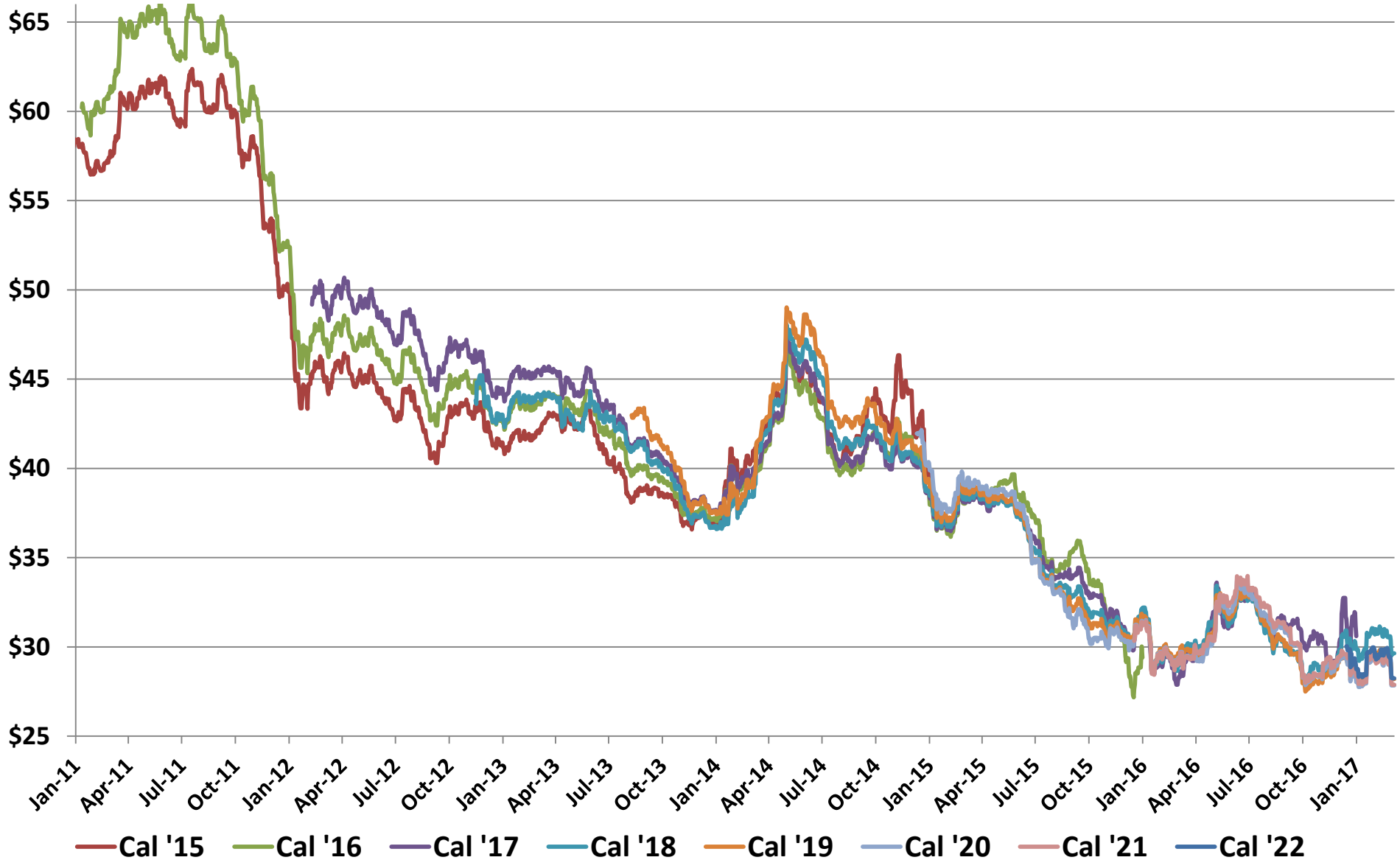
