

**BEFORE  
THE PUBLIC UTILITIES COMMISSION OF OHIO**

In the Matter of the Application Seeking	)	
Approval of Ohio Power Company's	)	Case No. 14-1693-EL-RDR
Proposal to Enter into an Affiliate Power	)	
Purchase Agreement for Inclusion in the	)	
Power Purchase Agreement Rider	)	
	)	
In the Matter of the Application of Ohio	)	
Power Company for Approval of Certain	)	Case No. 14-1694-EL-AAM
Accounting Authority	)	

---

**DIRECT TESTIMONY OF PAUL LEANZA**

---

On behalf of Interstate Gas Supply, Inc.

1    **I.    INTRODUCTION AND PURPOSE OF TESTIMONY**

2    **Q.    Please introduce yourself.**

3    A.    My name is Paul Leanza. I am employed by Interstate Gas Supply, Inc. ("IGS" or  
4        "IGS Energy") as Gas Supply Director. My business address is 6100 Emerald  
5        Parkway, Dublin, Ohio 43016.

6    **Q.    Please describe your educational background and work history.**

7    A.    I received a BSBA degree from The Ohio State University in 1989 and have  
8        worked exclusively in the energy industry since 1991. My experience includes  
9        positions on both the regulated utility side of the business and non-regulated side  
10       including wholesale, retail, and trading for both natural gas and power. I am well  
11       versed in futures, swaps, and options and currently execute or oversee all  
12       NYMEX future and swap transactions and manage the fixed price position for  
13       Interstate Gas Supply, Inc.. As the Director for the Northeast Desk at Enron  
14       Energy Services I was responsible for purchasing and selling physical supplies  
15       under short and long term contractual arrangements including fixed and floating  
16       pricing for fixed and variable volumes. The position also included the  
17       management of storage contracts and supply peaking arrangements. My  
18       experience also includes power and gas trading at AEP Energy Services where I  
19       traded power in the NYISO region and traded natural gas in the Northeast  
20       region.

21   **Q.    What is the purpose of your testimony?**

1 A. In this proceeding, the Ohio Power Company (“AEP”) is asking AEP ratepayers  
2 to guaranteed cost recovery, plus a rate of return, for approximately 3,100 MW of  
3 AEP Generation Resources (“AEPGR”) coal fired generation.<sup>1</sup> As part of its  
4 application AEP submitted testimony claiming that its proposal will help protect  
5 Ohio ratepayers from increased natural gas prices, and volatility in the natural  
6 gas market, which AEP claims will likely lead to increase cost of electric  
7 generation. In my testimony I explain that AEP’s projections for natural gas prices  
8 are contrary to current market prices and futures contract prices. Further, I  
9 explain, contrary to the statements made by AEP, the current production trends  
10 in the natural gas industry are likely to place a cap on gas prices in the future as  
11 explained further in my testimony. Further these trends are likely to result in less  
12 price volatility in Ohio for the foreseeable future. Thus, the Commission should  
13 not rely on AEP’s predictions with respect to natural gas prices.

14 **II. AEP’S NATURAL GAS PROJECTIONS**

15 **Q. Has AEP made natural gas projections to support its PPA Application?**

16 A. Yes. In Figure 1 of his testimony AEP witness Bletzacker projects Henry Hub  
17 natural gas prices from 2014 through 2030. According to forecasts supplied by  
18 Mr. Bletzacker, AEP projects natural gas prices to be at \$5.47 per mmBtu in  
19 2015, and steadily rise to \$8.52 per mmBTU in 2030.

20 **Q. Why are AEP’s natural gas projections important to its PPA Proposal?**

---

<sup>1</sup> The Coal Plants subject to the PPA Proposal are units at the Cardinal, Conesville, Stuart and Zimmer generation facilities (“PPA Units”).

