



Briefing Paper

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PENNSYLVANIA UTILITIES: HOW ARE CONSUMERS, WORKERS, AND CORPORATIONS FARING IN THE DEREGULATED ELECTRICITY, GAS, AND TELEPHONE INDUSTRIES?

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Summary

In the 1990s, the Pennsylvania General Assembly began deregulating basic utility services, including the electricity, telephone, and natural gas industries. Proponents of deregulation promised benefits to consumers and the Pennsylvania economy, as well as assurances that reliability and quality would not suffer.

This briefing paper presents preliminary data on whether deregulation has lived up to its promises. It focuses on the 1994 to 1999 period during which Pennsylvania has been conducting experiments in deregulation. The paper includes information for all major utilities in these three industries as a group, for each industry separately, and, in the Appendix Tables, for individual utilities.

What do the early returns tell us about how consumers, workers, corporations, and Chief Executive Officers (CEOs) are faring in a more deregulated environment?

- ◆ From 1994 to 1999, the number of Pennsylvania consumers who complained to the PUC about utility service in the electric, gas, and utility industries more than doubled. By 1999 the PUC received more than 10,000 complaints about utility service. Looking separately at quality and reliability in each industry:
 - Electric utility outages (not including major storms) lasted, on average, 30 minutes longer in 1999 than they did in 1994.
 - Following improvements from 1994 to 1998, gas utilities in 1999 – the year Pennsylvania enacted gas deregulation legislation — saw an increase in the number of consumer complaints and the number of distribution system “incidents” (e.g., explosions or other significant gas leaks leading to an accident of some type).

- Verizon Pennsylvania, Pennsylvania's dominant telephone utility, is seeing increasing customer dissatisfaction. Since 1994, consumer complaints to the PUC have tripled. In 1999, more than one out of every eight Verizon customers was dissatisfied with Verizon's repair service.
- ◆ As a result of a spike in electric utility profits in 1999, profits in all three utility industries combined were 50 percent higher (in nominal dollars) in 1999 than in 1994.
- ◆ During the six years examined here, Pennsylvania's utilities reinvested just 5 percent of their profits in Pennsylvania's utility systems. The rest, amounting to more than \$15 billion, was spent elsewhere (often in other states or even in other countries).
- ◆ From 1994 to 1999, Pennsylvania utilities decreased their Pennsylvania workforce by about 6,500 people, or nearly 15 percent.
- ◆ The most consistent trends concern CEO pay. In almost every year in each of the three Pennsylvania utility industries examined, CEO pay increased. In all three industries combined, CEO pay increased by 76 percent in inflation-adjusted dollars from 1994 to 1999. Over the same period, the real wages of typical Pennsylvania workers increased by about 5 percent.¹⁷

This briefing paper does not contain information on prices, in part because transitional price caps remain in effect in the electricity industry. Nor does the paper analyze the link between the trends documented and deregulation per se.

What this paper does show is that CEOs and the electric utilities themselves have so far prospered most as deregulation has moved forward. Consumers and workers do not appear to have gained. And investment trends raise questions about the long-run adequacy and safety of Pennsylvania's utility infrastructure.

Given the findings from this preliminary review of publicly available data, Keystone Research Center recommends that the Pennsylvania legislature commission a comprehensive and balanced assessment of the impacts of utility deregulation on Pennsylvania's economy and utility infrastructure. Experience in California and other states underscores that deregulation gone wrong can have devastating consequences. Pennsylvania needs to identify potential dangers before they become a crisis and make sensible and pragmatic – as opposed to ideological – adjustments to the utility regulatory environment.

Background

In 1993, the Pennsylvania General Assembly started the process of deregulating basic utility services in the Commonwealth. In that year, the legislature enacted legislation that was designed to open up competition in the telephone industry.² Three years later, the legislature followed with deregulation legislation for the electricity industry.⁷ In 1999, similar legislation was enacted that is designed to deregulate portions of the natural gas industry.¹⁰

During the 1990s, the U.S. Congress also passed legislation to encourage competition in utility industries – first in 1992 for the energy industry, then in 1996 for the telecommunications industry.^{9,15}

In all three of these utility industries, proponents of deregulation promised that substantial benefits would result. For example, the General Assembly’s goals for telecommunications deregulation included “the accelerated deployment of a universally available, state-of-the-art, interactive, public-switched broadband telecommunications network in rural, suburban, and urban areas.”² Similarly, the legislature’s goals for electricity deregulation included promises that the reliability of electric service would be ensured while the price of electricity would decrease for all classes of customers.⁷

During the past year, the effects of deregulation in California have captured the attention of the country. Deregulation of the electricity and natural gas industries in California has contributed to shortages of electricity and natural gas, numerous power outages, dramatic price increases, and calls to re-regulate the utility industry. Similar problems are occurring in Montana, where deregulation of electricity has led to enormous price increases that have closed down most of the major manufacturing and mining facilities in the state.¹³ Policymakers nationwide are wondering if the problems in California and Montana will be repeated in other states.^{1,5}

Purpose of this Briefing Paper

Rather than trying to guess about what the future will bring to Pennsylvania, this Briefing Paper will start to answer the question: “What has happened in the first few years of Pennsylvania’s experiment in utility deregulation?”

In particular, we will examine publicly available data on the following variables.

- ◆ Utility profits or “net income.”
- ◆ Pay packages for the CEOs of the corporations that own Pennsylvania’s utilities.
- ◆ Customer satisfaction with their utility service, measured by consumer complaints.
- ◆ The safety and reliability of utility service.
- ◆ The level of new investment in Pennsylvania’s utility infrastructure.
- ◆ The number of people employed by Pennsylvania’s utilities.

This briefing paper does not contain information on prices, in part because transitional price caps remain in effect in the electricity industries. While various proponents of deregulation have made claims about the short-term savings from electricity deregulation, we are not aware of any comprehensive study examining the costs and benefits to Pennsylvania’s economy from either telecommunications or energy deregulation. Such a study should examine not just rate savings, but also additional costs incurred by consumers in selecting a supplier, as well as costs associated with outages, service disruptions, improperly performed repairs, other changes in the quality of utility service, and reductions in employment levels.

Methodology

Data were collected to measure utility profits, compensation for utility CEOs, customer satisfaction with utility service, the safety and reliability of utility service, the level of investment in Pennsylvania's utility infrastructure, and the number of people employed by Pennsylvania's utilities. Data were collected for the years 1994 through 1999. Table 1 shows the source of these data for each type of utility.

All of the data were obtained in electronic form over the Internet, except for the data from the Pennsylvania Public Utility Commission (Pa. PUC). While the Pa. PUC publishes the consumer report¹⁶ and makes copies available to the public at no charge, the utility annual reports are kept on file in the Pa. PUC's office in Harrisburg and must be examined on-site. In theory, copies of the reports can be ordered from the Pa. PUC, but the copying charge (75 cents per page) makes it prohibitive for members of the public not in Harrisburg to review those reports (some of the reports are 100 pages or more in length). The electric reliability data¹² is not published at all, but is available on request from the Pa. PUC's Bureau of Conservation, Economics and Energy Planning.

This briefing paper does not attempt to draw conclusions about "cause and effect" relationships among these data. Rather, the paper presents the data to show what has happened in Pennsylvania since the deregulation experiments began.

Table 1
Data Sources

Category	Electric Utility	Natural Gas Utility	Verizon Pa.
Net Income	Annual Report ⁶	Annual Report ³	ARMIS ⁴
CEO Compensation*	Proxy Statement ⁸	Proxy Statement ⁸	Proxy Statement ⁸
Net Investment in Pa. (Plant additions less depreciation expense)	Annual Report ⁶	Annual Report ³	ARMIS ⁴
Full-time employees – individual utilities	Annual Report ⁶	Annual Report ³	ARMIS ⁴
Full-time employees – statewide industry**	Bureau of Labor Statistics ¹⁴	Bureau of Labor Statistics ¹⁴	N/A
Consumer Complaints	Pa. PUC ¹⁶	Pa. PUC ¹⁶	Pa. PUC ¹⁶
Safety and Reliability	Length of Outages ¹²	Distribution System Incidents ¹¹	Customer Satisfaction with Repair Service ⁴

In all cases, the data analyzed in this report are directly reported in the sources listed in this Table.

* CEO compensation is the reported basic compensation (salary and bonus) of the CEO of the corporation that owns each Pennsylvania utility. It does not include stock options, pensions, or other indirect forms of compensation.

** Statewide data on the number of utility employees could not be compiled by summing the individual utility reports for Pennsylvania's major electric and gas utilities because of missing data in several annual reports.

Therefore, the statewide data are those reported by the federal Department of Labor for Pennsylvania's electricity and natural gas distribution industries.

These results are presented graphically for each of the six categories listed in Table 1. The main body of the report presents the results for all utilities (excluding safety and reliability, the measures of which vary by utility), then separately for each of the three utility industries. Results for each utility are presented separately in tables appearing in the Appendix.

Findings

All Utilities

From 1994 to 1999, Pennsylvania's utilities, and their CEOs, have prospered. For example:

- ◆ Profits have increased by 50 percent in nominal terms, primarily as a result of 1999 profit growth in the electric utility industry (Figure 1 and Figure 6).
- ◆ CEO compensation has risen by 86 percent in nominal terms and 76 percent in inflation-adjusted terms (Figure 2).

In contrast, Pennsylvania, the utilities' employees, and consumers have not fared nearly as well.

- ◆ In several years, Pennsylvania's utilities pulled money out of their Pennsylvania operations; that is, they collected more for depreciation than they invested in new utility plant and equipment (Figure 3).
- ◆ Overall during these six years, Pennsylvania's utilities invested \$830 million, or 5 percent, of their \$16 billion profits in their Pennsylvania operations.
- ◆ More than 6,500 utility employees lost their jobs between 1994 and 1999 – one out of every seven utility employees in the Commonwealth (Figure 4).
- ◆ Consumer complaints to the Pa. PUC more than doubled during this time period (Figure 5).

Electric Utilities

Deregulation has allowed Pennsylvania's electric utilities, and their CEOs, to profit handsomely. Annual profits in nominal terms increased by more than \$1 billion (more than a 50 percent increase) between 1994 and 1999, as a result of a jump in 1999 (Figure 6). At the same time, the compensation for the CEOs of these companies increased by more than 75 percent (Figure 7).

Increased profits are not being invested in Pennsylvania utilities. Electric utility investment in the Commonwealth was negative in 1996 and 1997 – just after the deregulation law was passed (Figure 8). Overall, from 1994 through 1999, Pennsylvania's utilities invested less than \$1 billion of their \$13 billion in profits back into their Pennsylvania utility systems.

Employment in the electric industry in Pennsylvania fell by more than 3,000 people during this six-year period, representing a decline of more than 13 percent (Figure 9).

Quality of service has declined precipitously; for example:

- ◆ From 1994 to 1999, the number of complaints received by the Pa. PUC about electric utilities more than doubled (from under 2,000 to more than 4,000) (Figure 10).
- ◆ The average length of electric outages (excluding major storms) has worsened each year since 1994 (Figure 11).
- ◆ Between 1994 and 1999, it took Pennsylvania's electric utilities, on average, more than 30 minutes longer to restore service to a customer after an outage. In 1994, the average outage lasted an hour and 50 minutes; by 1999, the average outage was more than 2 hours and 20 minutes.

Natural Gas Utilities

Since legislation to deregulate the natural gas industry only passed in 1999, most of the information available covers the period prior to deregulation. Over this 1994-1999 period, profits in Pennsylvania's natural gas industry mushroomed 57 percent (Figure 12). CEO compensation has risen even more dramatically (increasing 85 percent in six years) (Figure 13).

High profits are not leading to more investment in Pennsylvania. During 1998 and 1999, the major natural gas companies earned profits of almost \$500 million in Pennsylvania. Of that amount, however, they invested just \$20 million in their Pennsylvania utility systems (Figure 14) – just 4 percent of their profits.

At the same time, Pennsylvania's gas companies have decreased their work force. Between 1994 and 1999, 1,500 people lost their jobs in the gas industry, a reduction of 20 percent (Figure 15). Consumer complaints were declining prior to deregulation but increased by 20 percent in 1999 (Figure 16). That year also saw a reversal of a 5-year trend in the reduction of the number of distribution system incidents (Figure 17).

Verizon Pennsylvania (formerly Bell Atlantic Pennsylvania)

Profits at Verizon, Pennsylvania's largest telephone company, were flat during this six-year period, actually declining slightly from their 1994 level (Figure 18). Still, Verizon is earning more than \$300 million per year on its Pennsylvania operations. At the same time, CEO compensation at the parent company of Verizon Pennsylvania has more than doubled (Figure 19).

Verizon is not reinvesting its profits in the Commonwealth. From 1994 through 1999, there are only two years when Verizon did not pull money out of Pennsylvania (i.e., by collecting more for depreciation than it

spent to build new facilities) (Figure 20). In total during these six years, Verizon reduced its investment in Pennsylvania's utility infrastructure by more than \$400 million.

From 1994 through 1999, Verizon earned profits of more than \$1.8 billion in Pennsylvania, but invested none of it in its Pennsylvania local telephone network. In fact, Verizon took \$400 million of its depreciation expenses paid by Pennsylvania customers and spent that money somewhere else.

From 1994 to 1999, Verizon also cut its Pennsylvania workforce by more than 1,600 people, or 13 percent. These cuts took place almost entirely during 1995 (Figure 21).