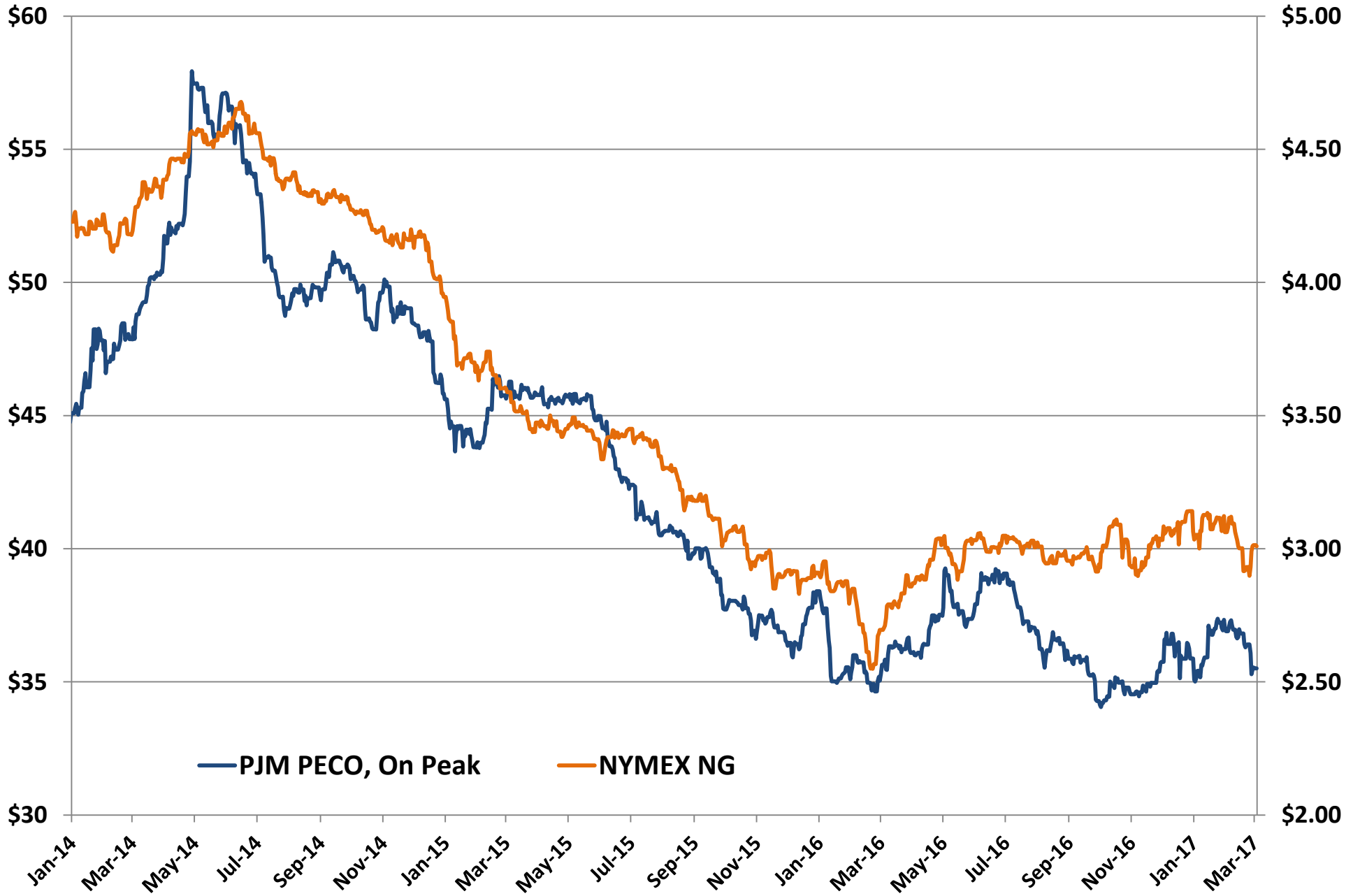


