36

*NOTE: Price in C\$ per gj

Holiday Notice

Gas Daily will not publish Friday, March 21, due to the Good Friday holiday. Gas price information collected Thursday, March 20, for the Daily Price Survey to be published in the March 24 Gas Daily will be for gas flowing March 21-24.

Dominion’s U.S. energy use forecast



This section of the Dominion Energy Index represents a national forecast for home heating and cooling requirements above or below normal with the baseline of 0 representing normal for that day based on historical data.

Source: Dominion

development.

Last week, Arkansas Governor Mike Beebe said his office has reached an agreement with gas producers on his proposal to increase the state's severance tax on gas a base rate of 5% of gas-sale proceeds (GD 3/12). —Jim Magill

INGAA criticizes flow-data proposal ... from page 1

authority to expand reporting rules in that way.

"Actual flow reporting is not appropriate because the additional metering will impact system efficiency and impose significant costs with no offsetting benefit to the market or consumers," INGAA asserted.

FERC has said that among its chief goals is to better understand whether wholesale gas prices reflect supply and demand fundamentals. And having the data to more thoroughly analyze gas market conditions is critical for FERC to carry out its oversight role and to inform the public.

But INGAA said actual pipeline flows aren't a good indicator of supply/demand fundamentals because they don't account for past transactions or displacement deliveries.

If FERC adopts a reporting requirement for actual flows, the group said, FERC should specify that: companies would not need to upgrade their facilities; mainline segments are excluded; reporting is aggregate and not for data at pipeline interconnections; and reporting is limited to once a day.

Going further, INGAA said its members shouldn't be obligated to revise reporting figures and there should be no liability for making revisions. In addition, the group said FERC should specify that companies have no obligation to report data "that is subject to confidential agreement."

The proposal would require interstate and certain "major non-interstate" pipelines to post daily capacity, scheduled flow data and actual flow data. FERC

Request for comment on new El Paso, South Mainline, posting

Dear Platts natural gas data providers and all interested parties:

Thank you for participating in Platts natural gas price surveys.

Platts intends to add a new daily pricing location for El Paso Natural Gas, South Mainline, and we are soliciting comments on which transactions to include in the new posting.

Platts believes there currently is sufficient trading liquidity in the daily market to warrant a new posting and it will add a monthly bidweek posting if sufficient liquidity develops. To that end, please report all transactions for this point in both the daily and monthly bidweek markets.

The El Paso, South Mainline, point would include transactions delivered **from** El Paso's south mainline to delivery points between Cornudas Station in West Texas and Ehrenberg, Arizona. Applicable transactions would not include deliveries to SoCal Gas at Ehrenberg.

Before adding the posting and finalizing the description, Platts would like to hear your thoughts and ideas about this market. Specifically, Platts would like to know whether you and/or your organization think transactions to be considered in this posting should include transactions for gas delivered at Ehrenberg but to markets other than SoCal Gas or whether these deals should also be excluded.

Please send email responses by March 31 to gas_survey_comments@platts.com. If you have questions about this notice, please contact Kelley Doolan at 202-383-2145 (Kelley_Doolan@platts.com) or Tom Castleman at 713-658-3263 (Tom_Castleman@platts.com).

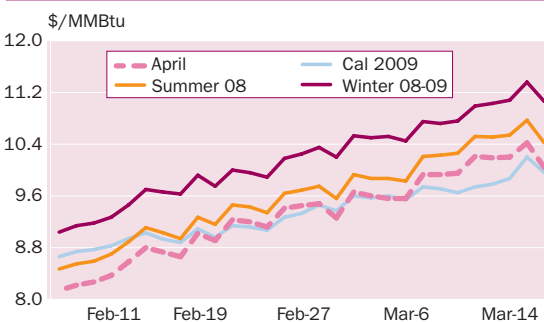
Platts-ICE Forward Curve — Natural Gas, Mar 14 (¢/MMBtu)