From 1994 to 1999, the number of consumer complaints to the Pa. PUC more than tripled (Figure 22). Further, customer satisfaction surveys (that are required by the Federal Communications Commission) show that in 1999 more than one out of every eight Verizon customers was dissatisfied with Verizon's repair service (Figure 23). This represents a deterioration from Verizon's performance during the previous two years.

Unanswered Questions

The data summarized in this Briefing Paper suggest that all is not well in Pennsylvania's increasingly deregulated utility industries. Pennsylvania's utilities are earning substantial profits, but that they are not reinvesting those profits in Pennsylvania's infrastructure. These same utilities are reducing their work force, even while consumers in the electricity and telephone industry are increasingly dissatisfied with their utility service. The most unambiguous beneficiaries in our deregulated environment are corporate CEO's. This preliminary examination of the effects of utility deregulation on Pennsylvania lead to several important questions, including:

- ◆ Is there a connection between lack of investment, employment cutbacks, and reliability problems and consumer complaints?
- ◆ Does the lack of investment in state utility infrastructure foreshadow more serious problems down the road, including in the areas of safety, reliability, and customer service?
- ◆ How does utility performance stack up against promises made prior to deregulation? To the extent that it does not, are utilities being held accountable and what additional actions by the PUC and legislature could be taken to hold them accountable?

Recommendations

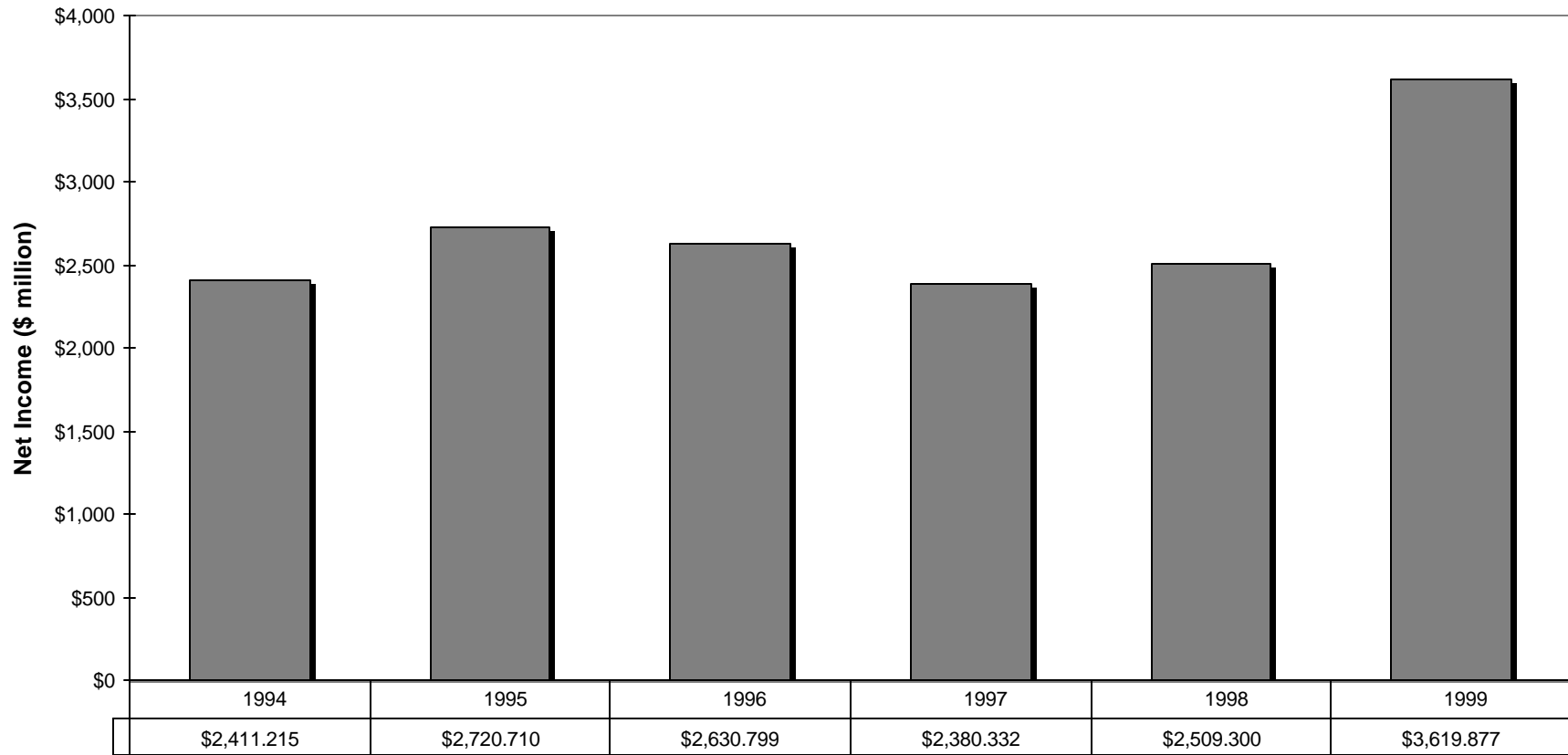
The Public Utility Commission, legislature, and the public at large should examine the questions above, and related questions, more closely. To further such examination, we conclude with four recommendations.

1. The Pennsylvania legislature should commission a comprehensive and balanced assessment of the impacts of utility deregulation on Pennsylvania's economy and utility infrastructure. This assessment should include, at a minimum, a comprehensive review of both the costs and benefits of deregulation, including impacts on Pennsylvania's economy, infrastructure, consumers, businesses, and employees. It should make recommendations regarding how regulation in each industry should be modified to better achieve the public good.
2. The PUC should evaluate ways to make critical data about utility performance widely available to the public. Improving public access to information will enable people to be better informed about the true impacts of utility industry deregulation and other regulatory experiments.
3. The PUC should require utilities to prepare annual infrastructure reports on the present and future safety and reliability of each major utility's infrastructure. This report should include information such as the following.
 - Employment levels in key operating areas (such as electric and telecommunications line workers).
 - Anticipated retirements and planned rehiring in key operating areas during the next five years (the aging of utility workforces poses a serious challenge to safety and reliability in the years ahead).
 - The number of apprentices who are being trained to replace key operating personnel.
 - The frequency and severity of accidents and safety violations.
 - Net investment in critical functional categories in the utility distribution networks.
 - The number of facilities in service of various ages, highlighting those that have been in service longer than their normal useful life.
 - Detailed information on maintenance practices for critical components of the distribution networks (such as poles, transformers, valves, switches, etc.).
4. The PUC should conduct periodic audits of each major utility's safety and reliability practices, including the items mentioned above, as well as an overall assessment of its actions to maintain and improve the quality, safety, and reliability of its Pennsylvania operations.

ENDNOTES

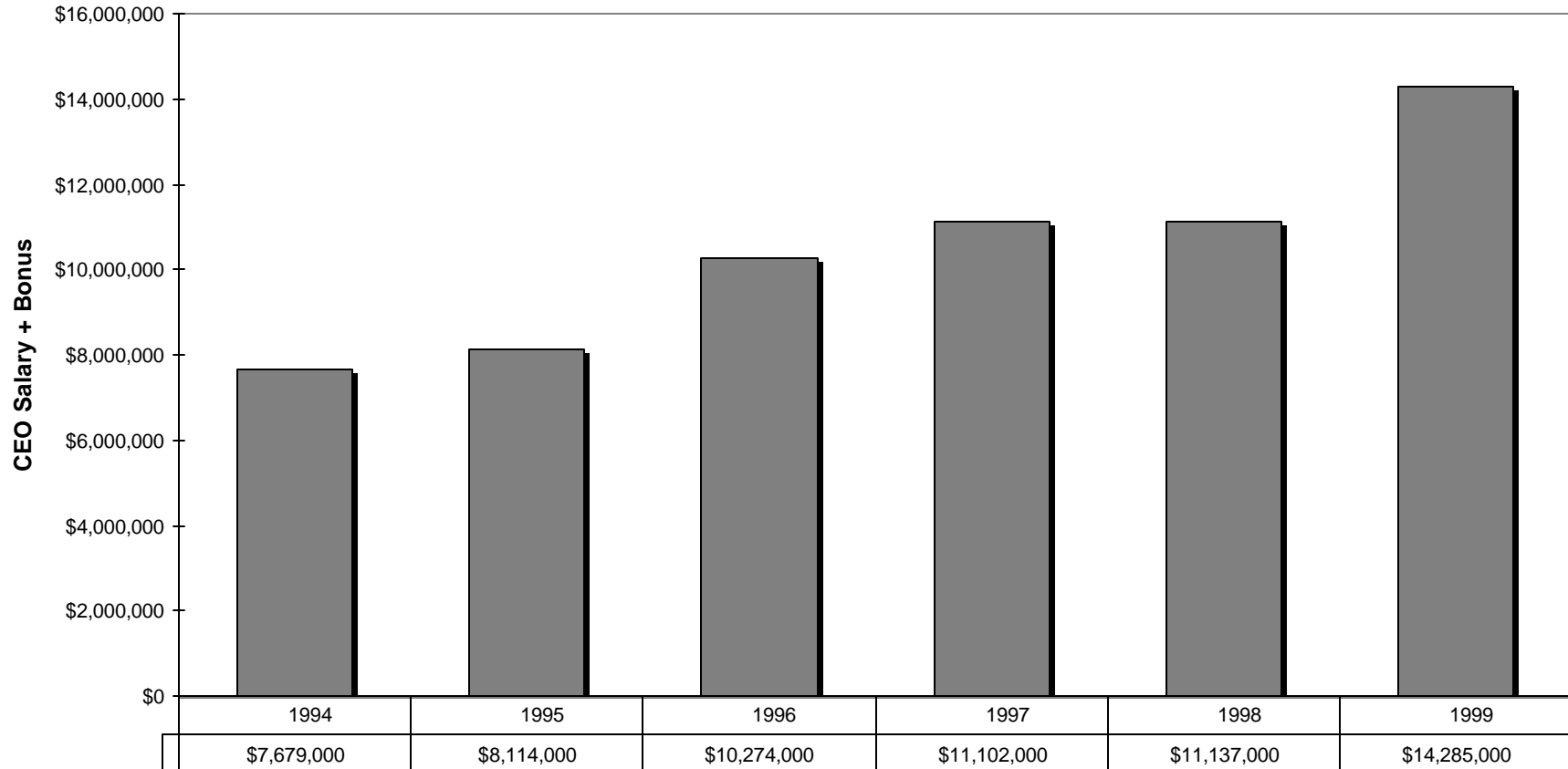
- ¹ “Across U.S. People Ask, ‘Could Blackouts Occur Here?’,” *Associated Press*, Apr. 9, 2001.
- ² Alternative Form of Regulation of Telecommunications Services, Act 67 of 1993, Pub. Law 456.
- ³ Annual Report to the Pa. Public Utility Commission (various utilities for the years 1994-1999).
- ⁴ Automated Reporting Management Information System, Federal Communications Commission [www.fcc.gov/ccb/armis/].
- ⁵ “California Power Crunch Sends Dereg. Shockwaves to Other States,” *Associated Press*, Feb. 3, 2001.
- ⁶ Electric Utility Annual Reports (Form 1) Database, Federal Energy Regulatory Commission [www.rimsweb2.ferc.fed.us/form1viewer/].
- ⁷ Electricity Generation Customer Choice and Competition Act, Act 138 of 1996, Pub. Law 802.
- ⁸ Electronic Data Gathering and Retrieval, U.S. Securities and Exchange Commission [www.sec.gov/cgi-bin/srch-edgar].
- ⁹ Energy Policy Act of 1992, Pub. Law. 102-486.
- ¹⁰ Natural Gas Choice and Competition Act, Act 21 of 1999, Pub. Law 122.
- ¹¹ Natural Gas Distribution Incidents Database, Office of Pipeline Safety, U.S. Department of Transportation [www.ops.dot.gov/IA98.htm].
- ¹² Pennsylvania Electric Distribution Company Reliability Data – 1994-1999, Bureau of Conservation, Economics and Energy Planning, Pa. Public Utility Commission.
- ¹³ Robbins, Jim, “As Power Prices Surge, Montana, Too, Asks Why,” *The New York Times*, May 13, 2001.
- ¹⁴ State and Area Employment, Hours, and Earnings, Bureau of Labor Statistics, U.S. Department of Labor [www.stats.bls.gov/].
- ¹⁵ Telecommunications Act of 1996, Pub. Law 104-104.
- ¹⁶ *Utility Consumer Activities Report and Evaluation* (for the years 1995-1999), Pa. Public Utility Commission.
- ¹⁷ *The State of Working Pennsylvania*, (Harrisburg; Keystone Research Center, various years) [www.keystoneresearch.org].