## Historical Pricing PJM PECO, Around the Clock

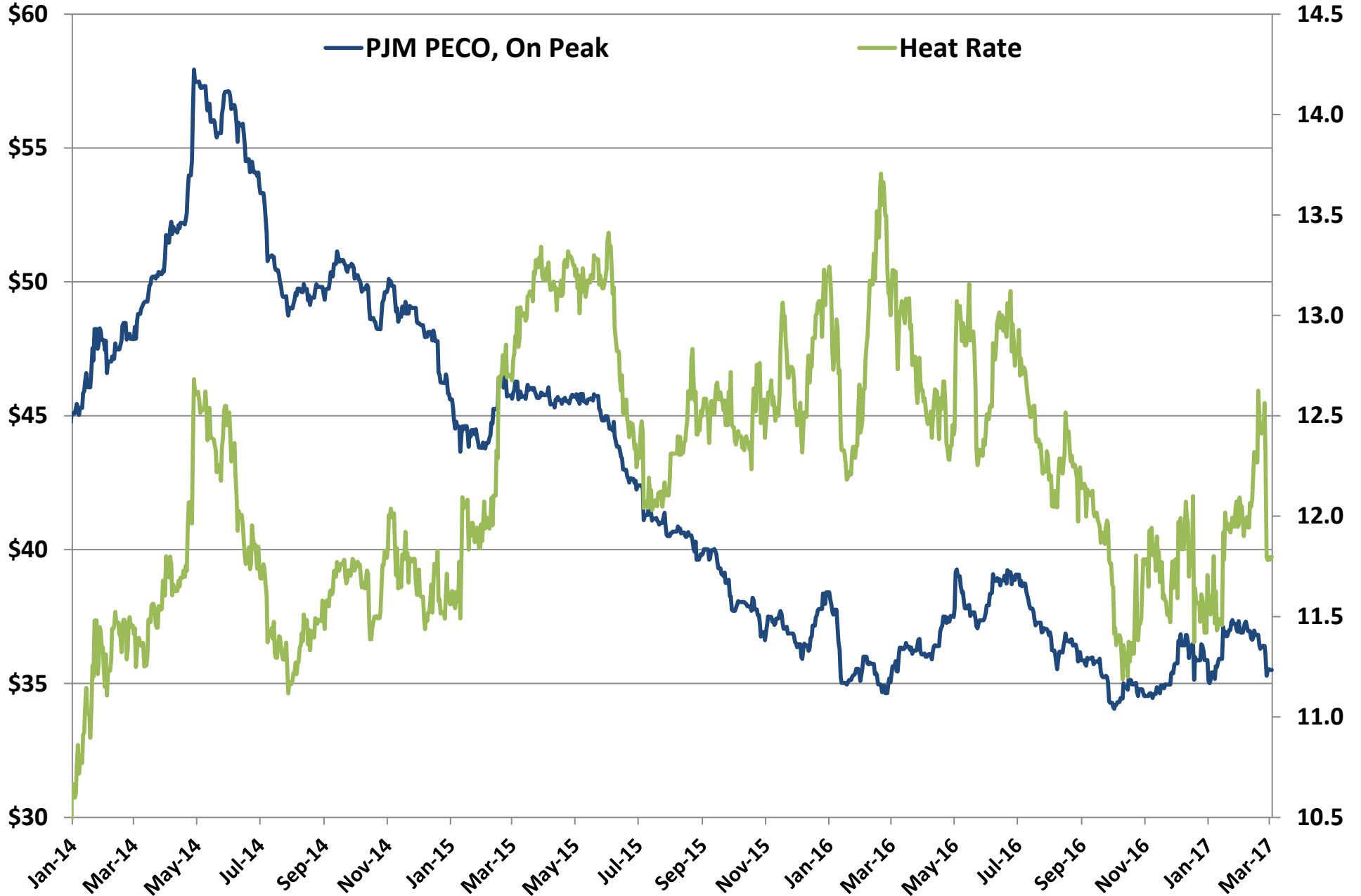


The information presented above was gathered and compiled by Direct Energy Business for the convenience of its employees, clients, and potential customers and is for informational purposes only. Direct Energy Business makes no representation or warranty regarding the accuracy, reliability, comprehensiveness, or currency of the aforementioned data. This information is being provided as a courtesy and should not be construed as an offer to sell, a solicitation of an offer to buy any exchange-traded futures, options contracts or any energy commodity, or advice regarding the purchase or sale of exchange-traded futures or options contracts. Past performance is not necessarily indicative of future results. Reliance upon this information is at the sole risk of the reader.