Prompt month: Apr08

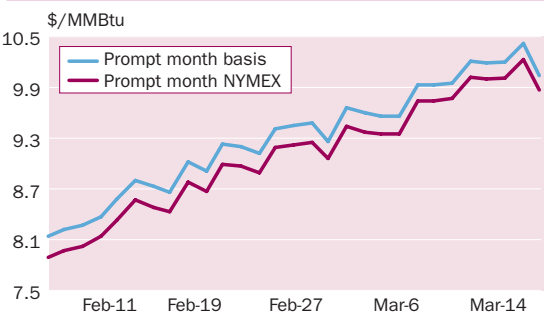
Algonquin city-gate	81.50
Transco Zone 6-NY	80.00
Texas Eastern, M-3	73.25
Columbia Gas, Appalachia	47.00
Transco, zone 3	7.00
Florida, zone 3	17.00
Trunkline, LA	-2.75
Houston Ship Channel	-30.75
Chicago city-gates	-4.25
MichCon city-gate	24.50
Panhandle, Tx.-Okla.	-136.50
Waha	-96.75
El Paso, Permian Basin	-113.50
El Paso, San Juan Basin	-129.00
PG&E city-gate	-24.00
SoCal Gas	-84.50
Northwest Pipe, Rockies	-178.25
Northwest, Sumas	-97.75
Dawn, Ontario	28.00
AECO, Alberta	-113.50

Summer season is April-October. Winter is November-March.

Florida Gas, zone 3: Key packages, last 30 days



Florida Gas, zone 3: Basis market vs NYMEX



Florida Gas, zone 3: Forward curve

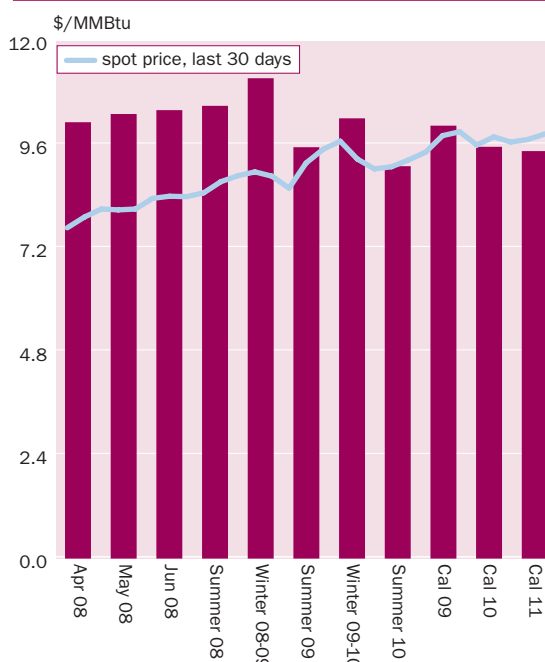


Table and graphs are created using Platts-ICE Forward Curve — Natural Gas (North America) data. Forward assessments as basis to the Henry Hub and full values are available for periods spanning three years. To see a sample and find information on how to subscribe to the full data set go to www.risk.platts.com. For more information on Platts services, please call +1-800-PLATTS8. For editorial questions call Sheetal Nasta +713-658-3203 or Samantha Santa Maria +713-658-3271.

defines a major pipeline as one that transports more than 10 Bcf of gas a year.

The proposal — scaled back from an original plan to require reporting for all intrastate pipelines — continued to raise concerns at the American Gas Association, which represents local distribution companies.

AGA said it supports an exemption for intrastate pipelines that deliver more than 95% of their gas volumes directly to end-users. Those flows don't make a significant contribution to wholesale gas flows or price formation, it explained.

In addition, AGA urged the commission to clarify that major non-interstate pipelines are not required to post daily data for interconnections with interstate pipelines. "Requiring the downstream entity to post the information would be unnecessarily redundant," AGA said.

Gas producers that often oppose pipelines on issues of transparency also warned FERC about the possible domino effect of rising costs associated with increased reporting requirements.

The Natural Gas Supply Association held to its longstanding position about the market: "The reality is that the natural gas commodity market is robust and functioning well."

NGSA called on FERC to streamline the proposal to include only "non-interstate pipelines" that serve 13 major gas hubs. If that doesn't garner enough information to get an adequate view of the market, the group suggested the commission require posting for pipes that flow 50 Bcf/year. "That would capture 90% of the intrastate pipeline volume and apply to only 57 pipelines," it said.

In reference to FERC's proposal, Jenny Fordham, NGSA's director of energy markets and government affairs, said in a release there's a "more practical and efficient way to get that data."

Kinder Morgan said in a filing that the value of the flow data "at best, questionable" and urged FERC to recognize that since so little actual flow data is now available "the commission's proposal will result in significant costs and burdens." Kinder Morgan quoted a \$300 million figure for its system.