1 A. AEP's natural gas forecasts are important because, historically, the price of  
2 natural gas is strongly correlated with electric prices. As Mr. Bletzacker notes in  
3 his testimony "natural gas prices will set Ohio's on-peak power prices for the  
4 foreseeable future. Natural gas prices are a key component in determining the  
5 supply stack, or merit order, for the dispatch of generating units." Mr. Bletzacker  
6 further notes that a "\$1 per mmBTU swing in gas prices would result in a \$7 to \$8  
7 per MWh swing in combined cycle natural gas generation costs." Thus, as Mr.  
8 Bletzacker notes there is a strong correlation between the price of natural gas  
9 and the electric revenue AEP ratepayers will be able to realize under the PPA  
10 agreements for AEPGR's coal fired generation.

11 **Q. Is your company familiar with the natural gas markets in Ohio?**

12 A. Yes. IGS has been buying and selling natural gas in Ohio for over 25 years. In  
13 the mid-1980s IGS started out as a natural gas supplier selling to large industrial  
14 customers in Ohio. IGS has since expanded its geographic footprint and now  
15 sells natural gas in multiple states throughout the Midwest and other areas of the  
16 country to residential, commercial and industrial customers. IGS also has  
17 extensive experience buying, selling, transporting, and storing natural gas on  
18 pipelines throughout the Northeast, Midwest, and Gulf regions.

19 **Q. Do you believe Mr. Bletzacker's natural gas forecasts are accurate?**

20 A. No. Henry Hub natural gas futures prices are publicly published by the Chicago  
21 Mercantile Exchange (CME). A futures contract allows a buyer to purchase  
22 natural gas today for delivery at some point in the future. Mr. Bletzacker's

forecasts do not reflect current market prices for natural gas, nor do they reflect the NYMEX futures prices for natural gas. Further, Mr. Bletzacker's forecasts are not supported by natural gas price projections published by the U.S. Energy Information Agency ("EIA").

**Q. How do Mr. Bletzacker's forecasts compare with EIA forecasts?**

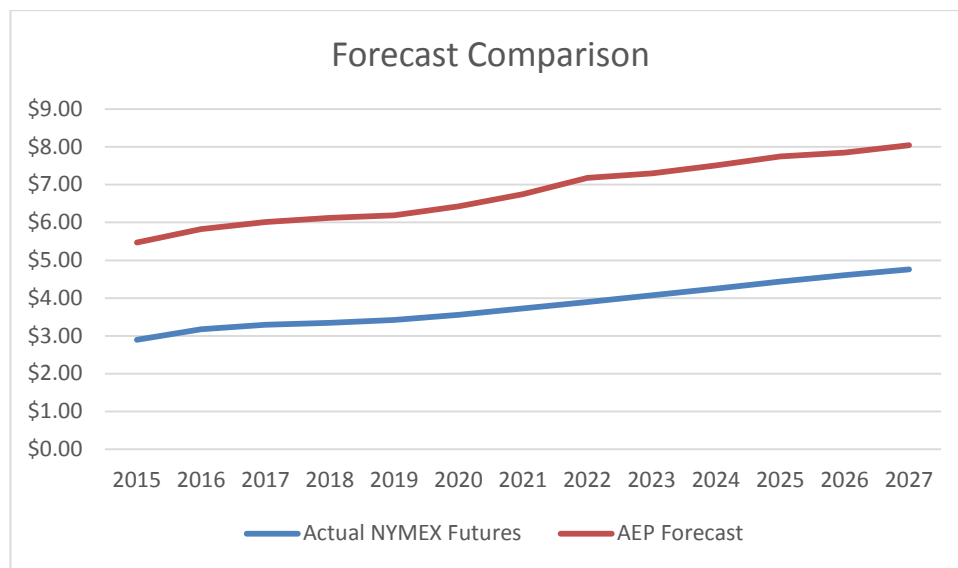
A. Mr. Bletzacker's forecasts are significantly higher than all of the forecasts in the scenarios provided by the EIA in its Annual Energy Outlook 2015, which was released on April 14, 2015. Mr. Bletzacker forecasts natural gas prices to reach \$8.52 cents an mmBTU by 2030. As you can see in the Figure 1 below, the EIA has four price cases for natural gas that go out to 2040. The "Reference Case" or base case which estimates natural gas prices to be \$5.69 in 2030. The highest price scenario or "High Oil Price" case estimates natural gas to be \$7.89 by 2030. The "Low Oil" price scenario predicts \$5.49 by 2030 and the "High Oil and Gas Resource" case presents prices at \$3.67. Thus Bletzacker's forecasts for 2030 exceed even the highest cost scenario of the EIA and is over double the price of gas in the low cost EIA scenario.

