

**BEFORE  
THE PUBLIC UTILITIES COMMISSION OF OHIO**

In the Matter of the Annual Application       )  
of Columbia Gas of Ohio, Inc. for an       )   Case No. 19-1940-GA-RDR  
Adjustment to Rider IRP and Rider DSM       )  
Rates.    )

**PUBLIC VERSION**

**DIRECT TESTIMONY  
OF  
COLLEEN SHUTRUMP**

**On Behalf of  
The Office of the Ohio Consumers' Counsel**  
*65 East State Street, 7th Floor  
Columbus, Ohio 43215*

**April 20, 2020**

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**I. BACKGROUND**

***Q1. PLEASE STATE YOUR NAME, TITLE, AND BUSINESS ADDRESS.***

***A1.*** My name is Colleen Shutrump. I am employed as the Energy Resource Planning Advisor for the Office of the Ohio Consumers' Counsel ("OCC"). My business address is 65 East State Street, Suite 700, Columbus, Ohio 43215.

***Q2. PLEASE BRIEFLY SUMMARIZE YOUR EDUCATION AND PROFESSIONAL EXPERIENCE.***

***A2.*** I have a Bachelor of Science in Business Administration from the Youngstown State University with a major in Management and a Master of Business Administration from Baldwin Wallace College with emphasis in International Business. I have worked over ten years in electric utility regulation with emphasis on customer-funded energy efficiency programs. I started as a Utility Analyst at the Indiana Utility Regulatory Commission in 2009. I was promoted to Senior Utility Analyst in 2015. While there, I attended the Institute of Public Utilities Michigan State University Advanced Regulatory Studies Program and Camp NARUC. I began work as an Energy Resource Planning Advisor with OCC in August 2015. In spring 2016, I completed a graduate-level course on Utility Regulation and Deregulation at the Ohio State University, John Glenn College of Public Affairs.

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1   ***Q3.   WHAT ARE YOUR DUTIES AT THE OHIO CONSUMERS' COUNSEL?***

2   ***A3.***   I provide analytical support on energy resource planning issues impacting Ohio  
3           consumers' interests. I serve as the Analytical Department's lead analyst and policy  
4           advisor for the OCC on cases and issues relating to customer-funded energy efficiency  
5           and demand side management programs. This includes, among other things, advocating  
6           for (i) consumer options to reduce their energy use and save money on their utility bills  
7           and (ii) developing OCC policy that addresses consumer-protection issues. I was  
8           extensively involved in each of the four 2016 electric energy efficiency portfolio cases  
9           before the Public Utilities Commission of Ohio ("PUCO"). My involvement included  
10          providing testimony on electric energy efficiency programs in the Dayton Power &  
11          Light<sup>1</sup> and Duke Energy Ohio<sup>2</sup> portfolio cases affecting consumers. I also testified on  
12          necessary consumer protections for gas programs in the Vectren rate case.<sup>3</sup> I am also  
13          extensively involved in proceedings about the electric and gas riders that consumers pay  
14          to support energy efficiency programs. I participate in energy efficiency collaborative  
15          meetings for utility-led electric and gas programs and the work groups on grid  
16          modernization data sharing and distribution system planning (*i.e.*, the PowerForward  
17          workgroups).

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<sup>1</sup> See <http://dis.puc.state.oh.us/DocumentRecord.aspx?DocID=e5387ca7-b061-4e9a-bc4b-66d71fafa20b>.

<sup>2</sup> See <http://dis.puc.state.oh.us/DocumentRecord.aspx?DocID=086ff9ae-a122-4479-9a18-fcaefc81f584>.

<sup>3</sup> See <http://dis.puc.state.oh.us/DocumentRecord.aspx?DocID=43f018b1-7394-4e2d-9708-26d64b02aafd>,  
<http://dis.puc.state.oh.us/DocumentRecord.aspx?DocID=ca349b36-83ee-4ca7-acfd-09a80f3e28f2>,  
<http://dis.puc.state.oh.us/DocumentRecord.aspx?DocID=0bbabc31-2fc9-4c10-affa-eb256e9a449b>.

**II. PURPOSE OF TESTIMONY AND SUMMARY OF RECOMMENDATIONS**

***Q4. WHAT IS THE PURPOSE OF YOUR TESTIMONY?***

**A4.** The purpose of my testimony is to provide recommendations and support for why the PUCO should suspend Columbia's non-low-income energy efficiency programs and suspend Columbia's charges that make a million Columbia customers subsidize the programs. The PUCO should find ways to reduce charges to consumers given the health emergency and the related developing financial emergency that many Ohioans will face for possibly years. Columbia's non-low-income energy efficiency programs and related subsidy charges to consumers should be suspended until and unless the PUCO decides otherwise.

It is worth noting that Columbia's energy efficiency programs, that Columbia charges consumers to subsidize, are ongoing at a time when elected officials ended mandated programs and related consumer payments for electric energy efficiency. Columbia has implemented \$200 million in natural gas energy efficiency programs without mandates, at the expense of consumers for programs costs and profits to Columbia.

***Q5. WHAT ARE YOUR RECOMMENDATIONS?***

**A5.** As stated, the PUCO should find ways to reduce charges to consumers given the health emergency and the related developing financial emergency that many Ohioans will face for possibly years. Columbia's non-low-income energy efficiency programs and related subsidy charges to consumers should be suspended until and unless the PUCO decides

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1 otherwise. Columbia's upcoming charges to customers for energy efficiency program  
2 costs, including for Columbia profits, are expected to be up to \$20 million in each of  
3 2021 and 2022.<sup>4</sup>

4  
5 Also, regarding last year's programs, I have a recommendation that the PUCO should not  
6 allow Columbia to charge customers for profits.

7  
8 ***Q6. WHY DO YOU RECOMMEND SUSPENDING COLUMBIA'S NON-LOW-INCOME***  
9 ***ENERGY EFFICIENCY PROGRAMS AND THE RELATED CHARGES TO***  
10 ***CONSUMERS?***

11 ***A6.*** The PUCO should find ways to reduce charges to consumers given the health emergency  
12 and the related developing financial emergency that many Ohioans will face, possibly for  
13 years. Columbia's non-low-income energy efficiency programs and related subsidy  
14 charges to consumers should be suspended until and unless the PUCO decides otherwise.  
15 My recommendations should be adopted because:

- 16  
17 1. The coronavirus emergency is resulting in lost income and other financial  
18 difficulties for Ohioans. These difficulties could last for years. Accordingly,  
19 many consumers have or will have a significant need for assistance in paying  
20 their utility bills. The PUCO should look for ways to reduce consumer bills and

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<sup>4</sup> Application, Appendix B, Table 3, Case No. 16-1309-GA-UNC. This does not include administrative costs or shared savings. Also removes from the table \$70,000/year for lunches per Stipulation filed August 12, 2016.

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1           suspending consumer subsidies for Columbia's energy efficiency programs  
2           should be part of this effort.

3  
4           2.     Residential non-low-income programs<sup>5</sup> by gas utilities have already achieved the  
5           regulatory objectives for which they were established. Those objectives were to  
6           stimulate the market and help mitigate high gas bills (from high natural gas  
7           prices) for consumers. The market for energy efficient products has greatly  
8           expanded since 2008 when Columbia's non-low-income programs were first  
9           approved. Today, the energy efficiency market is competitive, and consumers are  
10          making decisions on their own about whether and how to participate in that  
11          market.

12  
13          Further, the regulatory policy that provided for Columbia's non-low-income  
14          energy efficiency programs originated in a case where Columbia was filing  
15          monthly Gas Cost Recovery (GCR) rates as high as \$14.27 per Mcf.<sup>6</sup> But in June  
16          of 2016, when Columbia requested approval to continue programs in Case No.  
17          16-1309-GA-UNC, Columbia's natural gas price was a mere \$4.34 per Mcf.<sup>7</sup> It is  
18          axiomatic that low natural gas prices reduce the value proposition for utility-run  
19          energy efficiency programs, such as the programs that Columbia Gas consumers

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<sup>5</sup> Columbia non-low-income programs were first approved by stipulation on January 23, 2008. *See* <http://dis.puc.state.oh.us/DocumentRecord.aspx?DocID=660f7c43-0c23-4aff-90c2-aab8d9fd2edc>.

<sup>6</sup> Columbia Gas Cost Recovery Report filed November 20, 2008 in Case No. 07-221-GA-GCR, page 3, *available at* <http://dis.puc.state.oh.us/DocumentRecord.aspx?DocID=99ef0fa4-ba0d-4b13-ab69-9cd044e302fc>.

<sup>7</sup> Columbia Revised Tariff filed June 28, 2016 in Case No. 12-2637-GA-EXM, *available at* <http://dis.puc.state.oh.us/DocumentRecord.aspx?DocID=3f48b84f-0f23-4e14-86fc-a2ed7aef5466>.

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1 are subsidizing. And natural gas prices are projected to remain low well into the  
2 future.<sup>8</sup> Despite this lower price, the PUCO approved the continuation of  
3 Columbia's programs under a stipulation. *Today's* gas cost is even lower—just  
4 \$2.70 per Mcf.<sup>9</sup>

5  
6 For electric programs, there was a legislative energy efficiency mandate that  
7 required electric utilities to meet increasing annual savings targets each year in  
8 order to be in compliance with the law. Not so for gas. No law mandates the  
9 natural gas energy efficiency programs that Columbia runs, at consumer expense.  
10 And the passage of House Bill 6 last year ended the electric energy efficiency  
11 mandates.

- 12  
13 3. When using the appropriate discount rate to calculate the utility cost test, certain  
14 of Columbia's programs cost more to run than they save for consumers. Even  
15 using Columbia's own numbers, Columbia's low-income program (WarmChoice)  
16 and many of its non-low-income programs (Home Performance Solutions,  
17 Residential Energy Efficiency Education for Students, EPA Portfolio Manager,  
18 and Online Energy Audit) cost more money than they save consumers. Customer-  
19 funded energy efficiency programs that cost more money than they save should  
20 absolutely be suspended in this time where utilities should be striving for least

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<sup>8</sup> See e.g., the U.S. Energy Information Agency  
<https://www.eia.gov/outlooks/aeo/pdf/AEO2020%20Natural%20Gas.pdf>, at Slide 5.

<sup>9</sup> Columbia Tariff 128<sup>th</sup> Revised Sheet No. 22 SCO Rider price of \$0.2704 rate per 100 cubic feet of all gas consumed each billing period. <https://www.columbiagasohio.com/our-company/about-us/regulatory-information>.



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1 cost planning management and implementation. Following concepts of least cost  
2 planning should be a top priority to minimize the immediate and long-term stress  
3 that customers and the economy are bearing during this health and related  
4 financial crisis.

5  
6 ***Q7. WHY SHOULD THE PUCO RETHINK CHARGES FOR ENERGY EFFICIENCY?***

7 ***A7.*** The PUCO should rethink and end the Columbia energy efficiency charges, due to the  
8 financial harm that Ohioans are suffering and may suffer for years as a result of the  
9 coronavirus emergency. Due to the coronavirus pandemic, Ohioans face an  
10 unprecedented and precipitous rise in unemployment claims, with severe financial  
11 consequences.

12  
13 On March 22, 2020, Ohio Department of Health Director Amy Acton issued a “stay at  
14 home” order directing businesses and operations in the state to cease all activities, for the  
15 imperative to protect the public from the coronavirus. For the week ending March 21,  
16 unemployment claims in the state were estimated at 187,784.<sup>10</sup> This number represents a  
17 massive increase over the previous week, when just 7,046 claims were made in Ohio. In  
18 fact, the only state with more claims during the week ending March 21 was Pennsylvania  
19 at 378,908 claims. The impacts from these numbers will produce a whole new set of  
20 customers that likely paid their bills on time and in full in the past, but now because of  
21 the coronavirus, will receive a gas bill that is suddenly not affordable. Unemployed

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<sup>10</sup> See Attachment CLS-1 (U.S. Department of Labor Summary of Unemployment Claims).

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1 Ohioans are evaluating their household budgets to determine how to meet basic needs  
2 including home energy costs.