Figure 1
Major Electric, Gas, and Telephone Utilities
Net Income 1994-1999



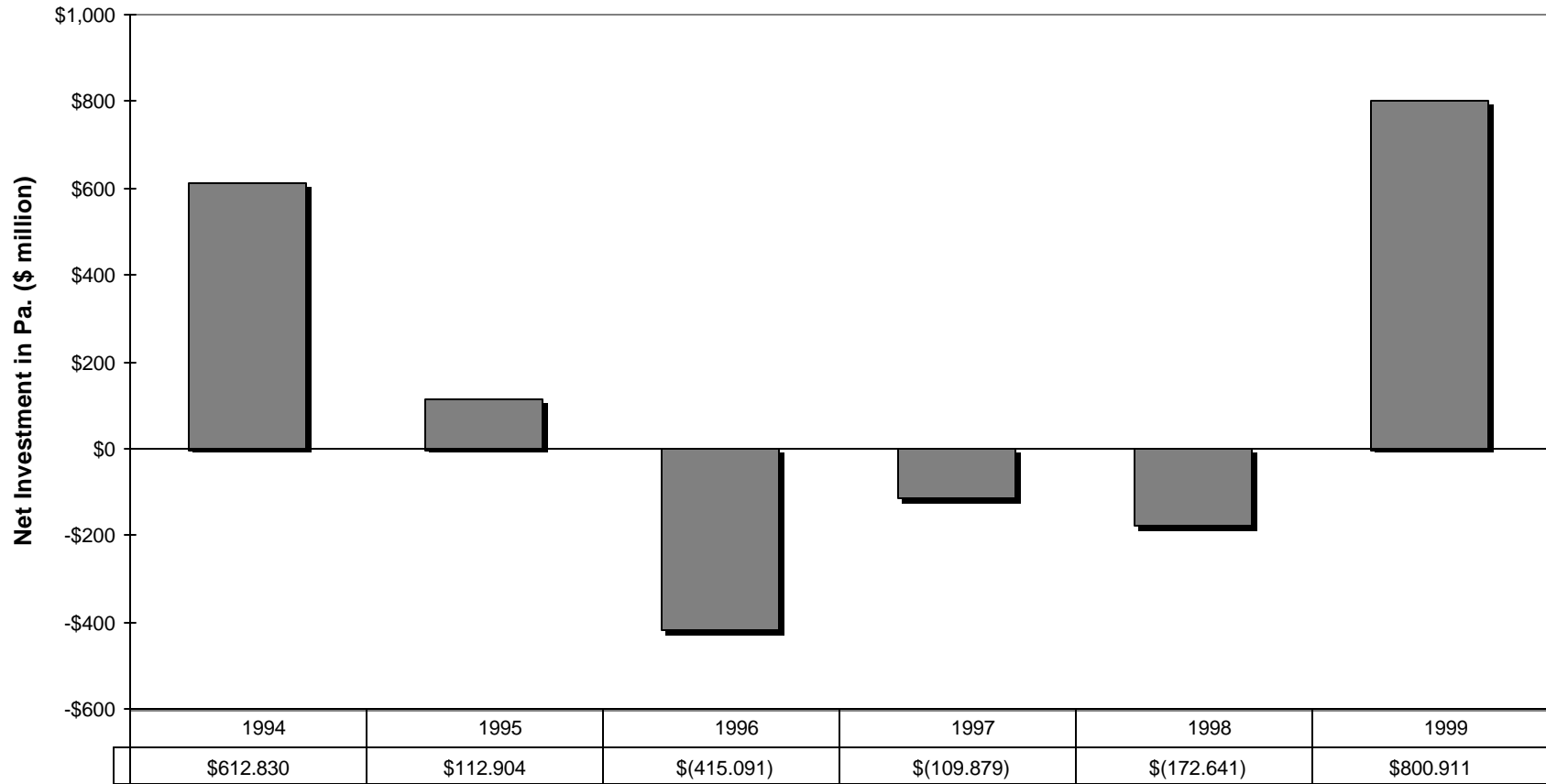
Source: See Table 1

Figure 2
Major Electric, Gas, and Telephone Utilities
CEO Compensation (Salary & Bonus) 1994-1999



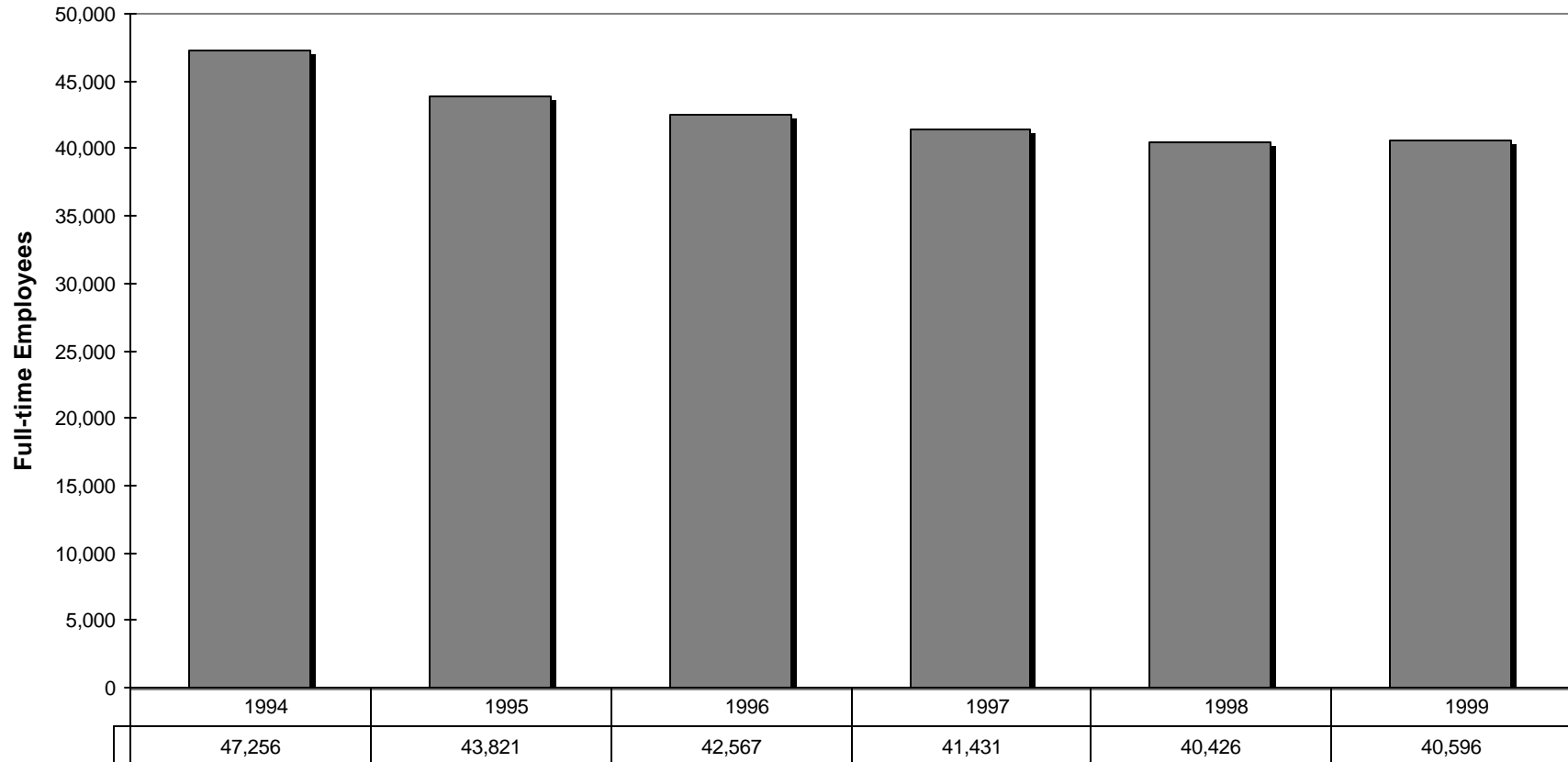
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Figure 3
Major Electric, Gas, and Telephone Utilities
Net Investment in Pennsylvania 1994-1999



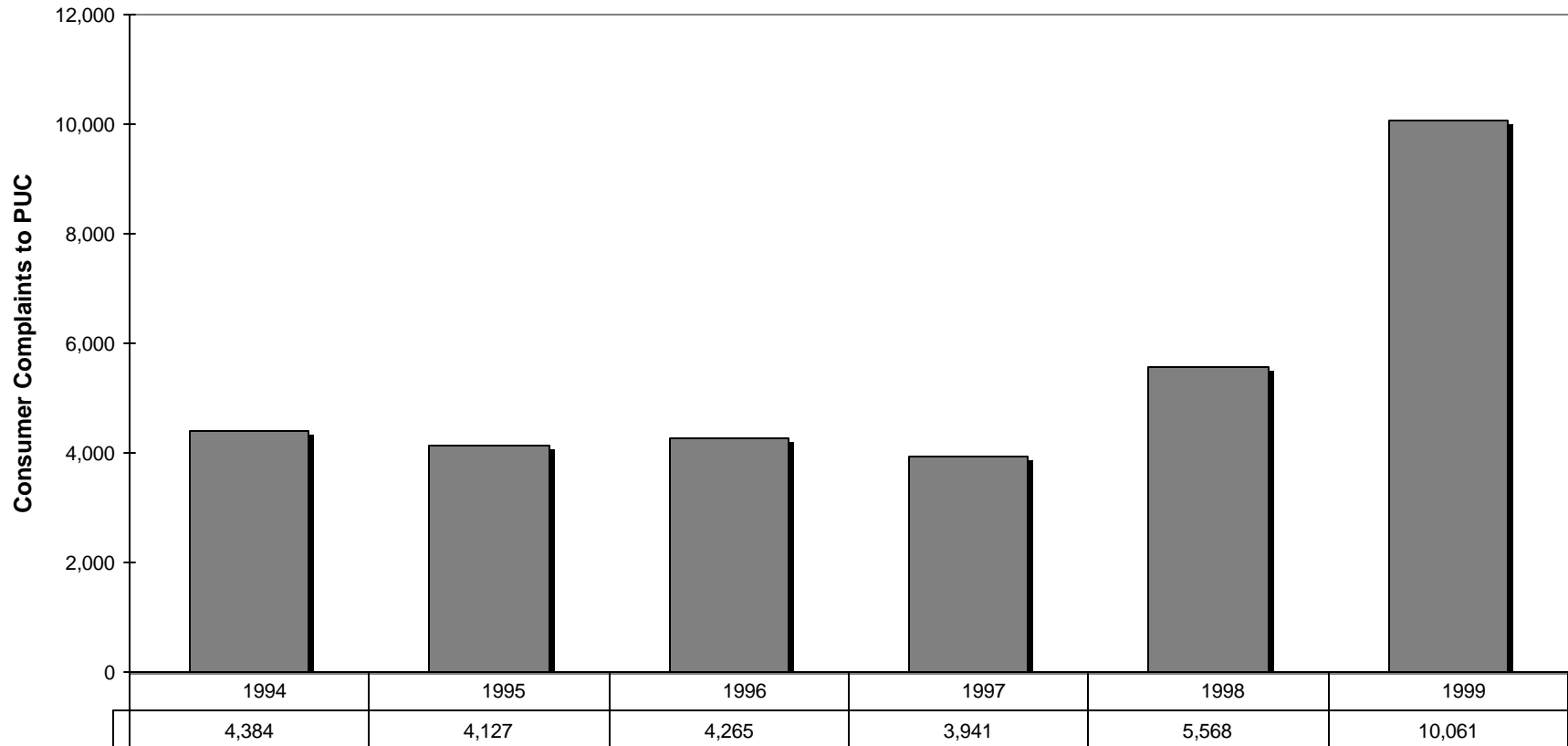
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Figure 4
Major Electric, Gas, and Telephone Utilities
Full-Time Employees 1994-1999



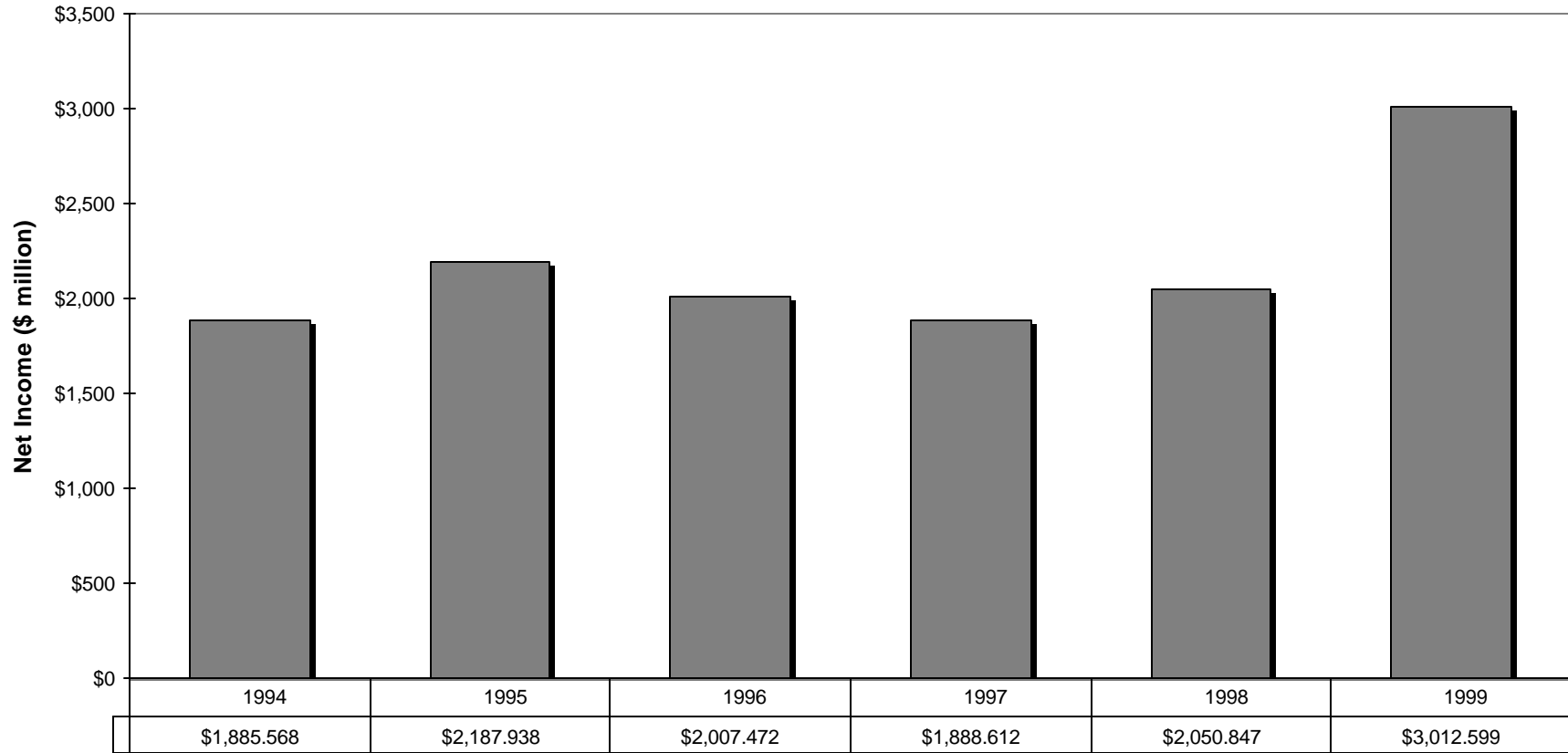
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Figure 5
Major Electric, Gas, and Telephone Utilities
Consumer Complaints to Pa. PUC 1994-1999