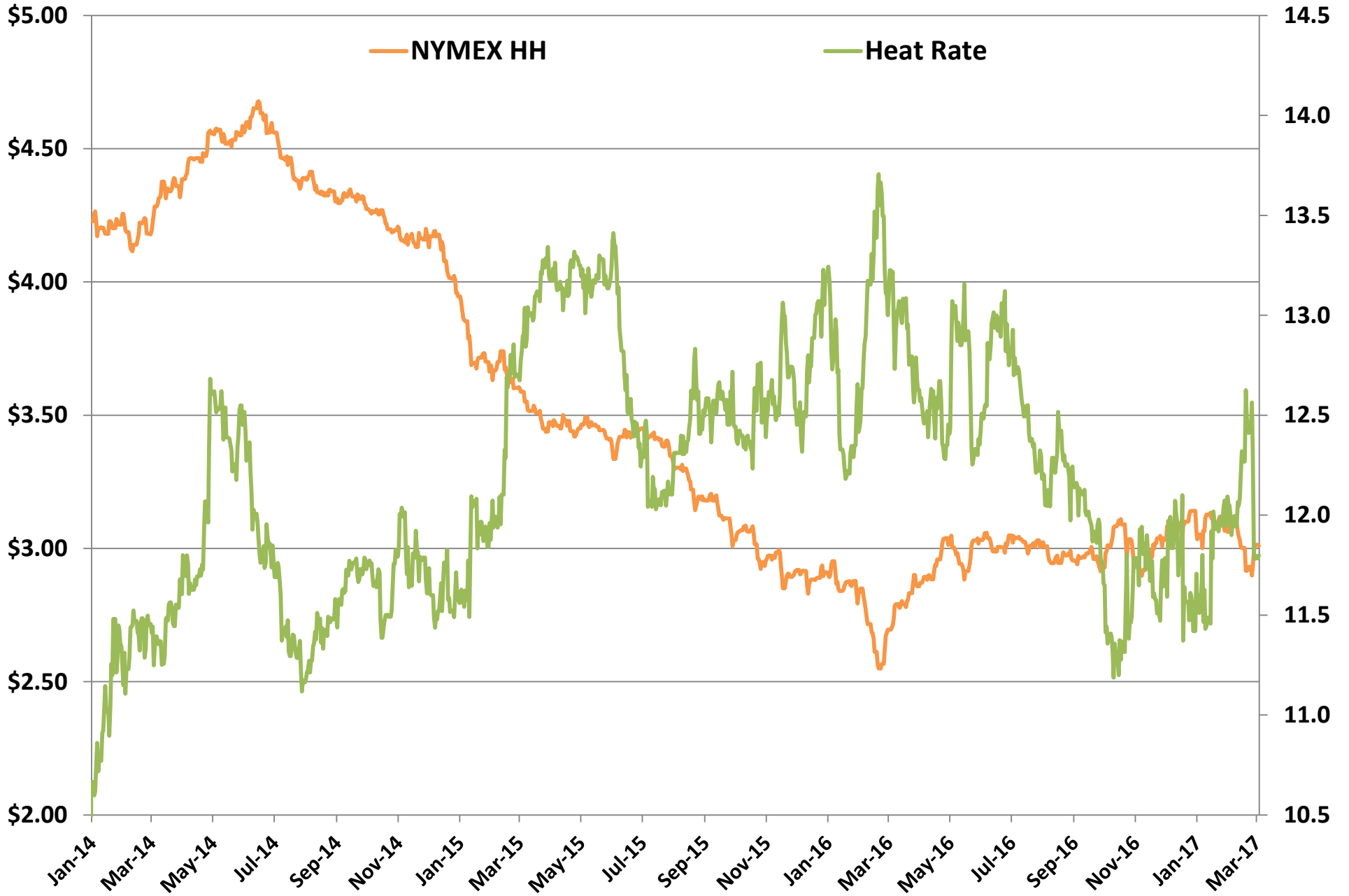
# PJM PECO vs NYMEX Natural Gas, Calendar 2017



# PJM PECO vs Heat Rate, Calendar 2017



# Heat Rate vs NYMEX Natural Gas, Calendar 2017





## PRICE TREND ANALYSIS

Transaction Point: **PJM PECO Peak**

Data Range

From:	2/9/2012	2/9/2012	2/9/2012	11/15/2012	11/15/2012	8/9/2013	12/10/2014	12/17/2015
To:	3/6/2017	3/6/2017	3/6/2017	3/6/2017	3/6/2017	3/6/2017	3/6/2017	3/6/2017

