ARGUS NORTH AMERICAN ELECTRICITY/NATURAL GAS CORRELATION CURVES

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The most up-to-date Argus North American Electricity/Natural Gas Correlation Curves methodology is available on www.argusmedia.com
Introduction

Argus North American Electricity/Natural Gas Correlation Curves deliver daily correlations between Argus’ forward electricity and natural gas prices.

Argus correlations provide an independent view of forward correlations. They are not intended to be “predictive” and do not represent a forecast of how electricity and natural gas markets will correlate in future physical prompt markets.

Curve length

Argus assesses electricity/natural gas correlations for the following terms:

<table>
<thead>
<tr>
<th>Period</th>
<th>Duration (inclusive)</th>
<th>Number of periods assessed</th>
<th>Earliest period assessed</th>
</tr>
</thead>
<tbody>
<tr>
<td>Month</td>
<td>12 months</td>
<td>84</td>
<td>Month after current month</td>
</tr>
<tr>
<td>Calendar year</td>
<td>1 year</td>
<td>6/7</td>
<td>Year after current year</td>
</tr>
<tr>
<td>Quarter</td>
<td>3 months</td>
<td>24</td>
<td>Quarter after current quarter</td>
</tr>
<tr>
<td>Power winter</td>
<td>1 Jan – last day Feb</td>
<td>6</td>
<td>Next season</td>
</tr>
<tr>
<td>Power spring</td>
<td>1 Mar – 30 Apr</td>
<td>6</td>
<td>Next season</td>
</tr>
<tr>
<td>Power summer</td>
<td>1 Jul – 31 Aug</td>
<td>6</td>
<td>Next season</td>
</tr>
</tbody>
</table>

Timing

Correlations are based on electricity and natural gas prices at the close of CME’s Henry Hub futures primary trading sessions, normally 14:30 EST.

Correlation terms

Argus assesses 5, 10, 20, 30 and 50 day correlation terms. A 5-day correlation is based on closing prices for each of the 5 consecutive trading sessions up to and including the day of publication. A 10-day correlation is based on closing prices for each of the 10 consecutive trading sessions up to and including the day of publication, and so on.

Means of calculation

Correlations are calculated according to the following formula:

\[ \text{Correlation} = \rho = \frac{\text{cov}(X, Y)}{\sigma_x \sigma_y} \]

Where:

- \( \text{cov} \) = Covariance
- \( X \) = Electricity Price
- \( Y \) = Natural Gas Price
- \( \sigma \) = Standard Deviation

Units of assessment

Correlations are expressed as correlation coefficients, which range between -100pc and +100pc.

Other

See Argus North American Electricity Forward Curves methodology for the following additional information:

- Information on how Argus assesses the underlying electricity forward curve
- Definitions of on-peak, off-peak, round-the-clock (RTC) and other electricity markets

See Argus North American Natural Gas Forward Curves methodology for the following additional information:

- Information on how Argus assesses the underlying natural gas forward curve

Corrections to assessments

Argus will on occasion publish corrections to price assessments after the publication date. We will correct errors that arise from clerical mistakes, calculation errors, or a misapplication of our stated methodology. Argus will not retroactively assess markets based on new information learned after the assessments are published. We make our best effort to assess markets based on the information we gather during the trading day assessed. If transaction information is submitted in error, and the company submitting informs Argus of the error within 24 hours of the original submission, Argus will make best efforts to correct the price data. After 24 hours, Argus will review both the material effect that the correction will have on the price data and the amount of time that has elapsed from the date of the published price data before deciding whether to issue a correction. After 30 days, data submitters are not expected to file corrections to submitted data.

Ethics and compliance

Argus operates according to the best practices in the publishing field, and maintains thorough compliance procedures throughout the firm. We want to be seen as a preferred provider by our subscribers, who are held to equally high standards, while at the same time maintaining our editorial integrity and independence. Argus has a strict ethics policy that applies to all staff. The policy can be found on our website at www.argusmedia.com. Included in this policy are restrictions against staff trading in any energy commodity or energy related stocks, and guidelines for accepting
gifts. Argus also has strict policies regarding central archiving of email and instant messenger communication, maintenance and archiving of notes, and archiving of spreadsheets and deal lists used in the price assessment process. Argus publishes prices that report and reflect prevailing levels for open-market arms length transactions (please see the Argus Global Compliance Policy for a detailed definition of arms length).

**Updates to methodology**

Argus methodologies are constantly updated and revised. The latest available methodology (which may supersede the one you are reading) is available at [www.argusmedia.com](http://www.argusmedia.com).