Spark Spreads
(Latest Update: March 2012)

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SPARK SPREADS

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Platts Spark Spreads show the daily margin between the cost of input spot fuels and the price fetched by output electricity in 10 major U.S. electricity spot market hubs. Platts Spark Spreads are calculated for the fuels of importance in each market, using composite actual data on thermal efficiencies for generating plants located in that market. Platts calculates one spread for each fuel based on the median generating efficiency (heat rate) for plants fired by that fuel within the hub, using the previous three years of historical data, as compiled by Platts, to calculate the median heat rate. Where warranted by actual historical use to meet peak demand within a hub, a second spread is calculated based on the least efficient quartile of generating plants for a given fuel, which represents the margin below which each market’s most expensive (peaking) capacity operates.

A negative Spark Spread indicates generators should look to purchase power rather than using that fuel for generation, if the fuel is being purchased at current spot trading prices. Generators using fuel obtained under longer-term contracts can also use Platts Spark Spreads as indicators to hedge when the spot market provides more favorable fuel purchase options.

Electricity prices used are those cited for each hub in Platts Energy Trader for next day delivery (on Fridays, for Monday delivery).

Input fuels are priced in their respective spot markets at the nearest delivery term for which trading occurs:

- **Natural Gas**: next day for spot prices on key pipelines feeding the electricity hub, as cited in Platts Gas Daily and Energy Trader. Specifics on each price used for each hub:
  - New England (Mass Hub): Average of Tennessee, zone 6; Algonquin, city-gates and Iroquois, zone 2.
  - Mid-Atlantic (PJM West): Average of Dominion, South Point and Columbia Gas, Appalachia.
  - Southern (Southern, into): Average of Transco, zone 3 and Southern Natural, La.
  - Midwest (Indiana Hub): Average of Lebanon Hub and ANR, ML 7.
  - Chicago (NI Hub): Chicago city-gate.
  - Entergy (Entergy, into): Average of Centerpoint, East and Henry Hub.
  - Houston (ERCOT, Houston): Houston Ship Channel.
  - Northwest (Mid-C): Northwest, Canadian border (Sumas).
  - Northern California (NP15): Average of PG&E, city-gate and PG&E, Malin.
  - Southern California (SP15): SoCal Gas.

- **Oil**: Fuel oil spot cargoes at New York port are used for the East region and fuel oil spot cargoes at Gulf Coast ports for the Central region, from Platts Global Alert.

- **Coal**: next-month delivery in over-the-counter trading in CAPP barge OTC for the New England, Mid-Atlantic, Southern and Midwest hubs, and PRB 8,800 OTC for Entergy, Chicago, Houston, and Northwest hubs, from Platts Coal Trader.

- **Transport adders**: Where it is relevant, the Platts editors have assessed a transport cost to the electricity hub, which is added to the fuel cost for natural gas, oil and coal. Transport costs are regularly reassessed by the respective fuel service editors. Nuclear fuel costs within a hub, averaged over three years like the composite heat rates, are from Platts NuclearFuel for comparative purposes where nuclear provides substantial baseload power in the markets. In all cases except nuclear, each fuel’s cost plus any applicable transport charge are converted to US dollars per MMBtu, multiplied by the composite heat rate to produce a composite fuel cost per megawatt-hour, and subtracted from the day’s spot electricity price to produce the spark spread. Nuclear fuel costs have been obtained on a US dollars/MWh basis and are subtracted directly from the spot electricity price.