3 The PUCO should evaluate whether bill charges for energy efficiency, which are not  
4 necessary for safe and reliable service, are reasonable in light of the pandemic's  
5 deleterious impact on consumers. The answer should be that the charges are not  
6 reasonable.

7  
8 ***Q8. COULD YOU BE MORE SPECIFIC ABOUT THE UNEMPLOYMENT IMPACT IN***  
9 ***COLUMBIA'S SERVICE TERRITORY?***

10 ***A8.*** During the week of March 21, 2020, the number of initial unemployment claims<sup>11</sup> in the  
11 61 counties served by Columbia represent 71% of total claims filed statewide. A map of  
12 Columbia's service area is attached as Attachment CLS-6. The table below shows how  
13 each county Columbia serves is impacted by the loss of income. The financial impact to  
14 consumers is massive and does not discriminate based on county of residence. In the  
15 aggregate, the number of initial unemployment claims filed by consumers in March of  
16 2020 represents a 1587% increase over the number of initial claims filed in March 2019.  
17 And this trend is true in every single county that Columbia serves. The economic impact  
18 of the coronavirus emergency at the local level demonstrates the seriousness of the  
19 financial loss to the individual paying the natural gas bill.

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<sup>11</sup> These numbers do not include continued claims [https://ohiolmi.com/portals/206/UC/weekly/UC236cw\\_2012.pdf](https://ohiolmi.com/portals/206/UC/weekly/UC236cw_2012.pdf).

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1

| County     | Initial<br>Claims<br>March<br>2020 | Initial<br>Claims<br>March<br>2019 | County    | Initial<br>Claims<br>March<br>2020 | Initial<br>Claims<br>March<br>2019 | County     | Initial<br>Claims<br>March<br>2020 | Initial<br>Claims<br>March<br>2019 |
|------------|------------------------------------|------------------------------------|-----------|------------------------------------|------------------------------------|------------|------------------------------------|------------------------------------|
| Allen      | 6,042                              | 222                                | Harrison  | 508                                | 37                                 | Noble      | 158                                | 31                                 |
| Athens     | 2,037                              | 60                                 | Hocking   | 345                                | 60                                 | Ottawa     | 2,328                              | 136                                |
| Belmont    | 2,179                              | 179                                | Holmes    | 891                                | 17                                 | Perry      | 1,602                              | 29                                 |
| Carroll    | 1,330                              | 113                                | Huron     | 4,214                              | 182                                | Pickaway   | 2,092                              | 78                                 |
| Champaign  | 1,775                              | 69                                 | Jackson   | 261                                | 108                                | Richland   | 6,557                              | 251                                |
| Clark      | 1,992                              | 183                                | Jefferson | 2,123                              | 197                                | Ross       | 1,041                              | 118                                |
| Columbiana | 4,901                              | 258                                | Lawrence  | 312                                | 90                                 | Sandusky   | 887                                | 181                                |
| Coshocton  | 1,325                              | 73                                 | Licking   | 7,315                              | 289                                | Scioto     | 2,283                              | 187                                |
| Crawford   | 3,063                              | 200                                | Logan     | 2,406                              | 58                                 | Seneca     | 4,227                              | 111                                |
| Cuyahoga   | 62,685                             | 2,986                              | Lorain    | 18,178                             | 992                                | Stark      | 19,694                             | 1,296                              |
| Delaware   | 7,281                              | 185                                | Lucas     | 8,690                              | 1,120                              | Summit     | 27,268                             | 1,172                              |
| Erie       | 6,570                              | 421                                | Madison   | 1,434                              | 45                                 | Trumbull   | 11,055                             | 1,207                              |
| Fairfield  | 6,743                              | 246                                | Mahoning  | 13,481                             | 1,283                              | Tuscarawas | 4,501                              | 305                                |
| Franklin   | 23,527                             | 1,975                              | Marion    | 838                                | 94                                 | Union      | 732                                | 41                                 |
| Fulton     | 611                                | 105                                | Medina    | 9,209                              | 418                                | Vinton     | 459                                | 39                                 |
| Gallia     | 885                                | 62                                 | Meigs     | 165                                | 96                                 | Warren     | 9,332                              | 351                                |
| Geauga     | 3,461                              | 107                                | Monroe    | 326                                | 36                                 | Washington | 617                                | 154                                |
| Greene     | 6,984                              | 224                                | Morgan    | 600                                | 52                                 | Wayne      | 4,865                              | 126                                |
| Guernsey   | 538                                | 114                                | Morrow    | 507                                | 46                                 | Wood       | 2,179                              | 279                                |
| Hancock    | 5,355                              | 103                                | Muskingum | 3,725                              | 187                                | Wyandot    | 288                                | 36                                 |
| Hardin     | 1,516                              | 52                                 |           |                                    |                                    |            |                                    |                                    |

2

3 See <https://ohiolmi.com/home/UIclaims#c2>.

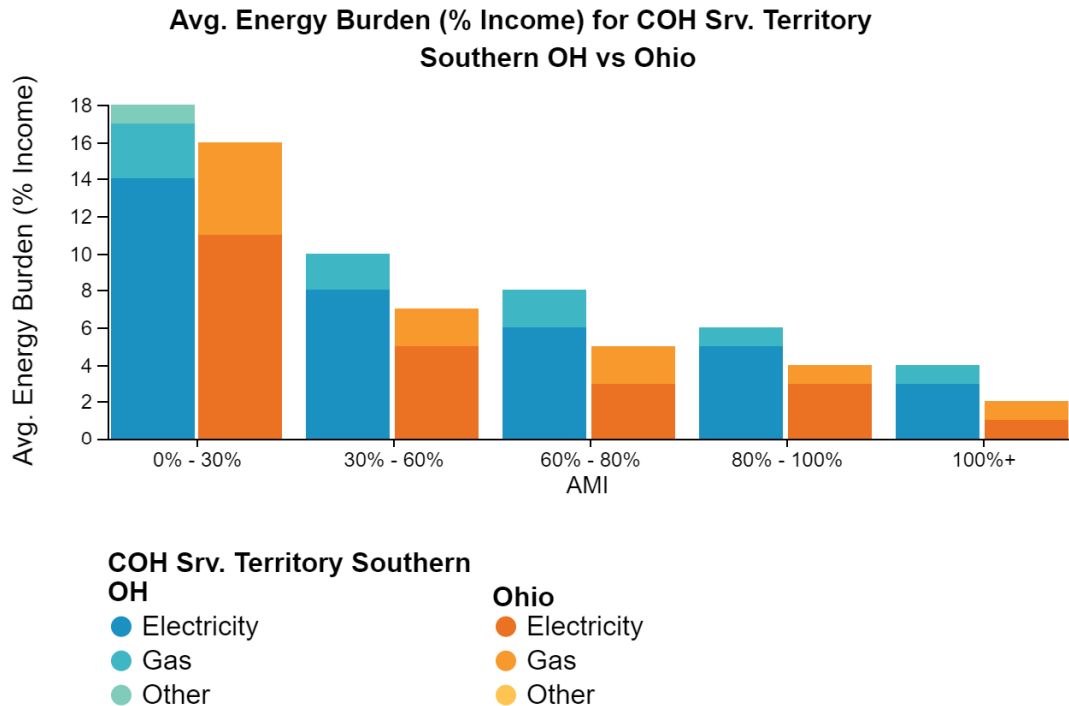
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1 And as demonstrated in the chart below, Ohioans in southern Ohio are already struggling  
2 with the burden of utility costs<sup>12</sup> (the percentage of household income that goes toward  
3 energy costs) that are higher than the rest of the state. This is an example of an already  
4 vulnerable group of Columbia customers that should not be paying to support energy  
5 efficiency programs.

6  
7 The chart below shows energy burden (vertical axis) and Area Median Income (AMI) on  
8 the horizontal axis, which is the household income for the median household in a  
9 specified area. Incomes below 80% of the AMI are considered “low-income.” Incomes  
10 above 80% and up to 120% of the median income are considered “moderate-income.”  
11 These groups are expected to pay Columbia’s energy efficiency charge (about \$1.50 per  
12 month for a typical customer) for the next two years. Yet their energy burden is higher  
13 than the rest of Ohio. And for non-participating customers within these groups, the  
14 energy efficiency charge that supports the ability for others to get a discounted gas  
15 furnace or smart thermostat is an injustice.

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<sup>12</sup> Lifting the High Energy Burden in America’s Largest Cities, April 2016 American Council for an Energy Efficient Economy (ACEEE). <https://www.aceee.org/sites/default/files/publications/researchreports/u1602.pdf>.



**Low-Income Energy Affordability Data Tool Chart Export (<https://www.energy.gov>)**  
 Exported On: 3/26/2020  
 COH Srv. Territory Southern OH: Vinton County, Jackson County, Gallia County, Scioto  
 AMI: 0% - 30%, 30% - 60%, 60% - 80%, 80% - 100%, 100%+

***Q9. PLEASE EXPLAIN HOW THE MARKET FOR ENERGY EFFICIENCY HAS EVOLVED.***

***A9.*** While energy efficiency products existed in the market decades ago, relatively few were sold. To remedy this, utilities were viewed by regulators as the most practical market intervention tool to provide information and bring public awareness to their customers about efficiency benefits using bill inserts, providing web content and offering rebates for products. Utility programs initially helped move the market toward higher customer adoption rates for energy efficiency products in the home. But now there is a thriving competitive market for the provision of energy-efficient technologies, numerous

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1 manufacturers producing those technologies, and many retailers offering those  
2 technologies.

3  
4 Education and information through utility programs and state and federal programs has  
5 also increased market availability over time. One example is the ENERGY STAR  
6 program, an information and branding campaign that for the last 20 years has  
7 revolutionized the market for energy-consuming products. More than 80% of American  
8 consumers now recognize the ENERGY STAR label.<sup>13</sup> And, there are more than 70  
9 product categories that are ENERGY STAR certified.<sup>14</sup> This would suggest that  
10 consumers have options to choose among a variety of energy efficient options depending  
11 on how much they choose to save and at what price. Regulatory expert Kenneth Costello  
12 (who is a witness for OCC in this case) agreed with this sentiment in a recent paper,  
13 concluding: “[C]ustomers have better information on [energy efficiency] programs ...  
14 Presumably, the most cost-effective actions have already been exploited. Thus, market  
15 failures for [energy efficiency] have decreased over time, lessening the need to have  
16 utility or government intervention to advance [energy efficiency].”<sup>15</sup>

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<sup>13</sup> Energy Star® Products 20 Years of Helping America Save Energy Save Money and Protect the Environment;  
[https://www.energystar.gov/ia/products/downloads/ES\\_Anniv\\_Book\\_030712\\_508compliant\\_v2.pdf](https://www.energystar.gov/ia/products/downloads/ES_Anniv_Book_030712_508compliant_v2.pdf).

<sup>14</sup> <https://energystar.zendesk.com/hc/en-us/articles/212112307-I-was-shopping-for-appliances-and-a-lot-of-models-were-ENERGY-STAR-I-thought-it-was-supposed-to-be-hard-to-get->.

<sup>15</sup> See Attachment CLS-5. A copy of the paper is also currently available at  
[https://www.cato.org/sites/cato.org/files/serials/files/regulation/2019/3/regulation-v42n1-4\\_0.pdf](https://www.cato.org/sites/cato.org/files/serials/files/regulation/2019/3/regulation-v42n1-4_0.pdf). (“Costello”). Mr.  
Costello’s paper is also attached to his testimony on behalf of OCC in this case.