	Reference	High Oil Price	Low Oil Price	High Oil and Gas Resource
Projections 2014	4.37	4.31	4.39	4.15
2015	3.69	3.40	3.60	3.14
2016	3.70	3.35	3.85	3.25
2017	3.80	3.63	4.09	3.43
2018	4.21	3.94	4.23	3.24
2019	4.55	4.22	4.30	3.16
2020	4.88	4.61	4.30	3.12
2021	5.02	5.05	4.34	3.24
2022	5.09	5.41	4.38	3.26
2023	5.25	6.02	4.66	3.33
2024	5.35	6.39	4.85	3.35
2025	5.46	6.70	5.01	3.41
2026	5.67	7.06	5.23	3.46
2027	5.67	7.20	5.52	3.55
2028	5.67	7.28	5.58	3.68
2029	5.71	7.59	5.45	3.66
2030	5.69	7.89	5.49	3.67
2031	5.91	8.30	5.56	3.73
2032	6.09	8.51	5.73	3.84
2033	6.27	8.51	5.86	3.94
2034	6.45	8.68	6.01	4.06
2035	6.60	8.81	6.12	4.16
2036	6.76	9.03	6.26	4.21
2037	6.84	9.30	6.38	4.32
2038	7.02	9.79	6.55	4.31
2039	7.38	10.35	7.06	4.35
2040	7.85	10.63	7.15	4.38

A. Mr. Bletzacker predicts a substantially higher price for natural gas than current market prices and the NYMEX futures price. Specifically, Mr. Bletzacker predicts 2015 gas prices of \$5.47 per mmBtu, but a December 2015 NYMEX contract for natural gas can now be purchased for under \$2.95 per mmBTU. Furthermore, if you average all the prompt month NYMEX natural gas settlements from January 1, 2015, to September 4, 2015, you end up with an average settlement of under \$2.80 which is roughly half of Mr. Bletzacker's forecasted price. In 2027 (which

is the farthest year out that natural gas futures prices are published), Mr. Bletzacker projects Henry Hub gas to be trading at \$8.04 cents an mmBTU, yet the average monthly futures price for 2027, settled under \$4.50 on September 10, 2015. Figure 2 below is a graph comparing Mr. Bletzacker's natural gas forecasts with the actual NYMEX futures prices.<sup>2</sup>

**Figure 2**



**Q. Do Mr. Bletzacker's price projections correspond with the EIA long term outlook?**

A. No. Reviewing Mr. Bletzacker's price projections for 2016 through 2019, it's clear that his prices are nowhere near current market conditions or EIA projections. The NYMEX natural gas settlement price averages for 2016, 2017, 2018, &

<sup>2</sup> The December prop month price for each year published by NYMEX was used for the Actual NYMEX Futures data. Source: [http://www.cmegroup.com/trading/energy/natural-gas/natural-gas\\_quotes\\_settlements\\_futures.html](http://www.cmegroup.com/trading/energy/natural-gas/natural-gas_quotes_settlements_futures.html)

1 2019, as of September 10, 2015, were \$2.97, \$3.143, \$3.205, & \$3.265  
2 respectively. The current market indicates that Mr. Bletzacker's CSAPR forecast  
3 is currently off by 100% when compared to current market prices. The  
4 "Reference Case" EIA forecast indicates prices for 2016, 2017, 2018, & 2019, at  
5 \$3.70, \$3.80, \$4.21, & \$4.55 respectfully which again are well under Mr.  
6 Bletzacker's forecasts.<sup>3</sup>

