

Vince Welage

Applications Analyst
Cincinnati, OH 45218
vwelage@fuse.net

Duke Energy Billing Study

Monthly Statements 225

Time Period 2018-2022

Customer Accounts 16

Home Square Ft 1230 – 3520

Energy Usage Qualifiers

Gas – Min Average monthly usage - 60 Ccf

Electric – Min Average monthly usage - 400 kWh

Gas & Electric or Electric Only Service

Zip Code Areas - 9

45056 Oxford

45140 Loveland

45150 Milford

45202 Cincinnati

45204 Cincinnati

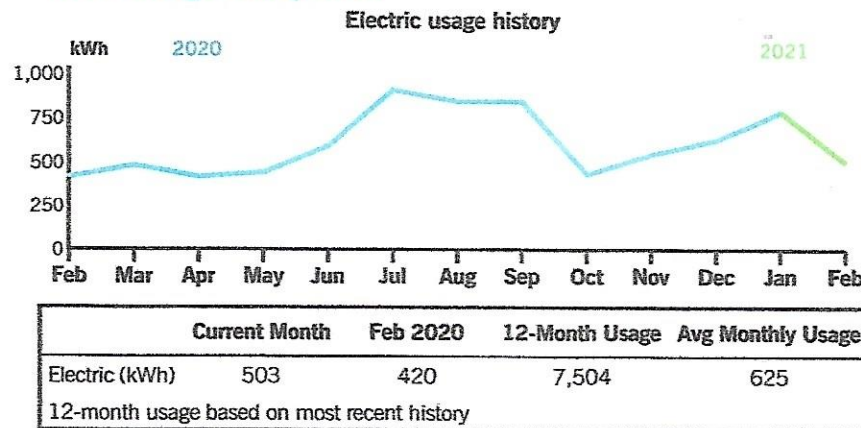
45218 Greenhills

45226 East End

45241 Blue Ash

45251 Colerain Twp

Your usage snapshot



Gas & Electric Monthly Fees

Efficient Home

- 84% (190 of 225) total cost > \$75.
- 54% (122 of 225) total cost > \$90.
- 19% (42 of 225) total cost > \$100.
- 31% (70 of 225) (400-750) kWh efficiency total cost > \$80.
- Non-heat 5 month average gas cost up to 10 times supply cost.

Overall Findings

Panel study electric usage - kWh/monthly average – 628 (median)

Panel study gas usage - Ccf/monthly average – 76 (median)

2020 U. S. electric kWh/monthly average - 893*; Ohio - 903*

Energy efficient homes can't realize actual cost savings when combined with high fixed charges and delivery rider subsidies.

*Energy Information Administration (EIA)

Email SWORT at swo4responsibletech@fuse.net

Duke Energy Ohio Gas Tariff

PIPP, Percentage of Income Payment Plan Rider 63

ETR, Ohio Excise Tax Liability Rider 64 (4.890%)

AMRP, Accelerated Main Replacement Program Rider 65 (\$2.82/month)

UE-G, Uncollectible Expense Rider 67

STR, State Tax Rider 68

MGP, Manufactured Gas Plant Rider 69

GCR, Gas Cost Recovery Rider 70

GCRR, Gas Cost Recovery Rate Rider 71

CCCR, Contract Commitment Cost Recovery Rider 76

CEP, Capital Expenditure Program Rider 84 (\$3.69/month)

Duke Energy Ohio Electric Tariff

ETCJA, Electric Tax Cuts and Jobs Act Rider 77

ESRR, Electric Service Reliability Rider 80 (2.18% x Distribution Charges)

OET, Ohio Excise Tax Rider 83

PF, Power Future Rider 84

USR, Universal Service Fund Rider 86

UE-GEN, Uncollectable Expense, Electric Generation Rider 88

BTR, Base Transmission Rider 89

RTO, Regional Transmission Organization Rider 97

DSR, Distribution Storm Rider 101

DCI, Distribution Capital Investment Rider 103 (22.763% x Distribution Charges)

DR-IM, Infrastructure Modernization Rider 104

DR-ECF, Economic Competitive Fund Rider 105 (0.60% x Distribution Charges)

UE-ED, Uncollectible Expense, Electric Distribution Rider 108.

AER-R, Alternative Energy Recovery Rider 110

RC, Retail Capacity Rider 111

RE, Retail Energy Rider 112

SCR, Supplier Cost Reconciliation Rider 115

EE-PDRR, Energy Efficiency/Peak Demand Response Recovery Rider 119

DDR, Distribution Decoupling Rider 122

PSR, Price Stabilization Rider 126

AMO, Advanced Meter Opt-Out – Res 127 (\$100 one-time + \$30/month)

The delivery riders are derived from customer usage distribution charges.

