

BEFORE THE
PENNSYLVANIA PUBLIC UTILITY COMMISSION

Pennsylvania Public Utility Commission :
v. : Docket No. R-2020-3017206
Philadelphia Gas Works :

DIRECT TESTIMONY OF
DR. DAVID S. HABR
ON BEHALF OF THE
OFFICE OF CONSUMER ADVOCATE

June 16, 2020

1 **Q: Please state your name and business address.**

2 A: David S. Habr, 213 Cornuta Way, Nipomo, CA.

3 **Q: By whom are you employed?**

4 A: I am the owner of Habr Economics, a consulting firm I founded in January 2009.
5 The firm focuses on cost of capital and mergers and acquisitions.

6 **Q: Would you provide a brief description of your education and experience?**

7 A: Yes. I received a Bachelor of Arts (1968) and a Master of Arts (1969) degree in
8 economics from the University of Nebraska – Lincoln. I received a Ph.D. degree
9 in economics from Washington State University in 1976.

10 My career in utility regulation began when I joined the Iowa State
11 Commerce Commission (n/k/a the Iowa Utilities Board) in 1981. I filed my first
12 rate of return testimony in a 1983 Northwestern Bell case and I have continued to
13 testify on rate of return and other economic and/or financial issues since then. In
14 1987, I was hired by the Iowa Office of Consumer Advocate to establish and
15 develop their testifying staff as well as continue to testify on economic and
16 financial matters including rate of return.

17 I remained in that position until the end of 2008. Since starting Habr
18 Economics I have filed testimony in merger cases in Maine and Maryland, rate of
19 return testimony in Hawaii, Pennsylvania, Maine and Maryland, and debt service
20 coverage ratio testimony in Philadelphia Gas Works' 2017 rate case.

21 Prior to joining the Iowa State Commerce Commission staff I had a private
22 consulting practice, worked for a small consulting firm, and served six years as

1 member of the Drake University economics faculty. My vita, Exhibit DSH-1,
2 contains a more detailed account of my previous activities.

3 **Q: What is the purpose of your direct testimony in this proceeding?**

4 A: In light of the severe impact the COVID-19 pandemic has had on economic
5 conditions at all levels of society, the purpose of my testimony is to provide a debt
6 service coverage ratio to use in this proceeding that, along with a \$30 million
7 reduction in net construction expenditures to reflect more recent expenditure
8 levels, reduces the rate impact on customers while maintaining the financial
9 integrity of Philadelphia Gas Works (PGW). I also have some comments on Mr.
10 Golden's testimony.

11 **Q: Have you prepared any exhibits to accompany your testimony?**

12 A: Yes, I have prepared Exhibits DSH-1 through DSH-6. A brief description of each
13 exhibit follows:

14 DSH-1 – Habr's Vita.

15 DSH-2 – Debt Service Ratios, Funds Left After Debt Service.

16 DSH-3 – End-of Year Days of Cash.

17 DSH-4 – Debt Ratio.

18 DSH-5 – Fifteenth Series Bond Pricing.

19 DSH-6 – Federal Reserve Statistical Release G.19

20 **Q: How does your analysis fit into the revenue requirement calculation?**

21 A: PGW's rates are established using the cash flow method. Under this method, the
22 revenue requirement is the sum of operating expenses, debt service, and a

1 “margin” sufficient to maintain the organization’s ability to attract capital on
2 reasonable terms. The 1998 Ordinance under which all of PGW’s outstanding
3 revenue bonds have been issued requires that 1.5 times the debt service amount be
4 included in the rate calculation. My role is to determine how much additional
5 margin, if any, needs to be added to establish a reasonable revenue requirement
6 under the current market conditions.

7 **Q: How much is PGW proposing to increase base rates?**

8 A: PGW is proposing a \$70 million base rate increase.

9 **Q: What were the driving forces for this proposed increase?**

10 A: At page 4 of his direct testimony, Mr. Stunder states that PGW is seeking
11 “approval to establish rate levels adequate to continue its efforts to modernize its
12 system and to provide safe and adequate service by making its system safer and
13 more efficient and improving customer service.”

14 **Q: Are these driving forces still relevant under current economic conditions?**

15 A: Not entirely. The activities Mr. Stunder refers to require additional capital
16 expenditures, some of which can be deferred if the situation calls for it. The
17 impact of the COVID-19 pandemic on household and business income reduces the
18 funds those entities have available to pay utility bills and this needs to be taken
19 into account.

20 **Q: How do capital expenditures impact PGW’s rates?**

1 A: For a cash flow regulated company like PGW, funds for capital expenditures come
2 from either the margin above operating costs (customer contributed) included in
3 rates, or debt issuances (investor contributed) or a combination of both.

4 **Q: What is PGW's proposed level of capital expenditures for FPFTY 2020-21?**

5 A: The cash flow statement in Exhibit JFG-1 shows \$154,084,000 in net construction
6 expenditures for FPFTY 2020-21.

7 **Q: How does this compare with PGW's previous net construction expenditures?**

8 A: That same cash flow statement shows actual net construction expenditures of
9 \$123,427,000 and \$110,523,000 for fiscal years 2017-18 and 2018-19 respectively
10 and estimated net construction expenditures of \$119,673,000 for fiscal year 2019-
11 20. The FPFTY 2020-21 budgeted net construction expenditures are \$30.5 to
12 \$43.5 million higher than recent actual expenditures.

13 In his testimony, Mr. Rubin describes the severe impact the COVID-19
14 pandemic has had on large parts of the Philadelphia community including small
15 businesses as well as PGW's preexisting high level of low income residential
16 customers. A \$30 million reduction in net construction expenditures to more
17 properly reflect recent actual experience reduces the amount of construction funds
18 that have to be recovered from customers.

19 **Q: What is the effective test-year split between customer financing and bond
20 financing for capital expenditures in Mr. Golden's exhibit JFG-2?**

21 A: To determine that split one must first subtract debt service from the total funds
22 available. Mr. Golden shows \$143,441,000 cash funds remaining after debt

1 service on JFG-2, page 3. Next, the \$18 million annual City Fee must be
2 subtracted from this amount leaving \$125,441,000 available to support capital
3 expenditures.¹

4 The cash flow statement on page 2 of JFG-2 shows capital expenditures of
5 \$154,084,000 and bond proceeds of \$78,084,000. This implies \$76,000,000 in
6 capital spending supported by customer provided funds with the remaining
7 \$49,441,000 of customer provided funds available for other purposes. Reducing
8 capital expenditures by \$30 million to reflect the most recent actual expenditures
9 reduces the need for customer supplied funds by a like amount.

10 **Q: Is there any need for PGW to pursue rapid upgrades in its bond rating?**

11 A: No. PGW currently has solid investment grade ratings and is certainly not
12 teetering on the edge of a down grade due to operating problems. Pursuing
13 upgrades at a rate faster than they may be obtained under current rates would
14 require increased rates which in turn would create a heavier burden for many of
15 PGW's customers.

16 **Q: What debt service coverage ratio are you recommending in this proceeding?**

17 A: I am recommending the revenue requirement be set at a level that generates a 1.88
18 debt service coverage ratio.

19 **Q: How did you arrive at a value of 1.88 for the debt service coverage ratio?**

¹ The \$18 million annual City fee is a payment PGW is required to make to the City of Philadelphia unless the City waives some or all of that payment.

