

## Data Spec & Automation

(Updated August 29, 2018)

### Notice Regarding Potential October 1, 2018 Change to NGI Datafeeds

While NGI price tables and data feeds have remained materially unchanged over the long history of our company, we are now considering a potential change to the way we present prices in the *Daily GPI*, *Weekly GPI*, *Bidweek Survey*, and *Shale Daily*. In order to offer our customers a greater degree of precision, and to make our prices more directly comparable not only to other alternatives but also to forward curves, NGI plans to begin displaying prices out to the half-cent beginning October 1<sup>st</sup>, 2018. Below is an example of how this would work:

### Current vs. Proposed Decimal Precision

#### Example Location With Four Trades

	Price	Volume
Trade 1	2.02	5
Trade 2	2.02	5
Trade 3	2.07	10
Trade 4	2.07	10
Calculated Weighted Avg	\$ 2.05333	
Published Price Under Current Rounding Scheme (Nearest Cent)	\$ 2.05	
Published Price Under Proposed Rounding Scheme (Nearest Half-Cent)	\$ 2.055	

In the above example, we have a location made up of four trades that result in a volumetric weighted-average price of \$2.05333. Under NGI's current rounding scheme, such a price would be rounded to \$2.05 (rounded to the nearest cent), whereas under the proposed rounding method, the published price would be shown as \$2.055 (rounded to the nearest half-cent).

Under the proposed rounding scheme, all published averages **and high/low ranges** will be shown to half-cent precision. In rounding the high/low ranges, we will continue to round up at the top of the range and down at the bottom of the range.

If you would like to provide feedback regarding this proposed change, please contact Dexter Steis via email at [dexter.steis@naturalgasintel.com](mailto:dexter.steis@naturalgasintel.com) or by phone at (703) 318-8848.

### What Is an NGI Datafeed?

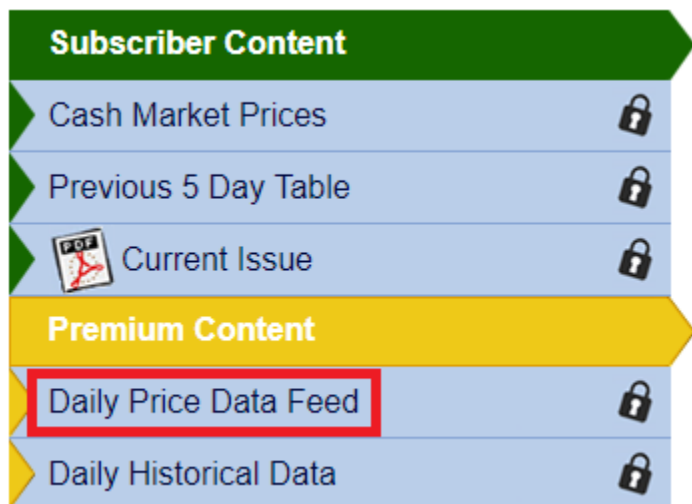
Along with distributing price data via the published newsletter emails and PDFs (*NGI's Daily GPI*, *NGI's Bidweek Survey*, etc.), many NGI datasets are also available in the form of Excel-readable files that can be retrieved easily and automatically via FTP or through an HTTPS call to a tool called the Data Assistant. The current datasets available as an NGI datafeed are as follows:

- NGI's Daily Gas Price Index (Daily series)
- NGI's Weekly Gas Price Index (Weekly series)
- NGI's Bidweek Survey (Bidweek series)

- *NGI's MidDay Price Alert (MidDay series)*
- *NGI's Shale Price Index (Shale series)*
- *NGI's Forward Look (Forward series)*
- *NGI's Mexico Cost+Transport Prices (CostPlus series)*
- *NGI's Mexico SISTRANGAS Summary Flow data (SNGFlows series)*

## Where do Datafeeds reside on the NGI website?

Datafeed files can be viewed / downloaded manually by navigating to the newsletter landing page for the subscription and then scrolling down to the "Subscriber Content" box in the right-rail. Below is an example take from the Daily GPI landing page.



## How do I subscribe to an NGI datafeed?

NGI datafeeds are subscription services that can be added on to your existing newsletter subscription. For more information on how to subscribe to an NGI datafeed series please reach out to [sales@naturalgasintel.com](mailto:sales@naturalgasintel.com).

For specifics on accessing each of NGI's datafeed series please see the below section for that series.