	Q2 - 17	Q3 - 17	Q4 - 17	Q1 - 18	2018	2019	2020	2021
Current Price	\$31.85	\$37.88	\$30.83	\$47.98	\$35.51	\$33.43	\$33.05	\$33.40
<b>Current Percentile</b>	<b>16.3%</b>	<b>14.9%</b>	<b>11.3%</b>	<b>16.0%</b>	<b>7.5%</b>	<b>1.7%</b>	<b>0.0%</b>	<b>0.2%</b>
Minimum Price	\$29.17	\$35.68	\$28.41	\$42.69	\$34.06	\$33.10	\$33.05	\$33.39
Date of Minimum	11/11/16	8/10/16	2/27/16	2/27/16	10/5/16	10/7/16	3/4/17	3/3/17
Maximum Price	\$55.37	\$67.79	\$54.24	\$74.81	\$57.93	\$59.12	\$49.54	\$39.94
Date of Maximum	4/4/12	4/4/12	4/4/12	5/1/14	5/1/14	5/1/14	12/18/14	6/10/16
25th Percentile	\$32.73	\$38.98	\$32.88	\$49.35	\$37.46	\$36.29	\$35.42	\$34.94
50th Percentile	\$41.52	\$52.64	\$37.91	\$52.53	\$45.74	\$44.58	\$36.96	\$35.74
75th Percentile	\$48.84	\$61.26	\$47.18	\$60.89	\$50.82	\$49.41	\$41.74	\$37.35

All prices are \$ per MWh and represent wholesale price component only.

The Current Percentile represents the percentage of days during the reference period in which the market price has been below the current price.

The information presented above was gathered and compiled by Direct Energy Business for the convenience of its employees, clients, and potential customers and is for informational purposes only. Direct Energy Business makes no representation or warranty regarding the accuracy, reliability, comprehensiveness, or currency of the aforementioned data. This information is being provided as a courtesy and should not be construed as an offer to sell, a solicitation of an offer to buy any exchange-traded futures, options contracts or any energy commodity, or advice regarding the purchase or sale of exchange-traded futures or options contracts. Past performance is not necessarily indicative of future results. Reliance upon this information is at the sole risk of the reader.

**3/7/2017**



## PRICE TREND ANALYSIS

Transaction Point: **PJM PECO offPeak**

Data Range

From:	1/11/2011	1/11/2011	1/11/2011	2/9/2012	2/9/2012	11/15/2012	8/9/2013	12/17/2015
To:	3/6/2017	3/6/2017	3/6/2017	3/6/2017	3/6/2017	3/6/2017	3/6/2017	3/6/2017

	Q2 - 17	Q3 - 17	Q4 - 17	Q1 - 18	2018	2019	2020	2021
Current Price	\$21.47	\$22.70	\$22.77	\$37.33	\$24.31	\$23.44	\$23.11	\$22.85
<b>Current Percentile</b>	<b>28.7%</b>	<b>29.5%</b>	<b>17.1%</b>	<b>14.8%</b>	<b>10.4%</b>	<b>6.2%</b>	<b>4.2%</b>	<b>4.9%</b>
Minimum Price	\$17.10	\$18.75	\$19.55	\$32.79	\$22.60	\$22.39	\$22.71	\$22.65
Date of Minimum	10/6/16	2/26/16	1/16/16	10/11/16	10/5/16	10/5/16	1/6/17	10/5/16
Maximum Price	\$39.49	\$43.77	\$41.12	\$53.42	\$39.86	\$39.83	\$35.42	\$28.77
Date of Maximum	2/23/12	4/4/12	4/4/12	5/6/14	11/22/12	5/1/14	12/18/14	6/28/16
25th Percentile	\$20.93	\$21.82	\$23.42	\$38.19	\$25.93	\$25.32	\$24.14	\$23.69
50th Percentile	\$28.38	\$29.80	\$28.66	\$41.24	\$31.77	\$30.77	\$25.69	\$24.24
75th Percentile	\$33.17	\$36.90	\$35.35	\$45.82	\$35.19	\$34.33	\$28.53	\$25.92

All prices are \$ per MWh and represent wholesale price component only.

The Current Percentile represents the percentage of days during the reference period in which the market price has been below the current price.