1 A: My 1.88 debt service coverage ratio is based on my review of PGW's performance
2 for the period 2010 through 2019. My goal was to arrive at a debt service
3 coverage ratio that did not add to the burden customers are carrying as a result of
4 the COVID-19 pandemic while still providing PGW with sufficient funds to
5 maintain investment grade bond ratings.

6 **Q: How did you examine PGW's performance?**

7 A: I examined PGW's debt service coverage ratio and funds available after debt
8 service (OCA Exhibit DSH-2), PGW's days of cash (OCA Exhibit DSH-3), and
9 PGW's debt ratio (OCA Exhibit DSH-4) for the period 2010 through 2019. I also
10 reviewed PGW's bond ratings for that same period. This information is
11 condensed in Table -1 below. My proposed debt service coverage ratio, 1.88, is
12 the average ratio for the period 2010 through 2016.

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Table - 1 Philadelphia Gas Works Financial Metrics and Bond Ratings, 2010 -- 2019

Year	Debt Ratio	Debt Service Coverage	EOY Days of Cash	Funds After Debt Service (\$000s)	Moody's	S&P	Fitch
2019	82.80%	2.33	96.9	\$130,817	A3	A	BBB+
2018	90.49%	2.35	106.9	\$118,529	A3	A	BBB+
2017	95.78%	2.71	70.9	\$115,446	A3	A	BBB+
2016	75.37%	2.13	78.5	\$88,008	Baa1	A	BBB+
2015	76.69%	1.82	78.4	\$79,830	Baa1	A-	BBB+
2014	79.17%	1.79	65.6	\$77,476	Baa2	A-	BBB+
2013	74.25%	2.16	70.1	\$90,358	Baa2	BBB-	BBB
2012	77.47%	1.51	55.2	\$51,239	Baa2	BBB+	BBB
2011	79.03%	1.77	64.8	\$81,142	Baa2	BBB+	BBB
2010	81.70%	1.95	30.3	\$91,910	Baa2	BBB+	BBB
Average, 2010 - 2016	77.67%	1.88	63.27	\$79,995			
OCA Proposal	78.33%	1.88	73.50	\$93,998			

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3 **Q: Why did you choose the 2010 through 2016 time period to develop your debt**
 4 **service coverage ratio?**

5 **A:** As I noted earlier, my goal in the proceeding was to recommend a debt service
 6 coverage ratio that is not burdensome to customers. The higher debt service
 7 coverage ratios in 2017 through 2019 indicate higher levels of margin (profit)
 8 collected from customers. Also, during the time period I use, PGW's financial
 9 metrics allowed it to maintain a steady to increasing investment grade bond

1 rating.² Moody’s ratings ranged from Baa2 to Baa1, S&P ratings ranged from
 2 BBB- to A-, and Fitch ratings ranged from BBB to BBB+.

3 My 1.88 debt service coverage ratio combined with the \$30 million
 4 reduction in net construction expenditures yields End-of-Year days of cash (73.50
 5 days) and Funds after Debt Service (\$93.998 million) amounts that are
 6 significantly greater than the average values for those metrics (63.27 days and
 7 \$79.995 million respectively) during the 2010 - 2019 time period. Consequently,
 8 PGW should be able to maintain an investment grade bond rating. This
 9 proposition is supported by Moody’s observation in February 2020 that “*Current*
 10 *rates* are sufficient to not only adequately cover annual debt service but also
 11 provide excess cash flow to continue to increase the cash funded share of capital
 12 expenditures.”³ (Emphasis added).

13 **Q: Do you have any comments about Mr. Golden’s direct testimony?**

14 A: Yes. At page 19, lines 17-24 of his Direct Testimony, Mr. Golden suggests that
 15 customers will actually save money over time by contributing capital to PGW and
 16 avoiding the debt service cost associated with borrowing the same amount of
 17 money. What Mr. Golden has left out is the customers’ opportunity cost of the
 18 money they are providing PGW. Taking the customer’s opportunity cost into
 19 consideration may show that financing construction expenditures with debt is less
 20 costly from the customers’ point of view.

² The lowest investment grade ratings are Baa3, BBB-, and BBB- for Moody’s, S&P, and Fitch respectively.

³ OCA Exhibit SJR-6, page 6.

1 **Q: What is the customers' opportunity cost of the funds they supply for their**
2 **“investment” in net construction expenditures?**

3 A: Depending on the individual customer's financial condition, the opportunity cost
4 of making an “investment” in PGW could be either the extra interest the customer
5 has to pay on credit cards that can't be paid down as fast or, it could be the interest
6 or other income from investments forgone due to the “investment” in PGW.

7 **Q: What is the starting point for examining PGW's customers' opportunity costs**
8 **relative to debt or margin financing?**

9 A: The starting point is PGW's cost of debt. OCA Exhibit DSH-5 provides yield (or
10 effective interest rate) data for PGW's Fifteenth Series revenue bond issuance in
11 August 2017. I'll use the 3.300% yield on the longer term bonds to represent
12 PGW's interest cost. For any fixed amount of capital expenditure, customers
13 could avoid this interest cost by providing the funds for that fixed amount of
14 capital expenditure through the “margin.” However, if customers, in order to
15 provide those funds, have to take on or add to credit card debt, their interest cost
16 could be in the neighborhood of 16.6%, the most recent average rate for bank
17 credit cards with outstanding balances. (See OCA Exhibit DSH-6.) Clearly, the
18 net interest payment for customers with credit card debt is minimized when they
19 use their funds to pay down credit card debt and PGW borrows the needed funds
20 at a much lower interest cost.

21 **Q: Would customers who have no credit card debt benefit from “investing” in**
22 **PGW?**

1 A: Yes, they could. In my example, they avoid paying the 3.300% interest cost on
2 new debt. However, if these customers have any debt with an interest cost above
3 3.300%, they would be better off paying down that debt as opposed to “investing”
4 in PGW.

5 **Q: What about customers with no debt outstanding?**

6 A: These customers may want to include an “investment” in PGW if it fits the risk
7 profile of their investment profile.

8 **Q: Based on your review of customer opportunity costs associated with customer**
9 **contributions to PGW’s “equity,” do you have any recommendations**
10 **concerning the debt portion of PGW’s capital structure?**

11 A: Yes. This review shows that customers benefit in different ways from PGW’s
12 utilization of low cost debt. Reducing the debt component of PGW’s capital
13 structure would lower these benefits. To maintain these benefits for customers, I
14 recommend that PGW keep its debt ratio in the 75% to 80% range.

15 **Q: Does this conclude your direct testimony?**

16 A: Yes, it does. I reserve the right to supplement this testimony should additional
17 information become available.

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SUMMARY

Ph.D. economist with over thirty five years of applied economic and financial experience in utility regulation. Has special expertise in rate of return, mergers, and asset transactions. Was instrumental in determining the methodology used in class cost of service and rate design. Solid technical background with testimony that is very clear and defensible under cross examination. Recognized by the Governor of Iowa for his knowledge and understanding of public utilities' operations and his fair and balanced judgment.

PROFESSIONAL EXPERIENCE

Habr Economics January 2009 – Present

Habr Economics established in January 2009 after a successful career in public utility regulation. The firm specializes in rate of return, mergers, asset transactions, and general policy issues.