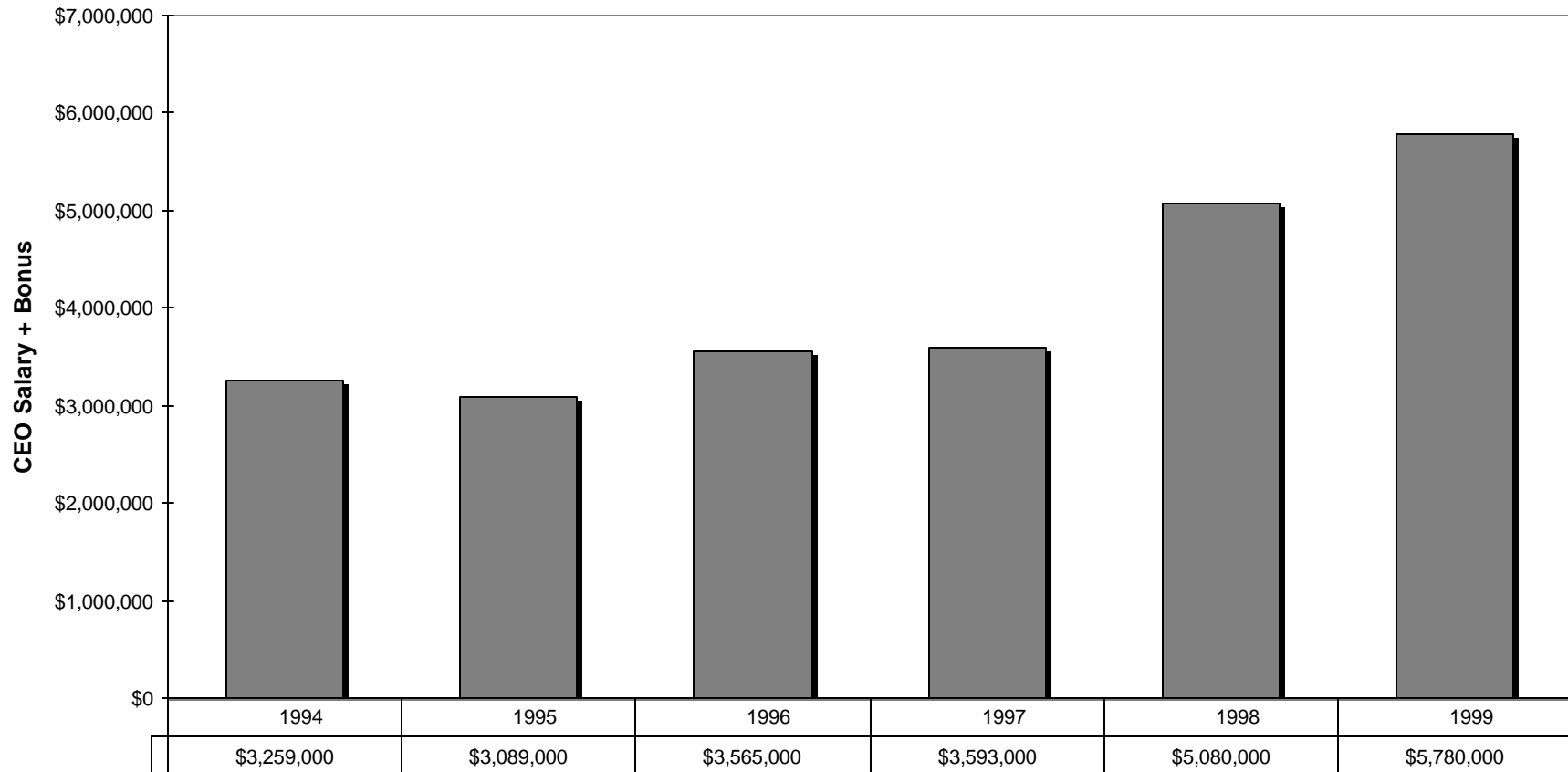
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Figure 6
Major Electric Utilities
Net Income 1994-1999



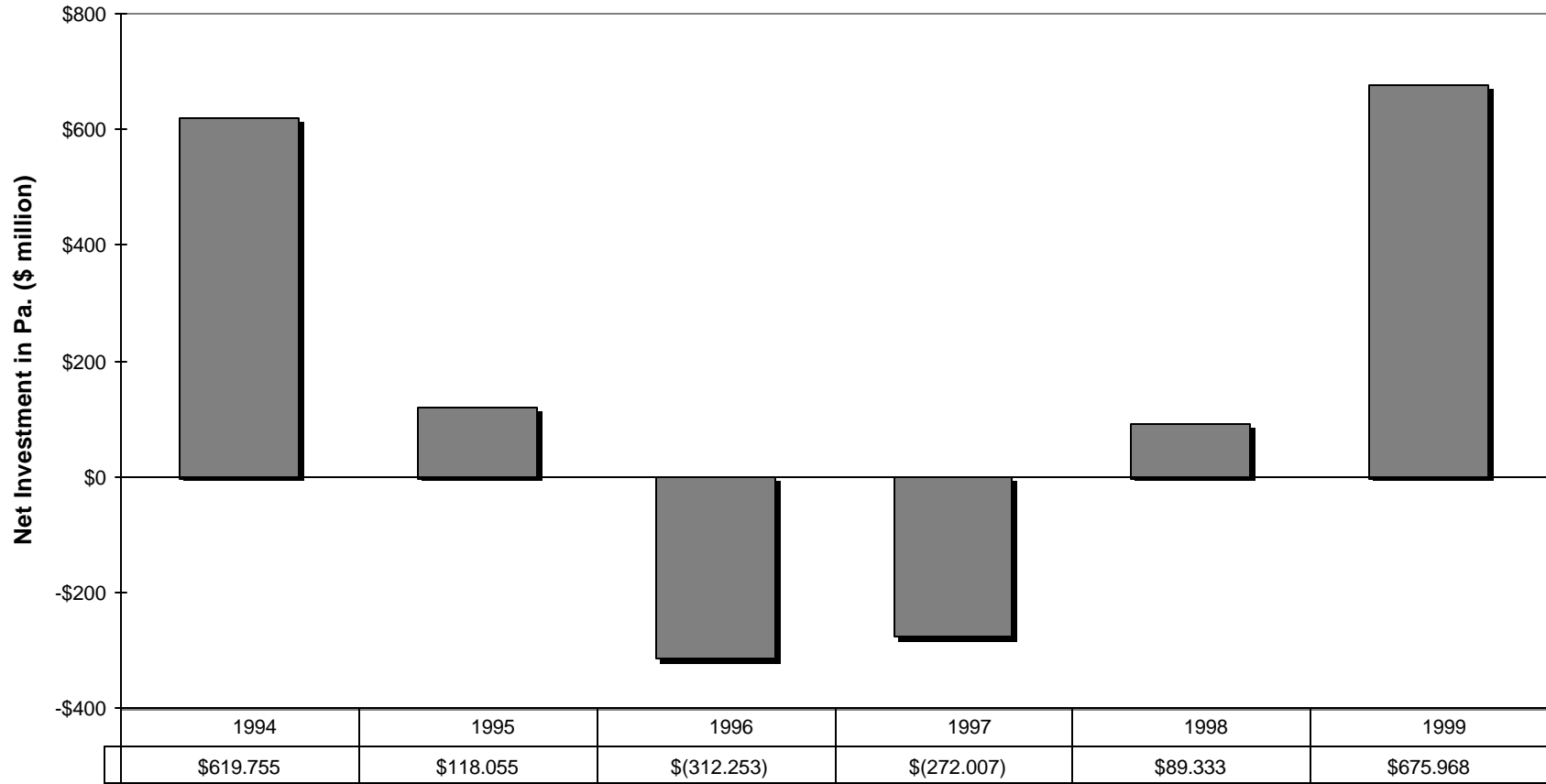
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Figure 7
Major Electric Utilities
CEO Compensation (Salary & Bonus) 1994-1999



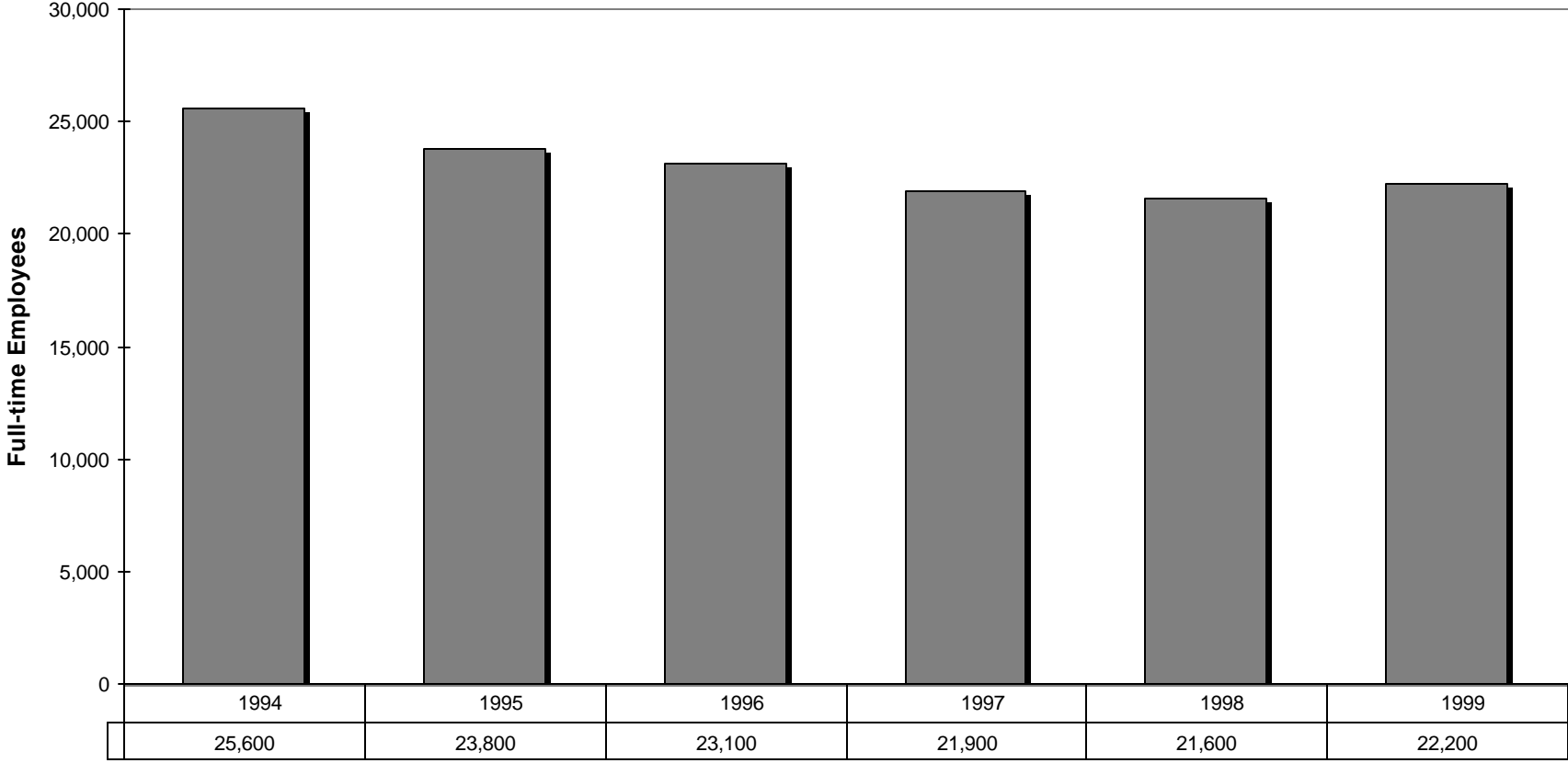
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Figure 8
Major Electric Utilities
Net Investment in Pennsylvania 1994-1999