7 **Q. Is there any reason to believe Mr. Bletzacker's projections?**

8 A. No. First, we know for a fact that Mr. Bletzacker's 2015 natural gas market  
9 projections are wrong. In his forecasts, Mr. Bletzacker's 2015 natural gas price is  
10 nearly double of what current spot natural gas is trading at today. Second, there  
11 are long term production trends in the natural gas markets that indicate that we  
12 will not see the high natural gas prices Mr. Bletzacker projects. Specifically with  
13 the development of horizontal drilling technology, there is now an abundance of  
14 natural gas available in the United States. In fact, since 2000, the EIA proven  
15 reserves estimates have increased from approximately 177,000 BCF to 338,000  
16 BCF which is the highest level of proven reserves in U.S history.<sup>4</sup> And much of  
17 the proven, yet untapped, reserves are in the Marcellus and Utica shale which is  
18 located in Ohio and surrounding states. Thus, there is little reason to believe that  
19 Ohio will face a scarcity of natural gas driving up prices as Mr. Bletzacker  
20 predicts.

21 **Q. Are there other reasons to doubt Mr. Bletzacker predictions?**

---

<sup>3</sup> Source: [http://www.eia.gov/forecasts/aeo/executive\\_summary.cfm](http://www.eia.gov/forecasts/aeo/executive_summary.cfm)

<sup>4</sup> Source: [http://www.eia.gov/dnav/ng/hist/rngr11nus\\_1a.htm](http://www.eia.gov/dnav/ng/hist/rngr11nus_1a.htm)



1 A. Yes. Mr. Blezacker's forecast predicts natural gas prices to rise at a rate  
2 significantly higher than the current rate of inflation. Using the current NYMEX  
3 price of \$2.71 per mmBTU, natural gas would have to increase at an average  
4 annual rate of approximately 7.5% to reach Mr. Blezacker's \$8.52 per mmBTU  
5 price in 2030. Currently the rate of inflation is only 1.64%, thus a 7.5% increase  
6 of natural gas prices year-over-year is not a reasonable expectation given the  
7 much lower rate of inflation.<sup>5</sup>

8 **Q. Is there reason to believe that Mr. Bletzacker has also overstated the**  
9 **volatility we are likely to see in the natural gas markets?**

10 A. Yes. In his testimony Mr. Bletzacker states "near-term natural gas prices will  
11 remain volatile as they are primarily affected by weather's deviation from normal  
12 (known as 'heating degree-day departure') which then results in deficit or surplus  
13 levels of natural gas storage in inventory. It is likely, in the event of a colder-than-  
14 normal heating season, that natural gas spot prices could exceed \$8 /mmBTU."  
15 However, last winter Ohio experienced an extreme cold winter yet we did not see  
16 the significant volatility last winter that Mr. Bletzacker predicted.

17 **Q. Can you please explain how the natural gas markets in Ohio reacted last**  
18 **winter?**

19 A. Yes. The winter of 2014-2015 in Ohio was significantly colder than normal with  
20 temperatures similar to what we saw in the 2013-2014 polar vortex winter.<sup>6</sup>

---

<sup>5</sup> Source: <https://www.statbureau.org/en/united-states/inflation>

<sup>6</sup>In Ohio, according to National Oceanic and Atmospheric Administration's ("NOAA") state by state heating degree day ("HDD") record, the winter of the Polar Vortex, defined as October, 2013 through