The company also said its pipelines would see a decrease in pipeline capacity because of the need to reduce pressure to install equipment. — *Joel Kirkland*

Bear Energy denies reports of selloff ... from page 1

as a severe liquidity impairment. The loan is being secured by the Federal Reserve.

Several players in the North American gas and power markets contacted by Platts on Friday said they were concerned about the liquidity of Bear Energy and were analyzing their exposure to the Houston-based firm. According to one market participant, there is considerable uncertainty over how the parent company's

Natural gas hub flow, Mar 14

Hub Name	Scheduled Flow	+/-	% Change	Daily Price	—31 Day Average— Flow Price
ANR, La.	925	-47	-4.80	9.710	947 9.108
Dracut, Mass.	228	-64	-21.78	10.310	275 10.389
Florida city-gates	1,608	103	6.81	10.080	1,569 9.460
Iroquois, receipts	903	-47	-4.93	10.425	1,073 9.824
Kern River, Opal plant	821	-21	-2.53	8.300	1,231 8.124
Niagara	642	-41	-6.01	10.360	730 9.722
Northern, Ventura	685	1	0.19	9.630	1,035 9.225
Northern, demarc	1,573	49	3.22	9.065	1,636 8.750
Northwest, Can. bdr. (Sumas)	689	-90	-11.59	9.165	706 8.542
PG&E, Malin	1,241	97	8.44	9.255	1,057 8.658
Stanfield, Ore.	90	31	53.61	9.175	150 8.566
Transco, zone 3	1,979	-8	-0.41	9.770	2,198 9.186
Transco, zone 6 N.Y.	1,491	-94	-5.91	10.445	1,704 11.031

Volumes in 000 MMBtu; prices in \$/MMBtu. For more information, contact Bill Murphy at 720-548-5485.

Source: Platts Energy Advantage

NYMEX Henry Hub gas futures contract, Mar 14

	Settlement	High	Low	+/-	Volume
Apr 2008	9.868	10.285	9.850	-36.2	69972
May 2008	9.961	10.300	10.080	-34.5	36348
Jun 2008	10.041	10.365	10.020	-34.3	9399
Jul 2008	10.140	10.465	10.440	-33.5	5021
Aug 2008	10.201	10.590	10.195	-33.5	3181
Sep 2008	10.216	10.560	10.530	-33.0	2888
Oct 2008	10.271	10.590	10.580	-33.0	4969
Nov 2008	10.531	10.840	10.840	-32.5	800
Dec 2008	10.891	11.200	11.200	-32.0	958
Jan 2009	11.101	11.101	11.101	-31.5	3430
Feb 2009	11.061	11.061	11.061	-29.5	171
Mar 2009	10.821	11.070	10.990	-28.0	1441
Apr 2009	9.271	9.271	9.271	-23.0	2608
May 2009	9.101	9.101	9.101	-22.5	667
Jun 2009	9.146	9.146	9.146	-22.5	1310
Jul 2009	9.211	9.550	9.530	-22.0	56
Aug 2009	9.266	9.590	9.590	-21.5	1091
Sep 2009	9.276	9.580	9.580	-21.0	567
Oct 2009	9.356	9.670	9.650	-20.5	1154
Nov 2009	9.591	9.870	9.721	-20.0	152
Dec 2009	9.961	9.961	9.961	-19.0	289
Jan 2010	10.176	10.406	10.406	-19.0	218
Feb 2010	10.166	10.396	10.396	-19.0	328
Mar 2010	9.916	9.916	9.916	-19.0	328
Apr 2010	8.826	8.826	8.826	-17.0	245
May 2010	8.726	8.726	8.726	-17.0	194
Jun 2010	8.776	8.970	8.970	-17.0	136
Jul 2010	8.846	8.846	8.846	-16.5	66
Aug 2010	8.901	8.901	8.901	-16.0	66
Sep 2010	8.911	9.161	9.161	-16.0	128
Oct 2010	8.996	8.996	8.996	-15.5	141
Nov 2010	9.281	9.281	9.281	-14.5	102
Dec 2010	9.656	9.881	9.881	-13.5	109
Jan 2011	9.886	10.061	10.061	-13.5	66
Feb 2011	9.876	10.051	10.031	-13.5	69
Mar 2011	9.631	9.631	9.631	-14.5	274