## How do I access an NGI datafeed if I already have a subscription?

There are two ways of downloading/scraping NGI datafeeds:

- 1) *NGI's Data Assistant Tool (Preferred Method)*: Works similarly to an API. Information is provided to the server as GET variables and the requested file is returned.
- 2) *FTP*: FTP is available to certain customers who require it. To learn more about FTP, please reach out to [ngidata@naturalgasintel.com](mailto:ngidata@naturalgasintel.com).

## What Do the Datafeed Files Look Like?

Most of price datafeeds (Daily/Week/Bidweek prices) are distributed in the form of a tab-delimited text file while others take the form of an XLS file or CSV. To see an example of these files for our Daily, Weekly, Bidweek, Shale & MidDay series please navigate to the sample links below:

Example Daily series datafeed file:

<http://www.naturalgasintel.com/ext/resources/Data-Feed/Daily-GPI/2013/10/20131021td.txt>

Example Weekly series datafeed file:

<http://www.naturalgasintel.com/ext/resources/Data-Feed/Weekly-GPI/2013/01/20131021wt.txt>

Example Bidweek series datafeed file:

<http://www.naturalgasintel.com/ext/resources/Data-Feed/Bidweek/2013/10/20131001bw.txt>

Example MidDay series datafeed file:

<http://www.naturalgasintel.com/ext/resources/Data-Feed/Midday/2017/03/20170303md.txt>

Example Shale series datafeed file:

<http://www.naturalgasintel.com/ext/resources/Data-Feed/Shale/2013/01/20131021sd.txt>

Example Forward Look series datafeed file:

<http://www.naturalgasintel.com/ext/resources/Data-Feed/ForwardLook/2018/08/FL20180801.xls>

Example Mexico Cost+Transport prices datafeed file:

<http://www.naturalgasintel.com/ext/resources/Data-Feed/Mexico-GPI/Cost-Plus/2018/08/mxcp20180801.csv>

Example SISTRANGAS Summary Flows datafeed file:

<http://www.naturalgasintel.com/ext/resources/Data-Feed/Mexico-GPI/SNG-Flows/2018/08/sngflow20180801.csv>

## Instructions for opening tab-delimited text files in Excel

Some of the available NGI datafeed files are provided in tab-delimited text format. These include the Daily GPI, Weekly GPI, Bidweek Survey, MidDay Price Alert and Shale Price Indexes. If you are not familiar with opening tab-delimited text files in Excel, please follow the steps provided below:

- 1) Open the file in your browser by navigating to the file URL (see examples above).
- 2) Once the page has loaded you will see the data on the screen in tab-delimited format. Right-click anywhere on the page and choose "Save Page As".
- 3) Once you've saved the page, navigate to where you saved the file on your local drive, right-click the file, and select "Open with Excel". If you the option to "Open with Excel" when you right-click the file, you can instead open Excel first and then use Excel's menus to navigate and open the file from your drive. Once opened, the file should look like what you see below:

	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q
1	PointCode	Issue Date	Trade Date	Region	Pricing Po	Low	High	Average	Volume	Deals	Delivery S	Delivery End Date					
2	STXAGUAI	#####	#####	South Tex	Agua Dulce						#####	#####					
3	STXFGTZ1	#####	#####	South Tex	Florida Ga	3.69	3.7	3.69	38	6	#####	#####					
4	STXNGPL	#####	#####	South Tex	NGPL S. T	3.63	3.66	3.65	270	36	#####	#####					
5	STXTENN	#####	#####	South Tex	Tennessee	3.63	3.65	3.63	265	42	#####	#####					
6	STXTETCO	#####	#####	South Tex	Texas East	3.6	3.64	3.63	72	13	#####	#####					
7	STXST30	#####	#####	South Tex	Transco Zc	3.62	3.65	3.63	58	14	#####	#####					
8	ETXCARTH	#####	#####	East Texas	Carthage	3.64	3.66	3.65	76	18	#####	#####					
9	ETXHSHIP	#####	#####	East Texas	Houston S	3.65	3.69	3.67	137	20	#####	#####					
10	ETXKATY	#####	#####	East Texas	Katy	3.65	3.68	3.66	384	63	#####	#####					
11	ETXNGPL	#####	#####	East Texas	NGPL Tex	3.68	3.74	3.72	867	123	#####	#####					
12	ETXTENN	#####	#####	East Texas	Tennessee	3.62	3.64	3.63	138	21	#####	#####					
13	ETXTETCO	#####	#####	East Texas	Texas East	3.59	3.63	3.61	51	20	#####	#####					
14	ETXST45	#####	#####	East Texas	Transco Zc	3.68	3.69	3.69	32	12	#####	#####					
15	WTXEPPE	#####	#####	West Texas	El Paso Pe	3.52	3.59	3.56	579	99	#####	#####					
16	WTXTM	#####	#####	West Texas	Transco	3.53	3.56	3.54	41	10	#####	#####					