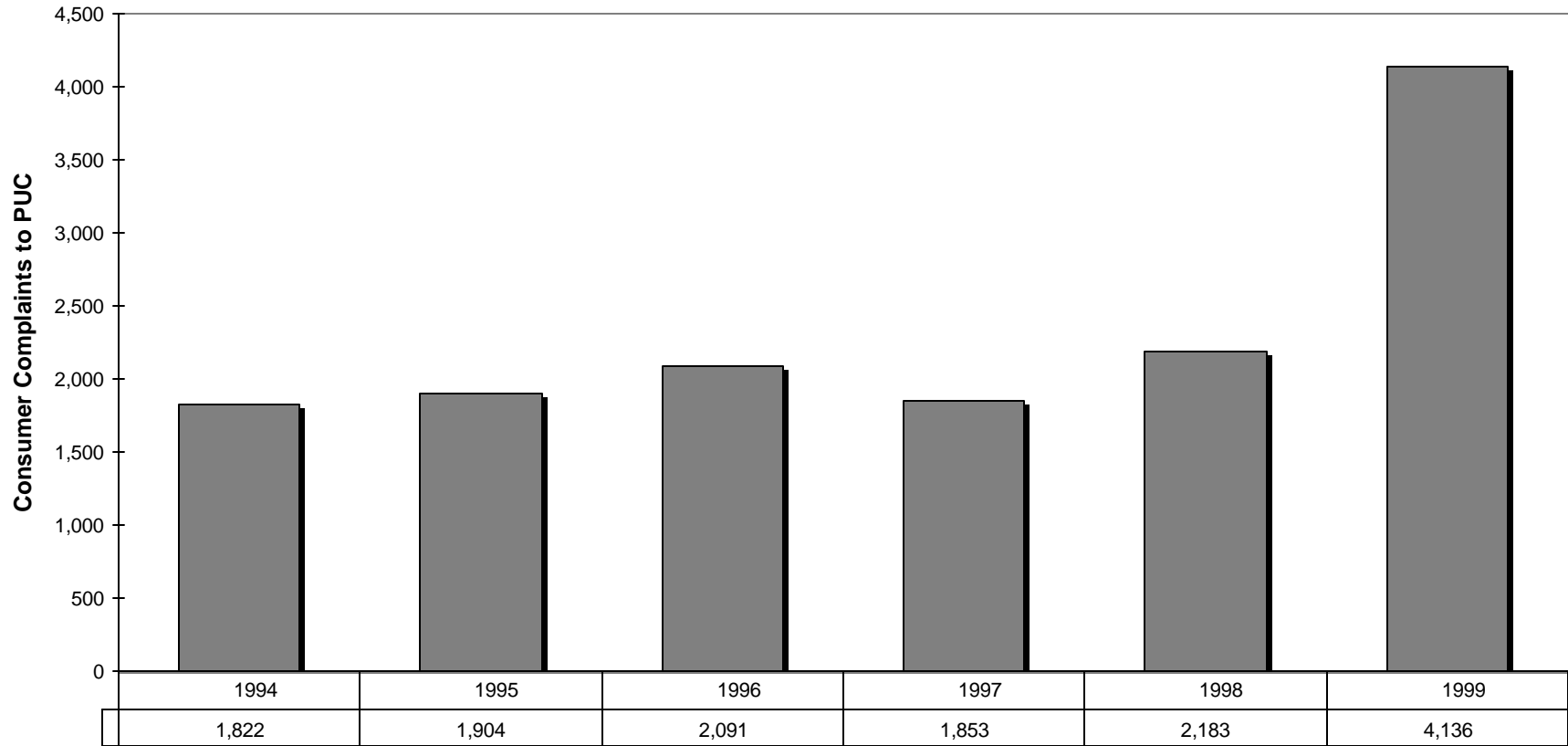
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Figure 9
Major Electric Utilities
Full-Time Employees 1994-1999



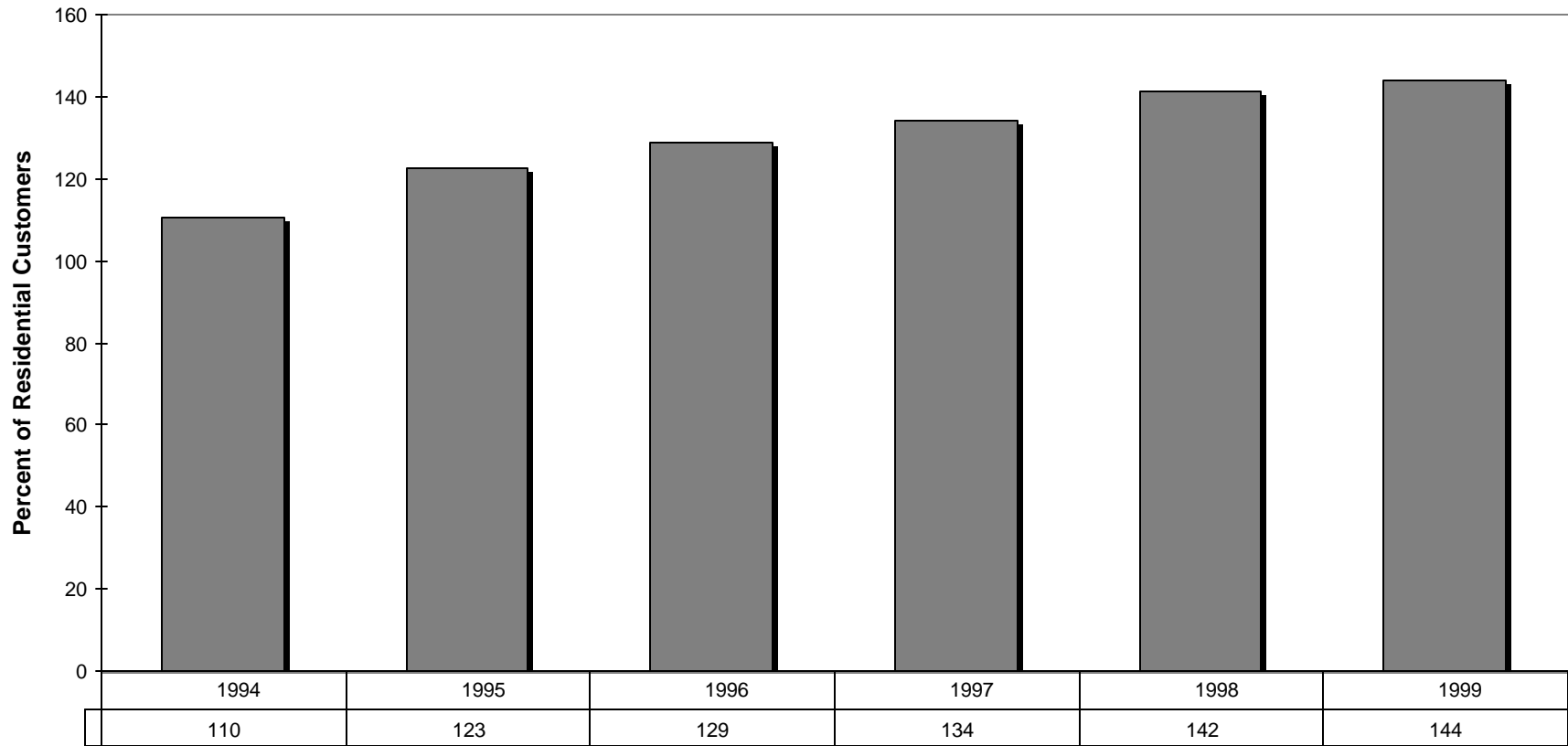
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Figure 10
Major Electric Utilities
Consumer Complaints to Pa. PUC 1994-1999



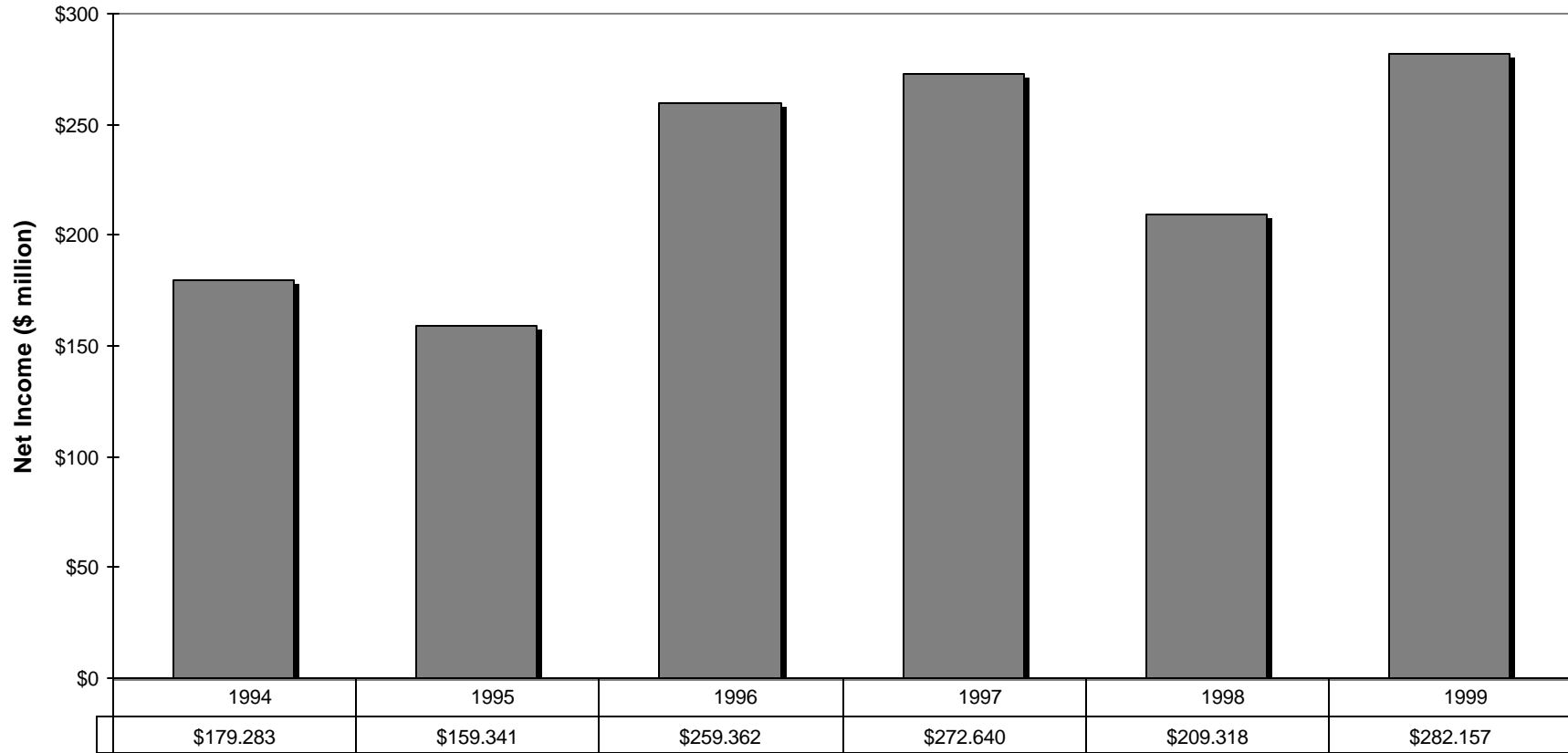
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Figure 11
Major Electric Utilities
Average Length of Customer Outage (Excluding Major Storms) 1994-1999



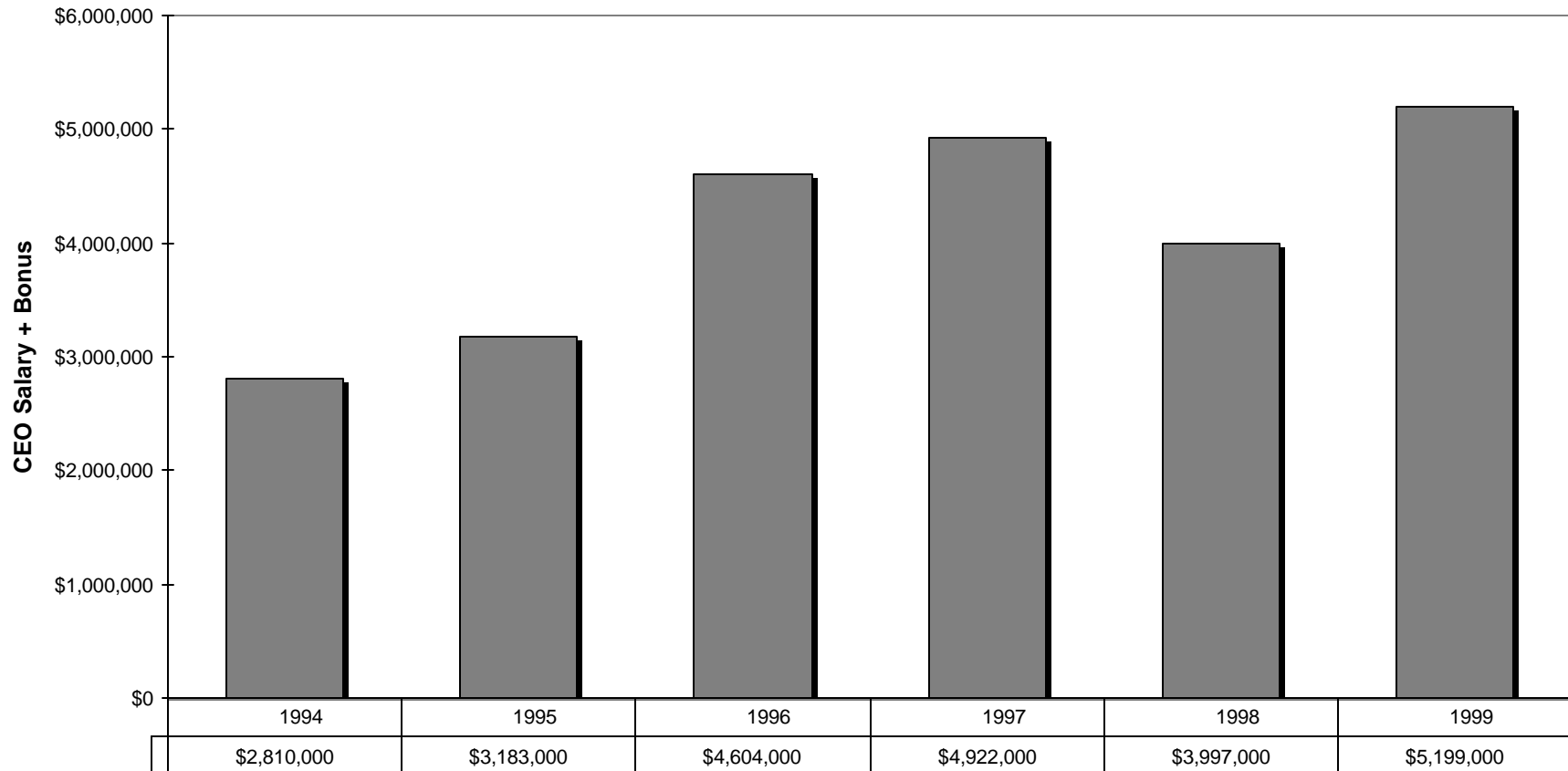
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Figure 12
Major Gas Utilities
Net Income 1994-1999