**Consumer Advocate Division,
Iowa Department of Justice November 1987 – December 2008**

Chief, Technical Bureau July 1989 – December 2008

Leader of the Consumer Advocate Division's technical staff. Staff's expertise includes accounting, economics, finance, and electrical engineering. Members testify on matters ranging from the cost of capital, rate design, and transmission line location to optimal programs for demand side management. Disputed amounts have ranged from \$1 million to over \$100 million.

- Testified as an expert witness in over 45 cases on the cost of common equity, the overall cost of capital, and other economic and financial matters including utility mergers, asset acquisitions, and competitive market analysis. Testimony successfully defended under strenuous cross examination.
- Initiated studies on electric restructuring which demonstrated that electric deregulation could cost Iowa customers a minimum of \$200 million per year. These un-refuted results helped the efforts which lead to restructuring being rejected in Iowa.
- Achieved consensus in settlement negotiations, represented the Office in public forums, Public Consumer Advocate Sector representative on Midwest Independent System Operator Advisory Committee, drafted legislation, and prepared and managed the OCA's \$3 million annual budget.
- Identified and hired the professional staff needed to expand from a six to a 17 person technical staff in 1989. Staff educational level ranges from B.A.'s to Ph.D.'s. At December 31, 2008 staff's average time with the Office was 19 years.

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Head, Technical Section November 1987 – July 1989
Hired to establish the Consumer Advocate's initial six person technical staff and advise the Consumer Advocate and legal staff on economic matters. Staff's main goal was to provide the attorneys with technical assistance on accounting, economics, engineering, financial, and rate design matters.

- Testified as an expert witness on the cost of common equity, the overall cost of capital, and other economic or financial matters.
- Integrated the use of bond betas to develop a “risk premium” method of estimating common equity cost rates based on the Capital Asset Pricing Model.

**Utilities Division,
Iowa Department of Commerce September 1981 – November 1987**

Utility Specialist September 1981 – November 1987

- Determined cost of common equity and overall cost of capital for various utility companies. Presented the analysis as written testimony and was subject to cross-examination on the testimony.
- Completed article integrating brokerage fees and flotation cost in the discounted cash flow model which was accepted for publication in the January 1988 issue of the National Regulatory Research Institute Quarterly Bulletin. Presented a paper on the use of double leverage in determining the cost of capital for utility subsidiaries of a holding company to the Economics and Finance Subcommittee at the 1987 Winter Meeting of the National Association of Regulatory Utility Commissioners.
- Refined and improved the accuracy of the computer program used to calculate the weighted cost of capital for rate case presentation.

Private Consulting Practice September 1980 – September 1981

- Estimated damages in two antitrust cases; helped develop a brief in a third antitrust case.
- Testified on a telephone rate design issue before the Iowa State Commerce Commission and on alternative benefit payment methods before the Iowa Industrial Commission.

Mitchell & Mitchell Economists, Ltd. October 1979 – August 1980

- Organized and developed the economics group. Secured and completed contract with Northwestern Bell to develop a revenue forecasting model. Secured and completed contract with City of Des Moines to conduct a feasibility study for the Neighborhood Business Revitalization Program.

Drake University September 1973 – June 1979

- Taught graduate and undergraduate courses in the economics program. Courses included Managerial Economics (M.B.A. Program), Government Regulation of Business, Public Utilities, and Transportation.
- Served on University Business Affairs Committee for four years; committee chair 1978-79. Faculty advisor, local chapter of Omicron Delta Epsilon (economics honor society) 1973-79.

EDUCATION

Ph.D. (Economics) Washington State University

Dissertation: "The Returns to Advertising: An Analysis of the Relationship Between Advertising and Liquor Sales in the State of Washington"

M.A. (Economics) University of Nebraska – Lincoln

B.A. (Economics) University of Nebraska – Lincoln

PROFESSIONAL ACTIVITIES

Activities and Memberships: Developed and taught an antitrust economics class at the Drake Law School Fall 1981 and taught the macroeconomics class in the Drake M.B.A. program Spring and Fall 1987. Member of the National Association of State Utility Consumer Advocates' Economics and Finance Committee 1990 – 2008 and the NARUC Ad Hoc Committee on Diversification (1986 – 1987).

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Regulatory Proceedings in Which Dr. Habr Has Filed Testimony

1. Northwestern Bell Telephone Company (Iowa State Commerce Commission Docket No. RPU-81-40, Direct January 1982), Cost of equity issues.
2. Northwestern Bell Telephone Company (Iowa State Commerce Commission Docket No. RPU-82-49, Direct March 1983), Rate of Return.
3. MCI Telecommunications Corporation (Iowa State Commerce Commission Docket No. RPU-84-2, Direct 1984), Competitiveness of Long Distance Markets.
4. Northwestern Bell Telephone Company (Iowa State Commerce Commission Docket No. RPU-84-7, Direct June 1984), Rate of Return.
5. INVESTIGATION INTO COMPETITION IN COMMUNICATIONS SERVICES AND FACILITIES (Iowa State Commerce Commission Docket No. INU-84-6, October 1984), Workable Competition and Cost Allocation.
6. Peoples Natural Gas Company (Iowa State Commerce Commission Docket No. RPU-84-42, Direct December 1984), Capital Structure.
7. Union Electric Company (Iowa State Commerce Commission Docket No. RPU-85-9, Direct August 1985), Flotation Costs.
8. Iowa Public Service Company -- Gas (Iowa State Commerce Commission Docket No. RPU-85-14, Direct September 1985), Rate of Return.
9. INVESTIGATION INTO COMPETITION IN MTS, WATS, AND PL SERVICES (Iowa State Commerce Commission Docket No. INU-83-3, October 1985), Workable Competition.
10. Iowa Electric Light and Power Company – Gas (Iowa State Commerce Commission Docket No. RPU-85-31, Direct February 1986), Rate of Return.
11. Iowa Electric Light and Power Company – Electric (Iowa Utilities Board Docket No. RPU-86-7, Direct July 1986), Capital Structure.
12. Peoples Natural Gas Company, A Division of Utilicorp United, Inc. (Iowa Utilities Board Docket No. RPU-86-11, Direct September 1986), Rate of Return.
13. Great River Gas Company (Iowa Utilities Board Docket No. RPU-86-12, Direct September 1986), Rate of Return.
14. Iowa Power and Light Company – Electric (Iowa Utilities Board Docket No. RPU-87-2, Direct, June 1987, Rebuttal, October 1987), Capital Structure.