1 However, the natural gas markets did not react last winter as Mr. Bletzacker  
2 predicted even in the face of extreme cold weather. Mr. Bletzacker testifies that  
3 daily cash prices are likely to exceed \$8 a mmBTU during colder than normal  
4 winters. However, during January and February of 2015, which were the coldest  
5 months of the winter, the prompt month NYMEX traded around \$3 per mmBTU,  
6 and throughout the winter the daily cash midpoint price for Columbia Gas,  
7 Appalachia, as published by Platts Gas Daily, never settled above \$ 4.50 per  
8 mmBTU. Further, the average daily Henry Hub Spot Price , as referenced by the  
9 EIA, during the 2014-2015 winter (November through March) was \$3.25 per  
10 mmBTU.<sup>7</sup> Mr. Bletzacker also predicted that natural gas prices would rise to \$30  
11 per mmBTU during colder than normal winters at certain local trading hubs.  
12 Again, Mr. Bletzacker predictions were incorrect, as the local hub prices did not  
13 reach nearly the \$30 per mmBTU level anywhere in Ohio, even during the  
14 coldest days of the winter.

15 **Q. Is there a reason to believe that the trend towards lower volatility in Ohio**  
16 **natural gas prices is likely to continue?**

17 A. Yes. The amount of natural gas production throughout the United States has  
18 increased substantially even over the last five years. Further, much of that  
19 production has come from the Marcellus shale, which is located in Pennsylvania,  
20 West Virginia, New York and to a lesser extent, Ohio. In fact, as shown in Figure

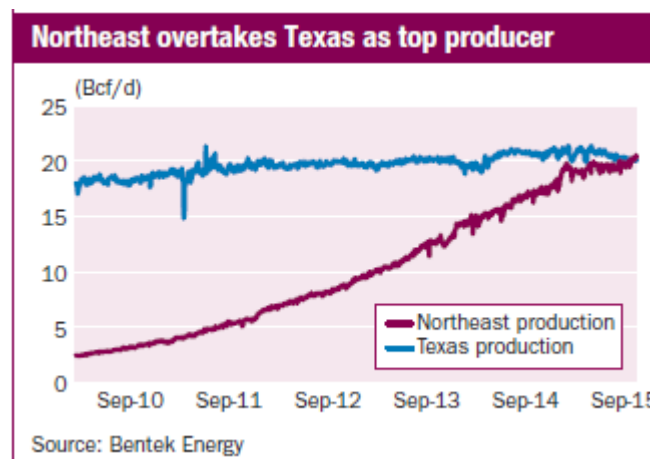
---

April, 2014 was only three tenths of a degree per day colder, than this past winter, defined as October, 2014 through April 2015. Both winters were large deviations from normal. The Polar Vortex winter accumulated 108% of the normal HDD count and this past winter accumulated 107% of the normal HDD count Source: [http://www.cpc.noaa.gov/products/analysis\\_monitoring/cdus/degree\\_days](http://www.cpc.noaa.gov/products/analysis_monitoring/cdus/degree_days)

<sup>7</sup> Source: [http://www.eia.gov/dnav/ng/ng\\_pri\\_fut\\_s1\\_d.htm](http://www.eia.gov/dnav/ng/ng_pri_fut_s1_d.htm)

3, according to a Bentek Energy report published in Platts Gas Daily, the Northeast surpassed Texas as the largest production region in the US by producing 20.37 BCF and is expected to average 21.1 BCF/day through the end of the year.

**Figure 3**



This increased production in and around Ohio has not only led to decreased prices, but it has also led to decreased volatility in natural gas markets given there are more opportunities to deliver gas from diverse range of sources. Thus, volatility in natural gas prices has decreased substantially even over the last few years. Moreover, given the long term trends in natural gas markets, this decreased volatility in natural gas pricing is likely to continue for the foreseeable future. Further, Bentek indicates the Northeast region, on an annual basis, has recently moved from a net importer of natural gas to a net exporter. In fact Bentek projects that the Northeast will be exporting roughly 10 BCF/day out of the Northeast region by 2020.