Contract data for Thursday

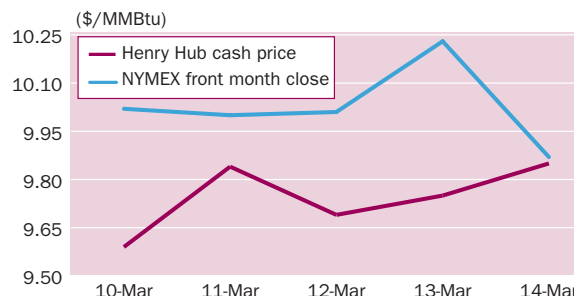
Volume of contracts traded: **150,317**

Front-months open interest:

APR: 93,287 ; MAY: 141,406; JUN: 41,973

Total open interest: 923,346

Henry Hub/NYMEX spread



Platts oil prices, Mar 14

	(\$/b)	(\$/MMBtu)
Gulf Coast spot		
1% Resid	74.70-74.80	11.89
3% Resid	72.20-72.30	11.49
Crude spot		
WTI (Mar)	110.20-110.25	18.92
New York spot		
No.2	135.30-135.51	23.25
0.3% Resid HP	86.85-87.05	13.83
0.3% Resid LP	93.75-93.95	14.93
0.7% Resid	74.75-74.95	11.91
1% Resid HP	72.70-72.90	11.58

financial woes will affect the energy trading unit.

"Apparently Bear Energy has been liquidating all its physical gas (mostly in storage), to raise cash for the firm," a New York source said. "It's been pressuring physical natural gas for over a week and has caused likely weakness in the futures as well."

Sources in the power trading market said they had halted or reduced trading with Bear Energy until its financial future becomes clearer.

One market participant speculated Friday that Bear Energy's counterparties could send letters over the weekend demanding collateral increases on both physical and financial deals after parent company Bear Stearns had its credit ratings cut by Standard & Poor's Ratings Services.

Formed in June 2006, Bear Energy employs 220 people and trades in the gas, electricity, coal, emissions and weather markets.

Concern about Bear Energy began circulating in the energy markets after Bear Stearns President and CEO Alan Schwartz acknowledged Friday morning that the company "has been the subject of a multitude of market rumors regarding our liquidity," adding that "our liquidity position in the last 24 hours had significantly deteriorated."

Schwartz said Bear Stearns had reached an agreement with JP Morgan Chase to provide a secured loan facility "for an initial period of up to 28 days" in order for the investment bank to "strengthen our liquidity and allow us to continue normal operations."

On Friday afternoon S&P lowered its long-term counterparty credit rating on Bear Stearns to BBB from A. At the same time, S&P placed the long- and short-term ratings on CreditWatch with negative implications. S&P, like Platts, is a unit of The McGraw-Hill Companies.

The agreement with the Fed and JP Morgan "is designed to ease Bear's liquidity pressures until it can implement a longer-term funding structure," S&P credit analyst Diane Hinton said.

She added that Bear Stearns had been experiencing "significant stress in the past week," despite the fact that it had \$18 billion in cash. The "anxiety" in the market, she said, "resulted in significant cash outflows toward the week's end, leaving Bear with a significantly deteriorated liquidity position at end of business on Thursday."

Hinton said that while S&P sees the deal with JP Morgan as a "positive," it also considers it a "short-term solution to a longer-term issue that does not entirely affect Bear's confidence crisis."

"We also remain concerned about Bear's ability to generate sustainable revenues in an ongoing volatile market environment," she added.

— Bill Holland, Jeffrey Ryser

Analyst: Speculators helping fuel recent gas price run-up

Fundamentals such as a colder-than-expected winter in the Midwest have helped send the price of natural gas soaring in recent weeks, but another force — speculation by funds — has had considerable influence as well, a financial analyst said last week.

MXEnergy President and CEO Jeffrey Mayer, hosting a monthly teleconference for clients and media, said during introductory remarks that the past few weeks "have been the most exciting that I have seen in my career in the natural gas business." MXEnergy is a retail supplier of gas and electricity based in Stamford, Connecticut.

Mayer, engaging in a question-and-answer session with Michael Haigh, a specialist in commodities and derivatives trading at European investment bank Société Générale and a former associate chief economist for the Commodity Futures Trading Commission, said the \$3/MMBtu-plus climb by the NYMEX gas futures contract this winter "doesn't seem to want to quit."

Haigh replied that that "the big news is that the price of crude is about \$110" per barrel and that the gas market is experiencing a "spillover" effect.

"You're saying fundamentals and speculative investors in the market are influencing the price rise for natural gas?" Mayer asked. Haigh agreed.