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15. Iowa Public Service Company – Gas (Iowa Utilities Board Docket No. RPU-87-3, Direct December 1987), Rate of Return.
16. Iowa Public Service Company – Electric (Iowa Utilities Board Docket No. RPU-87-6, Direct April 1988, Rebuttal August 1988), Rate of Return, Weather Normalization.
17. Iowa Southern Utilities Company and Ottumwa Water Works (Iowa Utilities Board Docket No. AEP-88-1, Direct May 1989, Rebuttal May 1989), Capacity and Energy Rates for a Small Hydro.
18. DEREGULATION OF INTERLATA INTEREXCHANGE MESSAGE TELECOMMUNICATIONS SERVICES (MTS), WIDE AREA TELECOMMUNICATIONS SERVICE (WATS), CHANNEL SERVICE (PRIVATE LINE), AND CUSTOM NETWORK SERVICE (Iowa Utilities Board Docket No. INU-88-2, September 1988), Strength of Competitive Market Forces.
19. Iowa Southern Utilities Company (Iowa Utilities Board Docket No. RPU-89-7, Direct February 1990, Rebuttal April 1990), Rate of Return.
20. Iowa Electric Light and Power Company – Electric (Iowa Utilities Board Docket No. RPU-89-9, Direct April 1990, Rebuttal May 1990), Cost of Common equity, Double Leverage.
21. Iowa Resources, Inc. and Midwest Energy Company (Iowa Utilities Board Docket No. SPU-90-5, Direct June 1990, Rebuttal June 1990), Utility Holding Company Merger.
22. Iowa Electric Light and Power Company – Gas (Iowa Utilities Board Docket No. RPU-90-7, November 1990), Cost of Common Equity, Double Leverage.
23. Iowa Southern Utilities Company – Electric (Iowa Utilities Board Docket No. RPU-90-8, Direct August 1990, Rebuttal January 1991), Rate of Return.
24. Rochester Telephone Co. et al (Iowa Utilities Board Docket No. SPU-91-3, Direct June 1991, Rebuttal June 1991), Merger Analysis.
25. Midwest Gas, a Division of Iowa Public Service Company (Iowa Utilities Board Docket No. RPU-91-5, Direct October 1995, Rebuttal of Intervenor November 1991, Rebuttal December 1991), Cost of Common Equity, Acquisition Adjustment.
26. Iowa Public Service Company – Electric (Iowa Utilities Board Docket No. RPU-91-6, Direct August 1991, Rebuttal January 1992), Cost of Common Equity.
27. Iowa Southern Utilities Company – Electric (Iowa Utilities Board Docket No. RPU-91-8, Direct September 1991, Rebuttal February 1992, Additional Rebuttal April 1992), Cost of Common Equity.

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28. Iowa Electric Light and Power Company – Electric (Iowa Utilities Board Docket No. RPU-91-9, Direct January 1992, Rebuttal of Intervenor February 1992, Rebuttal March 1992), Cost of Common Equity.
29. Iowa Electric Light and Power Company and Union Electric Company (Iowa Utilities Board Docket No. SPU-92-7, Direct April 1992), Asset Purchase Analysis.
30. Iowa Power, Inc. – Electric (Iowa Utilities Board Docket No. RPU-92-2, Direct June 1992, Direct June 1992, Rebuttal of Intervenor July 1992), Cost of Common Equity.
31. Peoples Natural Gas Company, A Division of UtiliCorp United, Inc. (Iowa Utilities Board Docket No. RPU-92-6, Direct August 1992), Cost of Common Equity.
32. Iowa Southern Utilities Company – Gas (Iowa Utilities Board Docket No. RPU-92-8, Direct October 1992), Cost of Common Equity.
33. Iowa Electric Light and Power Company – Gas (Iowa Utilities Board Docket No. RPU-92-9, Direct October 1992, Rebuttal of Intervenor November 1992), Cost of Common Equity.
34. ENERGY POLICY ACT OF 1992 (Iowa Utilities Board Docket No. INU-93-1, Rebuttal July 1993, Surrebuttal, July 1993), Purchase Power and the Cost of Capital, Financial Leverage Used by EWGs.
35. Interstate Power Company (Iowa Utilities Board Docket No. ECR-93-1, Direct September 1993, Rebuttal October 1993), Rate of Return for Unrecovered Energy Efficiency Expenditures, Cost of Capital for Avoided Cost Calculations.
36. Midwest Power Systems (Iowa Utilities Board Docket No. ECT-93-2, Direct November 1993, Rebuttal January 1994), Rate of Return for Unrecovered Energy Efficiency Expenditures, Appropriate Method for Determining the Annualized Recovery of the Expenditures.
37. Interstate Power Company – Electric (Iowa Utilities Board Docket No. RPU-93-6, Direct November 1993, Rebuttal January 1994), Cost of Common Equity.
38. U S West Communications, Inc. (Iowa Utilities Board Docket No. RPU-93-9, Direct August 1993, Rebuttal February 1994), Rate of Return.
39. IES Utilities, Inc. – Electric and Gas (Iowa Utilities Board Docket No. ECR-94-2, Direct October 1994), Rate of Return to Apply to Deferred Unamortized Energy Efficiency Balances.

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40. IES Utilities, Inc. – Electric (Iowa Utilities Board Docket No. RPU-94-2, Direct October 1994, Rebuttal of Intervenor, November 1994, Rebuttal December 1994, Rebuttal Related to Duane Arnold Depreciation, January 1995, Supplemental January 1995), Cost of Common Equity, Acquisition Adjustment, Economic Depreciation for Duane Arnold, Decommissioning Expenditures for Duane Arnold.
41. Midwest Gas (Iowa Utilities Board Docket No. RPU-94-3, Direct November 1994, Rebuttal of Intervenor, December 1994, Rebuttal January 1995), Cost of Common Equity.
42. Midwest Power (Iowa Utilities Board Docket No. RPU-94-4, Direct January 1995, Rebuttal of Intervenor January 1995, Rebuttal March 1995), Cost of Common Equity.
43. Iowa-Illinois Gas & Electric –Gas (Iowa Utilities Board Docket No. TF-94-640, Direct February 1995), Proper Policy for Rates That are Less Than Full Cost.
44. MidAmerican Energy Company (Iowa Utilities Board Docket No. P-831, Direct July 1995), Cost/Benefit Analysis of Proposed Pipeline.
45. Midwest Wind Developers v. Iowa Electric Light and Power Company et al; and Windustries, Inc. v. Iowa Electric Light and Power Company et. al (Iowa Utilities Board Docket No. AEP-95-1 thru 4, Direct September 1995, Rebuttal December 1995), Develop Appropriate kW and kWh rates.
46. Windustries, Inc. v. MidAmerican Energy Company (Iowa Utilities Board Docket No. AEP-95-5, Direct November 1995, Rebuttal December 1995), Develop Appropriate kW and kWh rates.
47. McLeod Telemanagement v. U S WEST Communications, Inc. (Iowa Utilities Board Docket No. FCU-96-1/FCU-96-3, Direct April 1996), Competitive Impact of Not Offering Centrex Plus to New Customers.
48. MidAmerican Energy Company – Electric (Iowa Utilities Board Docket No. RPU-96-8, Direct August 1996, Rebuttal November 1996), Cost of Common Equity.
49. Lost Nation-Elwood Telephone Company (Iowa Utilities Board Docket No. TCU-96-9, Direct August 1996), Facilities Based Competition.
50. GTE Midwest Incorporated (Iowa Utilities Board Docket No. RPU-96-6, Direct September 1996), Proper Cost Recovery for intraLATA Equal Access.
51. MidAmerican Energy Company (Iowa Utilities Board Docket No. APP-96-1, Direct September 1996, Rebuttal November 1996), Causes of High Payout Ratio and Stranded Costs.