Billing details - Gas

Billing Period - Apr 13 to May 11	
Meter -	
Duke Energy Delivery	
Service Delivery	
Fixed Delivery Service Charge	\$33.03
Usage-Based Charge	
66,000 CCF @ \$0.03272800	2.16
Gas Delivery Riders	9.96

Billing details - Electric

Billing Period - May 12 to Jun 13	
Meter -	
Duke Energy Delivery	
Service Delivery	
AMI Opt Out Fee	\$30.00
Distribution-Customer Charge	6.00
Distribution-Energy Charge	
948,000 kWh @ \$0.03148200	29.84
Delivery Riders	23.22

How Smart Meters Play a Major Role in Your High Utility Bills

Smart Meters are 2-way transmitting whereas traditional analog meters are 1-way transmitting and use less energy. Unsafe technology includes utility Smart Meters which have been installed by many Ohio utility companies including Duke Energy. Ohio elected officials never propose a path to review the harmful effects from any wireless devices including these Smart Meters. Duke Energy has a well documented history of enforcing the highest number of utility shutoffs and collections among Ohio energy utilities. Many of the shutoffs include “hardship” households that use retail supplier companies. In 2017, shutoffs were reported at 15%.

Smart Meter Components

Surveillance

- Collects usage in real time; Utility can rent, sell, market to 3rd parties.
- Utility aggregation programs are tied in with these Smart Meters and Smart Grids.
- Remote access can turn off electricity with only email or phone call notice.

Overcharges

The outgrowth from the changeover from Analog Meters to AMI Smart meters has resulted in a high volume of collections, disconnects, and legal actions against consumers. There have been rate increases and/or riders approved with the new technology in 2014 and 2017.

- 2009 - Start of Analog Meter replacements.
- 2014 - Finished install of 700,000+ AMI Smart Meters.
- 2016 – With PUCO approval, Duke imposes \$100 setup and \$30/month SM opt-out fee
- 2018 - Replacement of existing AMI meters with new AMI Smart Meters; Expansion of the deployment now at approximately 1 million.
- 2021 - Duke submitted application to PUCO to increase distribution rates.

Health and Safety

- Smart Meters emit Radio Frequency Radiation (RFR).
- RF radiation is biologically-active electromagnetic exposure absorbed into the skin.
- Chronic exposure to wireless radiation has been linked to neurological damage, reproductive effects, cancer, and numerous other health issues.
- Smart Meters installed on homes in close proximity are exposing those residents to extremely high RF levels because of connectivity to neighborhood energy grid.
- Smart Meters don't have surge protectors; Prone to fires and explosions; AMI meters must be properly grounded in order to divert lightning strikes.

Privacy and Security

- Home energy usage tracking data must be kept private and confidential.
- Cyber security risk from hackers using backdoor or calling home mechanisms during software updates; AMI meters need frequent replacement because they are computers.
- Duke Energy distributed network has experienced a significant number of cyber attacks using Smart Meter technology resulting in fines because of cyber security violations.

