ICE Heat Rates

ICE will begin offering new heat rate products on November 16. ICE listed heat rates offer the efficiency of a single market with no legging risk, and save time by automatically calculating gas volume, power and gas leg prices for a fixed amount of power (MWHs). The ICE Heat Rates product will provide Henry Hub ICE lot swaps rounded to the nearest single ICE lot (2500 MMBTU) in relative quantity associated with the heat rate price transacted.

Permissions

The heat rates spread will be a new market type. Access to this market type will be automatically granted to those companies with user IDs that can access both the Henry Hub and financial power market types. This script will run prior to November 16.

Heat Rates Spread Offering

Starting November 16, ICE will list heat rates on PJM WH Real Time and ERCOT North. Heat rates for the remaining ERCOT zones (Houston, West and North) will roll out shortly afterwards.

Heat Rates Spread Product Information

- Heat rate spreads will be offered on monthly, seasonal, quarterly and calendar strips
- The primary market in all heat rates will be power.
- The secondary market in all spreads will be the Henry ICE Lots
- Buying a heat rate means buying the power and selling for the Henry (the reverse would occur when selling a heat rate.)
- Quantities are in increments of 50 MWH on spread.
- The price increment is 0.001.
- Clearing validations will be made against clearing account with limits in both the power and Henry markets.
- A Henry leg may result in split priced fills (50 @ 4.001 and 25 @ 4.000) in order to get proper price precision
- Henry leg quantity may be rounded to more or less than the actual desired quantity in MMBtus due to the nature of the strip (number of cycles).

Heat Rate Spread Example

Based on a purchase of a 50 MWH Cal10 PJM WH RT Heat Rate Spread @ 11.005.

Using a Henry Cal10 anchor price of 6.000.

1. Find a desired Power Cal10 price 66.03 (Henry Anchor * HR price)
2. Round Power Cal10 price to 66.05 (power increment is 0.05)
3. Recalculate the adjusted new Henry price (power price / HR price)
4. The Henry price would be 6.001817356.

5. Calculate a Henry qty for the Cal10 (PJM total qty in MWH * HR price.)
6. Henry qty would result in 2,253,824 MMBtus (204,800 * 11.005)
7. Divide the MMBtus by the increment quantity of 2500 for the product (2,253,824/2500) = 901.5296 total cleared ice lots
8. Based on calendar with 12 months, divide 901.5296/12 to figure out the number of cleared lots divided evenly amongst all months. This would result in 75.12746667 lots per month.
9. Since 75.12746667 cannot be sent to each month, it would be rounded to the nearest increment qty of 75 (total MMBtus of 2,250,000).
10. To get a precise price on the Henry leg, the price form step 4 would be split (6.001817356) into two prices (6.001 and 6.002).
11. The volume of 75 lots per month at both price levels would then be split in order to get as close as possible to to the 6.0018 value.
12. This would result in 61 @ 6.002 and 14 @ 6.001 for an weighted average price of 6.0018133
13. The final confirm would show.

Bought 50 MWH PJM WH RT Cal10 Heat Rate Spread @ 11.005
Bought 50 MWH PJM WH RT Cal10 @ 66.05
Sold 61 Henry ICE Lot Cal10 @ 6.002
Sold 14 Henry ICE Lot Cal10 @ 6.001

*Total Slippage in MMBTUS is 3,824 (under)

The breakdown in clearing for each month of the Cal10 trade is:

	PJM Lots	PJM Price	Henry Lots1	Henry Price1	Henry Lots2	Henry Price2
10-Jan	20	66.05	61	6.002	14	6.001
10-Feb	20	66.05	61	6.002	14	6.001
10-Mar	23	66.05	61	6.002	14	6.001
10-Apr	22	66.05	61	6.002	14	6.001
10-May	20	66.05	61	6.002	14	6.001
10-Jun	22	66.05	61	6.002	14	6.001
10-Jul	21	66.05	61	6.002	14	6.001
10-Aug	22	66.05	61	6.002	14	6.001
10-Sep	21	66.05	61	6.002	14	6.001
10-Oct	21	66.05	61	6.002	14	6.001
10-Nov	21	66.05	61	6.002	14	6.001
10-Dec	23	66.05	61	6.002	14	6.001
Total	256	66.05	732	6.002	168	6.001

The amount of slippage (over or under) on the gas side depends on the number of months in the contract. While the slippage on a "monthly" Heat Rate will never be greater than 1,250 MMBtus <or> half an ICE Lot, the slippage may be greater on a Quarter or Calendar strip.

The reason for the additional slippage in these longer strips is that we cannot split the "over or under" lots evenly among all the contract months in strip.