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1 Requiring consumers to subsidize natural gas energy efficiency programs is unnecessary  
2 and unreasonable given that the competitive market for energy efficient products is  
3 strong. Consumers are acting on their own (or deciding not to act) for being more energy  
4 efficient. Today, the competitive market provides that connection between energy  
5 efficiency products and the information needed by consumers to make informed savings  
6 decisions. Decades of marketing the benefits of energy efficiency programs have resulted  
7 in much better information on energy efficiency programs and more consumer awareness.  
8 The market has transformed and utility involvement in offering programs is not needed.  
9 The Ohio General Assembly seems to have reached a similar conclusion in House Bill 6  
10 last year, when it ended requirements for utility-run electric energy efficiency programs.  
11

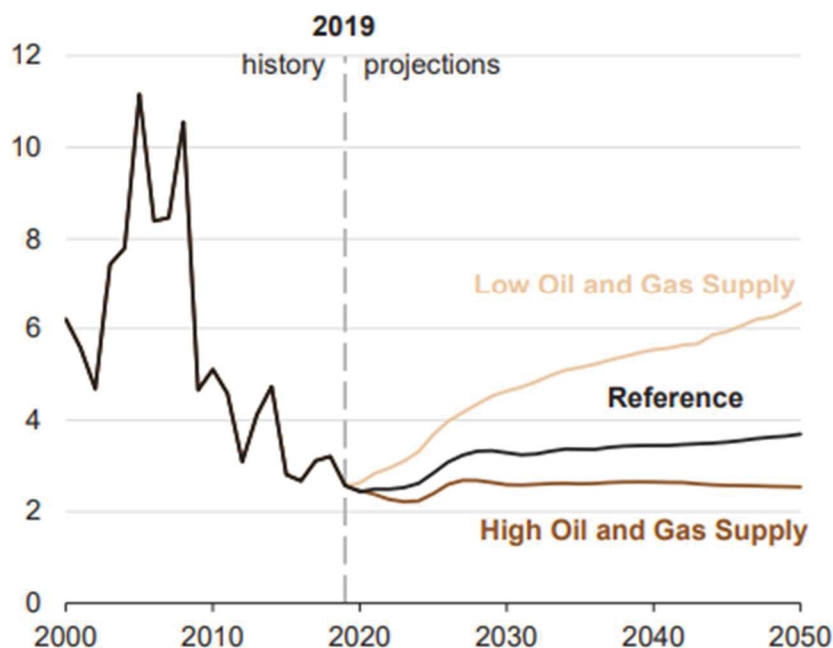
12 ***Q10. HOW DOES THE PRICE OF NATURAL GAS IMPACT THE REASONABLENESS***  
13 ***OF UTILITY ENERGY EFFICIENCY PROGRAMS?***

14 ***A10.*** Natural gas prices have a fundamental impact on the reasonableness of energy efficiency  
15 programs. Henry Hub gas prices, as reported in the U.S. Energy Information  
16 Administration's Annual Energy Outlook 2020 reference case remain lower than \$4.00  
17 per million British Thermal Units (BTU) throughout the projection period as shown  
18 below to 2050.<sup>16</sup>

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<sup>16</sup> Annual Energy Outlook 2020 Natural Gas Sector <https://www.eia.gov/outlooks/aeo/>.

**AEO2020 natural gas spot price at Henry Hub**  
2019 dollars per million British thermal units



As explained earlier, natural gas energy efficiency programs were initiated largely as a response to higher gas prices. Mr. Costello (who is also testifying for OCC in this case) explained in his recent paper that “the rationales for EE programs of both electric and gas utilities are less valid today than when they were first implemented” because “natural gas prices are low and expect to remain so for the next several years.”<sup>17</sup> I agree. When gas prices are low, the programs are less cost-effective and the payback period for energy efficiency equipment is much longer. The competitive market, not utility monopolies, is preferred for the provision of natural gas energy efficiency services and products to consumers. Again, I refer to Mr. Costello’s succinct conclusion: “[S]ociety should rely more heavily on the marketplace to influence EE investments, or the role of utilities

<sup>17</sup> Attachment CLS-5 (which is also attached to Mr. Costello’s testimony).



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1       should be increasingly displaced by better-functioning market mechanisms that rely on  
2       the self-interest of individual customers to reduce their energy bills.”<sup>18</sup>

3  
4    ***Q11. ARE COLUMBIA’S PROGRAMS COST-EFFECTIVE?***

5    ***A11.*** No, not in the aggregate. But the PUCO’s approved energy efficiency tariff rider itself  
6       requires the programs to be cost-effective. That tariff describes the charge as: “An  
7       additional charge, for all gas consumed, to recover the costs associated with the  
8       implementation of comprehensive, cost-effective energy efficiency programs made  
9       available to residential and commercial customers.”<sup>19</sup> Columbia uses an unjustifiably and  
10      unrealistically low discount rate to inflate its cost-effectiveness scores (analysis) and to  
11      inflate claims that its programs are beneficial to consumers who pay to subsidize the  
12      programs. Indeed, as OCC witness Costello said in his paper, “Utility-sponsored studies  
13      of [energy efficiency] proposals often yield results that are much more optimistic about  
14      energy savings than subsequent academic, peer-reviewed studies of the programs once  
15      they are in place. Why does this happen, and whose results should regulators believe?”<sup>20</sup>

16  
17   ***Q12. WHY IS THE DISCOUNT RATE IMPORTANT?***

18   ***A12.*** When calculating the costs and monetary benefits (*i.e.*, present value) of natural gas  
19      energy efficiency programs, it is necessary to apply a discount rate. The discount rate can  
20      have a large impact on the cost-effectiveness results for energy efficiency. Columbia

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<sup>18</sup> Costello at 29.

<sup>19</sup> See Application, Sixteenth Revised Sheet No. 28 (Demand Side Management Rider).

<sup>20</sup> Costello at 28.

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*PUCO Case No. 19-1940-GA-RDR*

1 claims that its natural gas energy efficiency programs are cost-effective (*i.e.*, that the  
2 benefits of the programs outweigh the costs for consumers) at least in the aggregate.<sup>21</sup>  
3 According to Columbia, its programs will save customers \$34,171,734 (net present value)  
4 and cost customers \$29,559,487, thus making the programs cost effective.<sup>22</sup> But  
5 Columbia's programs are only cost effective when using Columbia's chosen discount  
6 rate, [REDACTED]. And, generally, the lower the discount rate used in the net present value  
7 calculation, the more beneficial the utility's programs will appear to be for consumers—if  
8 the programs are beneficial at all in the aggregate.

9  
10 However, Columbia does not explain anywhere in its application or testimony how it  
11 arrived at its chosen discount rate. It would be difficult to explain such a low discount  
12 rate. And indeed, Columbia's use of this low discount rate is inconsistent with PUCO  
13 precedent and is contrary to how professionals in the field evaluate energy efficiency  
14 savings.<sup>23</sup> The PUCO has previously found that the utility weighted average cost of  
15 capital is the appropriate discount rate for the Utility Cost Test: "For the ...[Utility Cost  
16 Test] ...the after-tax weighted average cost of capital has generally been adopted because  
17 this is the same discount rate as is used from a utility perspective to evaluate supply-side  
18 investments."<sup>24</sup>

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<sup>21</sup> See Application, Schedule DSM-5 (claiming \$34.1 million in benefits compared to \$29.6 million in costs).

<sup>22</sup> See Application, Schedule DSM-5.

<sup>23</sup> Comments by the Office of the Ohio Consumers' Counsel filed March 20, 2020, Case No. 19-1940-GA-RDR.

<sup>24</sup> *In re Protocols for the Measurement and Verification of energy Efficiency & Peak Demand Reduction Measures*, Case No. 09-512-GE-UNC, Finding & Order (Oct. 15, 2009).

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1 When using the appropriate discount rate of 8.12% (which is Columbia's weighted  
2 average cost of capital),<sup>25</sup> the total net benefits from the programs for consumers are just  
3 \$27,571,011. That amount of benefits is *lower* than the \$29,559,487 in total costs for  
4 consumers.<sup>26</sup> This revised analysis shows that Columbia's programs are not cost-effective  
5 for consumers overall. That means the programs are losing money on the whole for  
6 residential and small business customers. That means the programs are overall not  
7 beneficial for consumers. And that means, by the terms of Columbia's aforementioned  
8 tariff, Columbia should not be charging consumers.

9  
10 Two of Columbia's programs are particularly problematic when it comes to costs and  
11 benefits. Even using Columbia's own calculations (including its self-serving [REDACTED]  
12 discount rate), its non-low-income home audit program (called "Home Performance  
13 Solutions") is incredibly unsuccessful. Columbia projects that despite costing customers  
14 \$6.1 million, it will only save [REDACTED] for consumers.<sup>27</sup> Customers should not pay  
15 Columbia for Columbia to lose them [REDACTED] on home audits. Columbia's low-  
16 income weatherization program, WarmChoice, is also losing tons of money for  
17 consumers. Again, using Columbia's own calculations (including its unrealistically low  
18 discount rate), the program cost customers \$11.3 million in 2019 but will save customers  
19 just [REDACTED]<sup>28</sup> Columbia's 2019 WarmChoice program is causing customers to *lose*

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<sup>25</sup> See Attachment CLS-2.

<sup>26</sup> See Attachment CLS-3.

<sup>27</sup> See Attachment CLS-4.

<sup>28</sup> See Attachment CLS-4.



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1 more than [REDACTED]. This simply cannot be an appropriate use of customers' money  
2 right now in this time of health and financial crisis (or at any time).  
3

4 ***Q13. DO NATURAL GAS EFFICIENCY PROGRAMS BENEFIT ALL CUSTOMERS,***  
5 ***INCLUDING THOSE CUSTOMERS THAT PAY FOR PROGRAMS BUT DON'T***  
6 ***PARTICIPATE?***

7 ***A13.*** No. Electric energy efficiency programs may benefit all customers (including those who  
8 do not participate in the programs) by lowering market prices and deferring the need for  
9 new power plants that can cost money for consumers. But there is no such benefit to non-  
10 participating customers for natural gas energy efficiency. That point was made years ago  
11 by the PUCO Staff when gas prices were considerably higher.<sup>29</sup>  
12

13 ***Q14. SHOULD COLUMBIA BE ALLOWED TO CHARGE CUSTOMERS FOR UTILITY***  
14 ***PROFITS FOR ITS 2019 PROGRAMS?***

15 ***A14.*** No. In its application, Columbia seeks to charge customers \$461,225 for utility profits,  
16 plus Columbia's taxes on those profits, for a total of \$583,827 in so-called "shared  
17 savings."<sup>30</sup> But Columbia is only allowed to charge customers for profits if its programs  
18 are cost-effective. And as I explained above, when the appropriate 8.12% discount rate is  
19 used, Columbia's programs are not cost-effective. Therefore, Columbia should not be  
20 allowed to charge customers for profits. Based on this more reasonable analysis, the  
21 PUCO should deny Columbia's request for \$583,827 in shared savings profits.

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<sup>29</sup> See Prefiled Testimony of Stephen E. Puican, Case No. 05-1444-GA-UNC (March 20, 2006).

<sup>30</sup> Application, Schedule DSM-5.

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1    ***Q15. DO YOU HAVE ANY OTHER CONCERNS ABOUT COLUMBIA’S ENERGY***  
2            ***EFFICIENCY PROGRAMS?***

3    ***A15.*** Yes. Essential elements of Columbia’s programs are not open and transparent to  
4            consumers who are subsidizing the programs. That should be changed. Transparency to  
5            the public about the costs they pay under government regulation is essential, especially  
6            considering that customers are paying to subsidize more than \$20 million annually to  
7            support these programs on the premise that they are beneficial. Columbia should be held  
8            accountable to provide information about its programs in the public domain, including  
9            detailed information about whether the programs are beneficial to consumers.

10  
11   ***Q16. DOES THIS CONCLUDE YOUR TESTIMONY?***

12   ***A16.*** Yes. However, I reserve the right to supplement my testimony if additional testimony is  
13            filed, or if new information or data in connection with this proceeding becomes available.

### **CERTIFICATE OF SERVICE**

I hereby certify that a true copy of the foregoing *Public Version Direct Testimony of Colleen Shutrump on Behalf of the Office of the Ohio Consumers' Counsel* was served via electronic transmission to the persons listed below on this 20th day of April 2020.

/s/ Christopher Healey  
Assistant Consumers' Counsel

The PUCO's e-filing system will electronically serve notice of the filing of this document on the following parties:

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# News Release



TRANSMISSION OF MATERIALS IN THIS RELEASE IS EMBARGOED UNTIL  
8:30 A.M. (Eastern) Thursday, March 26, 2020

## COVID-19 Impact

During the week ending March 21, the increase in initial claims are due to the impacts of the COVID-19 virus. Nearly every state providing comments cited the COVID-19 virus impacts. States continued to cite services industries broadly, particularly accommodation and food services. Additional industries heavily cited for the increases included the health care and social assistance, arts, entertainment and recreation, transportation and warehousing, and manufacturing industries.

