

## Data Spec & Automation

(Updated September 10, 2019)

### What Is an NGI Datafeed?

Along with distributing 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 request to a tool called the Data Assistant which works similarly to an API. The current datasets available as an *NGI* datafeed are:

- *Bidweek Survey* (Bidweek series)
- *Daily Gas Price Index* (Daily series)
- *Forward Look* (Forward series)
- *LNG Flow Data* (LNGFlows series)
- *Mexico Cost+Transport Prices* (CostPlus series)
- *Mexico SISTRANGAS Summary Flow Data* (SNGFlows series)
- *MidDay Price Alert* (MidDay series)
- *Shale Price Index* (Shale series)
- *Weekly Gas Price Index* (Weekly series)

### What do the Datafeeds Represent?

***Bidweek Survey (Bidweek series):*** Monthly Bidweek pricing composed of transactions completed during the last five business days of each month for gas to be delivered for the entire following month.

***Daily Gas Price Index (Daily series):*** Daily spot market prices for traded for next-day flow.

***Forward Look (Forward series):*** Natural gas forward prices by point with monthly contracts going out 10 years. These prices are provided in both basis- and fixed-price form.

***LNG Flow Data (LNGFlows series):*** Rolling seven-day history of pipeline deliveries of natural gas to each of the major U.S. LNG export facilities broken out by feeder pipeline.

***Mexico Cost+Transport Prices (CostPlus series):*** Estimated prices for gas delivered from the U.S. to locations on the U.S./Mexico border and into Mexico itself. These prices are calculated by taking U.S. *Daily Gas Price Index* prices and adding on the cost of transporting the gas via pipeline to each of the points.

***Mexico SISTRANGAS Summary Flow Data (SNGFlows series):*** Summary pipeline delivery and receipt information grouped by category on Mexico's largest backbone pipeline, SISTRANGAS.

***MidDay Price Alert (MidDay series):*** Preliminary daily spot market prices composed of deals done on exchange. The MidDay Price Alert seeks to provide an early (2:30 PM ET) indication of where Daily Gas Price Index prices will be at the end of the day while also providing price information for ICE-traded locations deemed to illiquid or granular to be included in the Daily Gas Price Index.

***Shale Price Index (Shale series):*** Day-ahead, delivered-to-pipeline spot market prices that aim to represent the price of production for each of the U.S. unconventional plays listed.

**Weekly Gas Price Index (Weekly series):** These prices are simple averages of prices published in the *Daily Gas Price Index* across each day in a given week. For more information on how *NGI* handles weeks that split across two different months, please see our [methodology](#).

## How do I subscribe to an *NGI* datafeed?

*NGI* datafeeds are subscription services that are either included with or can be added on to your existing *NGI* subscriptions. To request access to a new *NGI* datafeed please reach out to [sales@naturalgasintel.com](mailto:sales@naturalgasintel.com).

## How do I access an *NGI* datafeed I'm already subscribed to?

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 Access:** 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?

Some 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 file. To see examples of these files please navigate to the example links below:

Example Daily series datafeed file:

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

Example Weekly series datafeed file:

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

Example Bidweek series datafeed file:

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

Example MidDay series datafeed file:

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

Example Shale series datafeed file:

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

Example Forward Look series datafeed file:

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

Example Mexico CostPlus prices datafeed file:

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

Example SISTRANGAS Summary Flows datafeed file:

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

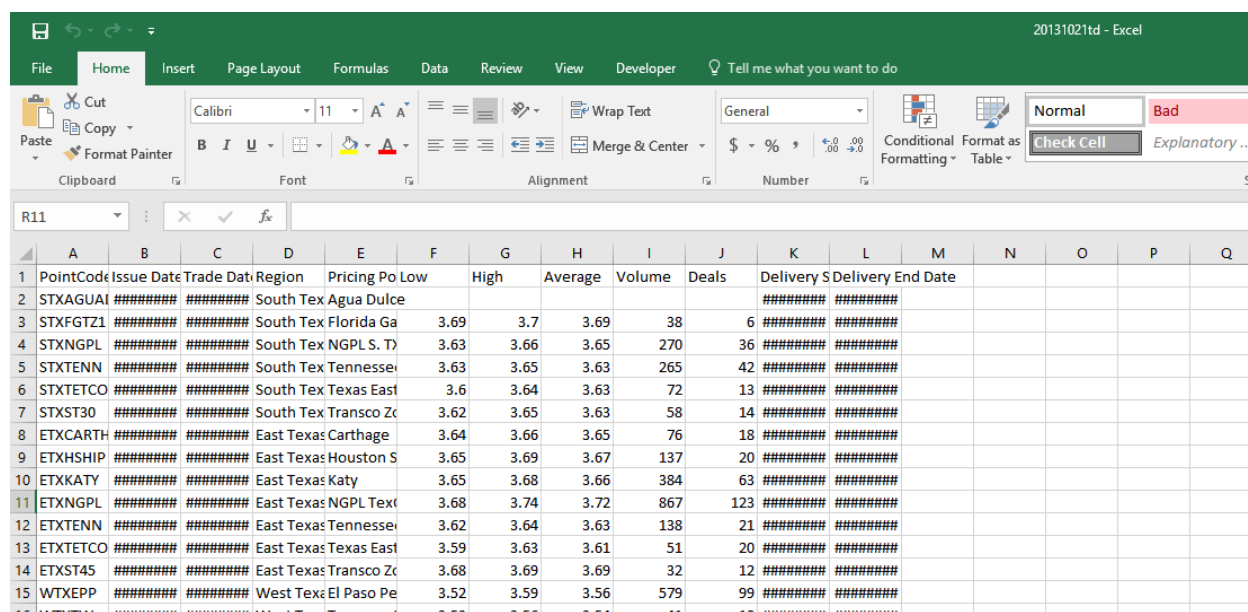
Example LNG Flows datafeed file:

<https://www.naturalgasintel.com/ext/resources/Data-Feed/LNG-Flows/08/Ingflow20190828.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 Daily*. 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:



PointCode	Issue Date	Trade Date	Region	Pricing	Po Low	High	Average	Volume	Deals	Delivery S	Delivery End Date
STXAGUAI	#####	#####	South Tex	Agua Dulce						#####	#####
STXFGTZ1	#####	#####	South Tex	Florida Ga	3.69		3.69	38	6	#####	#####
STXNGPL	#####	#####	South Tex	NGPL S. T)	3.63	3.66	3.65	270	36	#####	#####
STXTENN	#####	#####	South Tex	Tennessee	3.63	3.65	3.63	265	42	#####	#####
STXTETCO	#####	#####	South Tex	Texas East	3.6	3.64	3.63	72	13	#####	#####
STXST30	#####	#####	South Tex	Transco Zc	3.62	3.65	3.63	58	14	#####	#####
ETXCARTH	#####	#####	East Texas	Carthage	3.64	3.66	3.65	76	18	#####	#####
ETXHSHP	#####	#####	East Texas	Houston S	3.65	3.69	3.67	137	20	#####	#####
ETXKATY	#####	#####	East Texas	Katy	3.65	3.68	3.66	384	63	#####	#####
ETXNGPL	#####	#####	East Texas	NGPL Text	3.68	3.74	3.72	867	123	#####	#####
ETXTENN	#####	#####	East Texas	Tennessee	3.62	3.64	3.63	138	21	#####	#####
ETXTETCO	#####	#####	East Texas	Texas East	3.59	3.63	3.61	51	20	#####	#####
ETXST45	#####	#####	East Texas	Transco Zc	3.68	3.69	3.69	32	12	#####	#####
WTXKEPP	#####	#####	West Texas	El Paso Pe	3.52	3.59	3.56	579	99	#####	#####

## 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:

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

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

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

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

**LNGFlows Series:** Published each business day by 12:30 PM Eastern Time.

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

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

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

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

**Holiday Calendar:** 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:

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

## Field Definitions for the Bidweek, Daily, MidDay, Shale & Weekly Series

**Average:** The average price of the trades surveyed.

**Deals:** The number of trades that compose each price. *NGI* counts both the buy and sell side of a deal.

**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 at a location.

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

**Location:** Name of the pricing point. This can fields can change over time whereas its corresponding Pointcode will remain the same.