## When Do New Datafeed Files Become Available?

The release of each new datafeed file is dependent on the series to which it belongs. For example, new Daily series datafeed files become available each business day, while Bidweek files are for monthly flow and become available the first business day of each month.

With the exception of holidays, you should expect NGI datafeed series to follow this schedule:

Daily Series: Published each business day by 6:30 PM Eastern Time.

Weekly Series: Published the first business day of each week by 6:30 PM Eastern Time.

Bidweek Series: Published the first business day of each month by 6:30 PM Eastern Time.

Shale Series: Published each business day by 6:30 PM Eastern Time.

MidDay Series: Published each business day by 2:30 PM Eastern Time.

Forward Series: Published each business day by 11:00 AM Eastern Time.

Mexico CostPlus Series: Published each business day by 10:00 AM Eastern Time.

SISTRANGAS Summary Flows Series: Published each business day by 11:00 AM Eastern Time.

To make it easy to keep track of when holidays may impact datafeed file availability NGI provides a publishing calendar with holiday observances which you can find here:

<http://www.naturalgasintel.com/ext/resources/NGI-Calendar.pdf>

## Field Definitions for the Daily, Weekly, Bidweek and MidDay Alert Series

Average: The weighted average price of the trades surveyed.

Deals: A count of the transaction reports included in our survey.

Delivery End Date: The last day the gas is nominated to flow.

Delivery Start Date: The first day the gas is nominated to flow.

High: The highest price of trades included in our survey.

Issue Date: The issue date of the newsletter in which this pricing information appears.

Low: The lowest price of trades included in our survey.

Pointcode: An alpha-numeric code for the delivery location. The delivery location, as it appears in the publication, is specified in the "pricing point" field. The pointcode will not change for a particular location over time whereas the "pricing point" may change as pipelines change ownership or are re-branded (e.g. Arkla became Noram, became Reliant, became CenterPoint, and is now Enable).

Pricing Point: The name of the location as it appears in *NGI's* Daily Gas Price Index. Note that this name may change over time and should not be used as a key field in your application. The Pointcode above does not change and would be more appropriate for a key field.

Region: The region section that the pricing point appears in as published in the corresponding *NGI* PDF publication (ex. *NGI's* Daily Gas Price Index)

Survey End: The last day in which trading occurred for the survey period. For the Weekly GPI, this

will usually be the last business day of the preceding week. For Bidweek Survey, this will be the last day of bidweek trading. This field is only included in series where more than one day of trading is being surveyed, which is why it does not appear in the Daily GPI series.

**Survey Start:** The first day in which trading occurred for the survey period. For the Weekly GPI, this will usually be the first business day of the preceding week. For Bidweek Survey, this will be the first day of bidweek trading. This field is only included in series where more than one day of trading is being surveyed, which is why it does not appear in the Daily GPI series.

**Trade Date:** The trading day on which gas was surveyed.

**Volume:** The sum of the volume of the deals included in our survey, expressed in thousands of MMBtus/day.

## Corrections & Error Resolution

Very rarely a correction will be made to the prices in the Daily, Weekly, Bidweek, or Shale series. These corrections can automatically be applied to your data sets by loading and processing the correction files for each of those series. You can find the correction files at the following URLs:

Daily Series: [naturalgasintel.com/ext/resources/corrections/daily\\_corrections.txt](http://naturalgasintel.com/ext/resources/corrections/daily_corrections.txt)

Weekly Series: [naturalgasintel.com/ext/resources/corrections/weekly\\_corrections.txt](http://naturalgasintel.com/ext/resources/corrections/weekly_corrections.txt)

Bidweek Series: [naturalgasintel.com/ext/resources/corrections/bidweek\\_corrections.txt](http://naturalgasintel.com/ext/resources/corrections/bidweek_corrections.txt)

Shale Series: [naturalgasintel.com/ext/resources/corrections/shale\\_corrections.txt](http://naturalgasintel.com/ext/resources/corrections/shale_corrections.txt)

## Historical Data

Historical data are also available from *NGI*, for some locations dating back as far as 1988. To find out more about receiving access to either this historical data or any of the datafeed series please contact [sales@naturalgasintel.com](mailto:sales@naturalgasintel.com).