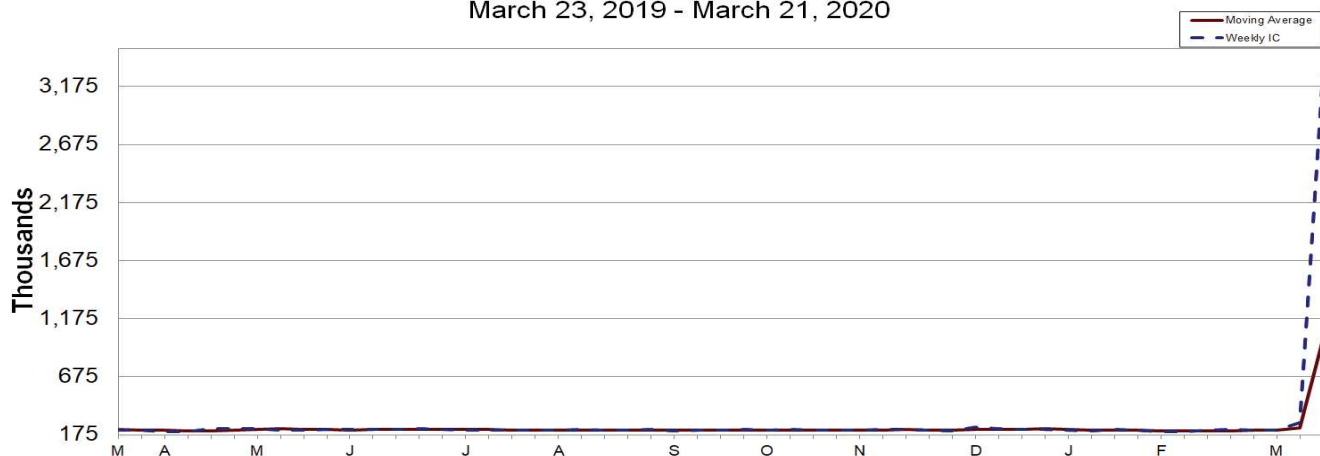
## UNEMPLOYMENT INSURANCE WEEKLY CLAIMS

### SEASONALLY ADJUSTED DATA

In the week ending March 21, the advance figure for seasonally adjusted **initial claims** was 3,283,000, an increase of 3,001,000 from the previous week's revised level. This marks the highest level of seasonally adjusted initial claims in the history of the seasonally adjusted series. The previous high was 695,000 in October of 1982. The previous week's level was revised up by 1,000 from 281,000 to 282,000. The 4-week moving average was 998,250, an increase of 765,750 from the previous week's revised average. The previous week's average was revised up by 250 from 232,250 to 232,500.

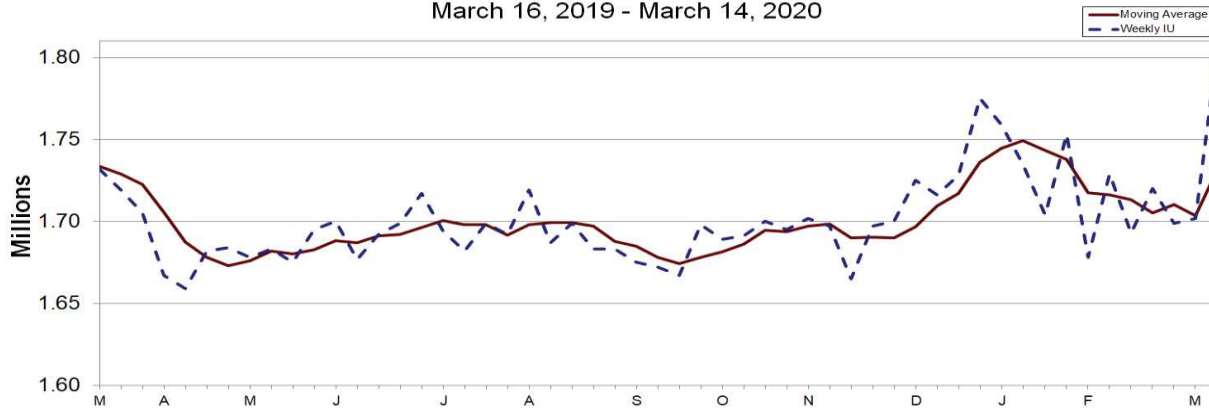
The advance seasonally adjusted **insured unemployment rate** was 1.2 percent for the week ending March 14, unchanged from the previous week's unrevised rate. The advance number for seasonally adjusted **insured unemployment** during the week ending March 14 was 1,803,000, an increase of 101,000 from the previous week's revised level. This is the highest level for insured unemployment since April 14, 2018 when it was 1,824,000. The previous week's level was revised up 1,000 from 1,701,000 to 1,702,000. The 4-week moving average was 1,731,000, an increase of 27,500 from the previous week's revised average. The previous week's average was revised up by 250 from 1,703,250 to 1,703,500.

Seasonally Adjusted Initial Claims  
March 23, 2019 - March 21, 2020



### Seasonally Adjusted Insured Unemployment

March 16, 2019 - March 14, 2020



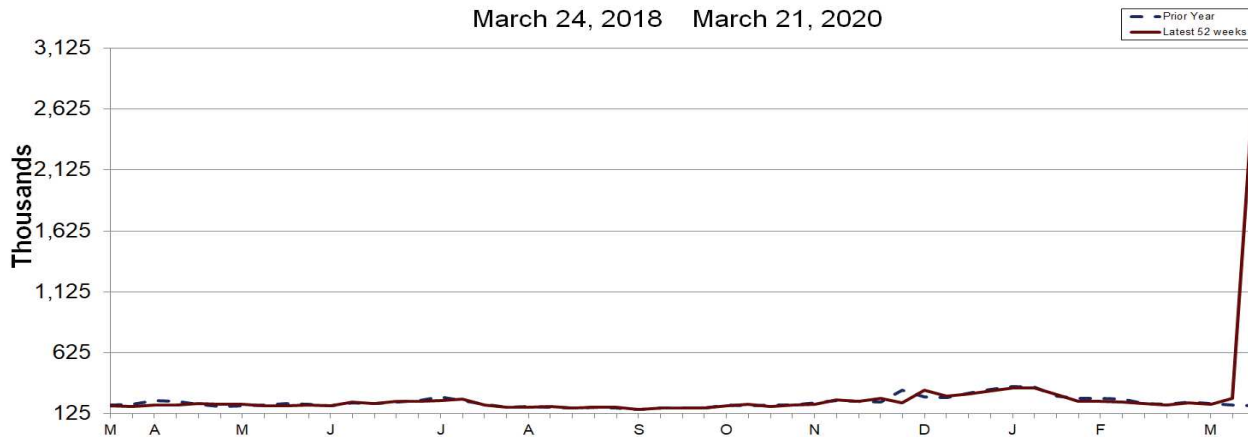
### UNADJUSTED DATA

The advance number of actual initial claims under state programs, unadjusted, totaled 2,898,450 in the week ending March 21, an increase of 2,647,034 (or 1,052.9 percent) from the previous week. The seasonal factors had expected a decrease of 2,815 (or -1.1 percent) from the previous week. There were 190,023 initial claims in the comparable week in 2019.

The advance unadjusted insured unemployment rate was 1.4 percent during the week ending March 14, unchanged from the prior week. The advance unadjusted number for persons claiming UI benefits in state programs totaled 2,097,193, an increase of 119,945 (or 6.1 percent) from the preceding week. The seasonal factors had expected an increase of 1,702 (or 0.1 percent) from the previous week. A year earlier the rate was 1.4 percent and the volume was 2,009,317.

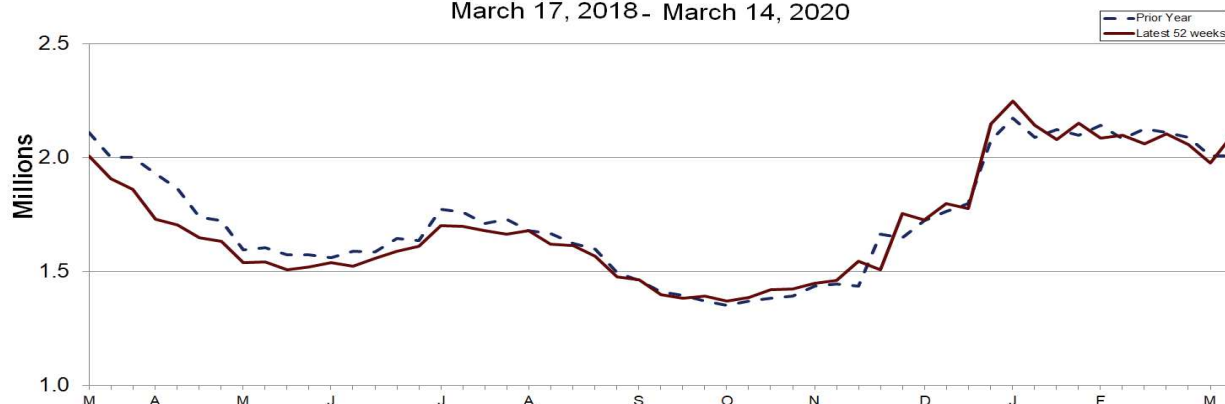
### Not Seasonally Adjusted Initial Claims

March 24, 2018 - March 21, 2020



### Not Seasonally Adjusted Insured Unemployment

March 17, 2018 - March 14, 2020





The total number of people claiming benefits in all programs for the week ending March 7 was 2,006,363, a decrease of 80,856 from the previous week. There were 2,039,322 persons claiming benefits in all programs in the comparable week in 2019.

No state was triggered "on" the Extended Benefits program during the week ending March 7.

Initial claims for UI benefits filed by former Federal civilian employees totaled 573 in the week ending March 14, an increase of 20 from the prior week. There were 436 initial claims filed by newly discharged veterans, a decrease of 71 from the preceding week.

There were 9,644 former Federal civilian employees claiming UI benefits for the week ending March 7, a decrease of 852 from the previous week. Newly discharged veterans claiming benefits totaled 5,207, a decrease of 145 from the prior week.

The highest insured unemployment rates in the week ending March 7 were in Alaska (2.8), New Jersey (2.6), Connecticut (2.4), Rhode Island (2.3), West Virginia (2.3), Illinois (2.2), Minnesota (2.2), Montana (2.2), Pennsylvania (2.2), and Puerto Rico (2.2).

The largest increases in initial claims for the week ending March 14 were in California (+14,221), Washington (+7,624), Nevada (+4,047), Pennsylvania (+3,212), and Massachusetts (+2,737), while the largest decreases were in Arkansas (-461), Alabama (-341), Puerto Rico (-171), West Virginia (-168), and Maine (-81).