**Low:** The lowest price of trades at a location.

**Pointcode:** An alpha-numeric code for a location. The pointcode will not change for a particular location over time whereas the name of the location 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.

## Field Definitions for the Mexico CostPlus Series

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

**Location:** Name of the pricing point.

**Exchange Rate:** The Peso/\$U.S. exchange rate used in converting tariff rates on the day the prices were calculated.

**Price:** Estimated price of gas at U.S. border and Mexico locations in \$U.S./MMBtu.

**Price MX:** Estimated price of gas at U.S. border and Mexico locations in MXP/Gj.

## Field Definitions for the Forward Series

The Forward series contains natural gas forward prices by point with monthly contracts going out 10 years into the future. The file is in XLS format with two tabs: Fixed & Basis. Natural gas forwards are generally traded in basis-to-Henry-Hub format and you can find the prices in this form in the Basis tab. To make the prices easier to understand in real dollar terms, we've also converted them to fixed-price format in the Fixed tab by adding each basis price to the corresponding CME Henry Hub futures price.

Each tab is arranged with the list of all published locations in the first column. Columns for each monthly contract then follow in each subsequent column:

	A	B	C	D	E	F	G	H
1	Location	Sep-19	Oct-19	Nov-19	Dec-19	Jan-20	Feb-20	Mar-20
2	Algonquin Citygates	1.845	1.824	3.182	5.905	7.963	7.836	4.899
3	ANR SE	2.139	2.084	2.159	2.340	2.452	2.433	2.353
4	ANR SW	1.742	1.728	1.866	2.182	2.374	2.270	2.066
5	Chicago Citygate	1.987	1.987	2.181	2.609	2.837	2.827	2.448
6	CIG	1.656	1.659	1.890	2.260	2.305	2.194	1.885
7	Columbia Gas	1.885	1.793	1.981	2.195	2.303	2.285	2.204
8	Columbia Gulf Mainline	2.022	1.984	2.100	2.280	2.375	2.360	2.282
9	Columbia Gulf Onshore	2.164	2.135	2.181	2.362	2.484	2.457	2.374
10	Dawn	2.041	1.982	2.210	2.587	2.697	2.701	2.666

**Location:** The name of the forward location.

**Contract Months (ex. Sep-19):** The delivery months for each point going out ten years.

## Field Definitions for the SNGFlows Series

The SISTRANGAS Flows datafeed provides summary pipeline delivery and receipt information grouped by category on Mexico's largest backbone pipeline, SISTRANGAS. This datafeed is broken up into different sections that show deliveries and receipts on the SISTRANGAS pipeline in different ways separated by a blank line between each section. Due to the nature of these data, it is possible that on certain days, NGI will not publish a file due to lack of flow data availability on the SISTRANGAS electronic bulletin board. These data may be best understood by comparing them to their corresponding table (below) that is published each day in NGI's Mexico GPI.

<b>NGI Summary SISTRANGAS NatGas Pipeline Flows 28-Aug-2019</b>					
<b>Deliveries By Sector</b>			<b>Receipts By Sector</b>		
	<b>Sched Qty</b>	<b>Chg</b>		<b>Sched Qty</b>	<b>Chg</b>
Distribution	496,388	-11,209	Import	3,494,608	-58,419
Electric	2,533,890	70,220	National	2,569,853	122,784
Industrial	896,080	-6,992	Other	58,291	0
Petroleum	273,013	4,220	<b>TOTAL</b>	<b>6,122,752</b>	<b>64,365</b>
Other	1,765,355	38,276	<b>Receipts By Type</b>		
<b>TOTAL</b>	<b>5,964,726</b>	<b>94,515</b>		<b>Sched Qty</b>	<b>Chg</b>
<b>Electric Deliveries Breakout</b>			Import Receipts	3,494,608	-58,419
	<b>Sched Qty</b>	<b>Chg</b>	LNG Receipts	740,391	66,433
CFE Points <sup>2</sup>	1,182,269	-8,045	Production Receipts	1,588,432	11,712
Other	1,351,621	78,265	Other Receipts	299,321	44,639
<b>TOTAL ELECTRIC</b>	<b>2,533,890</b>	<b>70,220</b>	<b>TOTAL</b>	<b>6,122,752</b>	<b>64,365</b>
<b>Deliveries By Zone</b>			<b>Receipts By Zone</b>		
	<b>Sched Qty</b>	<b>Chg</b>		<b>Sched Qty</b>	<b>Chg</b>
Zone 1	289,565	7,507	Zone 1	55,971	0
Zone 2	114,752	-2,024	Zone 2	0	0
Zone 3	698,114	-1,243	Zone 3	3,696,363	-58,318
Zone 4	1,373,981	45,295	Zone 4	715,595	66,481
Zone 5	1,478,636	13,600	Zone 5	388,680	36,958
Zone 6	554,817	4,204	Zone 6	123,454	0
Zone 7	309,394	-4,566	Zone 7	211,540	-765
Zone 8	644,213	22,401	Zone 8	872,858	20,009
Zone 9	21,544	0	Zone 9	0	0
Other <sup>1</sup>	479,710	9,341	Other <sup>1</sup>	58,291	0
<b>TOTAL</b>	<b>5,964,726</b>	<b>94,515</b>	<b>TOTAL</b>	<b>6,122,752</b>	<b>64,365</b>