"In other words, this is not day trading?" Mayer said.

"That's exactly what I am saying," Haigh affirmed.

Mayer asked Haigh if he sees gas market volatility subsiding. Haigh responded that "when we look at volatility, we look at forward volatility ... so despite the \$10 price range [for gas], it is surprising that volatility is low right now. ... We're looking for upside potential."

He added that the level of volatility in gas "is about at the level of the crude oil volatility."

Mayer speculated that since the last time gas prices underwent a huge run-up — after Hurricanes Katrina and Rita knocked out substantial production in the Gulf of Mexico — the market has been "spoiled by low gas prices in milder winters" and that the lull "may be rapidly slipping into memory."

"I think that is exactly a way to summarize it," Haigh said. — Amy Fickling

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RETAIL REPORT ... a weekly supplement to *Gas Daily*

NARUC loses two key advocates on gas issues

The National Association of Regulatory Utility Commissioners has lost two of its strongest leaders on natural gas-related issues, NARUC President Marsha Smith said last week.

Commissioners Don Mason of Ohio and Dave Harbour of Alaska "contributed mightily not only to the benefit of NARUC but to the ratepayers of their home states of Ohio, Alaska and the country as a whole," Smith said in a statement. "Under their leadership, the gas committee confronted escalating energy prices and educated our members on critical pipeline safety and gas supply issues."

Mason, in particular, "was a heavy hitter for us as he testified before Congress on a number of occasions, most recently at Wednesday's hearing in the House on pipeline safety," said Smith, a member of the Idaho Public Utilities Commission. "Both commissioners will be missed and we wish them well in their new endeavors."

Mason, who was not reappointed to the Ohio Public Utilities Commission, said he believes his greatest accomplishment while serving on NARUC, and at the state level, was his advocacy of the "conservation rate" — a base rate design in which gas utility profits are decoupled from the volume of gas sold.

The early discussions on how to match up customer and company interests "has been a fundamental breakthrough," Mason told Platts. "The whole concept of moving companies from making more money as customers use more gas to holding companies neutral so that they can encourage energy efficiency, weatherization, conservation has had a positive effect. The fact is decoupling has become more than just a fringe tariff or program. It is actually at the forefront of energy deregulation."

Mason, who was appointed to the Ohio commission in 1998, acknowledged that the concept has sometimes been opposed by consumer advocates, who think it shifts risk from the utility to the ratepayer. Mason disagrees.

"Decoupling allows you to realistically set a company's return on equity which is independent of the volumetric throughput," he said. "Moving forward, companies are going to need to have the cash flow to make investments in their infrastructure."

Harbour pressed for access to gas reserves

Harbour, who opted not to seek reappointment to Alaska's regulatory commission, declined to say much about his contributions to NARUC. But that didn't stop his fellow commissioners from listing them in a resolution honoring his service during their winter meetings in February.

A former chairman of the gas committee, the resolution noted, Harbour's first association with the organization occurred in 1976 when, as director of public affairs for the Arctic Gas Consortium, he helped persuade NARUC to adopt a resolution encouraging the development of stranded Arctic gas reserves.

It was not the last time he was heard from on that issue. In 2003, Harbour was appointed to a six-year-term on the Alaska Regulatory Commission and to NARUC. In 2004, he persuaded NARUC's gas and electric committee to support a resolution calling for the development of offshore gas reserves, the resolution noted. Mason joined in that effort.

The following year, Harbour worked with Mason in sponsoring a resolution that called upon state regulators to let local distribution companies enter into long-term gas supply contracts.

He also was instrumental in persuading his colleagues to adopt in 2007 a resolution calling for the development of "reliable research regarding the social, economic and environmental effects of maintaining domestic energy exploration and production moratoria on and beneath federal lands," NARUC said. — *Rodney White*

Ohio regulators order LDCs to take inventory of gas risers

The Ohio Public Utilities Commission on last week ordered all 26 local distribution companies in the state to conduct a full inventory of all natural gas risers in their service territories.

Acting on the recommendations of its staff, the PUC also instructed LDCs to track and monitor all riser leak failures that occur within their service area and report all riser failures to PUC staff semi-annually.

LDCs also were instructed to incorporate riser installation into their company operator qualification requirements and include customer-owned service line failures in their investigation procedures. LDCs that fail to comply with the PUC directives may be subject to fines.

A riser connects a building's outside gas meter to the piping that runs from the building to the LDC's pipelines. While some LDCs have completed the inventory, others have not, the PUC said.