## UNEMPLOYMENT INSURANCE DATA FOR REGULAR STATE PROGRAMS

| WEEK ENDING              | March 21  | March 14 | Change     | March 7 | Prior Year <sup>1</sup> |
|--------------------------|-----------|----------|------------|---------|-------------------------|
| Initial Claims (SA)      | 3,283,000 | 282,000  | +3,001,000 | 211,000 | 215,000                 |
| Initial Claims (NSA)     | 2,898,450 | 251,416  | +2,647,034 | 200,382 | 190,023                 |
| 4-Wk Moving Average (SA) | 998,250   | 232,500  | +765,750   | 215,750 | 219,500                 |

| WEEK ENDING                                  | March 14  | March 7   | Change   | February 29 | Prior Year <sup>1</sup> |
|--|-----------|-----------|----------|-------------|-------------------------|
| Insured Unemployment (SA)                    | 1,803,000 | 1,702,000 | +101,000 | 1,699,000   | 1,732,000               |
| Insured Unemployment (NSA)                   | 2,097,193 | 1,977,248 | +119,945 | 2,057,280   | 2,009,317               |
| 4-Wk Moving Average (SA)                     | 1,731,000 | 1,703,500 | +27,500  | 1,710,250   | 1,733,750               |
| Insured Unemployment Rate (SA) <sup>2</sup>  | 1.2%      | 1.2%      | 0.0      | 1.2%        | 1.2%                    |
| Insured Unemployment Rate (NSA) <sup>2</sup> | 1.4%      | 1.4%      | 0.0      | 1.4%        | 1.4%                    |

## INITIAL CLAIMS FILED IN FEDERAL PROGRAMS (UNADJUSTED)

| WEEK ENDING                     | March 14 | March 7 | Change | Prior Year <sup>1</sup> |
|---------------------------------|----------|---------|--------|-------------------------|
| Federal Employees (UCFE)        | 573      | 553     | +20    | 579                     |
| Newly Discharged Veterans (UCX) | 436      | 507     | -71    | 507                     |

## PERSONS CLAIMING UI BENEFITS IN ALL PROGRAMS (UNADJUSTED)

| WEEK ENDING                            | March 7   | February 29 | Change  | Prior Year <sup>1</sup> |
|--|-----------|-------------|---------|-------------------------|
| Regular State                          | 1,973,560 | 2,054,152   | -80,592 | 2,005,466               |
| Federal Employees                      | 9,644     | 10,496      | -852    | 10,705                  |
| Newly Discharged Veterans              | 5,207     | 5,352       | -145    | 6,135                   |
| Extended Benefits <sup>3</sup>         | 0         | 0           | 0       | 1                       |
| State Additional Benefits <sup>4</sup> | 5,584     | 5,641       | -57     | 6,063                   |
| STC / Workshare <sup>5</sup>           | 12,368    | 11,578      | +790    | 10,952                  |
| TOTAL                                  | 2,006,363 | 2,087,219   | -80,856 | 2,039,322               |

## FOOTNOTES

SA - Seasonally Adjusted Data, NSA - Not Seasonally Adjusted Data

1. Prior year is comparable to most recent data.
2. Most recent week used covered employment of 145,230,691 as denominator.
3. Information on the EB program can be found here: [EB Program information](#)
4. Some states maintain additional benefit programs for those claimants who exhaust regular benefits, and when applicable, extended benefits. Information on states that participate, and the extent of benefits paid, can be found starting on page 4-4 of this link: [Extensions and Special Programs PDF](#)
5. Information on STC/Worksharing can be found starting on page 4-8 of the following link: [Extensions and Special Programs PDF](#)

## Advance State Claims - Not Seasonally Adjusted

| STATE                | Initial Claims Filed During Week Ended March 21 |          |           | Insured Unemployment For Week Ended March 14 |           |         |
|----------------------|---|----------|-----------|--|-----------|---------|
|                      | Advance   | Prior Wk | Change    | Advance                                      | Prior Wk  | Change  |
| Alabama              | 9,490   | 1,819    | 7,671     | 11,070                                       | 13,070    | -2,000  |
| Alaska               | 8,225   | 1,120    | 7,105     | 8,407  | 8,522     | -115    |
| Arizona              | 29,268  | 3,844    | 25,424    | 16,076                                       | 17,595    | -1,519  |
| Arkansas             | 8,958   | 1,382    | 7,576     | 9,851  | 11,514    | -1,663  |
| California           | 186,809   | 57,606   | 129,203   | 430,335                                      | 351,344   | 78,991  |
| Colorado             | 19,429  | 2,321    | 17,108    | 21,987                                       | 21,260    | 727     |
| Connecticut          | 25,098  | 3,440    | 21,658    | 45,284                                       | 39,786    | 5,498   |
| Delaware             | 10,720  | 472      | 10,248    | 5,627  | 5,310     | 317     |
| District of Columbia | 13,473  | 1,213    | 12,260    | 7,093  | 6,746     | 347     |
| Florida              | 74,021  | 6,463    | 67,558    | 29,612                                       | 32,244    | -2,632  |
| Georgia              | 11,746  | 5,445    | 6,301     | 26,644                                       | 25,352    | 1,292   |
| Hawaii               | 8,904   | 1,589    | 7,315     | 6,700  | 6,171     | 529     |
| Idaho                | 13,314  | 1,031    | 12,283    | 7,562  | 9,336     | -1,774  |
| Illinois             | 114,663   | 10,870   | 103,793   | 125,914                                      | 130,325   | -4,411  |
| Indiana              | 61,635  | 2,596    | 59,039    | 22,440                                       | 21,473    | 967     |
| Iowa                 | 41,890  | 2,229    | 39,661    | 27,172                                       | 27,816    | -644    |
| Kansas               | 23,687  | 1,755    | 21,932    | 10,245                                       | 9,771     | 474     |
| Kentucky             | 48,847  | 2,785    | 46,062    | 21,885                                       | 22,940    | -1,055  |
| Louisiana            | 72,620  | 2,255    | 70,365    | 12,052                                       | 13,987    | -1,935  |
| Maine                | 21,197  | 634      | 20,563    | 8,620  | 8,451     | 169     |
| Maryland             | 41,882  | 3,864    | 38,018    | 26,072                                       | 27,046    | -974    |
| Massachusetts        | 147,995   | 7,449    | 140,546   | 82,475                                       | 74,336    | 8,139   |
| Michigan             | 129,298   | 5,338    | 123,960   | 78,824                                       | 75,757    | 3,067   |
| Minnesota            | 116,438   | 4,010    | 112,428   | 70,530                                       | 61,781    | 8,749   |
| Mississippi          | 6,723   | 1,147    | 5,576     | 5,714  | 7,098     | -1,384  |
| Missouri             | 40,508  | 4,016    | 36,492    | 22,188                                       | 22,381    | -193    |
| Montana              | 14,704  | 817      | 13,887    | 10,054                                       | 10,112    | -58     |
| Nebraska             | 15,668  | 795      | 14,873    | 4,603  | 5,076     | -473    |
| Nevada               | 93,036  | 6,356    | 86,680    | 20,852                                       | 19,475    | 1,377   |
| New Hampshire        | 21,878  | 642      | 21,236    | 3,731  | 3,909     | -178    |
| New Jersey           | 155,454   | 9,467    | 145,987   | 108,091                                      | 104,283   | 3,808   |
| New Mexico           | 17,187  | 869      | 16,318    | 9,707  | 9,566     | 141     |
| New York             | 80,334  | 14,272   | 66,062    | 168,921                                      | 158,268   | 10,653  |
| North Carolina       | 93,587  | 3,533    | 90,054    | 19,377                                       | 19,683    | -306    |
| North Dakota         | 5,968   | 415      | 5,553     | 7,165  | 6,349     | 816     |
| Ohio*                | 187,784   | 7,046    | 180,738   | 68,743                                       | 68,516    | 227     |
| Oklahoma             | 17,720  | 1,836    | 15,884    | 15,863                                       | 16,482    | -619    |
| Oregon               | 22,824  | 4,269    | 18,555    | 30,488                                       | 29,002    | 1,486   |
| Pennsylvania*        | 378,908   | 15,439   | 363,469   | 128,932                                      | 128,842   | 90      |
| Puerto Rico*         | 1,471   | 1,172    | 299       | 17,198                                       | 18,704    | -1,506  |
| Rhode Island         | 35,436  | 1,108    | 34,328    | 11,011                                       | 10,692    | 319     |
| South Carolina       | 31,064  | 2,093    | 28,971    | 14,780                                       | 15,032    | -252    |
| South Dakota         | 1,703   | 190      | 1,513     | 2,657  | 2,870     | -213    |
| Tennessee            | 39,096  | 2,702    | 36,394    | 17,235                                       | 18,450    | -1,215  |
| Texas                | 155,657   | 16,176   | 139,481   | 126,955                                      | 127,905   | -950    |
| Utah                 | 1,314   | 1,305    | 9         | 10,324                                       | 10,701    | -377    |
| Vermont              | 3,667   | 659      | 3,008     | 5,055  | 4,896     | 159     |
| Virgin Islands       | 58  | 44       | 14        | 588  | 592       | -4      |
| Virginia             | 46,885  | 2,706    | 44,179    | 22,291                                       | 21,336    | 955     |
| Washington           | 133,478   | 14,240   | 119,238   | 67,415                                       | 55,588    | 11,827  |
| West Virginia        | 3,435   | 865      | 2,570     | 16,571                                       | 15,394    | 1,177   |
| Wisconsin            | 50,957  | 5,190    | 45,767    | 44,278                                       | 40,738    | 3,540   |
| Wyoming              | 2,339   | 517      | 1,822     | 3,929  | 3,375     | 554     |
| US Total             | 2,898,450                                       | 251,416  | 2,647,034 | 2,097,193                                    | 1,977,248 | 119,945 |

Note: Advance claims are not directly comparable to claims reported in prior weeks. Advance claims are reported by the state liable for paying the unemployment compensation, whereas previous weeks reported claims reflect claimants by state of residence. In addition, claims reported as "workshare equivalent" in the previous week are added to the advance claims as a proxy for the current week's "workshare equivalent" activity.

\*Denotes state estimate.