Residential

Duke Energy Billing Charges
2018-2022(400 - 750) kWh
Monthly Usage
Exhibit C

Acct#	Zip Code	Home SqFt	Date	Unit kWh	Elec Supply per kWh	Elec Supply Total	Elec Delivery Rider	Elec USB Charge	Opt Out	Fees Total
4	45218	1688	2020/01	483	\$0.0978	\$47.24	\$11.07	\$15.21	\$44	\$61.07
3	45218	1878	2020/08	736	\$0.0492	\$36.21	\$16.45	\$23.17	\$37	\$59.45
4	45218	1688	2019/12	565	\$0.0978	\$55.26	\$12.59	\$17.79	\$40	\$58.59
4	45218	1688	2019/11	468	\$0.0978	\$45.77	\$10.07	\$14.73	\$40	\$56.07
2	45218	1570	2018/06	682	\$0.0547	\$37.31	\$18.55	\$17.28	\$30	\$54.55
2	45218	1570	2018/05	678	\$0.0547	\$37.09	\$18.19	\$17.19	\$30	\$54.19
2	45218	1570	2022/05	715	\$0.0630	\$45.05	\$18.01	\$22.51	\$30	\$54.01
2	45218	1570	2018/09	647	\$0.0547	\$35.39	\$18.00	\$16.40	\$30	\$54.00
7	45056	1694	2020/12	704	\$0.0534	\$37.59	\$17.93	\$22.16	\$30	\$53.93
1	45218	1910	2021/04	711	\$0.0536	\$38.11	\$17.76	\$22.38	\$30	\$53.76
2	45218	1570	2020/12	694	\$0.0534	\$37.06	\$17.69	\$21.85	\$30	\$53.69
7	45056	1694	2021/01	689	\$0.0534	\$36.79	\$17.58	\$21.69	\$30	\$53.58
2	45218	1570	2020/09	739	\$0.0526	\$38.87	\$17.58	\$23.27	\$30	\$53.58
2	45218	1570	2021/09	741	\$0.0556	\$41.20	\$17.25	\$23.33	\$30	\$53.25
4	45218	1688	2021/08	652	\$0.0544	\$35.47	\$16.57	\$20.53	\$30	\$52.57
1	45218	1910	2020/04	734	\$0.0547	\$40.15	\$16.46	\$23.11	\$30	\$52.46
4	45218	1688	2021/07	647	\$0.0544	\$35.20	\$16.45	\$20.37	\$30	\$52.45
1	45218	1910	2020/03	686	\$0.0547	\$37.52	\$15.52	\$21.60	\$30	\$51.52
2	45218	1570	2021/02	608	\$0.0534	\$32.47	\$15.48	\$19.14	\$30	\$51.48
2	45218	1570	2021/04	597	\$0.0536	\$32.00	\$15.22	\$18.79	\$30	\$51.22
2	45218	1570	2022/01	587	\$0.0556	\$32.64	\$15.17	\$18.48	\$30	\$51.17
5	45202	1275	2020/11	634	\$0.0495	\$31.38	\$15.16	\$19.96	\$30	\$51.16
3	45218	1878	2021/09	489	\$0.0469	\$22.93	\$12.12	\$15.39	\$33	\$51.12
3	45218	1878	2021/05	453	\$0.0469	\$21.25	\$12.04	\$14.26	\$33	\$51.04
2	45218	1570	2021/01	568	\$0.0534	\$30.33	\$14.88	\$17.88	\$30	\$50.88
3	45218	1878	2020/09	443	\$0.0659	\$29.19	\$11.52	\$13.95	\$33	\$50.52
2	45218	1570	2019/05	672	\$0.0547	\$36.76	\$14.32	\$21.16	\$30	\$50.32
2	45218	1570	2021/03	546	\$0.0536	\$29.27	\$14.10	\$17.19	\$30	\$50.10
2	45218	1570	2021/12	555	\$0.0556	\$30.86	\$13.96	\$17.47	\$30	\$49.96
2	45218	1570	2021/11	570	\$0.0556	\$31.69	\$13.87	\$17.94	\$30	\$49.87
2	45218	1570	2020/05	626	\$0.0546	\$34.18	\$13.83	\$19.71	\$30	\$49.83
2	45218	1570	2022/02	519	\$0.0556	\$28.86	\$13.68	\$16.34	\$30	\$49.68
5	45202	1275	2020/10	554	\$0.0495	\$27.42	\$13.53	\$17.44	\$30	\$49.53
5	45202	1275	2021/01	503	\$0.0495	\$24.90	\$13.40	\$15.84	\$30	\$49.40
2	45218	1570	2020/04	575	\$0.0589	\$33.87	\$13.40	\$18.10	\$30	\$49.40
5	45202	1275	2020/05	602	\$0.0495	\$29.80	\$13.37	\$18.95	\$30	\$49.37
4	45218	1688	2020/04	566	\$0.0589	\$33.34	\$13.25	\$17.82	\$30	\$49.25
4	45218	1688	2020/12	487	\$0.0534	\$26.01	\$13.05	\$15.33	\$30	\$49.05
4	45218	1688	2022/01	490	\$0.0556	\$27.24	\$13.03	\$15.43	\$30	\$49.03
2	45218	1570	2022/03	479	\$0.0543	\$26.01	\$12.79	\$15.08	\$30	\$48.79
4	45218	1688	2021/12	483	\$0.0556	\$26.85	\$12.39	\$15.21	\$30	\$48.39
4	45218	1688	2021/06	462	\$0.0544	\$25.13	\$12.38	\$14.54	\$30	\$48.38
7	45056	1694	2020/11	496	\$0.0526	\$26.09	\$12.34	\$15.62	\$30	\$48.34
4	45218	1688	2020/03	515	\$0.0589	\$30.33	\$12.21	\$16.21	\$30	\$48.21
3	45218	1878	2019/06	593	\$0.0511	\$30.30	\$11.93	\$18.67	\$30	\$47.93

Distribution Rate (USB)

Elec - \$.031482/kWh

Elec Fixed Delivery \$6