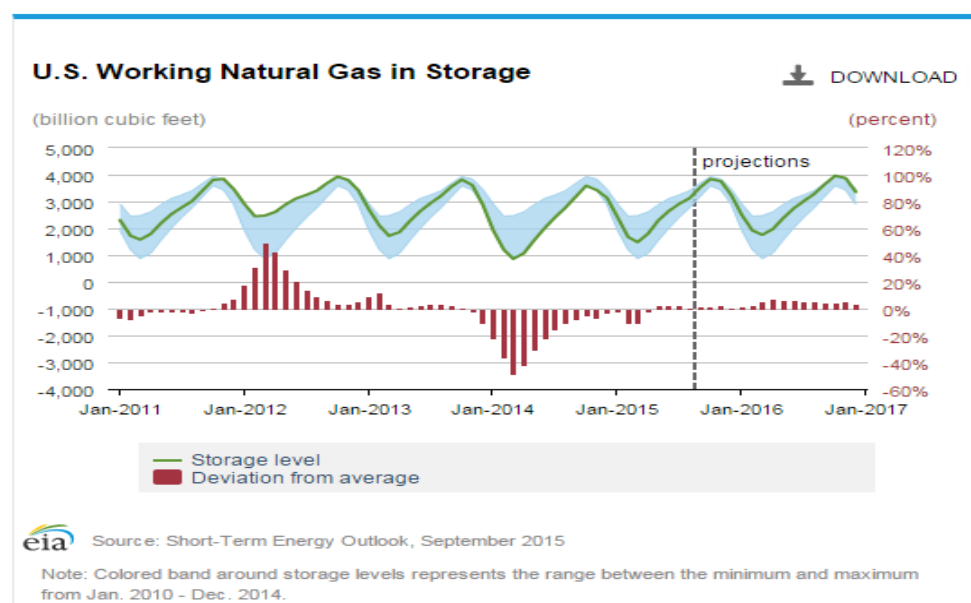
1 Q. Does storage inventory data also indicate lower expected volatility in the  
2 natural gas markets?

3 A. Yes. Natural gas storage plays an important role in price volatility. This year the  
4 natural gas industry is poised to have the largest storage balance in history at  
5 roughly 4 TCF. As you can see from the latest EIA graph below, Figure 4, not  
6 only will the balance this year be a record or extremely close but the US will  
7 struggle to not break another record next year.

8 **Figure 4<sup>8</sup>**

#### Natural Gas Inventories

On August 28, natural gas working inventories totaled 3,193 Bcf, 495 Bcf (18%) above the level at the same time in 2014 and 122 Bcf (4%) above the five-year average for that week. EIA projects end-of-October 2015 inventories will total 3,840 Bcf, which would be 43 Bcf above the five-year average.



9  
10 Q. Was the polar vortex prices indicative of volatility expected in the future?

<sup>8</sup> <http://www.eia.gov/forecasts/steo/report/natgas.cfm>. The Short-term outlook also indicates that natural gas prices will be approximately \$3.20 per mmbtu in 2016

1 A. No. First, it is important to keep the polar vortex in perspective. The polar vortex  
2 was the coldest winter that Ohio had experienced in over thirty years.<sup>9</sup> While  
3 there was increased volatility during that winter the average daily Henry Hub  
4 Spot Price, as referenced by the EIA for the period November 2013 through  
5 March 2014, was still only \$4.68 per mmBTU for the winter.<sup>10</sup> Also, much has  
6 changed in the Ohio gas markets even since the polar vortex. Production in the  
7 Marcellus and Utica shale regions has increased substantially. Additional  
8 pipeline has been also been added which has increased liquidity in the markets  
9 and reduced daily and geographic volatility. Again, we saw this decreased  
10 volatility play out during the 2014-2015 winter which was nearly as cold as the  
11 2013-2014 winter where we experienced the polar vortex.