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52. South Slope Cooperative Telephone Company (Iowa Utilities Board Docket No. TCU-96-12, Direct September 1996), Facilities Based Competition.
53. IES Utilities (Iowa Utilities Board Docket No. ECR-96-3, Direct February 1997), Pretax Return for Levelized Recovery of Deferred Energy Efficiency Expenditures.
54. U S WEST Communications, Inc. (Iowa Utilities Board Docket No. RPU-96-9, Direct April 1997, Rebuttal July 1997), Rate of Return.
55. MidAmerican Energy Company – Electric (Iowa Utilities Board Docket No. TF-97-229, Direct October 1997), Can Other Utility Companies be Forced to Join a Pilot Project.
56. CalEnergy Company and MidAmerican Energy Holdings Company (Iowa Utilities Board Docket No. SPU-98-8, Direct November 1998, Rebuttal December 1998), Merger Analysis.
57. MidAmerican Energy Holdings Company, MidAmerican Energy Company, Teton Formation L.L.C., and Teton Acquisition Corporation (Iowa Utilities Board Docket No. SPU-99-32, Direct January 2000), Merger Analysis.
58. Qwest Corporation (Iowa Utilities Board Docket No. TF-00-250, Direct February 2001), Price Plan Review.
59. MidAmerican Energy Company – Electric (Iowa Utilities Board Docket No. RPU-01-9, Direct February 2002), Implicit Excess Return on Common Equity.
60. Interstate Power Company – Electric (Iowa Utilities Board Docket No. RPU-02-3, Direct July 2002, Rebuttal of Intervenor August 2002, Rebuttal November 2002), Cost of Common Equity, Duane Arnold Decommissioning Cost, Nature and Purpose of Test Year.
61. Iowa Telecommunications Services, Inc. d/b/a Iowa Telecom (Iowa Utilities Board Docket No. RPU-02-4, Direct August 2002), Appropriateness of Using Forward Looking Cost Models to Establish Retail Rates.
62. Aquila, Inc. d/b/a Aquila Networks (Iowa Utilities Board Docket No. RPU-02-5, Direct September 2002, Rebuttal November 2002), Cost of Common Equity.
63. Interstate Power and Light Company – Gas (Iowa Utilities Board Docket No. RPU-02-7, Direct October 2002, Rebuttal of Intervenor November 2002, Rebuttal January 2003), Cost of Common Equity.
64. MidAmerican Energy Company – Electric (Iowa Utilities Board Docket No. RPU-02-10, Direct March 2003), Cost of Common Equity Issues.

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65. Iowa Telecommunications Services, Inc. d/b/a Iowa Telecom (Iowa Utilities Board Docket No. SPU-04-10, Direct May 2006), Analysis of Proposed Initial Public Offering.
66. Qwest Communications Corporation (Iowa Utilities Board Docket No. TCU-03-13, Rebuttal August 2004), Appropriateness of a Telecommunications Company Competing with an Affiliate.
67. Interstate Power and Light Company and FPL Energy Duane Arnold, LLC (Iowa Utilities Board Docket No. SPU-05-15, Direct September 2005, Rebuttal October 2005), Analysis of Proposed Sale of Nuclear Power Plant.
68. Interstate Power and Light Company and ITC Midwest, LLC (Iowa Utilities Board Docket No. SPU-07-11, Direct June 2007, Rebuttal July 2007), Analysis of Proposed Sale of Electric Transmission System.
69. Interstate Power and Light Company (Iowa Utilities Board Docket No. RPU-08-1, Rebuttal October 2008, Additional Supplemental October 2008), Energy Forecast Analysis.
70. Interstate Power and Light Company (Iowa Utilities Board Docket No. RPU-2009-0002, Direct July 2009, Rebuttal September 2009), Impact of Strategic Decisions on Efficiency of Utility Operations.
71. Bangor Hydro Electric Company, Maine Public Service Company, et. al (Maine Public Utilities Commission Docket No. 2010-89, Direct June 2010, Surrebuttal August 2010), Analysis of the Impact of Proposed Merger on Retail Customers.
72. FirstEnergy Corporation and Allegheny Energy, Inc. (Maryland Public Service Commission Case No. 9233, Direct October 2010, Surrebuttal November 2010), Analysis of the Impact of Proposed Merger on Retail Customers.
73. Bangor Gas Company and Maine Public Service Company (Maine Public Utilities Commission Docket No. 2013-00443, Direct March 2014), Rate of Return.
74. Columbia Gas Maryland, Inc. (Maryland Public Service Commission Case No. 9417, Direct June 2016, Rebuttal and Surrebuttal July 2016), Rate of Return.
75. Philadelphia Gas Works (Pennsylvania Public Utility Commission Docket No. R-2017-2586783, Direct May 2017, Surrebuttal June 2017), Proper Margin for a Municipal Gas Utility.
76. The Gas Company, LLC d/b/a Hawai'i Gas (Hawaii Public Utilities Commission Docket No. 2017-0150), Direct March 2018, Rate of Return.

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77. Duquesne Light Company (Pennsylvania Public Utility Commission Docket No. R-2018-3000124), Direct June 2018, Surrebuttal July 2018, Rate of Return.
78. PECO Energy Company (Pennsylvania Public Utility Commission Docket No. R-2018-3000164), Direct June 2018, Surrebuttal July 2018, Rate of Return.
79. PJM Interconnection, L.L.C. & PECO Energy Company (Federal Energy Regulatory Commission Docket No. ER17-1519-001), Direct & Answering August 2018, Return on Equity.
80. Hawai'i Electric Light Company (Hawaii Public Utilities Commission Docket No. 2019-0368), Direct July 2019, Rate of Return.
81. Citizens' Electric Company, Wellsboro Electric Company, and Valley Energy Company (Pennsylvania Public Utility Commission Docket Nos. R-2019-3008212, R-2019-3008208, and R-2019-3008209 respectively), Direct October 2019, Surrebuttal December 2019, Rate of Return.

Debt Service Ratios/Funds After Debt Service

	OCA FPFTY 2020-21	2019	2018	2017	2016	2015	2014	2013	2012	2011	2010
Funds Available for Debt Service	\$200,788	\$229,234	\$206,219	\$183,028	\$165,875	\$176,873	\$175,817	\$168,189	\$150,867	\$186,095	\$189,092
Total Debt Service	\$106,790	\$98,417	\$87,690	\$67,582	\$77,867	\$97,043	\$98,341	\$77,831	\$99,628	\$104,953	\$97,182
Debt Service Ratio	1.88	2.33	2.35	2.71	2.13	1.82	1.79	2.16	1.51	1.77	1.95
Remaining Funds	\$93,998	\$130,817	\$118,529	\$115,446	\$88,008	\$79,830	\$77,476	\$90,358	\$51,239	\$81,142	\$91,910

Sources: OCA Exhibit MEG-3 and Philadelphia Gas Works 2019 *Comprehensive Annual Financial Report*, pp. 110 - 111.

OCA AND HISTORICAL YEAR-END DAYS OF CASH (\$000's)

	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	OCA FPFTY 2020-21
Total Cash Operating Expenses	\$952,565	\$593,786	\$502,719	\$525,908	\$587,904	\$531,991	\$427,898	\$455,670	\$447,267	\$467,577	\$465,985
Days in year	365	365	366	365	365	365	366	365	365	365	365
Cash Expenses per Day	\$2,610	\$1,627	\$1,374	\$1,441	\$1,611	\$1,458	\$1,169	\$1,248	\$1,225	\$1,281	\$1,277
End-of-Year Cash	\$79,052	\$105,386	\$75,826	\$100,933	\$105,734	\$114,327	\$91,743	\$88,535	\$131,051	\$124,145	\$93,832
EOY Days of Cash	30.3	64.8	55.2	70.1	65.6	78.4	78.5	70.9	106.9	96.9	73.5

Sources: *Philadelphia Gas Works 2019 Comprehensive Annual Financial Report*, pp. 110 - 111, 118 - 119, OCA Exhibits MEG-3 and MEG-4.