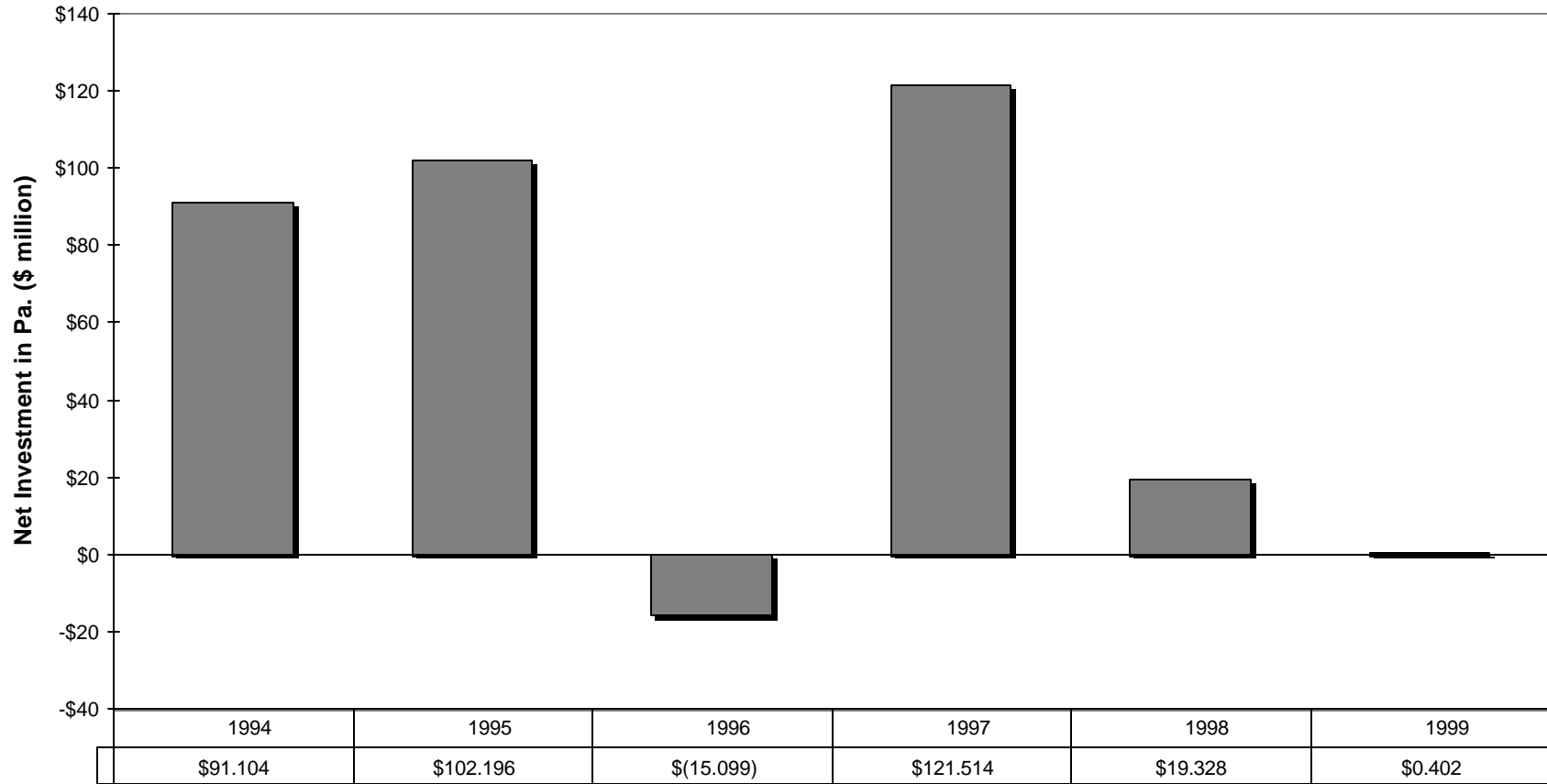
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Figure 13
Major Gas Utilities
CEO Compensation (Salary & Bonus) 1994-1999



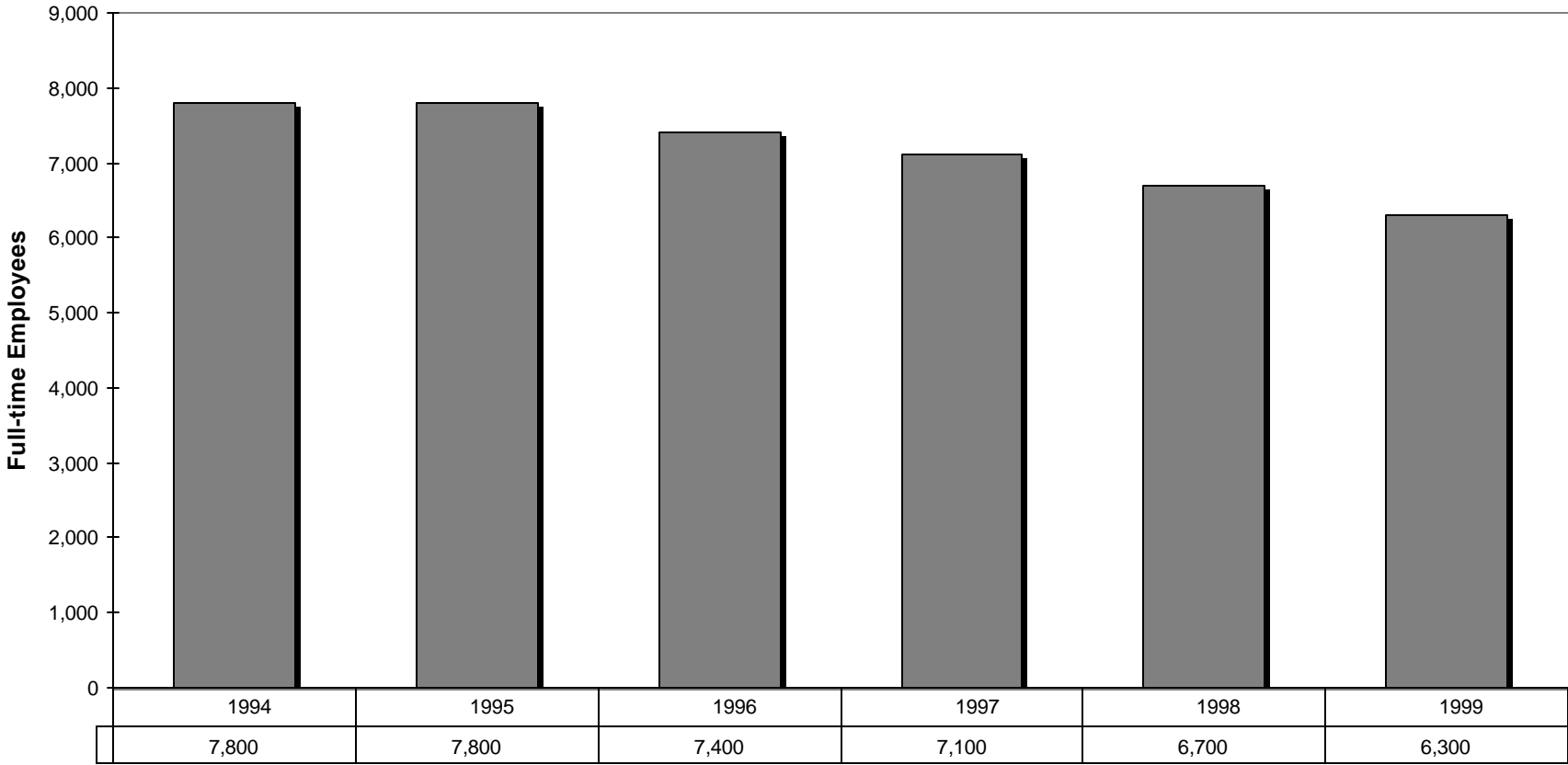
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Figure 14
Major Gas Utilities
Net Investment in Pennsylvania 1994-1999



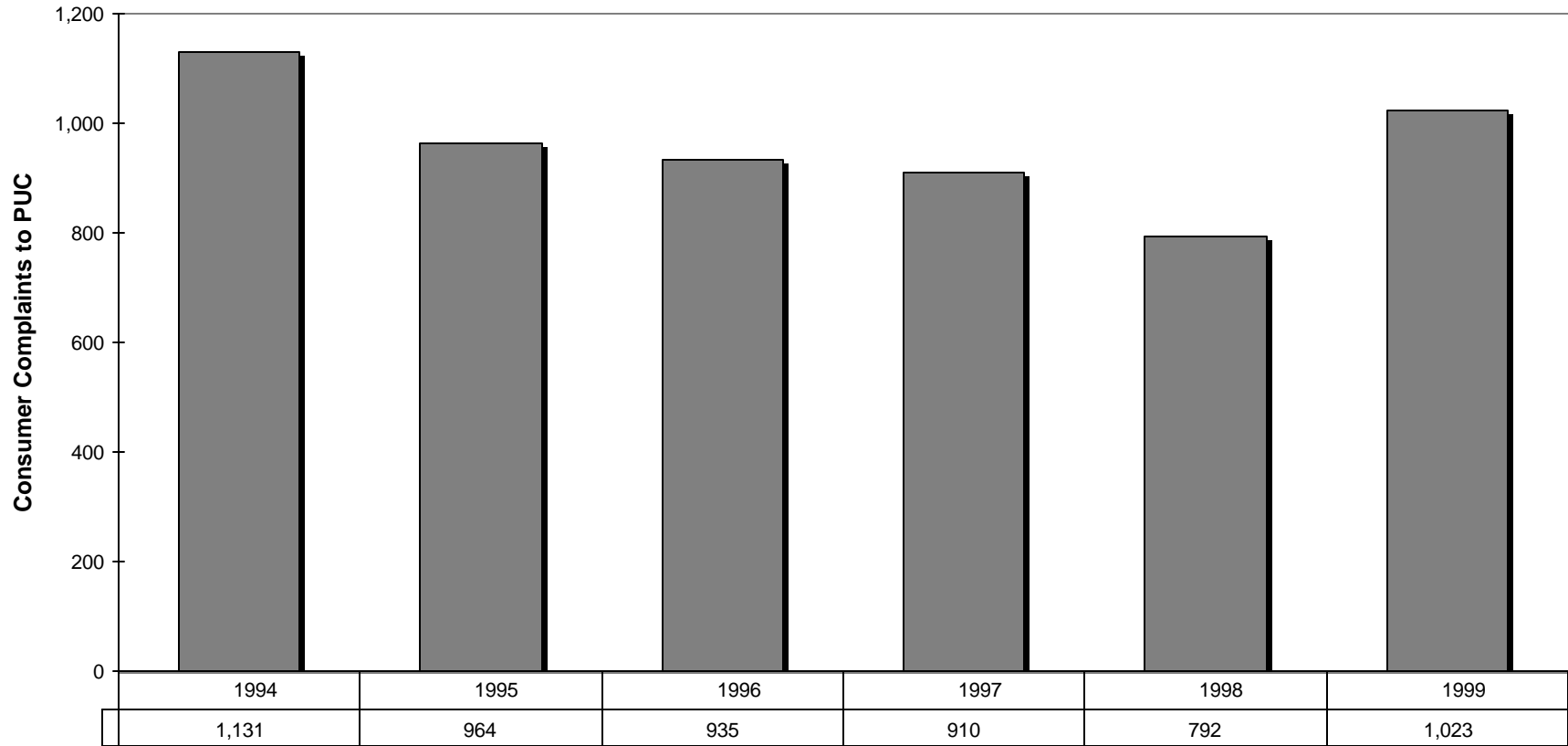
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Figure 15
Major Gas Utilities
Full-Time Employees 1994-1999