12 **Q. Has volatility also been reduced at Ohio specific trading hubs?**

13 A. Yes. The Columbia Gas Pool (also known as TCO IPP) is generally considered  
14 the most liquid trading hub for supplies moving into Ohio. Columbia has over a  
15 thousand miles of pipeline in Ohio with hundreds of physical interconnects along  
16 with over 100 BCF of underground storage capacity in Ohio. Depending on  
17 specific plant location, some facilities receive supplies from Dominion  
18 Transmission which has a liquid trading point called the Dominion South Point  
19 pool. As you can see from Figure 5, which shows the daily midpoint cash prices  
20 as defined by Platts Gas Daily, both TCO & Dominion South Point did in fact see

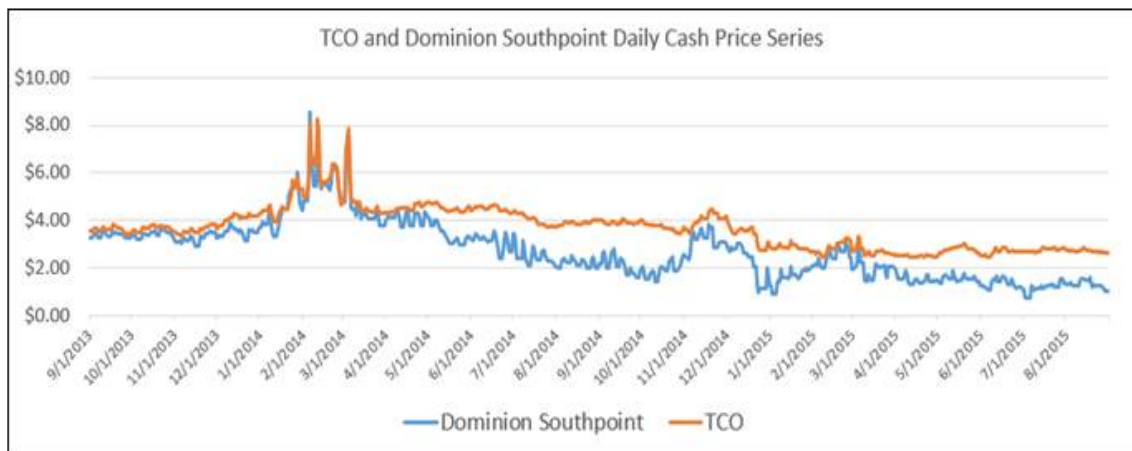
---

<sup>9</sup> In Ohio, according to NOAA's monthly statewide temperature reporting, the winter of the Polar Vortex, defined as October, 2013 through April, 2014 was the coldest winter in the last 30 years, where the temperature for each winter is defined as the average of the monthly average temperatures reported by NOAA in each winter. This past winter in Ohio, as defined as October, 2014 through April 2015 was the third coldest winter in the last thirty years. Source: <http://www.ncdc.noaa.gov/cag/>

<sup>10</sup> Source: Source: [http://www.eia.gov/dnav/ng/ng\\_pri\\_fut\\_s1\\_d.htm](http://www.eia.gov/dnav/ng/ng_pri_fut_s1_d.htm)

1 elevated prices and increased volatility during the polar vortex winter. During the  
2 following winter, however, which was only marginally milder, there was  
3 dramatically reduced volatility and very little price increases especially during the  
4 extreme cold periods of January and February 2015.

5 **Figure 5**



6  
7 **Q. Does this conclude your testimony?**

8 **A. Yes it does.**

The undersigned hereby certifies that a copy of the foregoing *Direct Testimony of Paul Leanza* was served this 11th day of September 2015 via electronic mail upon the following:

[Thomas.mcnamee@puc.state.oh.us](mailto:Thomas.mcnamee@puc.state.oh.us)  
[Katie.johnson@puc.state.oh.us](mailto:Katie.johnson@puc.state.oh.us)  
[haydenm@firstenergycorp.com](mailto:haydenm@firstenergycorp.com)  
[jmcdermott@firstenergycorp.com](mailto:jmcdermott@firstenergycorp.com)  
[scasto@firstenergycorp.com](mailto:scasto@firstenergycorp.com)  
[jang@calfee.com](mailto:jang@calfee.com)  
[tallexander@calfee.com](mailto:tallexander@calfee.com)  
[myurick@taftlaw.com](mailto:myurick@taftlaw.com)  
[callwein@wamenergylaw.com](mailto:callwein@wamenergylaw.com)  
[tony.mendoza@sierraclub.org](mailto:tony.mendoza@sierraclub.org)  
[todonnell@dickinsonwright.com](mailto:todonnell@dickinsonwright.com)  
[tdougherty@theOEC.org](mailto:tdougherty@theOEC.org)  
[toddm@wamenergylaw.com](mailto:toddm@wamenergylaw.com)  
[jeffrey.mayes@monitoringanalytics.com](mailto:jeffrey.mayes@monitoringanalytics.com)  
[ricks@ohanet.org](mailto:ricks@ohanet.org)  
[tobrien@bricker.com](mailto:tobrien@bricker.com)  
[mhpetricoff@vorys.com](mailto:mhpetricoff@vorys.com)  
[mjsettineri@vorys.com](mailto:mjsettineri@vorys.com)  
[glpetrucci@vorys.com](mailto:glpetrucci@vorys.com)  
[mdortch@kravitzllc.com](mailto:mdortch@kravitzllc.com)  
[joliker@igsenergyw.com](mailto:joliker@igsenergyw.com)  
[mswhite@igsenergy.com](mailto:mswhite@igsenergy.com)

[stnourse@aep.com](mailto:stnourse@aep.com)  
[mjsatterwhite@aep.com](mailto:mjsatterwhite@aep.com)  
[msmckenzie@aep.com](mailto:msmckenzie@aep.com)  
[mkurtz@BKLawfirm.com](mailto:mkurtz@BKLawfirm.com)  
[kboehm@BKLawfirm.com](mailto:kboehm@BKLawfirm.com)  
[jkylercohn@BKLawfirm.com](mailto:jkylercohn@BKLawfirm.com)  
[sam@mwncmh.com](mailto:sam@mwncmh.com)  
[fdarr@mwncmh.com](mailto:fdarr@mwncmh.com)  
[mpritchard@mwncmh.com](mailto:mpritchard@mwncmh.com)  
[Kurt.Helfrich@ThompsonHine.com](mailto:Kurt.Helfrich@ThompsonHine.com)  
[Scott.Campbell@ThompsonHine.com](mailto:Scott.Campbell@ThompsonHine.com)  
[Stephanie.Chmiel@ThompsonHine.com](mailto:Stephanie.Chmiel@ThompsonHine.com)  
[lhawrot@spilmanlaw.com](mailto:lhawrot@spilmanlaw.com)  
[dwilliamson@spilmanlaw.com](mailto:dwilliamson@spilmanlaw.com)  
[Stephen.Chriess@walmart.com](mailto:Stephen.Chriess@walmart.com)  
[Schmidt@sppgrp.com](mailto:Schmidt@sppgrp.com)  
[jfinnigan@edf.org](mailto:jfinnigan@edf.org)  
[Bojko@carpenterlipps.com](mailto:Bojko@carpenterlipps.com)  
[mfleisher@elpc.org](mailto:mfleisher@elpc.org)  
[msmalz@ohiopoveritylaw.org](mailto:msmalz@ohiopoveritylaw.org)  
[cmooney@ohiopartners.org](mailto:cmooney@ohiopartners.org)  
[joseph.clark@directenergy.com](mailto:joseph.clark@directenergy.com)  
[ghull@eckertseamans.com](mailto:ghull@eckertseamans.com)

Joseph E. Olikier

Counsel for IGS Energy

**This foregoing document was electronically filed with the Public Utilities**

**Commission of Ohio Docketing Information System on**

**9/11/2015 5:22:30 PM**

**in**

**Case No(s). 14-1693-EL-RDR, 14-1694-EL-AAM**

Summary: Testimony Paul Leanza electronically filed by Mr. Joseph E. Olikar on behalf of IGS Energy