PHILADELPHIA GAS WORKS HISTORICAL CAPITALIZATION

	FY 2010		FY 2011		FY 2012		FY 2013		FY 2014		FY 2015		FY 2016		FY 2017		FY 2018		FY 2019		OCA FPFTY 2020-21	
	Amount	Ratio	Amount	Ratio	Amount	Ratio	Amount	Ratio	Amount	Ratio	Amount	Ratio	Amount	Ratio	Amount	Ratio	Amount	Ratio	Amount	Ratio	Amount	Ratio
Long-Term Debt	\$1,224,987	81.70%	\$1,166,992	79.03%	\$1,086,502	77.47%	\$1,033,976	74.25%	\$980,749	79.17%	\$914,719	76.69%	\$881,620	75.37%	\$1,125,473	95.78%	\$1,062,763	90.49%	\$999,474	82.80%	\$1,195,179	78.33%
Net Position	\$274,436	18.30%	\$ 309,740	20.97%	\$315,945	22.53%	\$358,587	25.75%	\$258,002	20.83%	\$277,984	23.31%	\$288,038	24.63%	\$49,617	4.22%	\$111,700	9.51%	\$207,562	17.20%	\$330,652	21.67%
Total	\$1,499,423	100.00%	\$1,476,732	100.00%	\$1,402,447	100.00%	\$1,392,563	100.00%	\$1,238,751	100.00%	\$1,192,703	100.00%	\$1,169,658	100.00%	\$1,175,090	100.00%	\$1,174,463	100.00%	\$1,207,036	100.00%	\$1,525,831	100.00%
Debt to Equity		4.46		3.77		3.44		2.88		3.80		3.29		3.06		22.68		9.51		4.82		3.61

Sources: *Philadelphia Gas Works 2019 Comprehensive Annual Financial Report*, pp. 93-94; OCA Exhibit MEG-4.

BOND PRICING

City of Philadelphia, Pennsylvania
 Gas Works Revenue Bonds, Fifteenth Series (1998 General Ordinance)
 ** Final | Verified **

Bond Component	Maturity Date	Amount	Rate	Yield	Price	Yield to Maturity	Call Date	Call Price	Premium (-Discount)	Takedown
Serial Bonds:										
	08/01/2018	4,765,000	2.000%	0.910%	101.037				49,413.05	0.200
	08/01/2019	8,495,000	3.000%	1.040%	103.789				321,875.55	1.250
	08/01/2020	4,445,000	4.000%	1.200%	108.113				360,622.85	2.000
	08/01/2021	4,625,000	5.000%	1.340%	114.063				650,413.75	2.500
	08/01/2022	4,855,000	5.000%	1.500%	116.663				808,988.65	3.750
	08/01/2023	5,100,000	5.000%	1.690%	118.685				952,935.00	3.750
	08/01/2024	5,350,000	5.000%	1.880%	120.260				1,083,910.00	3.750
	08/01/2025	5,620,000	5.000%	2.070%	121.395				1,202,399.00	3.750
	08/01/2026	5,905,000	5.000%	2.240%	122.288				1,316,106.40	3.750
	08/01/2027	6,195,000	5.000%	2.420%	122.708				1,406,760.60	4.000
	08/01/2028	7,775,000	5.000%	2.550%	121.425 C	2.725%	08/01/2027	100.000	1,665,793.75	4.000
	08/01/2029	8,240,000	5.000%	2.660%	120.352 C	2.966%	08/01/2027	100.000	1,677,004.80	4.000
	08/01/2030	7,175,000	5.000%	2.770%	119.290 C	3.173%	08/01/2027	100.000	1,384,057.50	4.000
	08/01/2031	7,530,000	5.000%	2.850%	118.525 C	3.330%	08/01/2027	100.000	1,394,932.50	4.000
	08/01/2032	7,910,000	5.000%	2.920%	117.860 C	3.460%	08/01/2027	100.000	1,412,726.00	4.000
	08/01/2033	8,300,000	5.000%	2.980%	117.293 C	3.569%	08/01/2027	100.000	1,435,319.00	4.000
	08/01/2034	8,715,000	5.000%	3.030%	116.824 C	3.660%	08/01/2027	100.000	1,466,211.60	4.000
	08/01/2035	9,150,000	5.000%	3.060%	116.543 C	3.728%	08/01/2027	100.000	1,513,684.50	4.000
	08/01/2036	9,610,000	5.000%	3.090%	116.263 C	3.790%	08/01/2027	100.000	1,562,874.30	4.000
	08/01/2037	10,095,000	5.000%	3.120%	115.984 C	3.845%	08/01/2027	100.000	1,613,584.80	4.500
		<u>139,855,000</u>							<u>23,279,613.60</u>	
Term Bond 2042:										
	08/01/2038	10,600,000	5.000%	3.240%	114.876 C	4.047%	08/01/2027	100.000	1,576,856.00	4.500
	08/01/2039	11,125,000	5.000%	3.240%	114.876 C	4.047%	08/01/2027	100.000	1,654,955.00	4.500
	08/01/2040	11,685,000	5.000%	3.240%	114.876 C	4.047%	08/01/2027	100.000	1,738,260.60	4.500
	08/01/2041	12,265,000	5.000%	3.240%	114.876 C	4.047%	08/01/2027	100.000	1,824,541.40	4.500
	08/01/2042	<u>12,880,000</u>	5.000%	3.240%	114.876 C	4.047%	08/01/2027	100.000	<u>1,916,028.80</u>	4.500
		<u>58,555,000</u>							<u>8,710,641.80</u>	
Term Bond 2047:										
	08/01/2043	13,525,000	5.000%	3.300%	114.327 C	4.159%	08/01/2027	100.000	1,937,726.75	4.500
	08/01/2044	14,200,000	5.000%	3.300%	114.327 C	4.159%	08/01/2027	100.000	2,034,434.00	4.500
	08/01/2045	14,910,000	5.000%	3.300%	114.327 C	4.159%	08/01/2027	100.000	2,136,155.70	4.500
	08/01/2046	15,655,000	5.000%	3.300%	114.327 C	4.159%	08/01/2027	100.000	2,242,891.85	4.500
	08/01/2047	<u>16,440,000</u>	5.000%	3.300%	114.327 C	4.159%	08/01/2027	100.000	<u>2,355,358.80</u>	4.500
		<u>74,730,000</u>							<u>10,706,567.10</u>	
		<u>273,140,000</u>							<u>42,696,822.50</u>	

Dated Date	08/16/2017	
Delivery Date	08/16/2017	
First Coupon	02/01/2018	
Par Amount	273,140,000.00	
Premium	42,696,822.50	
Production	315,836,822.50	115.631845%
Underwriter's Discount	(1,192,963.77)	(0.436759%)
Purchase Price	314,643,858.73	115.195086%
Accrued Interest		
Net Proceeds	314,643,858.73	



FEDERAL RESERVE statistical release

G.19

Consumer Credit
April 2020

For release at **3 p.m.** (Eastern Time)
June 5, 2020

In April, consumer credit decreased at a seasonally adjusted annual rate of 19-1/2 percent. Revolving credit decreased at an annual rate of 65 percent, while nonrevolving credit decreased at an annual rate of 4 percent.

Consumer Credit Outstanding¹
Seasonally adjusted. Billions of dollars except as noted.