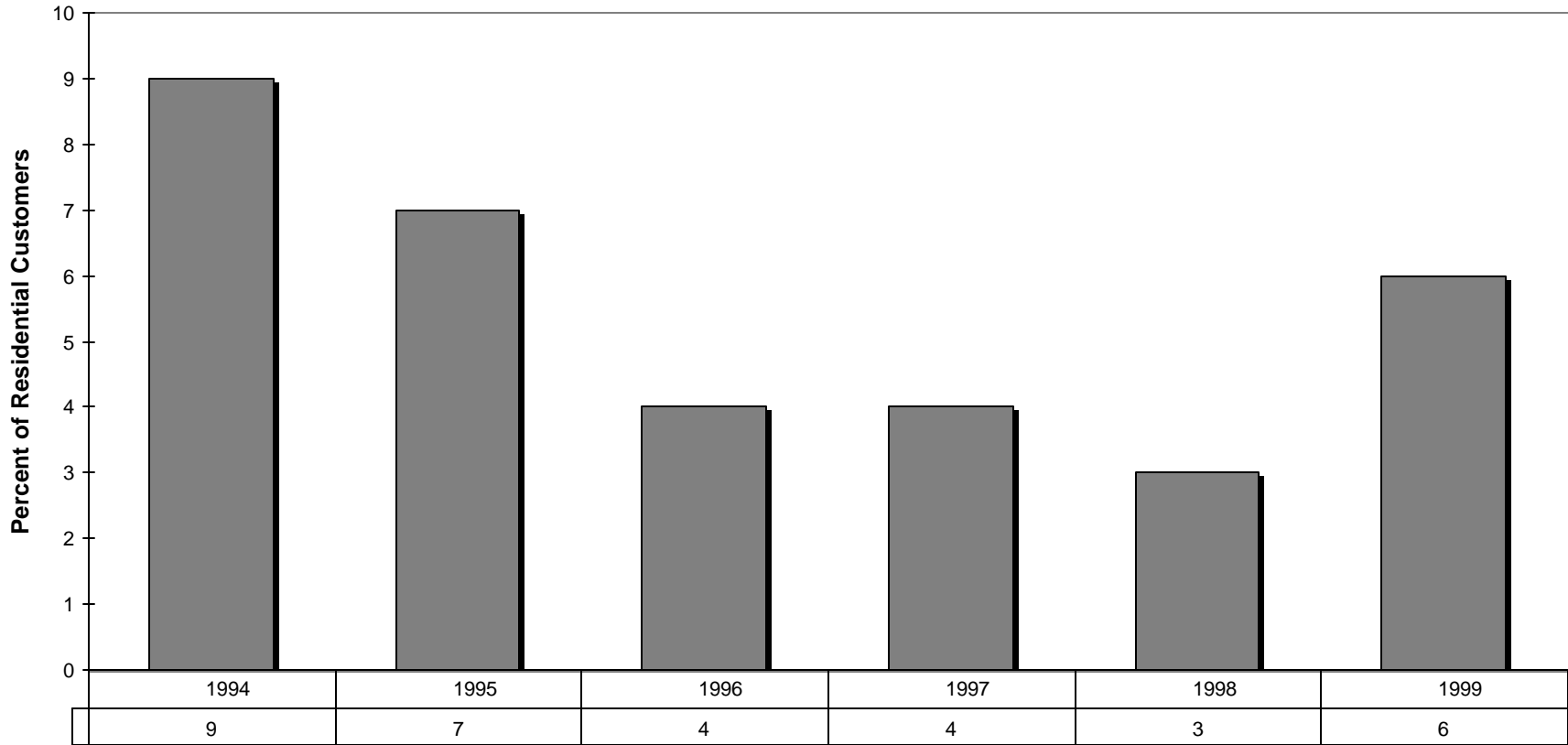
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Figure 16
Major Gas Utilities
Consumer Complaints to Pa. PUC 1994-1999



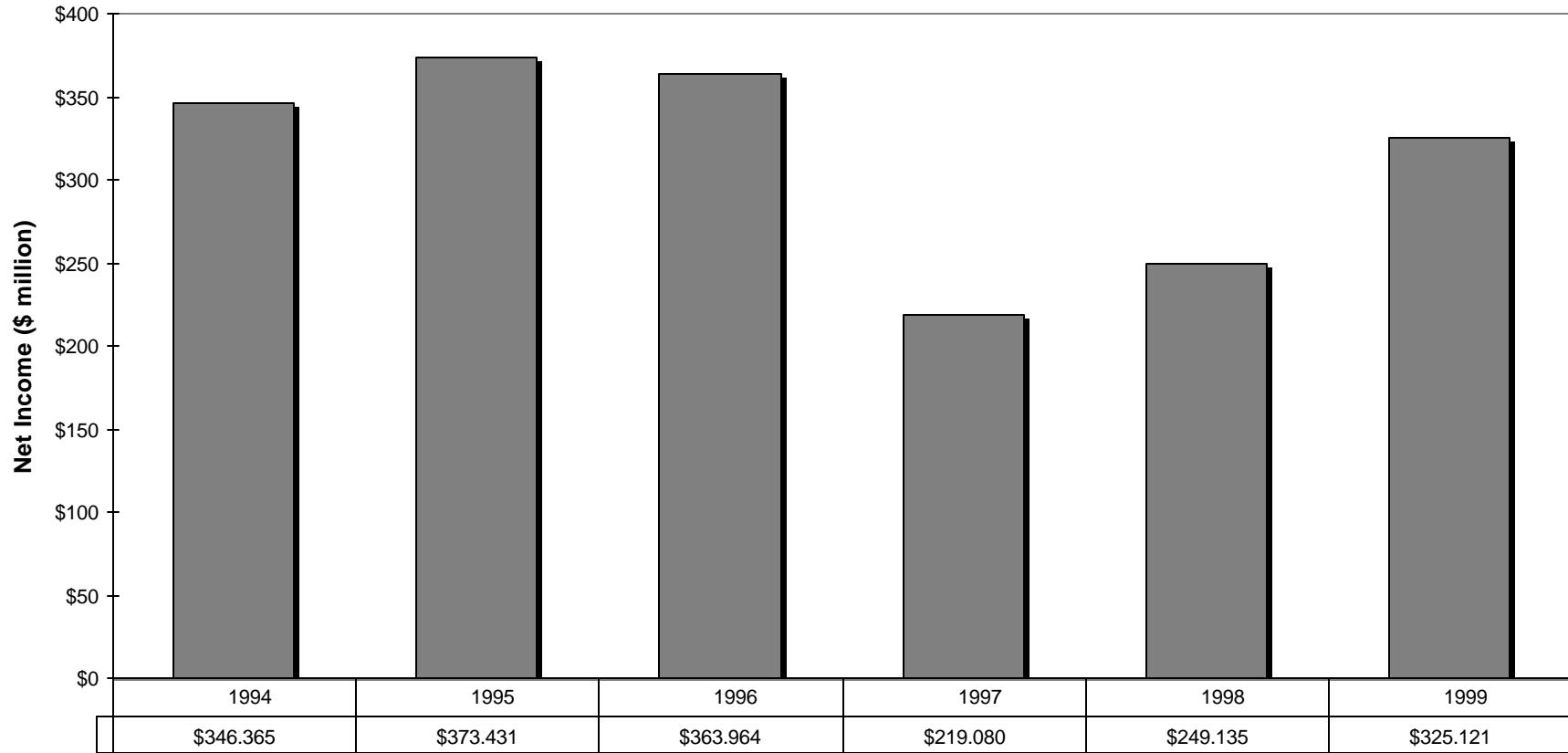
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Figure 17
Major Gas Utilities
Distribution System Incidents 1994-1999



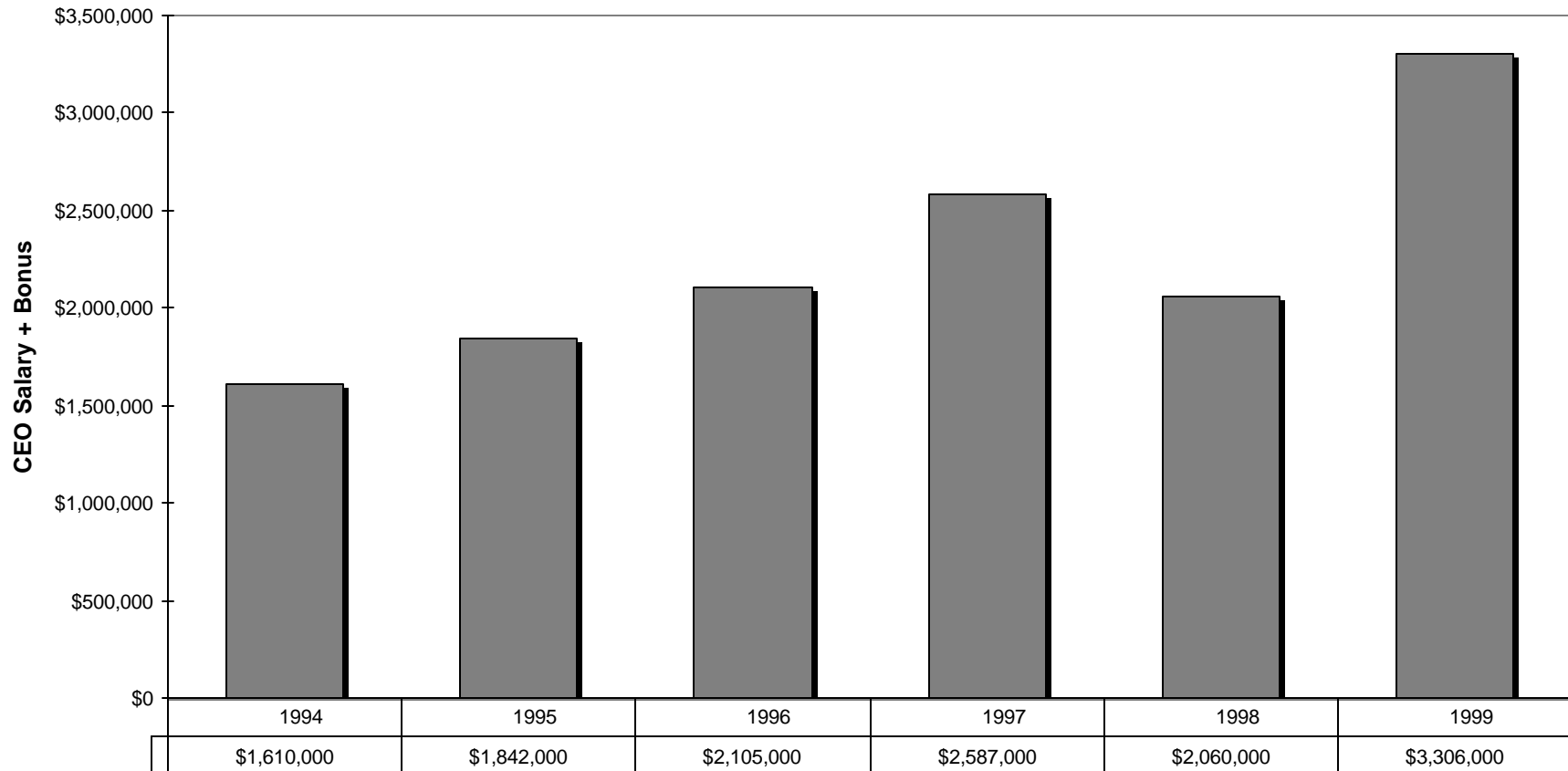
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Figure 18
Verizon Pennsylvania (formerly Bell Atlantic Pa.)
Net Income 1994-1999



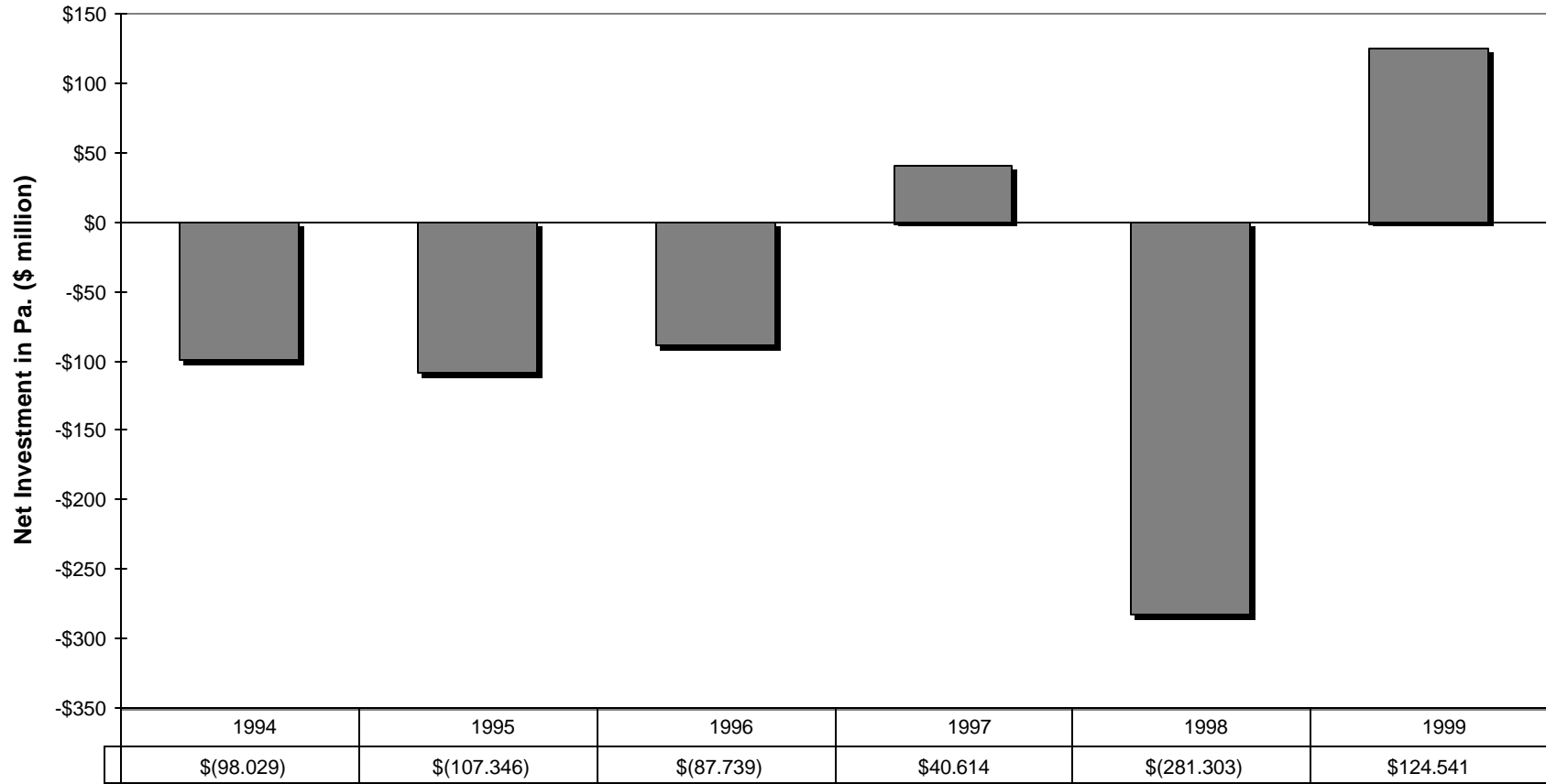
Source: See Table 1

Figure 19
Verizon Pennsylvania (formerly Bell Atlantic Pa.)
CEO Compensation (Salary & Bonus) 1994-1999