The order did not take up issues related to the ownership and repair of customer-owned service lines or financial issues, including the reimbursement of customers who have undertaken repairs of their own risers or service lines. Those issues can only be addressed on a company-by-company basis, and several LDCs have initiated related cases before the PUC (GD 2/4). — *Rodney White*

Canadian Enerdata gas storage survey, Mar 7

(in Bcf)	East	West	Total
Working gas	69.10	130.50	199.60
Weekly Change	-10.10	-10.20	-20.30
% of capacity	27.55%	32.44%	30.56%
Working Gas	73.20	163.50	236.70
Mar 9, 2007			

The information contained in this report is obtained from sources considered to be reliable. However, the information contained herein cannot be guaranteed with respect to its accuracy or completeness. Canadian Enerdata Ltd. assumes no responsibility for either the direct or indirect use of the information contained herein.

Baker Hughes Rig Count

Week ending	3/14/2008	3/7/2008	Chg.	3/16/2007
Total US rigs	1,792	1,802	-10	1,740
Total US gas rigs	1,441	1,456	-15	1,453
Total Canadian rigs	510	623	-113	409

Platts Podcast



Cuba's supply and demand picture

Leslie Moore Mira speaks with Jorge Pinon, an independent energy consultant, about Cuba's economic fundamentals, the effects on the energy industry of the US-Cuba embargo, and exploration projects in the Gulf of Mexico.

Download this podcast at
www.americaspodcast.platts.com

WEEKLY GAS FORWARDS

Surging NYMEX contract, Bear Stearns fallout scare off some basis players

Western forwards values fell nearly a quarter at some hubs last week as April cash-equivalent values seemed to hit a pain threshold after the April NYMEX gas futures contract raced above \$10/MMBtu and weather forecasts showed a decidedly warmer West vs. a colder East.

The April contract's retreat Friday coaxed basis up again slightly, but not nearly enough for a full recovery.

In addition, trading activity slowed to a standstill Friday afternoon, limiting basis movement as market players were preoccupied by news of Bear Stearns' bailout and the potential implications of the bank's liquidity issues for energy markets (*see story, page 1*).

Northwest Pipeline Rockies and El Paso-San Juan Basin April packages fell about 23 cents over the week.

Initially, more bullish weather forecasts

for the Pacific Northwest supported Northwest's Sumas market, as did reduced capacity from the Rockies as Northwest moved gas northwest from Clay Basin storage to Jackson Prairie storage. Sumas April climbed nearly 8 cents the same week, while AECO, Alberta April fell 5 cents.

West Texas markets followed the West lower, with Waha and El Paso-Permian Basin losing about 15 cents on average. In contrast, Houston Ship Channel April basis fell 5.25 cents, eyeing increased weather-related demand to the East.

Updated midweek weather forecasts calling for a chilly end of the month in the Northeast battled with cash weakness and anxiety over increased counterparty risk with regards to Bear Stearns.

Ultimately, bearish factors held sway even as cash did an about-face Friday to hold slight premiums over April full values

after seeing widening cash discounts for much of last week.

Transcontinental Gas Pipe Line's zone 6-New York April fell 4 cents, while Texas Eastern Transmission's zone M-3 lost 1.75 cents for the week.

Upper Midwest markets were mostly quiet as the \$10 NYMEX scared off several players. "NYMEX keeps going higher and cash relative [to the NYMEX] keeps weakening," a regional trader explained.

The April's contract steep decline Friday lured several players back into the fray as the contract fell below \$10, with April basis trades doing brisk business even after the close of Friday's open-outcry session, ultimately stemming losses somewhat.

Chicago city-gates April fell 2.75 cents, while the Michigan Consolidated city-gates rose a half-cent last week for April.