<sup>1</sup> Denotes deliveries & receipts where CENAGAS has no zone designations as yet. <sup>2</sup> Includes those locations with a CFE prefix per SISTRANGAS' list of location codes.  
Source: CENAGAS, NGI's Mexico Gas Price Index calculations

Each section is composed of the following three fields:

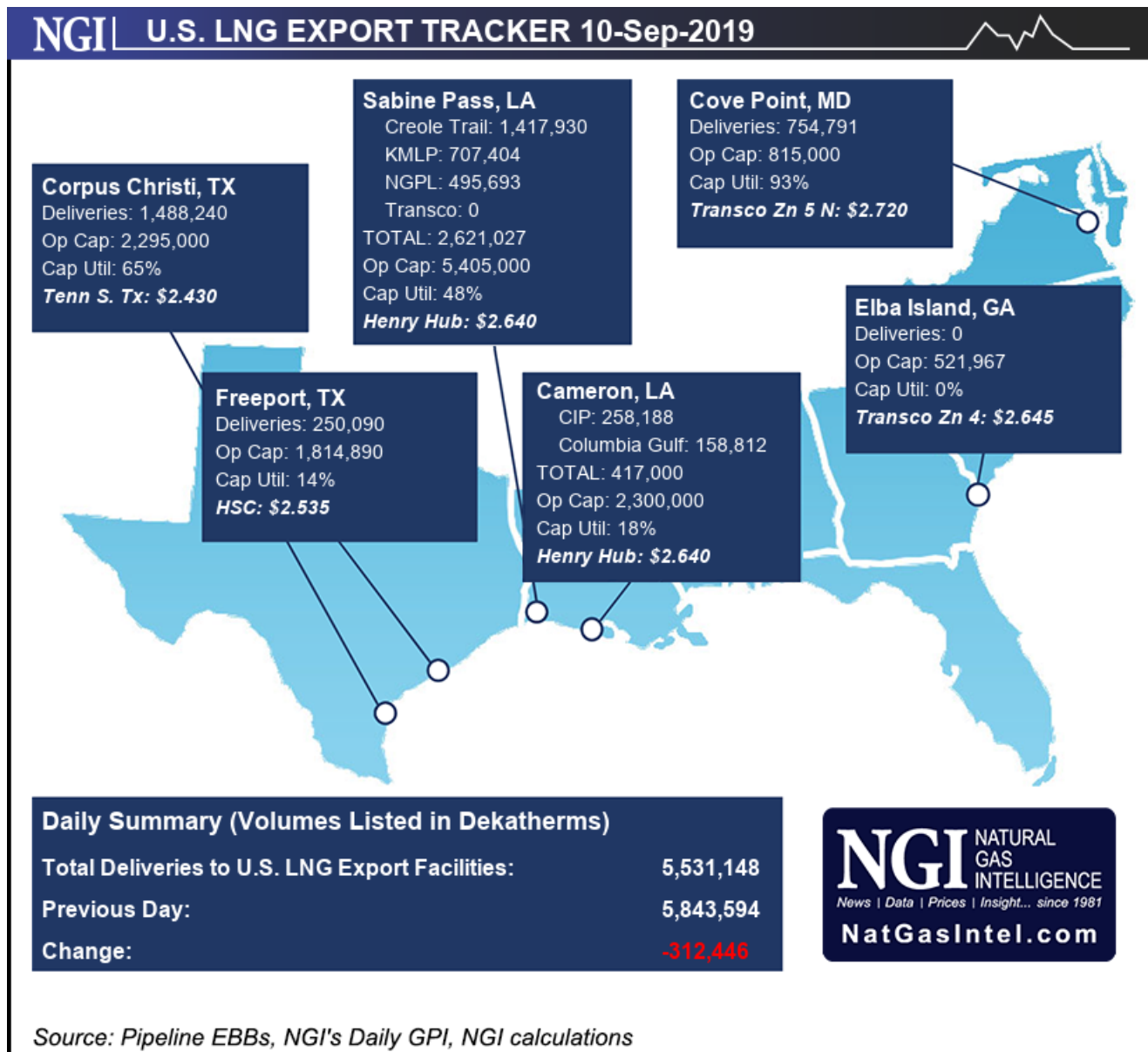
**Issue Date:** The issue date of the newsletter in which this pricing information appears.