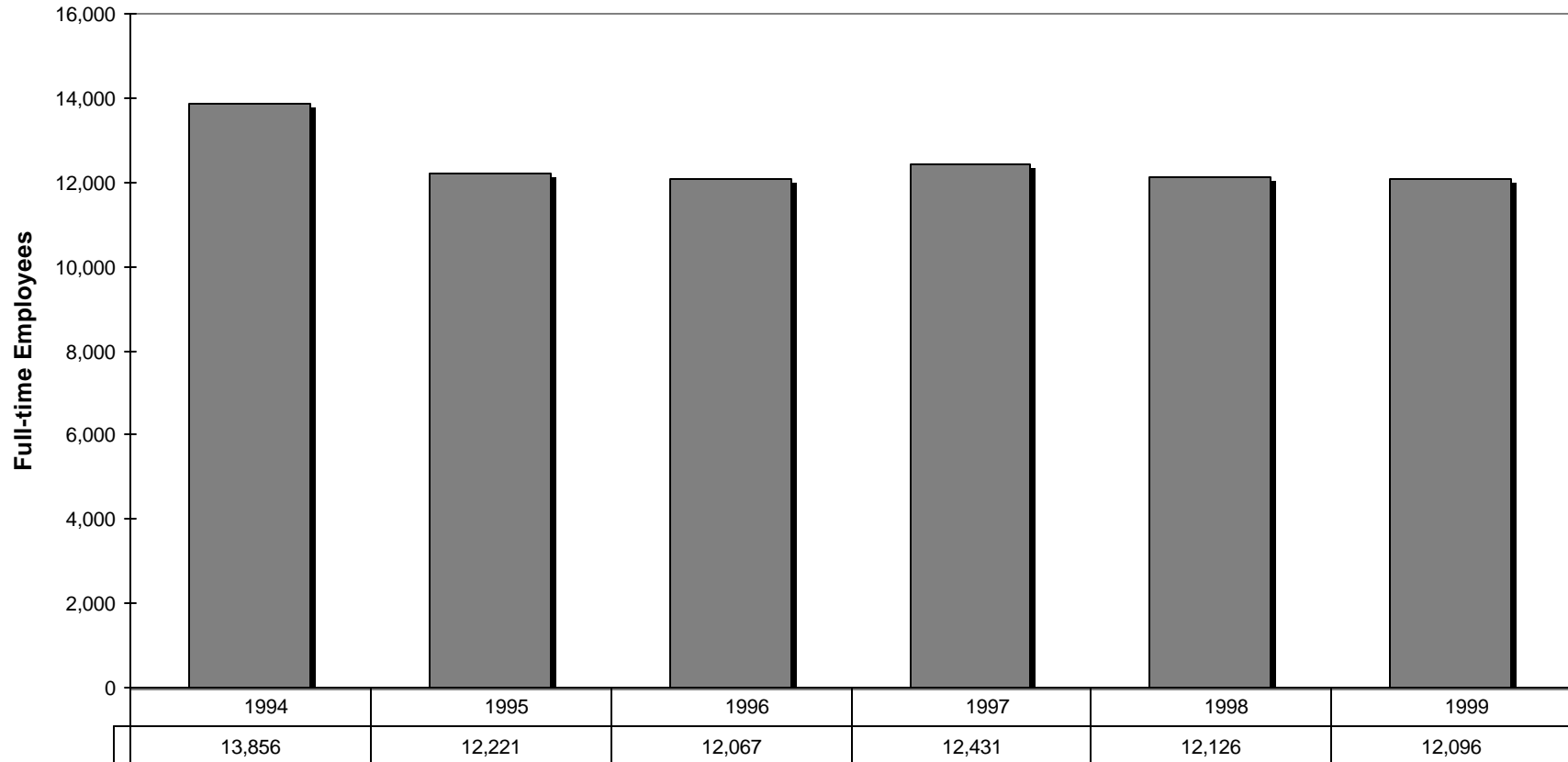
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Figure 20
Verizon Pennsylvania (formerly Bell Atlantic Pa.)
Net Investment in Pennsylvania 1994-1999



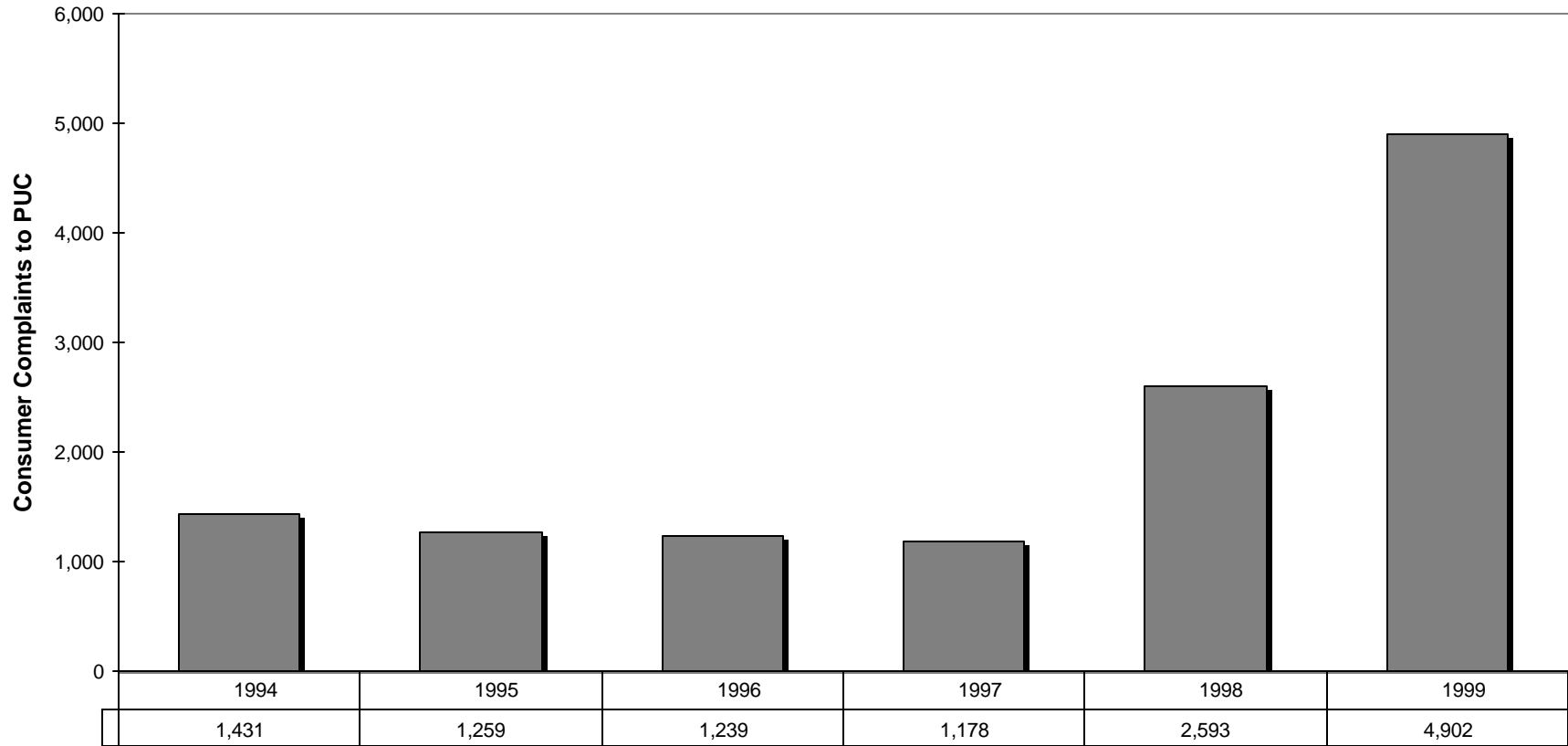
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Figure 21
Verizon Pennsylvania (formerly Bell Atlantic Pa.)
Full-Time Employees 1994-1999



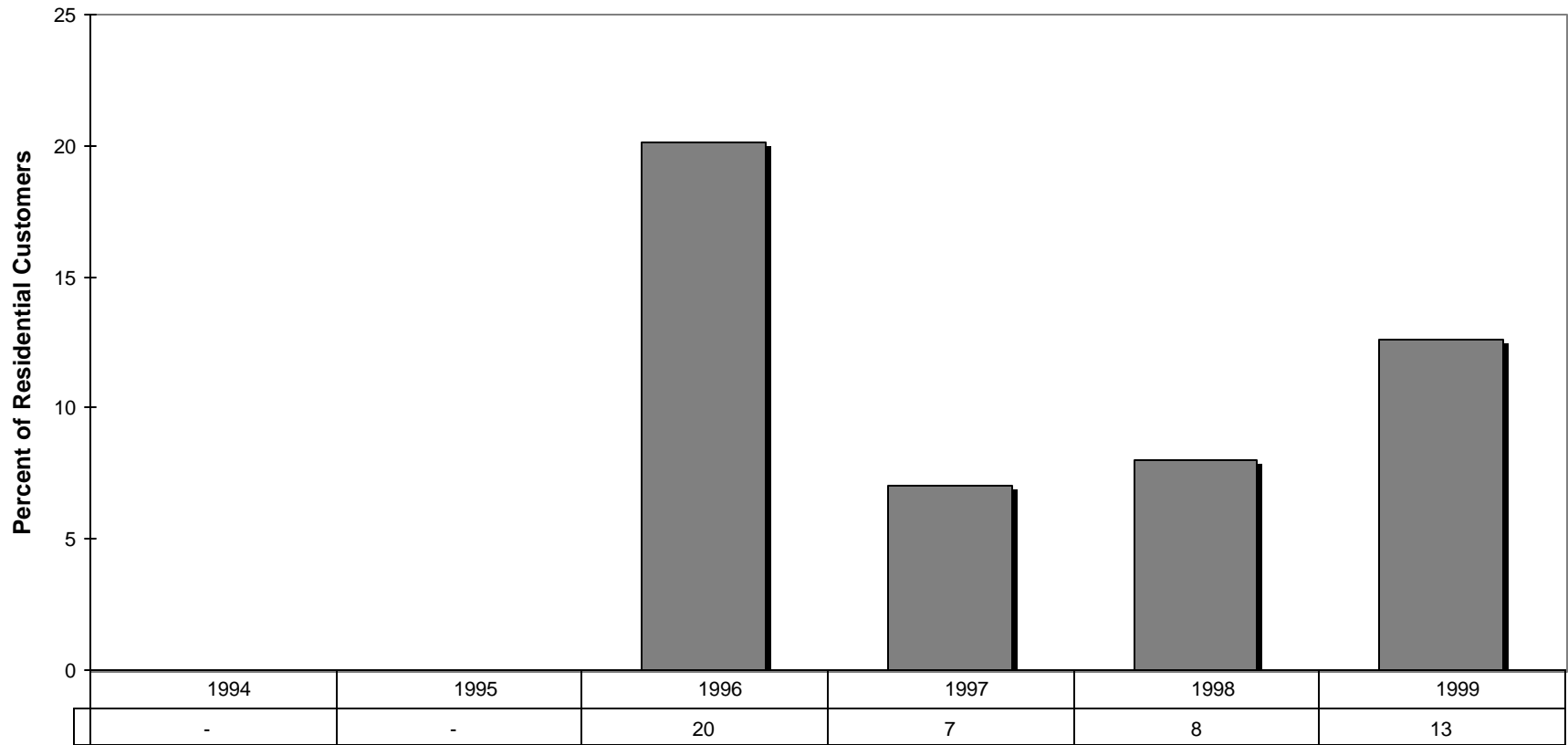
Source: See Table 1

Figure 22
Verizon Pennsylvania (formerly Bell Atlantic Pa.)
Consumer Complaints to Pa. PUC 1994-1999



Source: See Table 1

Figure 23
Verizon Pennsylvania (formerly Bell Atlantic Pa.)
Percent of Residential Consumers Dissatisfied with Repair Service 1994-1999



Source: See Table 1