	2015 ^r	2016 ^r	2017 ^r	2018 ^r	2019 ^r	2019				2020			
						Q1 ^r	Q2 ^r	Q3 ^r	Q4 ^r	Q1 ^r	Feb ^r	Mar ^r	Apr ^p
Total percent change (annual rate) ²	7.1	6.8	5.3	4.8	4.6	4.6	4.4	4.9	4.1	1.6	5.6	-3.3	-19.6
Revolving	5.7	6.9	6.0	3.6	3.8	2.5	4.6	4.3	3.4	-7.6	7.1	-28.6	-64.9
Nonrevolving ³	7.6	6.8	5.1	5.2	4.9	5.4	4.3	5.1	4.4	4.8	5.1	5.7	-4.0
Total flow (annual rate) ^{2,4}	235.0	230.1	192.3	181.6	182.6	184.2	176.5	198.7	171.1	65.8	233.6	-138.4	-825.4
Revolving	50.7	61.7	57.7	36.8	39.6	26.1	49.0	46.3	37.1	-83.3	77.2	-314.4	-699.8
Nonrevolving ³	184.3	168.4	134.5	144.8	143.0	158.2	127.5	152.5	134.0	149.1	156.4	176.0	-125.5
Total outstanding	3,390.6	3,620.8	3,813.0	3,998.3	4,180.9	4,044.3	4,088.4	4,138.1	4,180.9	4,202.0	4,208.9	4,202.0	4,133.3
Revolving	898.7	960.3	1,018.1	1,054.6	1,094.2	1,061.1	1,073.4	1,084.9	1,094.2	1,078.1	1,099.6	1,078.1	1,019.8
Nonrevolving ³	2,492.0	2,660.4	2,795.0	2,943.7	3,086.7	2,983.2	3,015.1	3,053.2	3,086.7	3,124.0	3,109.3	3,124.0	3,113.5

Terms of Credit
Not seasonally adjusted. Percent except as noted.

Commercial bank interest rates⁵

New car loans													
48-month	4.19	4.30	4.61	5.03	5.39	5.50	5.35	5.27	5.45	5.29	5.29	n.a.	n.a.
60-month	4.20	4.14	4.33	5.02	5.31	5.24	5.36	5.27	5.37	5.15	5.15	n.a.	n.a.
Credit card plans													
All accounts	12.09	12.35	12.89	14.22	15.05	15.09	15.13	15.10	14.87	15.09	15.09	n.a.	n.a.
Accounts assessed interest	13.66	13.56	14.44	16.04	16.98	16.91	17.14	16.97	16.88	16.61	16.61	n.a.	n.a.
Personal loans													
24-month	9.75	9.69	10.13	10.32	10.32	10.36	10.63	10.07	10.21	9.63	9.63	n.a.	n.a.

Finance companies (new car loans)⁶

Interest rates	5.1	5.1	5.4	6.1	6.4	6.5	6.7	6.4	6.1	6.1	n.a.	6.1	n.a.
Maturity (months)	65	66	67	66	67	66	66	66	67	68	n.a.	68	n.a.
Amount financed (dollars)	27,472	28,601	29,288	30,173	31,311	30,865	31,171	31,514	31,692	32,724	n.a.	32,724	n.a.

This release is generally issued on the fifth business day of each month. See the Statistical Release Schedule for more information.
Footnotes appear on the second and third pages.

Consumer Credit Outstanding (Levels)

Non seasonally adjusted

Billions of dollars

						2019				2020			
	2015 ^r	2016 ^r	2017 ^r	2018 ^r	2019 ^r	Q1 ^r	Q2 ^r	Q3 ^r	Q4 ^r	Q1 ^r	Feb ^r	Mar ^r	Apr ^p
Total	3,390.6	3,620.8	3,813.0	3,998.3	4,180.9	3,988.6	4,040.9	4,117.4	4,180.9	4,146.4	4,171.6	4,146.4	4,080.0
Major holders													
Depository institutions	1,454.6	1,562.6	1,633.2	1,687.4	1,774.0	1,649.2	1,688.4	1,719.4	1,774.0	1,712.6	1,740.5	1,712.6	1,655.8
Finance companies	561.3	548.4	541.3	534.4	537.6	529.4	533.3	536.0	537.6	528.4	532.9	528.4	529.2
Credit unions	342.3	380.3	418.4	469.2	482.4	471.6	472.8	483.6	482.4	489.0	484.9	489.0	476.7
Federal government ⁷	949.7	1,049.3	1,145.6	1,236.3	1,319.4	1,269.6	1,278.3	1,311.0	1,319.4	1,350.9	1,347.3	1,350.9	1,353.1
Nonprofit and educational institutions ⁸	44.9	41.3	35.1	31.4	27.8	30.4	29.3	28.5	27.8	27.0	27.3	27.0	26.7
Nonfinancial business	37.8	38.9	39.4	39.6	39.6	38.5	38.7	38.9	39.6	38.5	38.7	38.5	38.5
Major types of credit, by holder													
Revolving	898.7	960.3	1,018.1	1,054.6	1,094.2	1,005.8	1,032.2	1,045.1	1,094.2	1,022.8	1,052.5	1,022.8	967.1
Depository institutions	801.8	859.5	912.0	946.8	983.1	902.1	924.2	936.7	983.1	919.1	946.8	919.1	865.9
Finance companies	25.7	25.5	26.6	23.7	21.9	22.0	23.8	23.4	21.9	19.1	20.0	19.1	19.2
Credit unions	49.4	53.1	58.4	62.6	67.8	61.5	63.7	64.4	67.8	64.3	65.2	64.3	61.7
Federal government ⁷	...	...	...	...	...	...	...	...	...	...	...	...	...
Nonprofit and educational institutions ⁸	...	...	...	...	...	...	...	...	...	...	...	...	...
Nonfinancial business	21.7	22.2	21.1	21.4	21.4	20.3	20.6	20.6	21.4	20.3	20.5	20.3	20.3
Nonrevolving	2,492.0	2,660.4	2,795.0	2,943.7	3,086.7	2,982.8	3,008.7	3,072.3	3,086.7	3,123.6	3,119.2	3,123.6	3,112.9
Depository institutions	652.8	703.0	721.2	740.5	790.8	747.2	764.2	782.7	790.8	793.5	793.7	793.5	789.9
Finance companies	535.6	522.8	514.7	510.7	515.8	507.4	509.6	512.6	515.8	509.3	512.9	509.3	510.0
Credit unions	292.9	327.2	360.0	406.6	414.7	410.0	409.1	419.2	414.7	424.7	419.7	424.7	415.1
Federal government ⁷	949.7	1,049.3	1,145.6	1,236.3	1,319.4	1,269.6	1,278.3	1,311.0	1,319.4	1,350.9	1,347.3	1,350.9	1,353.1
Nonprofit and educational institutions ⁸	44.9	41.3	35.1	31.4	27.8	30.4	29.3	28.5	27.8	27.0	27.3	27.0	26.7
Nonfinancial business	16.1	16.7	18.3	18.2	18.2	18.2	18.1	18.3	18.2	18.2	18.3	18.2	18.2
Memo													
Student Loans ⁹	1,320.2	1,408.0	1,492.5	1,575.6	1,648.7	1,606.8	1,612.8	1,645.9	1,648.7	1,674.5	n.a.	1,674.5	n.a.
Motor Vehicle Loans ¹⁰	993.2	1,065.1	1,104.6	1,142.7	1,187.0	1,149.8	1,161.9	1,180.5	1,187.0	1,187.1	n.a.	1,187.1	n.a.