**Type:** Subcategory of the breakout.

**Scheduled Qty:** The amount of gas being delivered or received in dekatherms.

## Field Definitions for the LNGFlows Series

The LNG Flows series captures a rolling seven-day history of pipeline deliveries of natural gas to each of the major U.S. LNG export facilities broken out by feeder pipeline. For a visual representation of these data please see our LNG Tracker map (example below).



**Flow Date:** The date on which the gas is flowing on the actual pipeline and being delivered to the LNG facility.

**Pointcode:** A unique identifier for each of the pipeline Locations. While the Location could be renamed over time as pipelines are bought and sold, you can expect the Pointcode to remain the same.

**Location:** The name of the pipeline location. Ex. Sabine Pass Creole represents deliveries via the Creole Trail pipeline into the Sabine Pass LNG export facility.

**Scheduled Quantity:** The amount of gas being delivered in dekatherms.

**Op Cap:** The stated operational capacity of the pipeline location.

## Corrections & Error Resolution

NGI occasionally publishes corrections to our Daily, Weekly, Bidweek, or Shale series. These corrections can be automatically applied to your data sets by loading and processing the correction files for each 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.

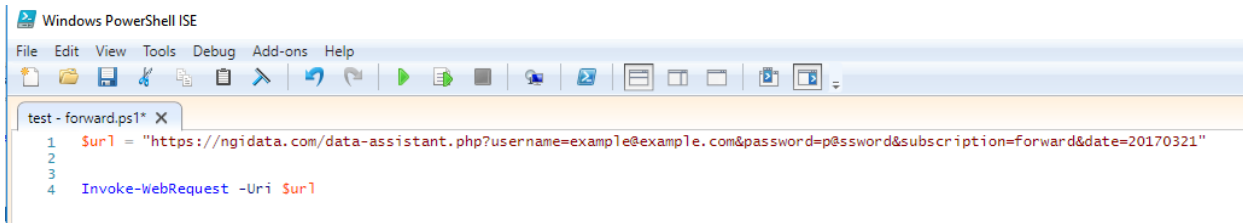
- 1) Username: This will be the email you use to log into naturalgasintel.com
- 2) Password: Your naturalgasintel.com password
- 3) Subscription: The type of datafeed you are requesting below are the values to set subscription to for each of NGI's data series:
  - a. Bidweek Survey: `bidweek`
  - b. CostPlus: `costplus`
  - c. Daily GPI: `daily`
  - d. Forward Look: `forward`
  - e. LNGFlows: `lngflow`
  - f. MidDay Alert: `midday`
  - g. Shale Daily: `shale`
  - h. SNGFlows: `sngflow`
  - i. Weekly GPI: `weekly`
- 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=password&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.

## Where Can I Direct Questions Related to This Document

Please reach out to [ngidata@naturalgasintel.com](mailto:ngidata@naturalgasintel.com) and we'll be glad to help.