## Seasonally Adjusted US Weekly UI Claims (in thousands)

| Week Ending        | Initial<br>Claims | Change<br>from |                   | Insured<br>Unemployment | Change<br>from |                   | IUR |
|--------------------|-------------------|----------------|-------------------|-------------------------|----------------|-------------------|-----|
|                    |                   | Prior<br>Week  | 4-Week<br>Average |                         | Prior<br>Week  | 4-Week<br>Average |     |
| March 16, 2019     | 219               | -5             | 221.75            | 1,732                   | -2             | 1,733.75          | 1.2 |
| March 23, 2019     | 215               | -4             | 219.50            | 1,719                   | -13            | 1,728.75          | 1.2 |
| March 30, 2019     | 211               | -4             | 217.25            | 1,705                   | -14            | 1,722.50          | 1.2 |
| April 6, 2019      | 203               | -8             | 212.00            | 1,667                   | -38            | 1,705.75          | 1.2 |
| April 13, 2019     | 203               | 0              | 208.00            | 1,659                   | -8             | 1,687.50          | 1.2 |
| April 20, 2019     | 226               | 23             | 210.75            | 1,682                   | 23             | 1,678.25          | 1.2 |
| April 27, 2019     | 230               | 4              | 215.50            | 1,684                   | 2              | 1,673.00          | 1.2 |
| May 4, 2019        | 225               | -5             | 221.00            | 1,678                   | -6             | 1,675.75          | 1.2 |
| May 11, 2019       | 217               | -8             | 224.50            | 1,683                   | 5              | 1,681.75          | 1.2 |
| May 18, 2019       | 213               | -4             | 221.25            | 1,675                   | -8             | 1,680.00          | 1.2 |
| May 25, 2019       | 218               | 5              | 218.25            | 1,695                   | 20             | 1,682.75          | 1.2 |
| June 1, 2019       | 220               | 2              | 217.00            | 1,700                   | 5              | 1,688.25          | 1.2 |
| June 8, 2019       | 220               | 0              | 217.75            | 1,677                   | -23            | 1,686.75          | 1.2 |
| June 15, 2019      | 219               | -1             | 219.25            | 1,692                   | 15             | 1,691.00          | 1.2 |
| June 22, 2019      | 224               | 5              | 220.75            | 1,699                   | 7              | 1,692.00          | 1.2 |
| June 29, 2019      | 222               | -2             | 221.25            | 1,717                   | 18             | 1,696.25          | 1.2 |
| July 6, 2019       | 211               | -11            | 219.00            | 1,694                   | -23            | 1,700.50          | 1.2 |
| July 13, 2019      | 217               | 6              | 218.50            | 1,682                   | -12            | 1,698.00          | 1.2 |
| July 20, 2019      | 211               | -6             | 215.25            | 1,699                   | 17             | 1,698.00          | 1.2 |
| July 27, 2019      | 216               | 5              | 213.75            | 1,692                   | -7             | 1,691.75          | 1.2 |
| August 3, 2019     | 214               | -2             | 214.50            | 1,719                   | 27             | 1,698.00          | 1.2 |
| August 10, 2019    | 218               | 4              | 214.75            | 1,687                   | -32            | 1,699.25          | 1.2 |
| August 17, 2019    | 215               | -3             | 215.75            | 1,699                   | 12             | 1,699.25          | 1.2 |
| August 24, 2019    | 215               | 0              | 215.50            | 1,683                   | -16            | 1,697.00          | 1.2 |
| August 31, 2019    | 219               | 4              | 216.75            | 1,683                   | 0              | 1,688.00          | 1.2 |
| September 7, 2019  | 208               | -11            | 214.25            | 1,675                   | -8             | 1,685.00          | 1.2 |
| September 14, 2019 | 211               | 3              | 213.25            | 1,672                   | -3             | 1,678.25          | 1.2 |
| September 21, 2019 | 215               | 4              | 213.25            | 1,667                   | -5             | 1,674.25          | 1.2 |
| September 28, 2019 | 218               | 3              | 213.00            | 1,698                   | 31             | 1,678.00          | 1.2 |
| October 5, 2019    | 212               | -6             | 214.00            | 1,689                   | -9             | 1,681.50          | 1.2 |
| October 12, 2019   | 218               | 6              | 215.75            | 1,691                   | 2              | 1,686.25          | 1.2 |
| October 19, 2019   | 213               | -5             | 215.25            | 1,700                   | 9              | 1,694.50          | 1.2 |
| October 26, 2019   | 217               | 4              | 215.00            | 1,695                   | -5             | 1,693.75          | 1.2 |
| November 2, 2019   | 212               | -5             | 215.00            | 1,702                   | 7              | 1,697.00          | 1.2 |
| November 9, 2019   | 222               | 10             | 216.00            | 1,697                   | -5             | 1,698.50          | 1.2 |
| November 16, 2019  | 223               | 1              | 218.50            | 1,665                   | -32            | 1,689.75          | 1.2 |
| November 23, 2019  | 211               | -12            | 217.00            | 1,697                   | 32             | 1,690.25          | 1.2 |
| November 30, 2019  | 206               | -5             | 215.50            | 1,700                   | 3              | 1,689.75          | 1.2 |
| December 7, 2019   | 237               | 31             | 219.25            | 1,725                   | 25             | 1,696.75          | 1.2 |
| December 14, 2019  | 229               | -8             | 220.75            | 1,716                   | -9             | 1,709.50          | 1.2 |
| December 21, 2019  | 218               | -11            | 222.50            | 1,728                   | 12             | 1,717.25          | 1.2 |
| December 28, 2019  | 220               | 2              | 226.00            | 1,775                   | 47             | 1,736.00          | 1.2 |
| January 4, 2020    | 212               | -8             | 219.75            | 1,759                   | -16            | 1,744.50          | 1.2 |
| January 11, 2020   | 207               | -5             | 214.25            | 1,735                   | -24            | 1,749.25          | 1.2 |
| January 18, 2020   | 220               | 13             | 214.75            | 1,704                   | -31            | 1,743.25          | 1.2 |
| January 25, 2020   | 212               | -8             | 212.75            | 1,753                   | 49             | 1,737.75          | 1.2 |
| February 1, 2020   | 201               | -11            | 210.00            | 1,678                   | -75            | 1,717.50          | 1.2 |
| February 8, 2020   | 204               | 3              | 209.25            | 1,729                   | 51             | 1,716.00          | 1.2 |
| February 15, 2020  | 215               | 11             | 208.00            | 1,693                   | -36            | 1,713.25          | 1.2 |
| February 22, 2020  | 220               | 5              | 210.00            | 1,720                   | 27             | 1,705.00          | 1.2 |
| February 29, 2020  | 217               | -3             | 214.00            | 1,699                   | -21            | 1,710.25          | 1.2 |
| March 7, 2020      | 211               | -6             | 215.75            | 1,702                   | 3              | 1,703.50          | 1.2 |
| March 14, 2020     | 282               | 71             | 232.50            | 1,803                   | 101            | 1,731.00          | 1.2 |
| March 21, 2020     | 3,283             | 3,001          | 998.25            |                         |                |                   |     |

| INITIAL CLAIMS FILED DURING WEEK ENDED<br>MARCH 14 |        |              |             |                   |                  | INSURED UNEMPLOYMENT FOR WEEK ENDED<br>MARCH 7 |                  |              |             |                   |                  |         |  | ALL PROGRAMS<br>EXCLUDING<br>RAILROAD<br>RETIREMENT |
|--|--------|--------------|-------------|-------------------|------------------|--|------------------|--------------|-------------|-------------------|------------------|---------|--|---|
| STATE NAME   | STATE  | CHANGE FROM  |             |                   |                  | STATE  | (%) <sup>2</sup> | CHANGE FROM  |             |                   |                  |         |  |   |
|  |        | LAST<br>WEEK | YEAR<br>AGO | UCFE <sup>1</sup> | UCX <sup>1</sup> |  |                  | LAST<br>WEEK | YEAR<br>AGO | UCFE <sup>1</sup> | UCX <sup>1</sup> |         |  |   |
| Alabama  | 1819   | -341         | -330        | 6                 | 3                | 13070  | 0.7              | -2707        | -1302       | 58                | 46               | 13174   |  |   |
| Alaska   | 1120   | 305          | 165         | 6                 | 0                | 8522   | 2.8              | 256          | -412        | 127               | 9                | 8658    |  |   |
| Arizona  | 3844   | 487          | 456         | 1                 | 2                | 17595  | 0.6              | 2            | -1493       | 183               | 30               | 17808   |  |   |
| Arkansas   | 1382   | -461         | -60         | 2                 | 3                | 11514  | 1.0              | -104         | 541         | 51                | 31               | 11596   |  |   |
| California   | 57606  | 14221        | 16478       | 127               | 57               | 351344   | 2.0              | -27520       | -20962      | 2225              | 1003             | 354572  |  |   |
| Colorado   | 2321   | 456          | 815         | 14                | 19               | 21260  | 0.8              | -1648        | 71          | 219               | 122              | 21601   |  |   |
| Connecticut  | 3440   | 913          | 619         | 2                 | 5                | 39786  | 2.4              | -852         | -1282       | 45                | 62               | 39893   |  |   |
| Delaware   | 472    | -46          | 12          | 0                 | 1                | 5310   | 1.2              | -170         | -425        | 13                | 10               | 5333    |  |   |
| District of Columbia                               | 1213   | 742          | 783         | 11                | 3                | 6746   | 1.2              | -46          | -513        | 186               | 5                | 6937    |  |   |
| Florida  | 6463   | 1138         | 662         | 20                | 26               | 32244  | 0.4              | -18          | -2507       | 148               | 91               | 32483   |  |   |
| Georgia  | 5445   | 876          | 1058        | 23                | 14               | 25352  | 0.6              | 273          | 670         | 180               | 123              | 25655   |  |   |
| Hawaii   | 1589   | 314          | 434         | 2                 | 4                | 6171   | 1.0              | 127          | -431        | 62                | 60               | 6293    |  |   |
| Idaho  | 1031   | 93           | -12         | 10                | 1                | 9336   | 1.3              | -831         | -361        | 259               | 12               | 9607    |  |   |
| Illinois   | 10870  | 2143         | 2883        | 5                 | 3                | 130325   | 2.2              | -6071        | 4863        | 369               | 148              | 130842  |  |   |
| Indiana  | 2596   | 373          | 508         | 3                 | 3                | 21473  | 0.7              | -1113        | 791         | 25                | 25               | 21523   |  |   |
| Iowa   | 2229   | 8            | -119        | 4                 | 1                | 27816  | 1.8              | -1608        | -2518       | 57                | 22               | 27895   |  |   |
| Kansas   | 1755   | 390          | 107         | 0                 | 0                | 9771   | 0.7              | -1232        | -1422       | 24                | 21               | 9816    |  |   |
| Kentucky   | 2785   | 322          | 680         | 3                 | 3                | 22940  | 1.2              | 170          | 2795        | 108               | 127              | 23175   |  |   |
| Louisiana  | 2255   | 557          | 594         | 5                 | 2                | 13987  | 0.7              | -212         | -281        | 40                | 14               | 14041   |  |   |
| Maine  | 634    | -81          | 15          | 0                 | 1                | 8451   | 1.4              | -288         | -42         | 45                | 6                | 8502    |  |   |
| Maryland   | 3864   | 1189         | 1271        | 13                | 4                | 27046  | 1.1              | -1022        | -3571       | 175               | 74               | 27295   |  |   |
| Massachusetts                                      | 7449   | 2737         | 3095        | 10                | 7                | 74336  | 2.1              | -1216        | -5238       | 136               | 91               | 74563   |  |   |
| Michigan   | 5338   | 188          | 182         | 14                | 12               | 75757  | 1.8              | -1904        | -327        | 198               | 88               | 76043   |  |   |
| Minnesota  | 4010   | 522          | 781         | 4                 | 4                | 61781  | 2.2              | -986         | 3247        | 122               | 62               | 61965   |  |   |
| Mississippi  | 1147   | 268          | 12          | 5                 | 2                | 7098   | 0.6              | -318         | -258        | 72                | 17               | 7187    |  |   |
| Missouri   | 4016   | 1022         | 783         | 3                 | 1                | 22381  | 0.8              | -2844        | -3410       | 83                | 27               | 22491   |  |   |
| Montana  | 817    | 103          | 43          | 20                | 0                | 10112  | 2.2              | -670         | -1489       | 434               | 19               | 10565   |  |   |
| Nebraska   | 795    | 294          | 7           | 6                 | 0                | 5076   | 0.5              | -505         | -1995       | 18                | 9                | 5103    |  |   |
| Nevada   | 6356   | 4047         | 4068        | 7                 | 1                | 19475  | 1.4              | -375         | -113        | 137               | 43               | 19655   |  |   |
| New Hampshire                                      | 642    | 147          | 124         | 0                 | 0                | 3909   | 0.6              | -566         | -575        | 8                 | 3                | 3920    |  |   |
| New Jersey   | 9467   | 1471         | 1614        | 27                | 23               | 104283   | 2.6              | -3363        | -3045       | 224               | 265              | 104772  |  |   |
| New Mexico   | 869    | 179          | 192         | 2                 | 4                | 9566   | 1.2              | -279         | -56         | 212               | 35               | 9813    |  |   |
| New York   | 14272  | 237          | 1357        | 14                | 18               | 158268   | 1.7              | -3624        | 1292        | 291               | 316              | 158875  |  |   |
| North Carolina                                     | 3533   | 958          | 865         | 13                | 20               | 19683  | 0.4              | -513         | 1070        | 114               | 85               | 19882   |  |   |
| North Dakota                                       | 415    | -8           | 127         | 2                 | 0                | 6349   | 1.5              | -194         | 188         | 16                | 3                | 6368    |  |   |
| Ohio   | 7046   | 501          | 597         | 7                 | 12               | 68516  | 1.3              | -4607        | 1130        | 106               | 117              | 68739   |  |   |
| Oklahoma   | 1836   | 267          | -833        | 8                 | 5                | 16482  | 1.1              | -585         | 2955        | 52                | 48               | 16582   |  |   |
| Oregon   | 4269   | 115          | 563         | 20                | 6                | 29002  | 1.5              | -515         | -2987       | 557               | 51               | 29610   |  |   |
| Pennsylvania                                       | 15439  | 3212         | 2361        | 70                | 26               | 128842   | 2.2              | -8089        | -1259       | 483               | 199              | 129524  |  |   |
| Puerto Rico  | 1172   | -171         | -3          | 3                 | 4                | 18704  | 2.2              | 47           | 2896        | 179               | 72               | 18955   |  |   |
| Rhode Island                                       | 1108   | 408          | 221         | 2                 | 3                | 10692  | 2.3              | -438         | -1108       | 15                | 6                | 10713   |  |   |
| South Carolina                                     | 2093   | 204          | 16          | 3                 | 2                | 15032  | 0.7              | -309         | 596         | 39                | 56               | 15127   |  |   |
| South Dakota                                       | 190    | 5            | 47          | 2                 | 0                | 2870   | 0.7              | -189         | -442        | 55                | 4                | 2929    |  |   |
| Tennessee  | 2702   | 670          | 454         | 4                 | 4                | 18450  | 0.6              | -585         | 297         | 82                | 49               | 18581   |  |   |
| Texas  | 16176  | 1821         | 4596        | 34                | 89               | 127905   | 1.0              | 2653         | 14449       | 418               | 838              | 129161  |  |   |
| Utah   | 1305   | 290          | 391         | 5                 | 3                | 10701  | 0.7              | -376         | -57         | 161               | 14               | 10876   |  |   |
| Vermont  | 659    | 213          | 18          | 0                 | 1                | 4896   | 1.6              | -323         | -323        | 11                | 1                | 4908    |  |   |
| Virgin Islands                                     | 44     | -20          | 24          | 0                 | 0                | 592  | 1.7              | 6            | 46          | 4                 | 0                | 596     |  |   |
| Virginia   | 2706   | 179          | 496         | 5                 | 8                | 21336  | 0.6              | -1378        | -591        | 169               | 179              | 21684   |  |   |
| Washington   | 14240  | 7624         | 8453        | 7                 | 23               | 55588  | 1.7              | -925         | -7301       | 450               | 400              | 56438   |  |   |
| West Virginia                                      | 865    | -168         | 25          | 0                 | 3                | 15394  | 2.3              | -716         | 1862        | 42                | 38               | 15474   |  |   |
| Wisconsin  | 5190   | 138          | -809        | 5                 | 0                | 40738  | 1.4              | -1599        | -3209       | 96                | 28               | 40862   |  |   |
| Wyoming  | 517    | -17          | 195         | 14                | 0                | 3375   | 1.3              | -133         | 446         | 61                | 3                | 3439    |  |   |
| Totals   | 251416 | 51034        | 57081       | 573               | 436              | 1977248  | 1.4              | -80032       | -31100      | 9644              | 5207             | 1992099 |  |   |

Figures appearing in columns showing over-the-week changes reflect all revisions in data for prior week submitted by state agencies.