## Automating the Datafeed Download Process Using the Data Assistant Tool

*NGI's* Data Assistant allows you to access any datafeed file via a simple call to the following URL:

<https://ngidata.com/data-assistant.php>

To request datafeed files you just set four URL (GET) variables: username, password, subscription, and date.

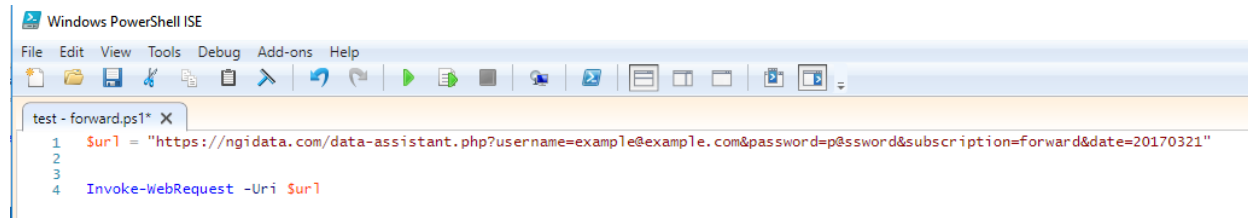
- 1) Username: This will be the email you use to log into [naturalgasintel.com](http://naturalgasintel.com)
- 2) Password: Your [naturalgasintel.com](http://naturalgasintel.com) password
- 3) Subscription: The type of datafeed you are requesting below are the values to set subscription to for each of *NGI's* data series:
  - a. Daily GPI: daily
  - b. Weekly GPI: weekly
  - c. Shale Daily: shale
  - d. Bidweek Survey: bidweek
  - e. MidDay Alert: midday
  - f. Forward Look: forward
  - g. Mexico Cost+Transport Prices: costplus
  - h. SISTRANGAS Flow Data: sngflow

4) Date – The date of the datafeed file you are retrieving in the form YYYYMMDD ex. 20170321

Here is an example call to request a Daily GPI datafeed file for the date of March 21, 2017:

<https://ngidata.com/data-assistant.php?username=example@example.com&password=p@ssword&subscription=daily&date=20170321>

Making a request in PowerShell only requires two lines. See below example requesting Forward Look data from March 21, 2017 (username and password fields must be changed):



```
Windows PowerShell ISE
File Edit View Tools Debug Add-ons Help
test - forward.ps1* X
1 $url = "https://ngidata.com/data-assistant.php?username=example@example.com&password=p@ssword&subscription=forward&date=20170321"
2
3
4 Invoke-WebRequest -Uri $url
```

## FTP Access

NGI limits the use of FTP and access is granted on a case-by-case basis. For more information, please reach out to [ngidata@naturalgasintel.com](mailto:ngidata@naturalgasintel.com).

## Specialized Data Access

If for some reason you require a specialized data access please reach out to [ngidata@naturalgasintel.com](mailto:ngidata@naturalgasintel.com) and we'll do our best to assist you in meeting your requirements.

## Frequently Asked Questions

Below are some common questions we receive regarding the NGI data. If your question isn't here please reach out to [ngidata@naturalgasintel.com](mailto:ngidata@naturalgasintel.com).

### How does NGI define a given location?

*You should be able to find everything you need to know about the 100+ locations for which NGI provides pricing information in our methodologies.*

*For Daily, Weekly and Bidweek:*

<http://www.naturalgasintel.com/ext/resources/Daily-GPI/NGIMethodology.pdf>

*For Shale Daily:*

<http://www.naturalgasintel.com/ext/resources/Shale-Daily/Shale-Methodology.pdf>

### Can I write my own script to scrape NGI datafeed series?

*Yes, you are more than welcome to write your own script to scrape the datafeed series for which you have an active subscription. You are welcome to use the Python script [here](#) or you can write your own using it as a guide.*

### Are delivery start and end dates the same thing as flow dates?

*Yes, the delivery start date is the first day of flow and the delivery end date is the last day of flow.*

### Does NGI count both sides of a deal in the Volume and Deals columns?

*Yes, both sides of a deal are counted. For more information please see our methodologies.*