The information presented above was gathered and compiled by Direct Energy Business for the convenience of its employees, clients, and potential customers and is for informational purposes only. Direct Energy Business makes no representation or warranty regarding the accuracy, reliability, comprehensiveness, or currency of the aforementioned data. This information is being provided as a courtesy and should not be construed as an offer to sell, a solicitation of an offer to buy any exchange-traded futures, options contracts or any energy commodity, or advice regarding the purchase or sale of exchange-traded futures or options contracts. Past performance is not necessarily indicative of future results. Reliance upon this information is at the sole risk of the reader.

**3/7/2017**



## PRICE TREND ANALYSIS

Transaction Point: **PJM PECO ATC**

Data Range

From: 2/9/2012 2/9/2012 2/9/2012 11/15/2012 11/15/2012 8/9/2013 12/10/2014 12/17/2015  
 To: 3/6/2017 3/6/2017 3/6/2017 3/6/2017 3/6/2017 3/6/2017 3/6/2017 3/6/2017

	Q2 - 17	Q3 - 17	Q4 - 17	Q1 - 18	2018	2019	2020	2021
Current Price	\$26.41	\$29.93	\$26.61	\$42.40	\$29.64	\$28.20	\$27.85	\$27.88
<b>Current Percentile</b>	<b>23.1%</b>	<b>25.9%</b>	<b>13.6%</b>	<b>19.7%</b>	<b>8.8%</b>	<b>3.4%</b>	<b>0.8%</b>	<b>0.2%</b>
Minimum Price	\$22.89	\$27.01	\$23.87	\$37.66	\$28.06	\$27.49	\$27.74	\$27.87
Date of Minimum	10/6/16	2/27/16	2/27/16	11/20/13	10/5/16	10/5/16	1/4/17	3/3/17
Maximum Price	\$46.98	\$55.21	\$47.37	\$63.52	\$48.05	\$49.01	\$42.14	\$33.97
Date of Maximum	4/4/12	4/4/12	4/4/12	5/1/14	5/1/14	5/1/14	12/18/14	6/28/16
25th Percentile	\$26.53	\$29.79	\$27.81	\$43.11	\$31.46	\$30.57	\$29.44	\$29.14
50th Percentile	\$34.61	\$40.78	\$33.26	\$45.36	\$37.90	\$37.34	\$31.14	\$29.65
75th Percentile	\$40.72	\$48.53	\$40.86	\$52.98	\$42.02	\$41.15	\$34.83	\$31.35