1. The Unemployment Compensation program for Federal Employees (UCFE) and the Unemployment Compensation for Ex-servicemembers (UCX) exclude claims filed jointly under other programs to avoid duplication.
2. Rate is not seasonally adjusted. The source of U.S. total covered employment is BLS.

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**UNADJUSTED INITIAL CLAIMS FOR WEEK ENDED MARCH 14, 2020**

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**STATES WITH AN INCREASE OF MORE THAN 1,000**

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| <b>State</b> | <b>Change</b> | <b>State Supplied Comment</b>  |
|--------------|---------------|--|
| CA           | +14,221       | Layoffs in the service industry.   |
| WA           | +7,624        | Layoffs in the transportation and warehousing, real estate rental and leasing, arts, entertainment and recreation, accommodation and food services, and service industries.  |
| NV           | +4,047        | Increase in layoffs are due to the COVID-19 virus.   |
| PA           | +3,212        | Layoffs in the accommodation and food services, transportation and warehousing, and educational service industries.  |
| MA           | +2,737        | Increase in layoffs are due to the COVID-19 virus.   |
| IL           | +2,143        | Layoffs in the construction, accommodation and food services, and administrative, support, waste management, and remediation services industries.  |
| TX           | +1,821        | Layoffs in the transportation and warehousing, administrative, support, waste management, and remediation services, accommodation and food services, health care and social assistance, and arts, entertainment and recreation industries. |
| NJ           | +1,471        | Layoffs in the accommodation and food services, transportation and warehousing, and educational service industries. Increase due to the COVID-19 virus.  |
| MD           | +1,189        | No comment.  |
| FL           | +1,138        | Layoffs in the agriculture, forestry, fishing, and hunting, manufacturing, wholesale trade, and retail trade industries.   |
| MO           | +1,022        | Layoffs in the transportation and warehousing, accommodation and food services, and administrative, support, waste management, and remediation services industries.  |

**STATES WITH A DECREASE OF MORE THAN 1,000**

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| <b>State</b> | <b>Change</b> | <b>State Supplied Comment</b> |
|--------------|---------------|-------------------------------|
| None         |               |                               |

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## TECHNICAL NOTES

This news release presents the weekly unemployment insurance (UI) claims reported by each state's unemployment insurance program offices. These claims may be used for monitoring workload volume, assessing state program operations and for assessing labor market conditions. States initially report claims directly taken by the state liable for the benefit payments, regardless of where the claimant who filed the claim resided. These are the basis for the advance initial claims and continued claims reported each week. These data come from ETA 538, Advance Weekly Initial and Continued Claims Report. The following week initial claims and continued claims are revised based on a second reporting by states that reflect the claimants by state of residence. These data come from the ETA 539, Weekly Claims and Extended Benefits Trigger Data Report.

### A. Initial Claims

An initial claim is a claim filed by an unemployed individual after a separation from an employer. The claimant requests a determination of basic eligibility for the UI program. When an initial claim is filed with a state, certain programmatic activities take place and these result in activity counts including the count of initial claims. The count of U.S. initial claims for unemployment insurance is a leading economic indicator because it is an indication of emerging labor market conditions in the country. However, these are weekly administrative data which are difficult to seasonally adjust, making the series subject to some volatility.

### B. Continued Weeks Claimed

A person who has already filed an initial claim and who has experienced a week of unemployment then files a continued claim to claim benefits for that week of unemployment. Continued claims are also referred to as insured unemployment. The count of U.S. continued weeks claimed is also a good indicator of labor market conditions. Continued claims reflect the current number of insured unemployed workers filing for UI benefits in the nation. While continued claims are not a leading indicator (they roughly coincide with economic cycles at their peaks and lag at cycle troughs), they provide confirming evidence of the direction of the U.S. economy.

### C. Seasonal Adjustments and Annual Revisions

Over the course of a year, the weekly changes in the levels of initial claims and continued claims undergo regularly occurring fluctuations. These fluctuations may result from seasonal changes in weather, major holidays, the opening and closing of schools, or other similar events. Because these seasonal events follow a more or less regular pattern each year, their influence on the level of a series can be tempered by adjusting for regular seasonal variation. These adjustments make trend and cycle developments easier to spot. At the beginning of each calendar year, the Bureau of Labor Statistics provides the Employment and Training Administration (ETA) with a set of seasonal factors to apply to the unadjusted data during that year. Concurrent with the implementation and release of the new seasonal factors, ETA incorporates revisions to the UI claims historical series caused by updates to the unadjusted data.

### [Weekly Claims Archives](#) [Weekly Claims Data](#)

U.S. Department of Labor news materials are accessible at <http://www.dol.gov>. The Department's [Reasonable Accommodation Resource Center](#) converts Departmental information and documents into alternative formats, which include Braille and large print. For alternative format requests, please contact the Department at (202) 693-7828 (voice) or (800) 877-8339 (federal relay).

U.S. Department of Labor  
Employment and Training Administration  
Washington, D.C. 20210  
Release Number: USDL 20-510-NAT

Program Contacts:  
Kevin Stapleton: (202) 693-3009  
Media Contact: (202) 693-4676

PUCO Case Nos. 16-1309-GA-UNC and 16-1310-GA-AAM

OCC Interrogatories Set 5 No. 83

Respondent: Melissa L. Thompson

As to Objections: Joseph M. Clark

**COLUMBIA GAS OF OHIO, INC.**  
**RESPONSE TO OCC'S INTERROGATORIES**  
**DATED SEPTEMBER 1, 2016**

INT-83. What is Columbia's weighted average cost of capital?

**RESPONSE:**

Objection – the interrogatory is not likely to lead to the discovery of admissible evidence.

Subject to and without waiving any of its objections, in an effort to cooperate in discovery, Columbia answers as follows: In Case No. 08-72-GA-AIR, *et al.*, the Public Utilities Commission of Ohio set a rate of return of 8.12% for Columbia.



ATTACHMENT CLS-3  
(SHUTRUMP CALCULATION OF PROGRAM BENEFITS)

FILED UNDER SEAL

INTENTIONALLY OMITTED

ATTACHMENT CLS-4  
(COLUMBIA COST EFFECTIVENESS RESULTS)  
FILED UNDER SEAL  
  
INTENTIONALLY OMITTED

ENERGY & ENVIRONMENT

# A Cautionary Tale About Energy Efficiency Initiatives

*If these programs are such bargains, then why does government mandate them and energy utilities push for them?*

◆ BY KENNETH W. COSTELLO

I constantly hear about how wonderful utility and government-mandated energy efficiency (EE) initiatives are. Many EE supporters claim these efforts to push consumers to buy higher-efficiency appliances and use more insulating materials are “negative-cost” ways to reduce carbon emissions—that by reducing energy consumption along with emissions, these changes more than pay for themselves.

For instance, in 2009 the consulting firm McKinsey & Co. estimated that adoption of cost-effective EE investments in the United States could generate \$700 billion in net private cost savings. Amory Lovins, an environmental scientist and chairman of the Rocky Mountain Institute, once remarked that EE is the “lunch you are paid to eat.”

Yet these free lunches seem suspicious to me—and to many analysts who have studied the benefits and costs of EE initiatives. If these efforts are such a bargain, then why must government mandate them and utilities push for them?

## WHY DO WE NEED EE POLICY?

The conventional economic defense for government-imposed EE standards begins by assuming deep flaws in consumer rationality, barriers to information, or underpricing of energy. Supposedly, these factors lead to consumers making incorrect calculations and tradeoffs between the initial costs of appliances and their subsequent energy-use costs. Consumers allegedly are unwilling to pay more initially for consumer durables that would use

less energy and save money in present value. Instead, they buy cheap durables that are costlier to run over time. Mandatory energy standards force consumers to make the “correct” tradeoff between initial and operating costs, “purchase” more energy efficiency, and eliminate the so-called “EE gap.”

In the typical EE gap study, analysts often calculate the savings in energy costs over the lifetime of an appliance by using a discount rate converting the stream of annual costs into a present value. If the present value of cost savings from an efficient appliance is greater than the incremental cost of the efficient appliance relative to a conventional substitute, then an EE gap is said to exist. Said differently, the discount rate that consumers appear to use in their decisions about paying more initially for later energy savings is “too high” relative to the “market” discount rate used by the analyst.

This gap provides the justification for both government EE standards and utility EE initiatives. Policymakers attribute the “low” adoption of EE investments to market failure or consumer-behavioral problems. The presumption is that consumers are incapable of making the correct calculations or else make decisions contrary to their self-interest.

Hence, there is an economic rationale for government policies such as energy building codes, appliance standards, and utility subsidies. However, this rationale includes two assumptions that often go unrecognized by EE supporters:

- The gap truly represents a market or behavioral failure.
- The benefits from correcting this failure are greater than the costs.

Just because market problems exist that might hinder EE invest-

ments does not mean that utility or governmental intervention is socially desirable.

### RECONCILING AN EE GAP AND RATIONAL CONSUMERS

Energy consumers who do not invest in seemingly cost-effective EE can be acting rationally. To understand why, we must keep in mind three additional factors.

First, consumers have difficulty verifying energy savings claims. And even if the energy savings are verifiable, future energy prices are not. Past energy prices have varied dramatically; they were

much higher in the 1970s, then low from the mid-1980s through the early 2000s, high again in the mid-2000s, and now they are low again. Thus, consumers have reason to balk at making EE investments because of uncertainty over whether those investments will pan out.

The second factor is consumer heterogeneity—the simple fact that different people use energy differently. Although the average consumer may find an EE investment economically attractive, some may not because of differences in preferences, the level of energy usage, and the cost of borrowing.

The third factor is the need to consider costs borne by consum-



PHOTO BY PARITAWAN / GETTY IMAGES

## ENERGY &amp; ENVIRONMENT

ers themselves. These include transaction costs (e.g., the time spent by households in searching for energy-efficient appliances), poor appliance performance (e.g., dishwashers and clothes washers that do a poor job on especially soiled loads), and so forth.

### ACADEMIC VS. UTILITY EVALUATIONS OF EE PROGRAMS

Another problem is that supposedly objective analyses of specific EE initiatives often reach very different conclusions. Utility-sponsored studies of EE proposals often yield results that are much more optimistic about energy savings than subsequent academic, peer-reviewed studies of the programs once they are in place. Why does this happen, and whose results should regulators believe?