— Sheetal Nasta, Samantha Santa Maria

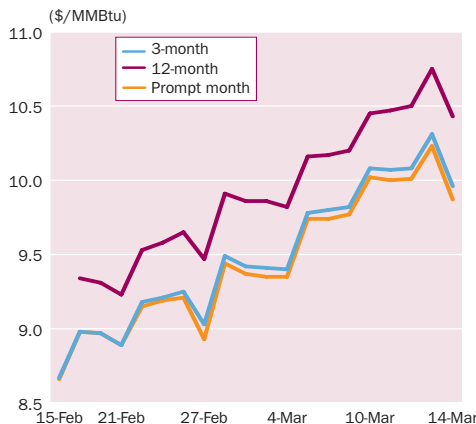
Basis differential

	Henry	El Paso	Agua	Transco	Katy	Kern,	Panhandle	Chicago	Col. Gas	SoCal
	Hub	Permian	Dulce	Zone 3		Opal	Tx.-Ok.	city-gates	Appa.	Gas
Weekly WACOG	9.76	8.99	9.50	9.76	9.47	8.68	8.78	9.94	10.22	9.24
Henry Hub		0.77	0.26	0.00	0.29	1.08	0.98	-0.18	-0.46	0.52
El Paso, Permian	-0.77		-0.51	-0.77	-0.48	0.31	0.21	-0.95	-1.23	-0.25
Agua Dulce	-0.26	0.51		-0.26	0.03	0.82	0.72	-0.44	-0.72	0.26
Transco Zone 3	0.00	0.77	0.26		0.29	1.08	0.98	-0.18	-0.46	0.52
Katy	-0.29	0.48	-0.03	-0.29		0.79	0.69	-0.47	-0.75	0.23
Kern, Opal	-1.08	-0.31	-0.82	-1.08	-0.79		-0.10	-1.26	-1.54	-0.56
Panhandle, Tx.-Ok.	-0.98	-0.21	-0.72	-0.98	-0.69	0.10		-1.16	-1.44	-0.46
Chicago city-gates	0.18	0.95	0.44	0.18	0.47	1.26	1.16		-0.28	0.70
Col. Gas Appa.	0.46	1.23	0.72	0.46	0.75	1.54	1.44	0.28		0.98
SoCal Gas	-0.52	0.25	-0.26	-0.52	-0.23	0.56	0.46	-0.70	-0.98	
NYMEX Basis	-0.108	-0.878	-0.368	-0.108	-0.398	-1.188	-1.088	0.072	0.352	-0.628

NYMEX Basis is the NYMEX Henry Hub/cash basis differential calculated from the near-month settlement of \$9.868.

Henry Hub futures and strips

	03/10	03/11	03/12	03/13	03/14
	Mon	Tue	Wed	Thu	Fri
Apr-08	10.024	10.000	10.011	10.230	9.868
May-08	10.075	10.064	10.078	10.306	9.961
Jun-08	10.136	10.134	10.150	10.384	10.041
Jul-08	10.214	10.222	10.240	10.475	10.140
Aug-08	10.270	10.281	10.301	10.536	10.201
Sep-08	10.268	10.281	10.303	10.546	10.216
Oct-08	10.320	10.334	10.356	10.601	10.271
Nov-08	10.535	10.554	10.596	10.856	10.531
Dec-08	10.840	10.874	10.921	11.211	10.891
Jan-09	11.045	11.084	11.131	11.416	11.101
Feb-09	10.990	11.029	11.076	11.356	11.061
Mar-09	10.710	10.754	10.806	11.101	10.821
3/strip	10.078	10.066	10.080	10.307	9.957
6/strip	10.165	10.164	10.181	10.413	10.071
9/strip	10.298	10.305	10.328	10.572	10.236
12/strip	10.452	10.468	10.497	10.752	10.425



Funds reduce NYMEX positions

Noncommercial traders decreased long and short positions in the NYMEX Henry Hub gas futures contract for the week ending March 11, the Commodity Futures Trading commission said Friday in its Commitments of Traders report.

Noncommercial traders, or funds, were 60.77% short, compared with 60.01% short the week prior. Their overall holdings decreased by 34,833 lots to 344,862 contracts from 379,695 as of March 4. Noncommercial traders were net short by 74,300 contracts, compared with 76,035 contracts short a week earlier. They held 135,281 long positions as of March 11, down from 151,830 a week earlier, while their short positions decreased to 209,581 lots from 227,865 lots as of March 4.

Meanwhile, commercial traders' overall holdings also decreased for the week ending March 11. Commercial traders came in 51.75% long, compared with 51.83% long a week earlier. Commercial traders as of March 11 held 775,398 contracts — 401,233 long and 374,165 short. Those numbers represent a total decrease of 3,748 contracts compared with the week ending March 4, when commercial traders held a total of 779,146 contracts — 403,813 long and 375,333 short.

Commitments of Traders

Rpt. Date	Long	Short	Spreading
11-Mar	135,281	209,581	307,303
4-Mar	151,830	227,865	305,659
26-Feb	137,308	235,952	295,217