Footnotes

1. Covers most credit extended to individuals, excluding loans secured by real estate. Includes receivables carried on the balance sheet of the institution as well as outstanding balances of pools upon which securities have been issued; under the current accounting rule, most of those balances remain on the balance sheets of the loan originator.
2. The series for consumer credit outstanding and its components may contain breaks that result from discontinuities in source data. Percent changes are adjusted to exclude the effect of such breaks. In addition, percent changes are at a simple annual rate and are calculated from unrounded data.
3. Includes motor vehicle loans and all other loans not included in revolving credit, such as loans for mobile homes, education, boats, trailers, or vacations. These loans may be secured or unsecured.
4. Flow data represent changes in the level of credit due to economic and financial activity, and exclude breaks in the data series due to changes in methodology, source data, and other technical aspects of the estimation that could affect the level of credit.
5. Interest rates are annual percentage rates (APR) as specified by the Federal Reserve's Regulation Z. Interest rates for new-car loans and personal loans at commercial banks are simple unweighted averages of each bank's most common rate charged during the first calendar week of the middle month of each quarter. For credit card accounts, the rate for all accounts is the stated APR averaged across all credit card accounts at all reporting banks. The rate for accounts assessed interest is the annualized ratio of total finance charges at all reporting banks to the total average daily balances against which the finance charges were assessed (excludes accounts for which no finance charges were assessed).

Consumer Credit Outstanding (Flows)

Not seasonally adjusted

Billions of dollars, annual rate

						2019				2020			
	2015 ^r	2016 ^r	2017 ^r	2018 ^r	2019 ^r	Q1 ^r	Q2 ^r	Q3 ^r	Q4 ^r	Q1 ^r	Feb ^r	Mar ^r	Apr ^p
Total	235.0	230.1	192.3	181.6	182.6	-38.4	209.0	305.9	254.1	-156.9	-142.1	-359.7	-796.3
Major holders													
Depository institutions	97.7	107.9	70.6	50.6	86.6	-152.7	156.8	124.0	218.3	-264.2	-171.3	-391.2	-681.8
Finance companies	-2.4	-13.0	-7.1	-6.9	3.2	-19.9	15.8	10.7	6.4	-36.8	-38.1	-53.7	9.2
Credit unions	39.5	38.0	38.1	50.8	13.2	9.5	5.0	43.1	-4.7	26.2	28.9	49.1	-147.4
Federal government ⁷	103.4	99.6	96.3	90.7	83.1	133.2	35.1	130.6	33.6	125.8	47.4	42.7	26.5
Nonprofit and educational institutions ⁸	-2.7	-3.6	-6.2	-3.8	-3.6	-3.9	-4.5	-3.3	-2.5	-3.4	-3.1	-3.3	-3.1
Nonfinancial business	-0.5	1.2	0.5	0.2	0.0	-4.6	0.9	0.8	2.9	-4.6	-6.0	-3.1	0.4
Major types of credit, by holder													
Revolving	50.7	61.7	57.7	36.8	39.6	-195.0	105.5	51.5	196.5	-304.4	-184.1	-412.6	-668.6
Depository institutions	51.8	57.7	52.5	35.1	36.3	-179.1	88.4	50.2	185.7	-275.0	-160.2	-388.8	-638.1
Finance companies	-5.4	-0.2	1.1	-2.9	-1.9	-7.0	7.3	-1.5	-6.1	-11.0	-11.1	-10.8	1.0
Credit unions	2.6	3.6	5.3	4.2	5.2	-4.2	8.7	2.7	13.5	-13.8	-7.6	-10.8	-32.0
Federal government ⁷	...	...	...	...	...	...	...	...	...	...	...	...	...
Nonprofit and educational institutions ⁸	...	...	...	...	...	...	...	...	...	...	...	...	...
Nonfinancial business	1.6	0.5	-1.1	0.3	0.0	-4.6	1.1	0.2	3.4	-4.7	-5.3	-2.2	0.5
Nonrevolving	184.3	168.4	134.5	144.8	143.0	156.6	103.5	254.4	57.6	147.5	42.0	52.9	-127.7
Depository institutions	45.9	50.2	18.2	15.4	50.3	26.4	68.3	73.8	32.6	10.8	-11.1	-2.4	-43.6
Finance companies	2.9	-12.8	-8.1	-4.1	5.1	-12.9	8.5	12.3	12.5	-25.8	-27.0	-43.0	8.2
Credit unions	36.9	34.3	32.8	46.6	8.1	13.7	-3.7	40.4	-18.2	40.0	36.4	59.9	-115.4
Federal government ⁷	103.4	99.6	96.3	90.7	83.1	133.2	35.1	130.6	33.6	125.8	47.4	42.7	26.5
Nonprofit and educational institutions ⁸	-2.7	-3.6	-6.2	-3.8	-3.6	-3.9	-4.5	-3.3	-2.5	-3.4	-3.1	-3.3	-3.1
Nonfinancial business	-2.1	0.7	1.6	-0.2	0.0	0.1	-0.2	0.7	-0.5	0.1	-0.7	-0.9	-0.2
Memo													
Student Loans ⁹	84.5	87.7	84.5	83.1	73.2	125.1	23.9	132.3	11.2	103.2	n.a.	103.2	n.a.
Motor Vehicle Loans ¹⁰	79.2	71.9	39.5	34.2	44.3	28.4	48.5	74.3	25.8	0.6	n.a.	0.6	n.a.

6. Covers most of the captive and non-captive finance companies. The series of finance company new car loan terms included in previous releases are discontinued. They remain available from the Data Download Program.

7. Includes student loans originated by the Department of Education under the Federal Direct Loan Program and the Perkins Loan Program, as well as Federal Family Education Program loans that the government purchased under the Ensuring Continued Access to Student Loans Act.

8. Includes student loans originated under the Federal Family Education Loan Program and held by educational institutions and nonprofit organizations.

9. Includes student loans originated under the Federal Family Education Loan Program and the Direct Loan Program; Perkins loans; and private student loans without government guarantees. This memo item includes loan balances that are not included in the nonrevolving credit balances. For additional information, see public documentation. Data for this memo item are released for each quarter-end month.

10. Includes motor vehicle loans owned and securitized by depository institutions, finance companies, credit unions, and nonfinancial business. Includes loans for passenger cars and other vehicles such as minivans, vans, sport-utility vehicles, pickup trucks, and similar light trucks for personal use. Loans for boats, motorcycles and recreational vehicles are not included. Data for this memo item are released for each quarter-end month.

r=revised. p=preliminary. n.a.=not available. ...=not applicable.

BEFORE THE
PENNSYLVANIA PUBLIC UTILITY COMMISSION

Pennsylvania Public Utility Commission :
 :
 v. : Docket No. R-2020-3017206
 :
 Philadelphia Gas Works :

VERIFICATION

I, David S. Habr hereby state that the facts above set forth in my Direct Testimony, OCA Statement No. 3, are true and correct and that I expect to be able to prove the same at a hearing held in this matter. I understand that the statements herein are made subject to the penalties of 18 Pa.C.S. § 4904 (relating to unsworn falsification to authorities).

DATED: June 15, 2020
*289880

Signature:



David S. Habr

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