Academic reviews of EE programs conclude that such programs are not the “low-hanging fruit” that many people believe. Academic reviews find that utilities grossly overstate energy savings from EE programs because they rely on *ex-ante* engineering estimates. The reviews also note that utilities often fail to consider “hidden costs” for consumers from the time and effort spent on both energy audits and investments. The combination of these factors, according to some academic studies, has led to

*Utility-sponsored ex-ante studies of energy-efficiency proposals often yield results that are much more optimistic about energy savings than subsequent academic, peer-reviewed studies of the programs once they are in place.*

utilities understating the costs of EE programs by as much as 50% or more.

Academic research on utility studies has also found “rebound effects” that reduce anticipated energy savings. A “rebound” occurs when energy consumers use their air conditioners and heating systems more intensively because of lower operating costs for the EE technologies. This reduces the actual energy savings relative to those predicted by engineering possibilities.

Academic studies also find “free riders.” These are individuals who would have purchased lower energy-use appliances or HVAC systems regardless of the existence of the EE programs and thus their energy savings should not be counted as benefits created by the policy. The subsidies they receive for purchasing their EE products are pure transfers from other utility customers, many of whom are low-income households. For instance, a 2016 *Energy Journal* paper by Anna Alberini, Will Gans, and Charles Towe document this effect in a heat pump subsidy program.

EE building codes have also produced less-than-expected energy savings. For instance, a 2016 *American Economic Review*

article by Arik Levinson found that California’s strict EE building codes have resulted in much less energy savings than projected.

The common perception is that residential weatherization programs have produced large and cost-effective savings to low-income households. But a 2015 *American Economic Review: Papers and Proceedings* article by Meredith Fowlie, Michael Greenstone, and Catherine Wolfram and a 2016 *Energy Journal* paper by Joshua Graff Zivin and Kevin Novan provide empirical evidence to the contrary. They find *ex-ante* energy savings projections to be grossly high and the overall net benefits to participating households in many instances to be negative.

Most utilities fail to apply the best analytical tools to their evaluations of EE programs. These tools include randomized trials and quasi-experimental designs to measure energy savings and understand consumer behavior. The problem with other approaches is that they do not reliably measure the actual energy savings from individual EE programs.

### WHY ARE EE PROGRAMS SO POPULAR?

Despite the negative evaluations of EE programs by academics, these programs are politically popular. Legislatures, governors, and state public utility commissions (PUCs) want utilities to promote EE. Some utilities initially balk at this, but PUCs then offer support to ensure the utilities’ profitability isn’t hurt by reduced energy sales. For instance, about half the states have adopted “revenue decoupling” for gas utilities; that is, the PUCs permit utilities to raise their rates in order to offset lower sales. These initiatives have been instrumental in mitigating utility opposition to EE programs. Instead, the utilities release reports (arguably both biased and technically flawed) showing that EE initiatives are cost-beneficial.

Everyone’s happy, right? Well, someone has to pay for these initiatives, and it is almost always the utility’s customers. But is it equitable and good public policy to compel utility customers to pay for EE initiatives? Many of these initiatives benefit only a relatively few customers, most of whom can afford to pay for higher EE without any financial assistance. Besides, these consumers are quite capable of making rational decisions, just like they do when they invest in other activities. So, why should utilities offer these customers subsidies and why should other customers bear the costs?

### ARE SOME EE PROGRAMS NOW UNECONOMICAL?

An especially relevant question for gas utilities today is, should they have eliminated or downsized some of their EE programs over the course of the “fracking” era? After all, shale gas has greatly increased the supply and lowered the cost of gas, thereby altering the energy efficiency calculus. Yet, gas utilities now spend

about \$1.5 billion annually on EE programs, up from \$320 million in 2007.

It seems that the rationales for EE programs of both electric and gas utilities are less valid today than when they were first implemented. Their customers have better information on EE programs, and natural gas prices are low and expect to remain so for the next several years. Presumably, the most cost-effective actions have already been exploited. Thus, market failures for EE have decreased over time, lessening the need to have utility or government intervention to advance EE.

Over time (we are talking about decades), we should expect to see a continual erosion of market problems, as well as consumer-behavioral ones, warranting fewer utility/regulatory (“bureaucratic”) programs. That is, society should rely more heavily on the marketplace to influence EE investments, or the role of utilities should be increasingly displaced by better-functioning market mechanisms that rely on the self-interest of individual customers to reduce their energy bills.

### THE PUSH FOR ELECTRIFICATION RESEMBLES THE PUSH FOR ENERGY EFFICIENCY

“Electrification” refers to the enactment of policies to induce consumers to use electricity rather than natural gas and other fossil fuels for specific end-use applications. Electrification can include conversion from natural gas heating to an electric heat pump in an existing home, or conversion from gasoline to electricity for transportation.

Electrification, according to its advocates, would reduce carbon emissions, lower energy costs for at least some consumers, and increase EE by reducing the primary energy use per unit of energy service (e.g., the full-cycle energy usage per mile of driving or gallon of heated water). These advocates assume that an “electrification gap” exists—that is, there is a deviation between socially optimal electrification and actual electrification.

Electrification advocates inevitably push for additional subsidies and out-of-market incentives to accelerate electrification. (Both electric vehicles and electric heat pumps presently receive subsidies from both the government and utilities.) Advocates have referred to electrification as “strategic electrification,” “smart electrification,” “beneficial electrification,” “efficient electrification,” and “policy-driven electrification.” I would add to this lexicon “bad electrification” and “artificial or subsidized electrification.”

Studies have shown electrification to be technically feasible in many end-use applications and economically feasible in at least some applications. Technological advances and public policy (e.g., digitization and the focus on clean energy) seem to favor electricity over fossil fuels in the future. Electrification proponents champion policies that would accelerate electrification. Before committing to such policies, should we not have more precise calculations of the costs and benefits, instead of referring to them in qualitative terms (which so far has dominated the analyses)?

Lacking today is evidence that market and behavioral problems

are severe enough to warrant additional government intervention to hasten the pace of electrification. There is a more-than-remote chance that subsidized electrification will have a negative effect on society.

The question at present for policymakers is how fast electrification should develop. We should expect the electrification advocates in the coming years to employ many of the same justifications that are now used to advocate EE.

### CONCLUSION

The best available evidence—peer-reviewed studies conducted by disinterested analysts using sophisticated methods—suggests that EE initiatives funded by utility customers should be scrutinized rather than reflexively praised by policymakers. Even if EE programs were ever cost effective, the “shale gas” era has made many of them ineffective now. The best available evidence suggests that EE programs transfer money from some utility customers to others with no gains in efficiency.

Regretfully, this evidence has had little effect on these programs because the public is unaware of the transfers, energy efficiency is culturally popular, and utilities can enjoy their support without suffering any financial consequences. Despite that, many of these programs would fail a benefit–cost test and should be called into question. R

### READINGS

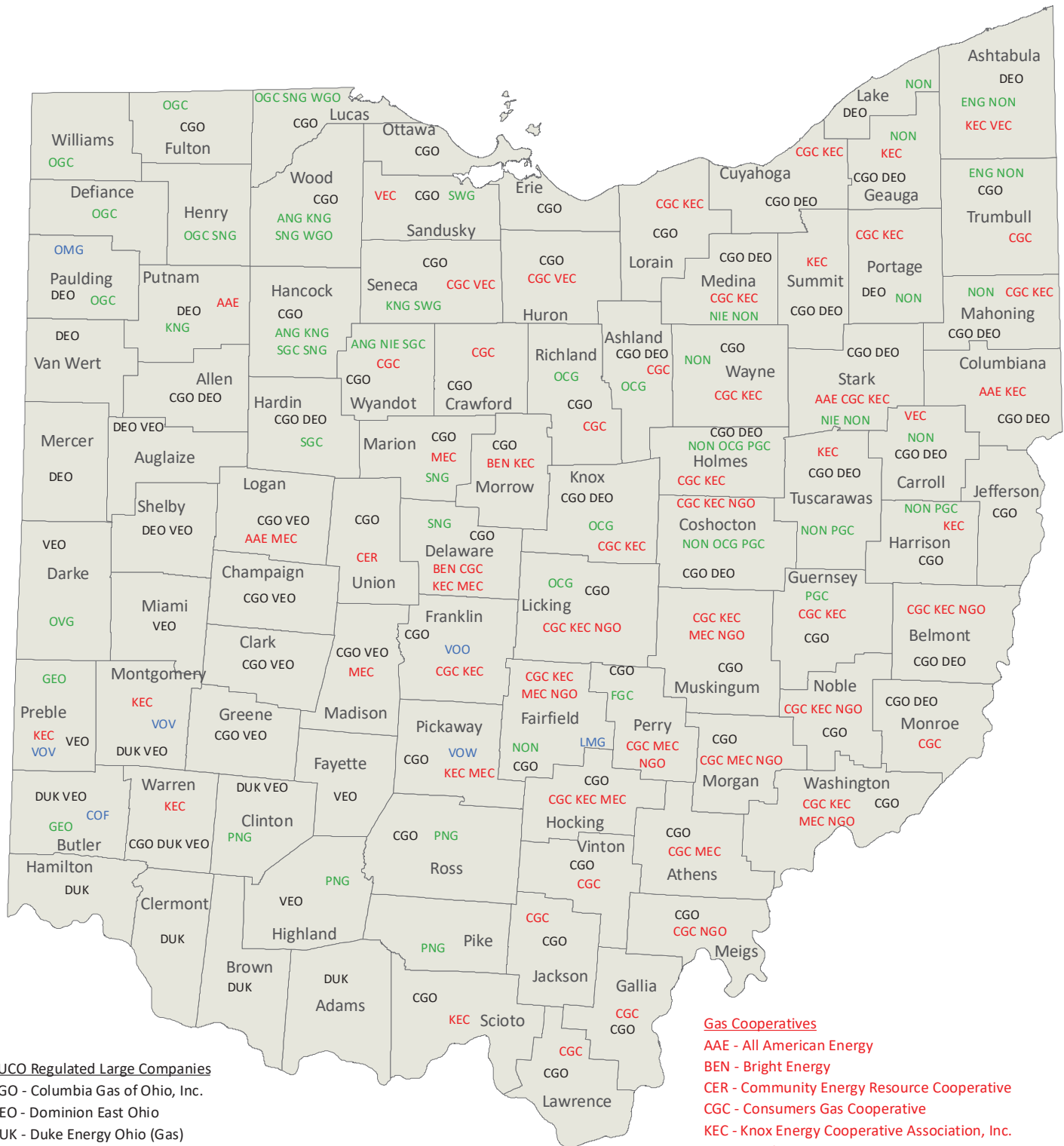
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## Natural Gas Distribution Service Providers

As of August 28, 2019

PUCO Regulated Large Companies

CGO - Columbia Gas of Ohio, Inc.

DEO - Dominion East Ohio

DUK - Duke Energy Ohio (Gas)

VEO - Vectren Energy Delivery of Ohio

PUCO Regulated Small Companies

ANG - Arlington Natural Gas Company

ENG - Eastern Natural Gas

FGC - Foraker Gas Company

GEO - Glenwood Energy of Oxford, Inc.

KNG - KNG Energy, Inc.

NIE - Northern Industrial Energy Development, Inc.

NON - Northeast Ohio Natural Gas Corporation

OCG - Ohio Cumberland Gas Company

OGC - Ohio Gas Company

OVG - Ohio Valley Gas Corporation

PGC - Piedmont Gas Company

PNG - Pike Natural Gas Company

SGC - Sheldon Gas Company

SNG - Suburban Natural Gas Company

SWG - Swickard Gas Company

WGO - Waterville Gas and Oil Company

Gas Cooperatives

AAE - All American Energy

BEN - Bright Energy

CER - Community Energy Resource Cooperative

CGC - Consumers Gas Cooperative

KEC - Knox Energy Cooperative Association, Inc.

MEC - Madison Energy Cooperative Association, Inc.

NGO - National Gas and Oil Cooperative

VEC - Village Energy Cooperative Association, Inc.

Municipal Gas Systems

COF - City of Hamilton

LMG - Lancaster Municipal Gas

OMG - Oakwood Municipal Gas

VOO - Village of Obetz

VOV - Village of Verona

VOW - Village of Williamsport

Notes: Data on operations by county is from the PUCO Gas Pipeline Safety database. Map produced on August 28, 2019.

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