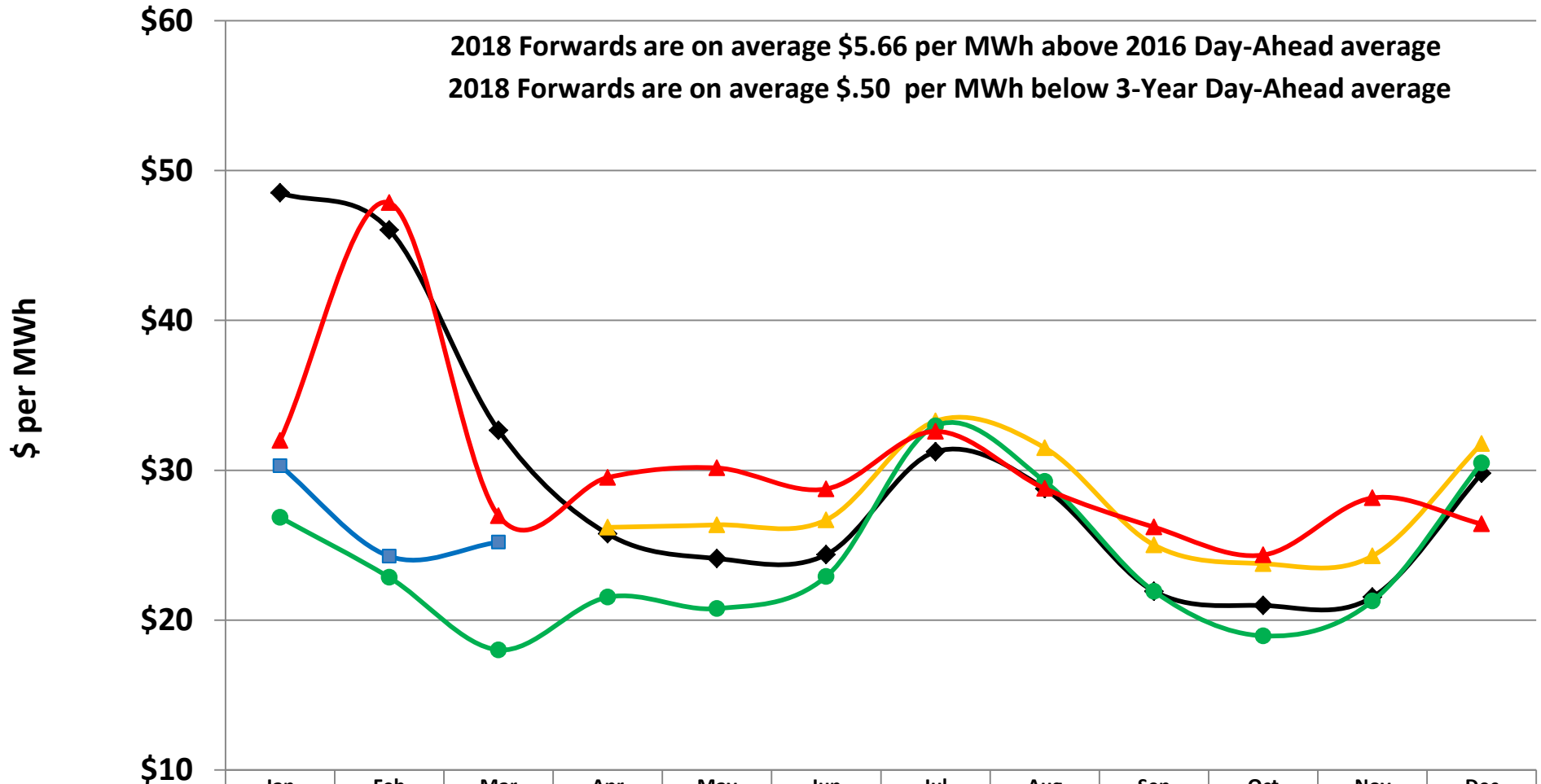
All prices are \$ per MWh and represent wholesale price component only.

The Current Percentile represents the percentage of days during the reference period in which the market price has been below the current price.

The information presented above was gathered and compiled by Direct Energy Business for the convenience of its employees, clients, and potential customers and is for informational purposes only. Direct Energy Business makes no representation or warranty regarding the accuracy, reliability, comprehensiveness, or currency of the aforementioned data. This information is being provided as a courtesy and should not be construed as an offer to sell, a solicitation of an offer to buy any exchange-traded futures, options contracts or any energy commodity, or advice regarding the purchase or sale of exchange-traded futures or options contracts. Past performance is not necessarily indicative of future results. Reliance upon this information is at the sole risk of the reader.



## Historical Day-Ahead vs Forward Prices PJM PECO



	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
◆ 2018 FWD	\$48.50	\$46.03	\$32.67	\$25.75	\$24.11	\$24.37	\$31.24	\$28.76	\$21.93	\$20.98	\$21.54	\$29.79
▲ 2017 FWD				\$26.19	\$26.36	\$26.69	\$33.28	\$31.50	\$25.01	\$23.77	\$24.28	\$31.77
■ 2017 DA Average	\$30.31	\$24.26	\$25.20									
● 2016 DA Avg	\$26.85	\$22.85	\$18.02	\$21.53	\$20.77	\$22.91	\$32.96	\$29.26	\$21.92	\$18.95	\$21.27	\$30.50
▲ 3 YR AVG	\$31.98	\$47.84	\$26.96	\$29.52	\$30.15	\$28.75	\$32.59	\$28.78	\$26.21	\$24.35	\$28.15	\$26.41

The information presented above was gathered and compiled by Direct Energy Business for the convenience of its employees, clients, and potential customers and is for informational purposes only. Direct Energy Business makes no representation or warranty regarding the accuracy, reliability, comprehensiveness, or currency of the aforementioned data. This information is being provided as a courtesy and should not be construed as an offer to sell, a solicitation of an offer to buy any exchange-traded futures, options contracts or any energy commodity, or advice regarding the purchase or sale of exchange-traded futures or options contracts. Past performance is not necessarily indicative of future results. Reliance upon this information is at the sole risk of the reader.